LINING OF PRIVATE SEWER PIPES IN THE CITY OF SAINT PAUL SPECIFICATION SUMMARY

The 2015 Minnesota Plumbing Code allows the use of Cured-In-Place-Pipe (CIPP) lining technology to rehabilitate existing private sanitary and/or storm sewer pipes. Installation is in accordance with ASTM 1216 and does not allow use on collapsed host pipe or host pipe that has been compromised to a point where the installed CIPP liner will not eliminate hazardous or insanitary conditions.

All requests for lining on private property or public right-of-way are regulated by the City of Saint Paul's Sewer Utility Division.

It is the responsibility of the installer to ensure that installation of the CIPP liner shall be successful and acceptable to both the property owner and the Sewer Utility. Along with all other factors that might affect the successful installation of the CIPP liner, the installer must meet the following requirements:

Contractor Qualification Requirements

- 1. The installer must be either a City of Saint Paul licensed house sewer contractor or a City of Saint Paul licensed master plumber. A City of Saint Paul licensed house sewer contractor can work (or line) both the portion of the private sewer service on private property as well as the portion of the private sewer service in the public right of way. A City of Saint Paul licensed master plumber can only work (or line) the portion of a private sewer service on private property.
- 2. The installer must provide product submittals, product samples, and liner thickness calculations annually.

Pre-Lining Requirements

- 1. Televise and perform a pre-installation inspection to evaluate existing conditions within one month of installing the liner.
- 2. Provide a pre-lining video, assessment acknowledgement or acceptance form (signed by PO), defective connection form (signed by PO), and completed Saint Paul CIPP worksheet to the Sewer Utility one business day prior to requesting and/or obtaining a sewer permit from the Sewer Utility. The pre-lining video must provide good quality images of the interior of the private sewer pipe showing that it is free of debris and obstructions.
- 3. Video must have the date and property address stated via audio or on-screen display and show digital foot measurements.
- 4. Video must clearly show sewer main connection and full length of lateral.
- 5. The Sewer Utility will send an email of acceptance or rejection to the installer one business day after receiving the pre-lining video.
- 6. Use approved methods to repair defective private sewer pipe connections. For the Sewer Utility to accept any trenchless repair of a defective private sewer connection at the point where it connects to the public sewer, the installer must submit a video of the repaired connection shot from inside the public sewer. The video must clearly reveal that all insanitary and/or hazardous conditions related to the connection have been eliminated by the trenchless repair.
- 7. Based on site-specific conditions of the private sewer pipe to be repaired, confirm that the design thickness of the CIPP liner meets the minimum criteria for a fully deteriorated pipe, consistent with Appendix X1 of ASTM 1216.
- 8. Provide the scheduled time and date for the lining to the Sewer Utility and confirm whether the Sewer Utility Inspector will be present during lining installation. Liners shall be installed during regular business hours.

Lining Procedures

- 1. Clean and prepare the private sewer pipe for lining, including eliminating all debris and obstructions.
- 2. Install the liner/bladder in a manner such that the finished product is continuous and free from defects such as foreign inclusions, dry spots, pinholes, excessive wrinkling and ridges, and delamination.
- 3. Cure the CIPP liner in accordance with the manufacturer's recommendations.
- 4. The upstream end of the CIPP liner shall be installed in such a manner that it provides a smooth transition and will not allow for debris buildup.
- 5. Have equipment readily available to excavate in the event of a failed liner installation.
- 6. Provide a sample of the finished CIPP liner for inspection and testing by the Sewer Utility when requested.
- 7. Reestablish all active connections after CIPP liner installation.
- 8. All excess material that is not a part of the finished work shall be removed from the private sewer pipe and from the public sewer system.
- 9. Eliminate all protrusions into the public sewer.

Post-Lining Requirements

- 1. Provide a post-lining video and completed final Saint Paul CIPP worksheet to the Sewer Utility for review and acceptance within seven business days after the CIPP liner installation. The post-lining video must provide good quality images of the interior of the lined private sewer pipe showing that it is free of debris and obstructions.
- 2. Video must have the date and property address stated via audio or on-screen display and show digital foot measurements.
- 3. Video must clearly show sewer main connection and full length of repair.
- 4. After reviewing the video, the Sewer Utility will notify the installer via email whether the CIPP liner installation was accepted or rejected.
- 5. For repairs performed on a private sewer connection at the point where it connects to the public sewer, the installer must submit a video of the repaired connection shot from inside the public sewer. The video must clearly reveal that all insanitary and/or hazardous conditions related to the connection have been eliminated by the trenchless repair. After reviewing the video, the Sewer Utility will notify the installer via email whether the repair at private sewer connection at the point was accepted or rejected.
- 6. If the property owner is using the assessment program, then the house sewer contractor must submit a Mechanical Lien Waiver, Repair Completion form, and final invoice to PW-SewerAssessment@ci.stpaul.mn.us with the property owner copied in the email.

Please submit all general requests and inquiries to PW-SewerLining@ci.stpaul.mn.us