ADDENDUM No. 4 4/03/20

Sanitary Sewer Improvements 2020 – Contract 1 Sanitary Sewer Rehabilitation City of Owosso OHM Job No. 0020-19-0050

The following changes, additions, and/or clarifications to the Contract Documents shall be incorporated in said documents and shall be allowed for in the unit prices bid by the Contractor such that the unit prices indicated in the Bid Form shall represent the conditions as set forth in the Contract Documents and this addendum. The bidder shall acknowledge the receipt of this addendum on attached page and shall send the receipt of addendum form by email to Trista.VanWormer@ohm-advisors.com.

See questions and responses (red text) from prospective bidders below:

- What is the minimum length up the lateral that grouting is required? The spec states that the lateral should be grouted with an effective sealing length no greater than 3 feet, but no minimum is listed. Please advise.

-The minimum sealing length shall be 1 foot

- Are we required to pressure test and grout all laterals on the mains that will be CIPP lined as part of this project as well as the segments listed in Appendix A?
- Grouting of joints will not apply to those pipe segments receiving CIPP.
- On the segments listed in Appendix A for grouting, are we required to test and grout every joint, every lateral, or both?
- The quantities provided reflect grouting that is anticipated and does not include every joint.
- Will the Contractor be paid for each joint and/or lateral pressure tested? Or only if the joint/lateral fails the pressure test and needs to be grouted?
- The Contractor will only be paid for joints/laterals with failing pressure tests
- The Chemical Grouting spec section 3.6.B mentions testing joints in laterals which are directly connected to manholes to a distance of 10 feet. Will this be required on this project as well?
- We do not anticipate any laterals connected to manholes on this project

- The pay item for Bid Item 9 Grouting Lateral Connections mentions the post TV shall occur no sooner than 14 days after the connection has been grouted. Later in the grouting spec section 3.14.A, it refers to a warranty inspection of mainline sewers on all pipe sections which contain grouting between 11 months and 18 months after completion.
 - Do we need to submit a post-TV at least 14 days after the initial grouting and then again for the warranty inspection, or does this warranty inspection suffice for both?
- The post-TV submitted at least 14 days after grouting will suffice
- Are there any specific design requirements for the CIPP liner thicknesses?

Design requirements shall be based upon the design guidelines that are shown in ASTM Specification F1216.

2.01 STRUCTURAL REQUIREMENTS

- A. Strength Properties
 - 1. The CIPP shall be designed per ASTM F1216. The CIPP design shall assume no bonding to the original pipe wall.
 - 2. The CIPP shall conform to the following minimum structural properties:

Table CIPP-1 Cast-In-Place Pipe

Property	Test Method	Minimum Value
Flexural Strength	ASTM D790	4,500 psi
Flexural Modulus of	ASTM D790	250,000 psi
Elasticity		
Tensile Strength (Gravity	ASTM D638	2,500 psi
Pipe)		
Tensile Strength (Pressure	ASTM D638	3,000 psi
Pipe)		

ACKNOWLEDGEMENT of RECEIPT OF ADDENDUM

ATTENTION:

Please complete this form and <u>return immediately</u> by email to Trista.VanWormer@ohm-advisors.com.

Our	firm:

has received from Orchard, Hiltz, & McCliment, Inc.

Addendum No. 4 for: Sanitary Sewer Improvements 2020 – Contract 1 Sanitary Sewer Rehabilitation City of Owosso OHM Job No. 0020-19-0050

Today,	<u>(date)</u> at	(time) a.m. / p.m. (circle one)
Signature of receiver:		
Printed name of receiver:		
Company name:		

End of Addendum No. 4