




LEHIGH COUNTY AUTHORITY WATER DISTRIBUTION & SEWER LINE COLLECTION

CITY DIVISION




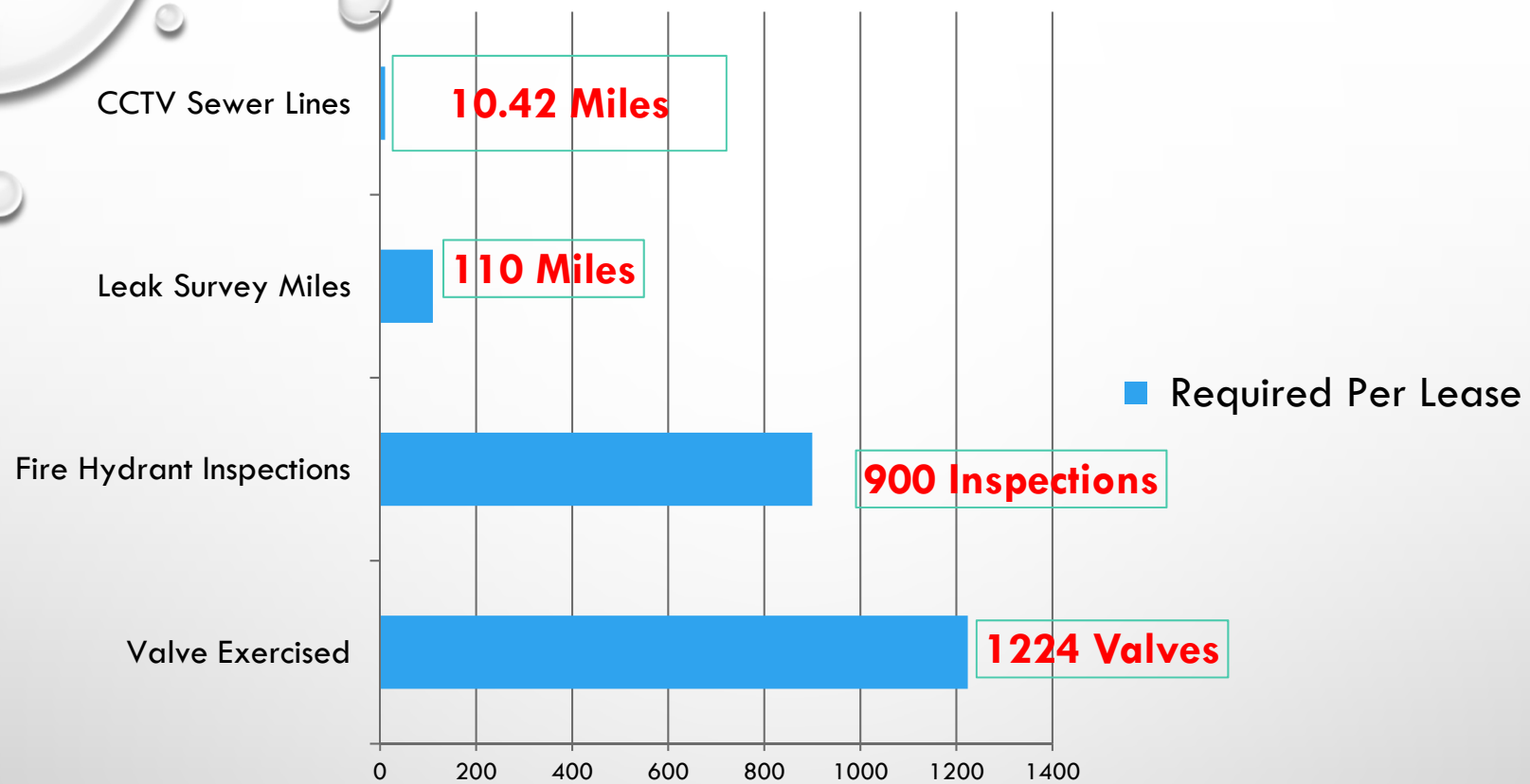
WHAT WE DO

- DEPARTMENT MANAGES THE CITY DIVISION'S SEWER COLLECTION AND WATER DISTRIBUTION SYSTEMS
 - 28 EMPLOYEES (5 NON-UNION)
 - WE HANDLE ALL MAINTENANCE ACTIVITIES AND REPAIRS THROUGHOUT THE ENTIRE CITY SYSTEM NETWORK ON BOTH WATER AND SEWER
 - DAILY TROUBLESHOOTING AND CUSTOMER VISITS INCLUDING AFTER-HOURS SERVICE CALLS
- 



