



AGENDA ITEM SUMMARY FORM

PROPOSED MEETING DATE: February 7, 2024
PREPARED BY: Matthew Woodard, Director
DEPARTMENT: Public Works

AGENDA ITEM DESCRIPTION:

Consideration, discussion, and possible action on purchasing a Vehicle-Mounted Utility Inspection System for filming inspections of the city's wastewater and stormwater lines.

BACKGROUND/SUMMARY:

CCTV Inspection Equipment

As of October 18, 2023, the City of Manor has 361,109.8 feet of Wastewater lines, 322,840.08 feet of gravity lines, and 38,269.72 feet of force mains, totaling 68.4 miles. Our engineering consultants, George Bulter & Associates (GBA), have indicated in their initial assessment, which does not include Manor Heights Phase 4 and Las Entradas N Section 3 developments, routine maintenance will need to be scheduled to handle the additional planned developments, adding to the city's sewer infrastructure maintenance on an annual basis. Wastewater lines are supposed to be inspected every five years per TCEQ regulations. This equipment will help locate our Inflow and Infiltration problems and any pipe failure with our wastewater mainlines. This equipment could also be used on storm drains as well, and we will budget in the future for attachments that will help navigate through storm drains with this equipment. Attached is the Sole Source letter for Patterson Equipment (Camera Equipment) and the TIPS USA 210907 quote from Silsbee Ford. All proceeds will be processed through Silsbee Ford. There was a difference of \$3,985.70 between what was budgeted, \$247,955.00, and the current quote of 251,940.70.

Closed Circuit Television equipment for pipeline inspections is a very important tool for any governmental agency or any entity that has underground pipes to maintain. This type of equipment helps with the asset management of sewer and stormwater systems.

There are many applications of CCTV Pipeline Inspection Equipment:

- Identifying Blockages
- Obstructions/Roots/Protruding Taps
- Detecting Structural Damages/Defects
- Pipe Conditions/Wear Points
- Locating Leaks in Pipes/Infiltration Points of Access
- Gathering Data/Footages for Future Repairs/Replacement

- Efficient Flow of Sewer/Stormwater in Pipes/Pipe Inclination Assessment
- Inspection of Lateral Lines/Taps into the Sewer Mainlines
- Ensuring Stormwater/Drainage Lines are Free of Debris/Obstructions
- Environmental Impact/Water Quality

The Subsite CCTV Equipment has the strongest cable on the market- a double steel armored single conductor system with 5400#lb pull strength for longer life and lower operating costs than other systems utilizing the multi-conductor style cables. Subsite offers Wheeled Steerable Transporters W/ Motorized lift system for raising the camera head remotely while conducting inspections if encountering a “Belly “in the pipe (Area Holding Water In Pipe) along with a rear camera eye for viewing while retrieving the camera/tractor back to the truck while in neutral. Subsite also manufactures Tread-Driven Transporters that are very useful in navigating severe off-sets in pipe joints or 6” lines that had been re-lined/cured-in-place.

Subsite also offers Storm Drain Tractors for 24” – 200” Pipeline Inspections and Lateral Launch Systems for Inspecting smaller customers’ lateral lines from the sewer mains without entering the client’s property. All Subsite equipment is interchangeable, utilizing the TrakStar Camera Pan/Tilt/Zoom that fits into all our Transporters, and all connect to the same bullet connector on the cable end. With local parts, inventory and experienced technicians, Patterson Equipment provides full sales and support for the Subsite CCTV technology.

TCEQ Requirement

<u>TITLE 30</u>	ENVIRONMENTAL QUALITY
<u>PART 1</u>	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
<u>CHAPTER 213</u>	EDWARDS AQUIFER
<u>SUBCHAPTER A</u>	EDWARDS AQUIFER IN MEDINA, BEXAR, COMAL, KINNEY, UVALDE, HAYS, TRAVIS, AND WILLIAMSON COUNTIES
RULE §213.5	Required Edwards Aquifer Protection Plans, Notification, and Exemptions

(i) Testing of all sewage collection systems must be conducted every five years after being put into use. Any sewage collection system in place as of March 21, 1990 must have commenced and completed the first round of five-year testing. Every five years, existing sewage collection systems must be tested to determine types and locations of structural damage and defects such as offsets, open joints, or cracked or crushed lines that would allow exfiltration to occur. These test results must be certified by a Texas licensed professional engineer. The test results must be retained by the plan holder for five years and made available to the executive director upon request. The use of one of the following methods will satisfy the requirements for the five-year testing of existing sewer lines.

- I. In-place deflection testing must meet the requirements of §317.2(a)(4)(C) of this title. No pipe shall exceed a deflection rate of 5.0%.
- II. Internal line inspections, using a color television camera to verify that the lines are free of structural damage such as offsets, open joints, or cracked or crushed lines, that would allow exfiltration to occur, are acceptable. The use of black and white television equipment may be

used following demonstration to the executive director that an acceptable inspection can be performed as provided in subclause (IV) of this clause.

III. In-line smoke testing is acceptable only for the testing of private service laterals.

LEGAL REVIEW: No

FISCAL IMPACT: Yes, approved in FY23-24 Budget

PRESENTATION: No

ATTACHMENTS: Yes

- Authorized Dealer Letter Manor
- Vehicle Mounted Systems Brochure
- City of Manor E450 Van with Patterson Install Tips
- Estimate 4407 CCTV DISC

STAFF RECOMMENDATION:

It is the staff's recommendation that the City Council approve the purchase of the CCTV Inspection Equipment with Silsbee Ford in association with Patterson Equipment Company for an amount not to exceed \$251,940.70.

PLANNING & ZONING COMMISSION: **Recommend Approval** **Disapproval** **None**
