

Clearing Blocked Force Mains

The City of Houston experienced an unusual occurrence



Houston, We Have a Problem!!!

Several Force Mains were exhibiting similar unusual symptoms:

- Flow was severely restricted
- Moving very little wastewater
- Pumps were running constantly
- Excess Power Usage
- Excessive wear on Pumps & Potential Damage
- Increased Manpower / Hours

Force Main Section

Removed

- 10" Steel Pipe
- Reduced to 2.5"
- 1,500 LF





After performing In-house tests and analyzing the character of the blockage CleanServe was ready to make its first attempt to remove the blockage and regain the pipe capacity.



The first project was a 1,500 foot long, 10" dia cast iron. There was no alternate path for the flow, so bypass was necessary. T Construction set up bypass and operated it each day. Flow was pumped from the wet well to a manhole just downstream of where the force main ended, leaving access for cleaning.





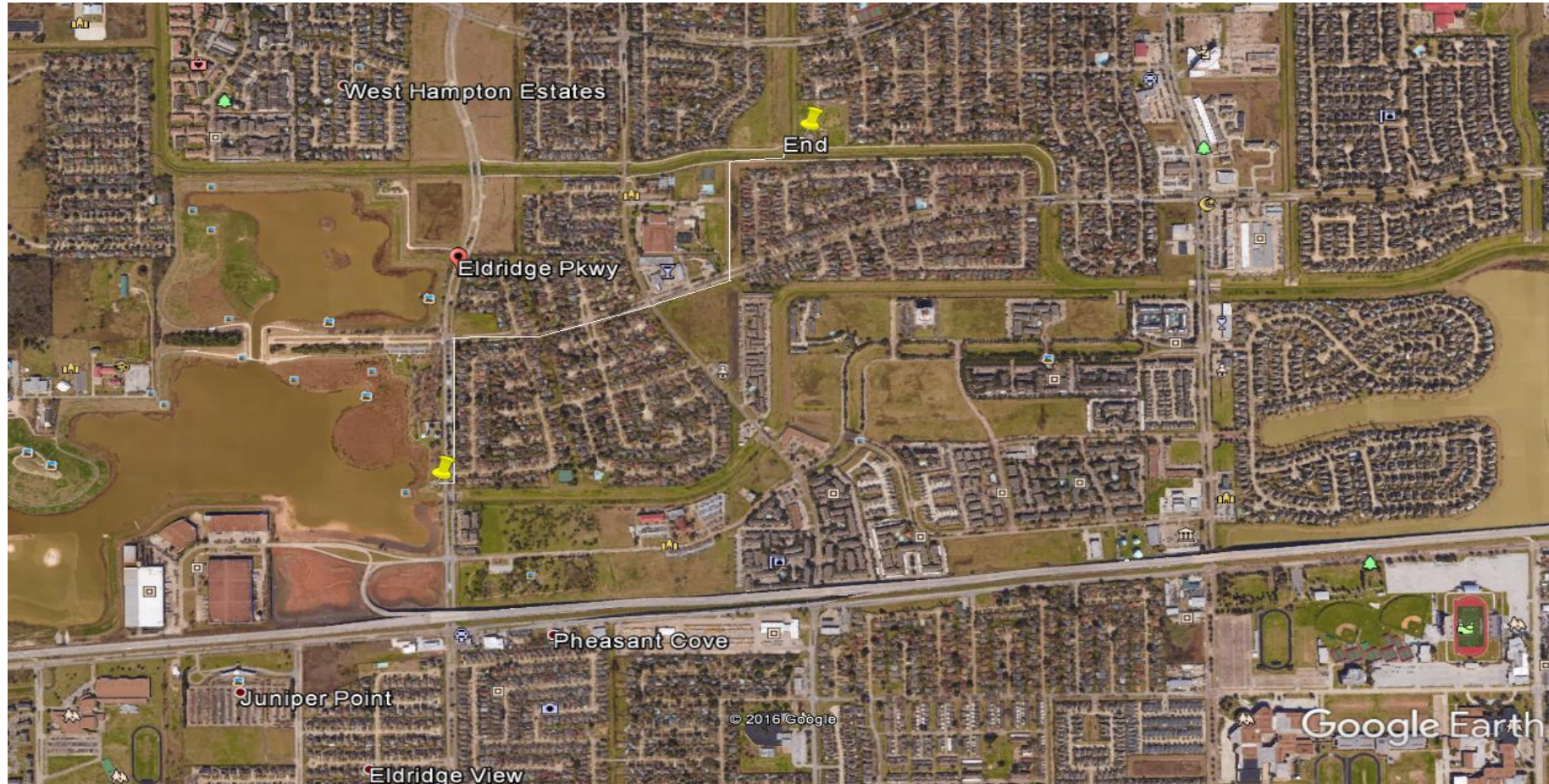


Before



After

The second project was 5,800 feet of 12" cast iron. There was not nearly enough access.



T Construction added access points and performed bypass as needed.





Building on the knowledge gained from the first project, CleanServe restored the line to 95% of capacity in 15 working days, removing nearly 120 cubic yards of debris.

The material is believed to be a combination of the particular chemistry of the waste in the line and chemicals which were added to reduce odors.





QUESTIONS?