WATER SYSTEM FACTS

- 325 MILES OF WATER DISTRIBUTION MAINS
 - 20 OF THEM ARE TRANSMISSION LINES RANGE FROM 14"- 36"
 - SIZES RANGE FROM 2" TO 36" IN DIAMETER
 - ACTIVE MAINS FROM THE 1870'S
 - 7,918 VALVES RANGE FROM 3" TO 36"
 - 1,800 FIRE HYDRANTS
 - NEARLY 33,500 SERVICE CONNECTIONS
- 



***All valves identified as inoperable must be replaced or repaired within one year of the identification.**

***All fire hydrants needing repair or replacement must be repaired or replaced within 6 months, 90 days for traffic damages.**

***We must flush the entire system annually.**

Lease Operating Standards – Status (2014-2018)

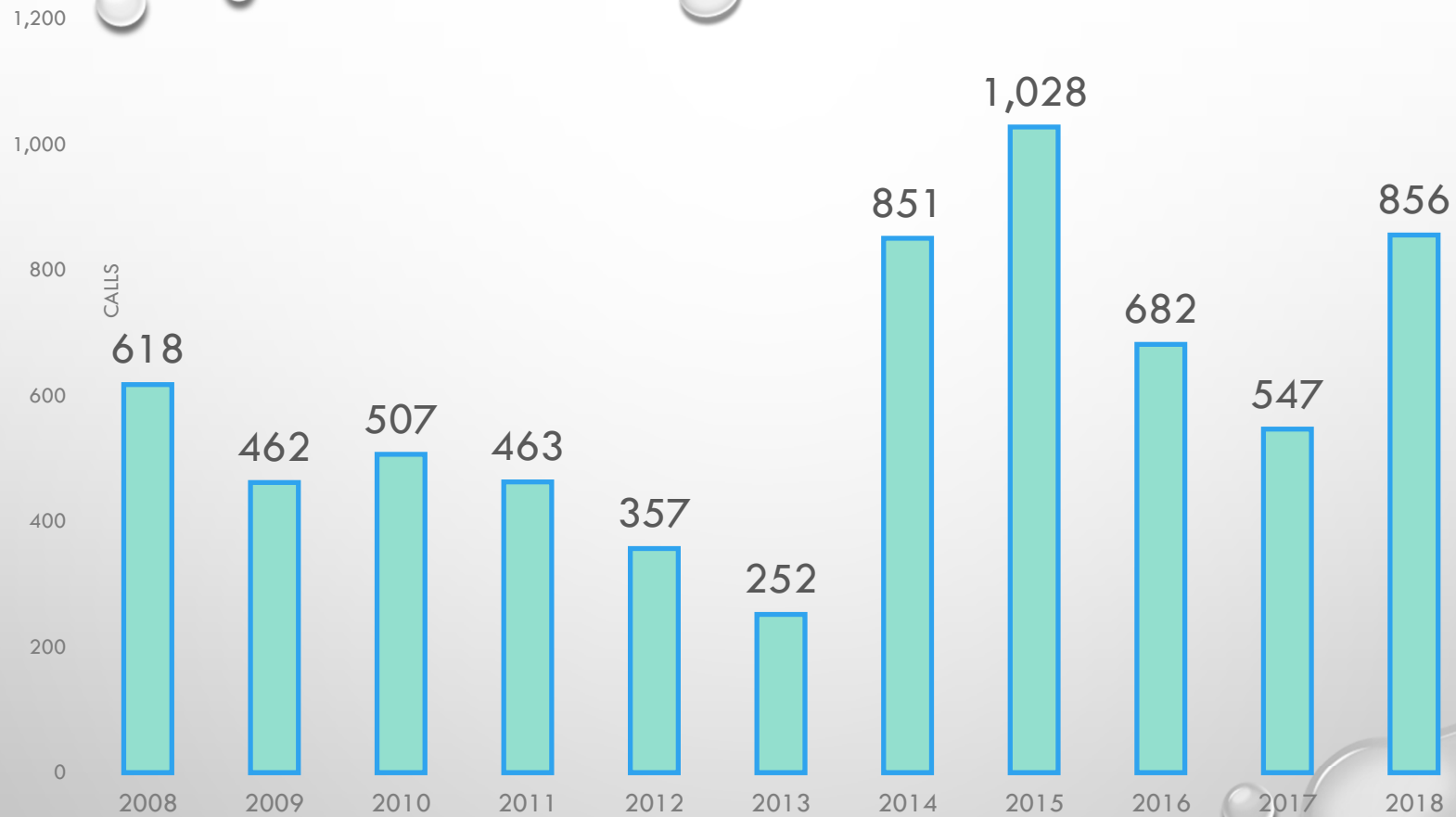
	Annual Requirement*	Cumulative Requirement (2014-2018)	Cumulative Actual Performance	Cumulative "Credits"	Goal: 1 Year Banked Credits
Leak Survey (miles)	110	495	579	84	76%
Valve Exercising (#)	1,224	5,508	6,732	1,224	100%
Hydrant Maint. (#)	900	4,050	4,703	653	73%
Sewer CCTV (feet)	55,000	247,500	332,914	85,414	155%

