

# Combination Sewer Tuck

## Jetting and Vacuum

Best Management Practice for cleaning and removing debris from the sewer system



# SEWER MAINTENANCE

- **An annual sanitary sewer system cleaning program lessens the risk of sanitary sewer blockages, which can cause sewer backups in homes.**
- **Catch basins are designed to catch sediment before entering local waterways, helping to keep them clean. DPW crews clean all catch basins on a rotating schedule.**

| Performance Indicator             | 2020    | 2021    | 2022    | 2023    |
|-----------------------------------|---------|---------|---------|---------|
| Sanitary Sewers Cleaned (ln. ft.) | 253,755 | 165,149 | 315,987 | 173,704 |
| Calls for Sanitary Service (each) | 98      | 75      | 85      | 94      |
| Catch Basins Cleaned (each)       | 600     | 609     | 635     | 621     |
| Catch Basin Debris (tons)         | 75      | 78      | 104     | 65      |

# Current DPW Capabilities | Jet Truck



- 2013 Sewer Jetting Truck has no vacuum capability.
- The Jetting Truck is designed to clean the sewers, but not to remove the debris. Crews use a basket connected to a pole.



# Current DPW Capabilities | Combination Truck

- 2005 Sewer Combination Truck with jetting and vacuuming is designed to clean sewers and vacuum the debris.



# SEWER MAINTENANCE

A combination jet and vacuum truck offers several advantages over a standard jet truck for cleaning.

**Efficient Debris Removal:** While a jet truck can effectively clear blockages with high-pressure water, a combination truck can immediately vacuum the dislodged debris and water, preventing it from settling back into the sewer.

**Reduced Cleanup Time:** The vacuum capability allows quicker and more thorough cleanup of the area, minimizing the need for additional equipment or manual labor to remove waste after jetting.

**Versatility:** These trucks can handle various tasks, from clearing clogs to removing accumulated sludge, making them more versatile for different types of sewer maintenance.

**Minimized Risk of Damage:** The vacuum function can help manage the water flow and pressure, reducing the risk of damaging sewer lines or manholes that might occur with high-pressure jets alone.

# SEWER MAINTENANCE – STORM SEWER



# SEWER MAINTENANCE – SANITARY SEWER



# Current DPW Capabilities | Challenges

Maintenance Cost January 2023 through May 2024

Fleet Labor Cost \$24,336.50

Inventory and Supplies \$45,947.83

Total Cost \$70,284.33

Water Pressure is lower than current trucks.

Newer combination trucks are set up for hydro excavation.



# Current DPW Capabilities | Challenges

Hydro-excavation uses high-pressure water to break up soil, which minimizes the risk of damaging underground utilities compared to traditional excavation methods. Using a vacuum system to remove the slurry (water and soil mixture) allows for the immediate removal of loose material, reducing the likelihood of accidentally impacting utilities near the surface. Both Wauwatosa Water Works and the Electrical and Traffic divisions would utilize this feature with a newer truck.



# Current DPW Capabilities | Challenges

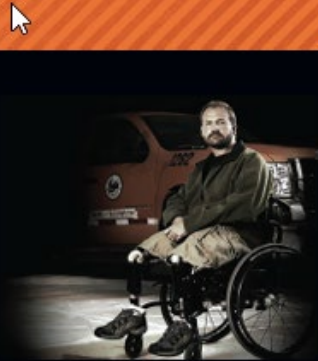


The current truck is set up with the vacuum, jet, and controls on the back of the truck.

This exposes the operators to oncoming traffic.

Newer trucks have the vacuum, jet, and controls on the front of the truck, providing a buffer for our employees.

