

SPECIAL PROVISIONS FOR CLEANING, INSPECTION, AND TESTING OF SEWERS

Des Moines County EDP-0977(650)--7Y-29

Effective Date October 20, 2020

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

155050.01 **DESCRIPTION.**

This work consists of cleaning and inspecting sewer mains via closed-circuit video recording.

155050.02 MATERIALS.

A. Testing Equipment

Comply with applicable sections of ASTM and other applicable industry standards and codes.

B. Video Inspection.

1. Camera.

- a. High-resolution color with adjustable iris focus
- b. Pan and tilt capabilities
- **c.** Integral lighting suitable to provide proper illumination and a clear video image of the entire periphery of the pipe
- d. Capable of operating in 100% humidity conditions
- e. Produce a high quality video image.
- 2. Proved closed-circuit video inspection equipment capable of displaying on-screen footage of distance measured to within 1% of actual distance.
- **3.** Record the inspection in color in the recording media specified by the Engineer. Forward the recording to the Engineer.

155050.03 CONSTRUCTION.

A. Cleaning.

1. Clean all sanitary sewers, storm sewers, and pipe culverts prior to testing by flushing with high pressure water and removing debris by vacuum extraction, and by removing sheeting,

bracing, shoring, forms, soil sediment, concrete, or other debris.

2. Do not discharge soil sediment or debris to drainage channels, existing storm sewers, or existing sanitary sewers.

B. Video Inspection.

1. General.

- **a.** Unless otherwise specified in the contract documents, conduct video inspection of all new and rehabilitated sanitary and storm sewers after all backfill and compaction operations are completed, but prior to paving.
- **b.** Notify the Engineer the day prior to inspection so the Engineer may be present during the inspection.
- **c.** Notify the Engineer of the extent of noncompliance with the low spot depth tolerances in Section 2504 of the Standard Specifications for sanitary sewers and Section 2503 of the Standard Specifications for storm sewers.
- **d.** Re-inspect sewers after any corrective action has been completed.

2. Inspection Procedure.

- **a.** Prior to video inspection, run sufficient water through the pipe to saturate potential low spots so they may be detected during inspection.
- **b.** Inspect each pipe segment between manholes or access points in a single, continuous run. Progress through the entire project in a uniform direction.
- **c.** Inspect all lateral connections and other observations at right angles utilizing the pan and tilt capabilities of the camera.
- **d.** Center the video camera in the pipe during the inspection.
- **e.** Do not exceed 30 feet of inspection per minute.

3. Inspection Reporting.

- **a.** Provide a copy of the video inspection including on-screen continuous footage, pipe diameter, direction of viewing, and manhole and street location references in the recording. Affix labels to the recording media to include the name of the project, the date, and the location of the inspection.
- **b.** Provide a written report of the inspection. In the report, include true-to-scale drawings of all sewer defects and observation locations. Reference the time stamp on each line item entry on the written report.

155050.04 METHOD OF MEASUREMENT.

Cleaning, inspection, and testing of sewers shall be paid as a lump sum item. No measurements shall be made.

155050.05 BASIS OF PAYMENT.

- A. Cleaning, inspection, and testing of sewers shall be paid as a lump sum item.
- **B.** Unit price includes, but is not limited to, all materials, equipment, and labor required to clean sewer pipes for inspection, and complete video inspection and recording of inspection, including post-production and submittal of electronic copies and any paper reports.