* 2014 requirement was reduced to 50% of regular annual requirement

Notes:

- Credits are “banked” for exceeding the standard
- Goal of 1 year “banked credits” provides cushion for the unexpected, like staffing shortages and major projects that temporarily draw staff away from preventive maintenance activities.

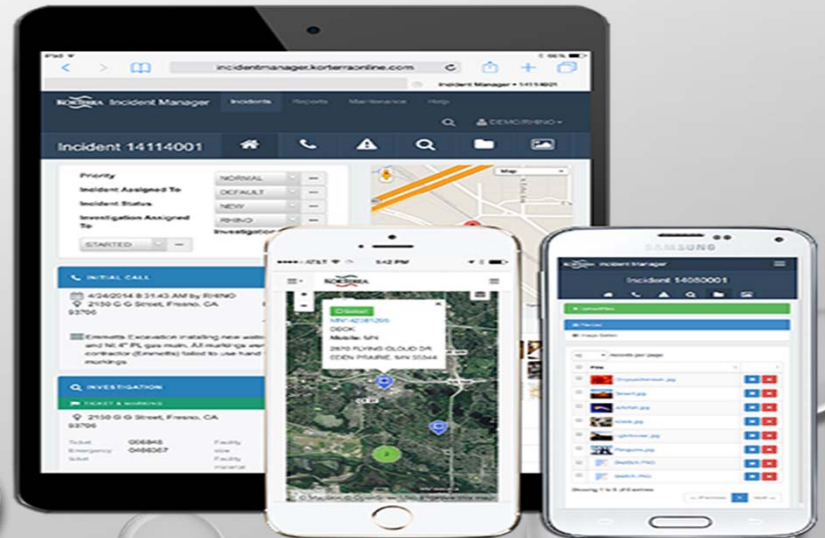
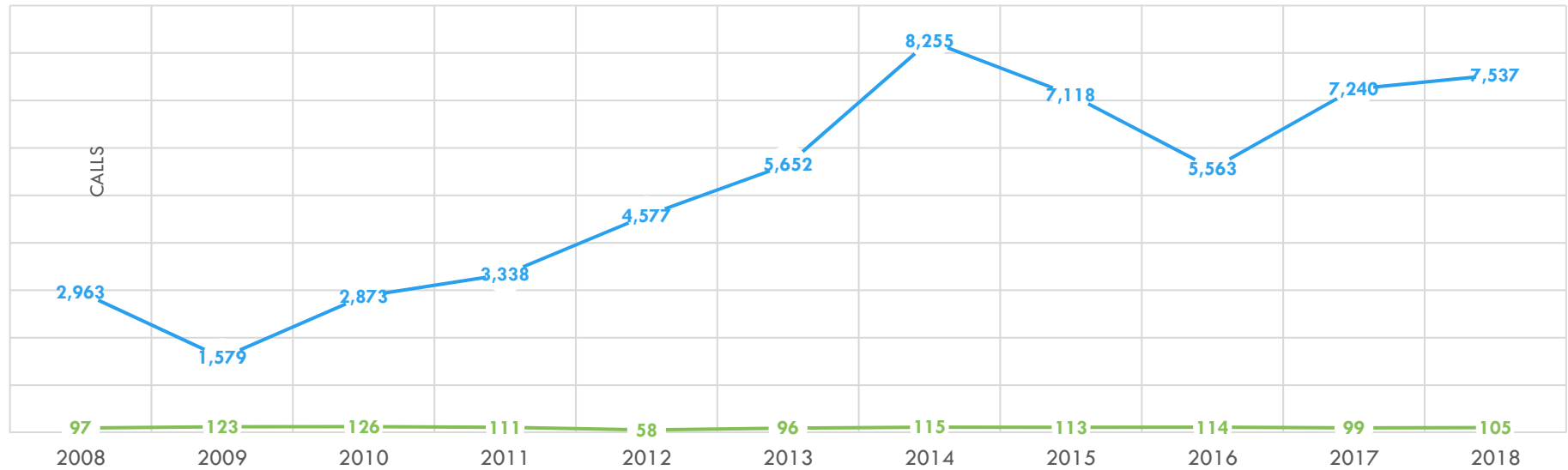
SERVICE REQUESTS AFTER HOURS TOTALS