# Current DPW Capabilities | Challenges



**"I JUST WANT TO GET BACK TO NORMAL STUFF. DRIVING AGAIN, PLAYING WITH MY SON, TAKING HIM FISHING. I WANT TO GET BACK TO LIFE AGAIN."**

**SCOTT HANSEN**

Wisconsin road maintenance worker  
and crash survivor



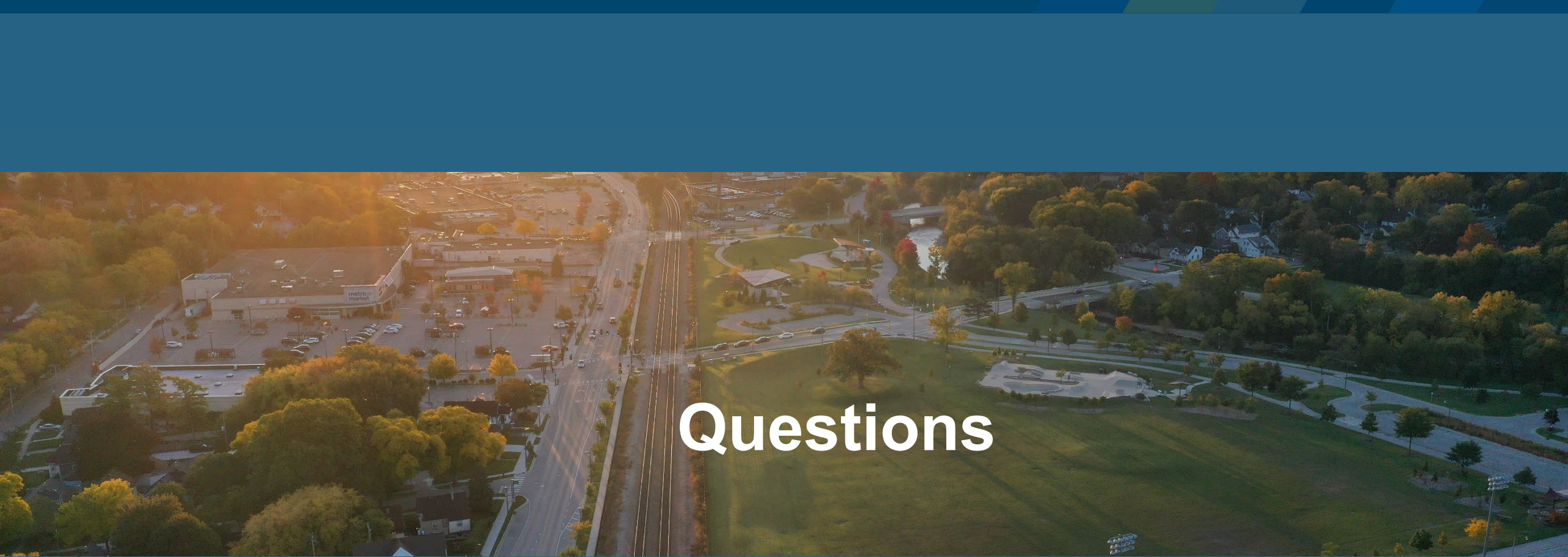
It was the third week of March, it was around noon time and my job that day was to clean sewer lines under Tenth and National and we had coned the whole lane closed and me and my coworker Butch, we had it all coned out and we just got out of the truck and we opened up the manhole and we were just starting to put the hose down the line, down to clean the sewer line and some person came through the cones and hit him and me.

Scott Hansen 2003

**Recommending a  
Level III Fund Transfer  
for the purchase of a  
2025 Vactor 2100i  
Combination Vacuum  
and Sewer Cleaning  
Truck and  
Maintenance Package  
through Sourcewell's  
cooperative  
purchasing  
agreement.**



**Vactor 2100i PD, 16" Vacuum, 15-yard Debris,  
Combo, 1500 Gallons Water**

An aerial photograph of a suburban landscape during the 'golden hour' of late afternoon. On the left, a large commercial building with a 'metro market' sign is visible, surrounded by parking lots and trees. A multi-lane road runs vertically through the center, with a set of train tracks running parallel to its right side. To the right of the tracks is a large, green park area with winding paths, a small pond, and a playground. The background shows more residential houses and dense foliage. The word 'Questions' is overlaid in white text on the right side of the image.

# Questions