

SECTION 33 01 33  
TV INSPECTION OF SEWER PIPELINES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
  - 1. Pipeline flushing and cleaning.
  - 2. TV inspection of sewer pipelines.
  - 3. Audio-video taping of pipeline interior.
- B. Related Sections:
  - 1. Section 33 31 00 - Sanitary Utility Sewerage Piping.

1.2 REFERENCES

- A. Electronics Industries Association (EIA).

1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Submit completed tape cassettes, identified by tape number, project name, street name, right-of-way property name, and manhole numbers.
- C. Tapes become property of Owner.
- D. Submit cleaning and television inspection logs for each section of sewer line to be rehabilitated and three copies of color videotapes for work performed. Include the following as minimum information: stationing and location of lateral services, wyes or tees, clock references, pipe joints, infiltration/inflow defects, cracks, leaks, offset joints, and other information required to assess condition of sewer.
- E. Submit a specific, detailed description of proposed bypass pumping system to include written description of plan and addressing quantity, capacity, and location of pumping equipment. Submit spill plan to address any spills that might occur.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with local agency having jurisdiction.
- B. Use cameras with video output capable of producing minimum of 600 lines of horizontal resolution at center; optimum imagery with minimum illumination; and meet requirements of EIA Standard Video Signal.

1.5 QUALIFICATIONS

- A. Applicator: Company specializing in performing work of this Section with minimum three years documented experience.

PART 2 PRODUCTS

2.1 DVD

- A. Audio track containing simultaneously recorded narrative commentary and evaluations of operator describing in detail condition of pipeline interior.

### PART 3 EXECUTION

#### 3.1 PREPARATION

- A. Flush and clean pipeline interiors to remove sludge, dirt, sand, stone, grease, and other materials from pipe to ensure clear view of interior conditions.
- B. Intercept flushed debris at next downstream manhole by use of weir or screening device; remove and dispose of debris off site.
- C. Furnish materials, labor, equipment, power, and maintenance to implement a temporary bypass pumping system around work area for time required to complete TV inspection.

#### 3.2 APPLICATION

- A. Closed-Circuit TV Camera System:
  - 1. Utilize cameras specifically designed and constructed for closed-circuit sewer line inspection. Utilize camera equipment with pan and tilt capability to view each lateral connection at multiple angles.
  - 2. Utilize camera capable of moving upstream and downstream; minimum 1,000 feet horizontal distance with one setup; direct reading cable position meter.

#### 3.3 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Pipeline Inspection:
  - 1. Audio-video sections of sewer pipeline between manholes designated.
  - 2. Identify and record locations of flat grades, dips, deflected joints, open joints, broken pipe, protrusions into pipeline, and points of infiltration.
  - 3. Locate and record service connections.
  - 4. Record locations of pipeline defects and connection horizontal distance, in feet, and direction from manholes.
  - 5. Video with pipe section plugged as to view 100 percent of inside pipe diameter; use flow control methods as specified for bypass pumping system to eliminate surcharging and reduce flow.

END OF SECTION