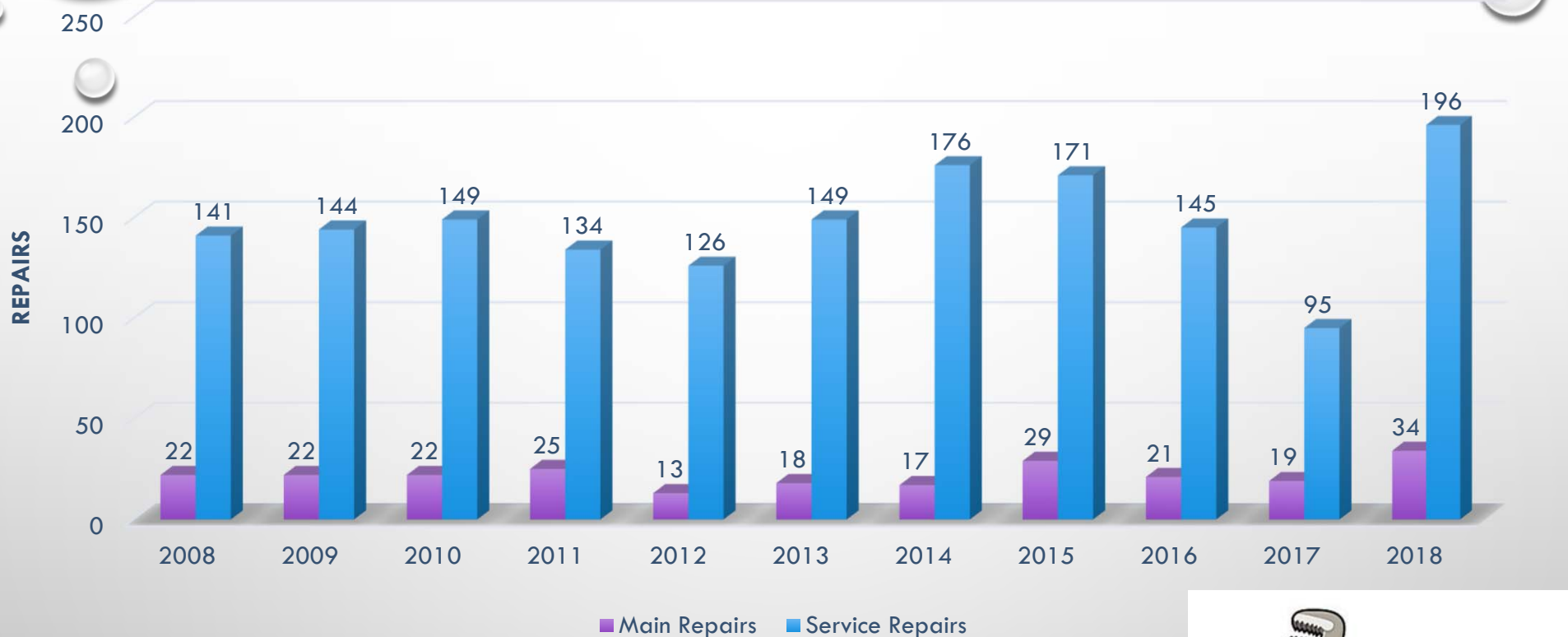
AFTER HOUR CALL OUTS / PA 1 CALLS / CURB TO HOUSE NOTICES

— Pa. 1 Call Requests

