

RADNOR TOWNSHIP

TOWNSHIP WIDE SANITARY SEWER ASSESSMENT

Draft Presentation

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TOWNSHIP WIDE SANITARY SEWER ASSESMENT

Sanitary Sewer Assets

Total Pipe Length: Approximately 750,407 LF = 142 Miles

Manholes: Approximately 3,908 Manholes

Four (4) Pumping Stations

Force Main: Approximately 5,825 LF

TOWNSHIP WIDE SANITARY SEWER ASSESMENT

Asset Evaluation Criteria

Assets were evaluated based primarily on the cycle of useful life expectancy. Replacement criteria was developed utilizing industry standard useful life projections and sound engineering practice.

TOWNSHIP WIDE SANITARY SEWER ASSESMENT

- **Ductile Iron Pipe/ Cast Iron Pipe:** **Maximum of 100 years**
- **Polyvinyl Chloride (PVC):** **Maximum 75 Years**
- **Vitrified Clay Pipe (VCP):** **Maximum 50 Years**
- **Asbestos Cement Pipe (ACP):** **Maximum 50 Years**
- **Other Pipe/Structures/Manholes:** **Maximum 50 Years**
- **Pumps/Controls/Components** **Maximum 15 Years**
- **Mechanical Systems** **Maximum 15 Years**



TOWNSHIP WIDE SANITARY SEWER ASSESMENT

Assets Exceeding Their Useful Life

Total Pipe Length: Approximately 345,255 LF = 46% of pipelines

Manholes: Approximately 1,680 Manholes

Four (4) Pumping Stations

Force Main: Approximately 3,155 LF

TOWNSHIP WIDE SANITARY SEWER ASSESMENT

Pumping Stations

King of Prussia PS	1,000 gpm	60HP	600,000 GPD	ADF Cap.
Woods Lane Ejector Station		33 Homes	925 lf FM	
Hermitage Ejector Station		40 Homes	1,410 lf FM	
Ithan Mills Ejector Station		52 Homes	820 lf FM	

TOWNSHIP WIDE SANITARY SEWER ASSESMENT

Replacement Costs For Capital Planning

Pipelines	\$43,399,410
Manholes	\$5,040,000
Pumping Stations	\$867,700
Force Mains	\$260,476
Total Replacement Cost	\$49,567,586

TOWNSHIP WIDE SANITARY SEWER ASSESMENT

Televisual Inspection

- Pipelines Not Exceeding Useful Life
- Exceeding 20 Years In Age
- Completed over a 10 year period

Approximately 362,348 LF

TOWNSHIP WIDE SANITARY SEWER ASSESMENT

Televisual Inspection Cost

- **It is recommended that this evaluation be completed at a maximum over a 10 year period**
- **Total Footage of Televisual Inspection = 362,348 lf**
- **Approximately \$2.50/LF Total Cost \$905,870**