— Curb to House Leaks Issued

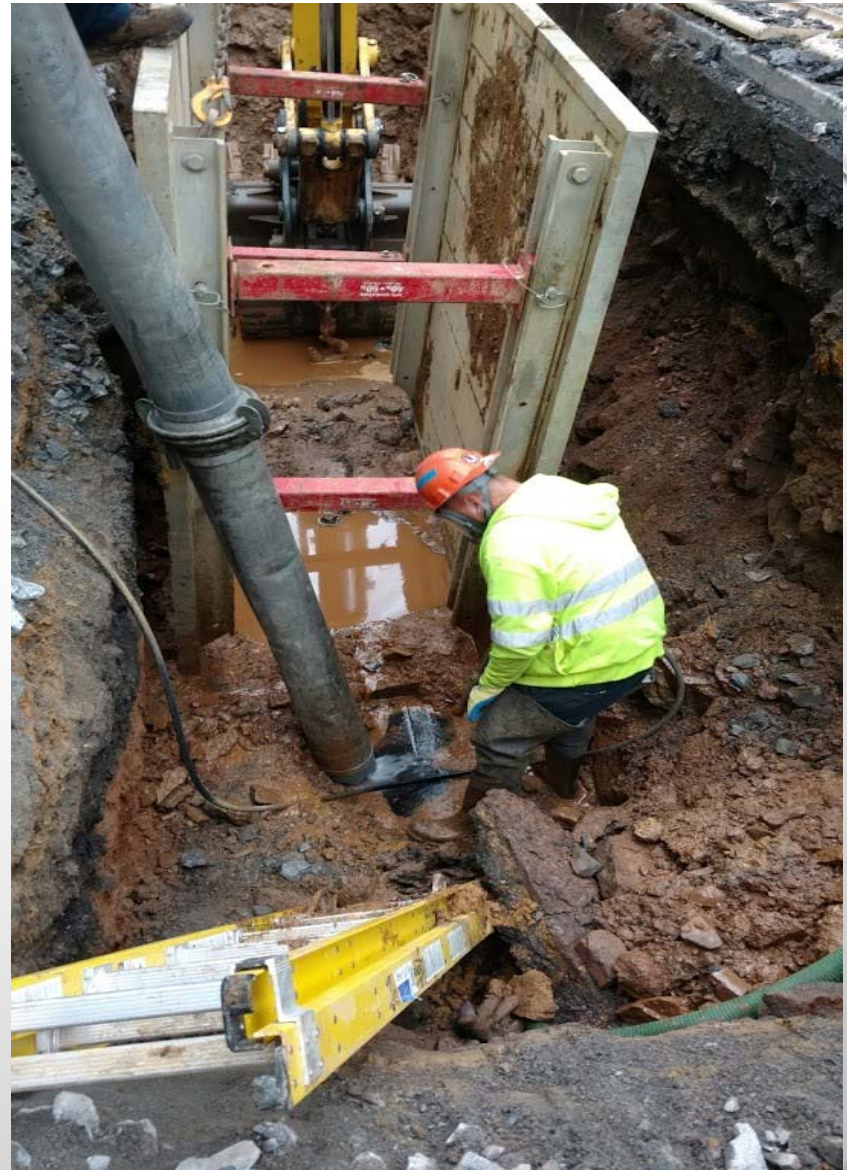


WATER MAIN / SERVICE REPAIRS



- 2018 WAS A RECORD BREAKING YEAR!






AWWA HYDRANT HYSTERIA PENNSYLVANIA STATE CHAMPS







SEWER SYSTEM FACTS

- OVER 290 MILES OF SANITARY SEWER LINES
 - 25 MILES OF THEM ARE TRUNK LINES
 - SIZES RANGE FROM 6" TO 60" IN DIAMETER
 - 7,500 SANITARY MANHOLES
 - LINE MATERIAL CONSIST OF VITRIFIED CLAY, CAST IN PLACE CONCRETE, TILE, CAST IRON, DUCTILE IRON, R.C.P, AND PLASTIC
 - LINES INSTALLED FROM THE EARLY 1920'S
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SANITARY SEWER TROUBLE ROUTES

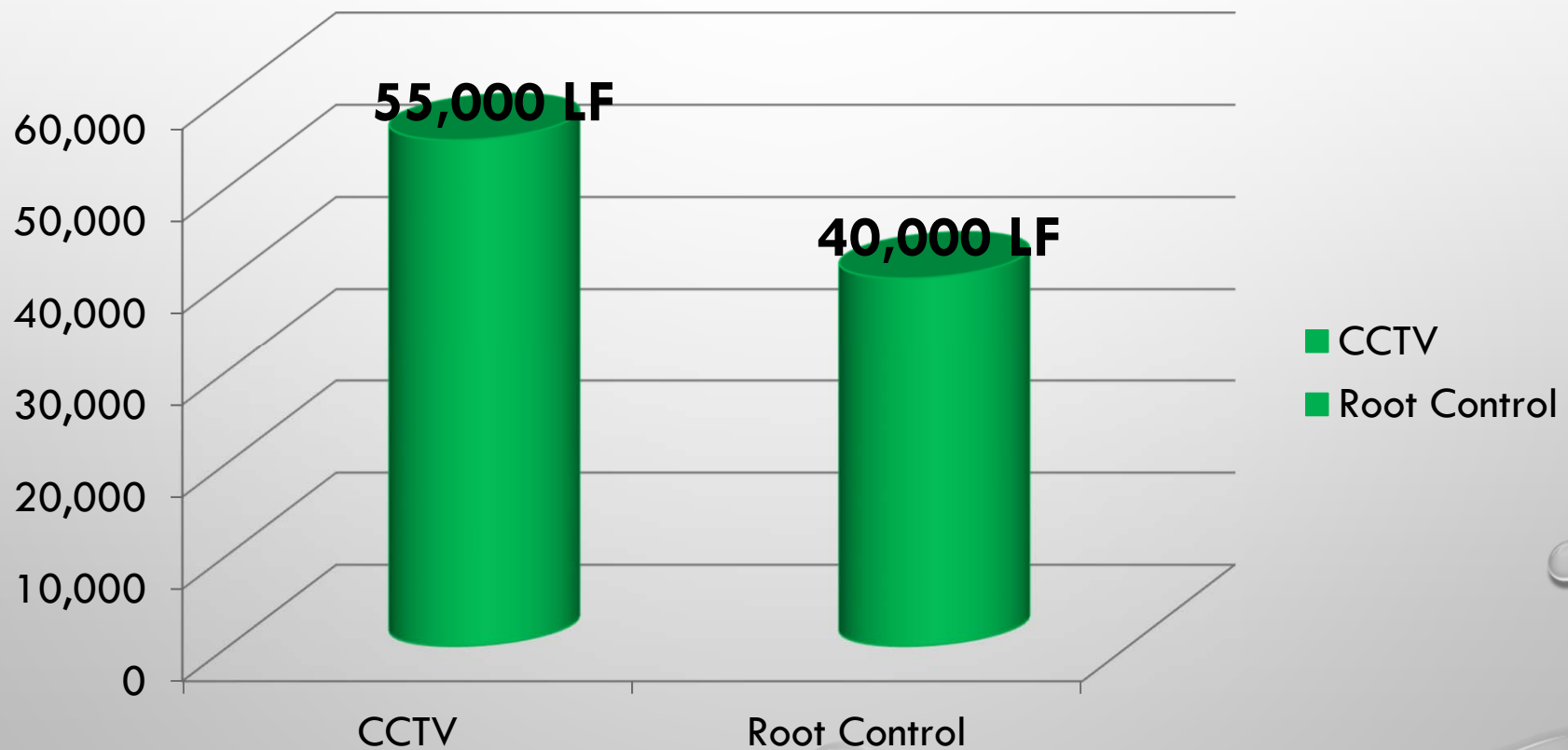
PREVENTIVE MAINTENANCE

- 252,035' REQUIRED CLEANING ON OUR ANNUAL ROUTE
- MONTHLY ROUTE OF 35,000'
- RESPOND 24X7 FOR CUSTOMER SERVICE CALLS / BACKUPS / ODOR ISSUES / SPILLS



IN ADDITION TO THE ITEMS LISTED BELOW, WE MUST ALSO CLEAN OVER
300,000 LF OF SEWER PIPE PER YEAR..

Minimal Required Per Lease



Chemically Root Treated over 331,000 feet of sewer pipe over the course of the past 5 years.

Allentown 2526 Shaler St

35B_8E 35B_8D

Circular 8inch Vitrified Clay Pipe

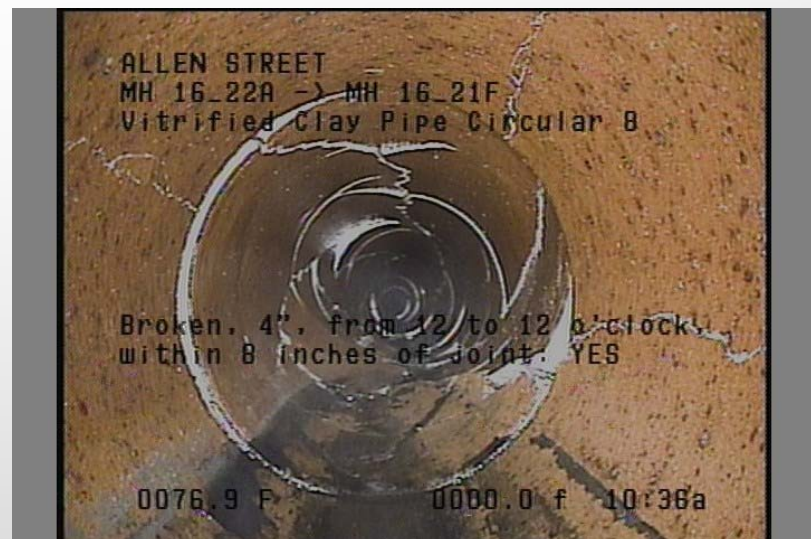
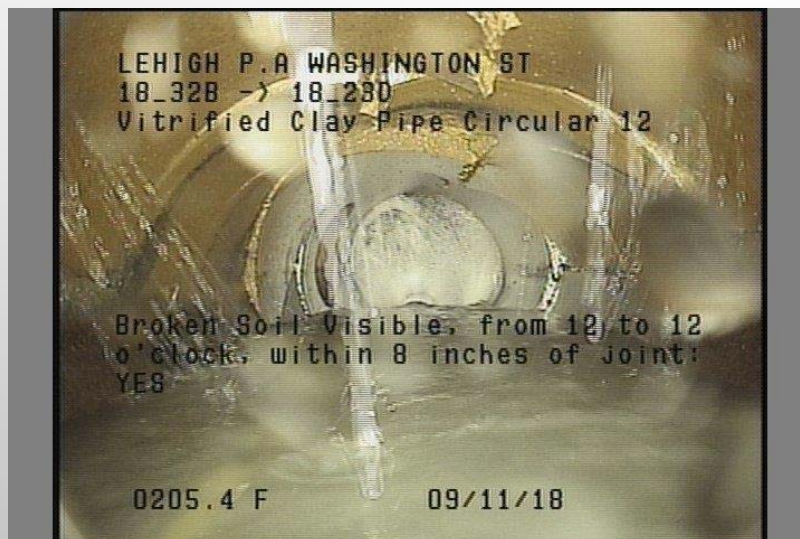
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3/1/2018

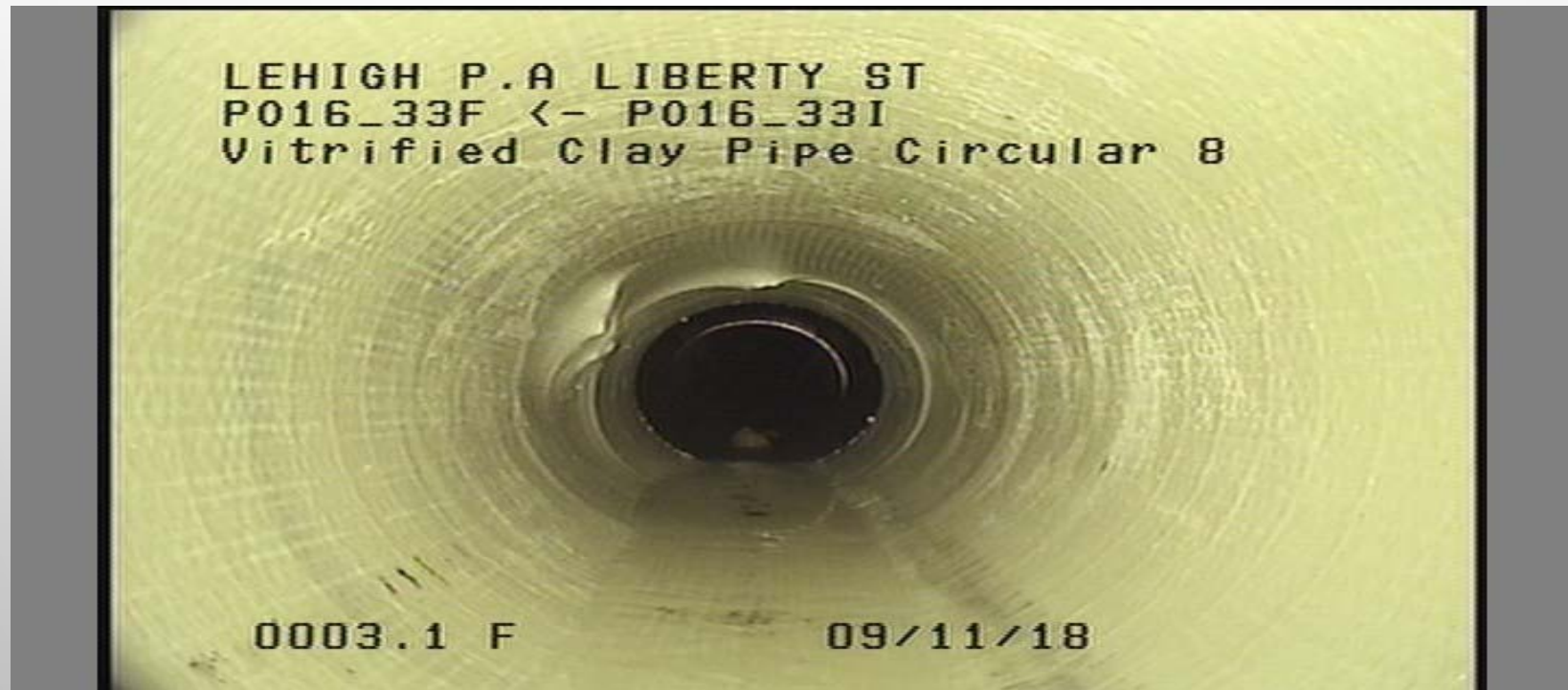
Roots Ball Joint from 7 o'clock to 3 o'clock,
80% lost, within 8 inch

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INFILTRATION ISSUES / BROKEN PIPES
FROM THE START OF THE LEASE LCA HAS COMPLETED
*45 INDIVIDUAL PIPE EXCAVATION REPAIRS
*152 TRENCHLESS REPAIRS
COSTING OVER \$896,000.00





CURED-IN-PLACE-PIPE LINING REPAIR IS A PRACTICAL, FAST AND ECONOMICAL NO-DIG SOLUTION FOR PIPES WITH PARTIAL STRUCTURAL DETERIORATION AND/OR DISTORTION, INTERIOR CORROSION, SETTLING, MISALIGNMENT AND CRACKING. IT PROVIDES JOINT LESS RENOVATION, IMPROVES FLOW CHARACTERISTICS, ADDS TO THE STRUCTURAL INTEGRITY OF THE PIPE AND VIRTUALLY ELIMINATES ALL EXFILTRATION AND INFILTRATION AT THE REPAIRED AREA





SANITARY CONSTRUCTION CREW

- REPAIR AND REPLACE MANHOLES UNDER ADMINISTRATIVE ORDER AND OTHER MAINTENANCE RELATED TASKS
 - LOCATE AND RAISE ALL MANHOLES TO PROPER GRADE PER STREET PROGRAM
 - COMPLETE ALL IN HOUSE CONCRETE RESTORATIONS FOR BOTH WATER AND SEWER SIDEWALK CUTS
 - COMPLETE EMERGENCY REPAIRS AS REQUIRED
 - INSPECT MANHOLES UNDER NASSCO GUIDELINES
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ANY QUESTIONS????

