

Ronald Wastewater District - Sanitary Sewer Rehabilitation
Project Summary: Briarcrest CIP No. 2 (10-B)

Neighborhood: Briarcrest

Permits: City of Shoreline Right-of-Way Permit

Project Areas: NE 147th St between 15th Ave NE and 17th Ave NE
NE 146th St and 17th Ave NE
NE 145th St between 17th Ave NE and 20th Ave NE

Condition Assessment: Through the District's ongoing maintenance, TV inspection personnel assess the entire system once every six to eight years, noting the various types and severity of defects in the sewer mainlines. Pipe segments in the Briarcrest CIP No. 2 were selected for replacement due to root intrusion, pulled joints, broken pipe, and evidence of infiltration and inflow (I/I).

Cost/Construction:

Engineer's Estimate: \$596,080

Contractor's Bid Price: \$496,040

Change Orders (2): \$100,478.06

Final Construction Cost: \$554,631.12

Cost per lineal foot main line: \$304.74 per LF

Engineer: Scott Christensen, P.E., Craig Christensen, CHS Engineers, LLC

Inspector: David Jensen, CHS Engineers

Contractor: Landis & Landis Construction, LLC

Notes: All estimates, prices, and costs are without tax.

Replacement/Rehabilitation:

8" Concrete Sanitary Sewer Pipeburst with 8" HDPE: 1,820 LF

Cleanouts Installed: 34

Private Side Sewers Replaced (4" HDPE): 19

Private Side Sewers Replaced (6" HDPE): 9

Additional Side Sewer Connections/Replacements: 14

Manholes Rehabilitated (Frame, Cover and Neck): 2

Manholes Rehabilitated (Neck Only): 1

Side Sewer Stubs Replaced: 2

Private Replacement/Participation:

Number of private side sewers in project: 34

Number of property owners that signed up (signed ROE): 27

Number of side sewers not needing replacement (per video): 1

**Ronald Wastewater District - Sanitary Sewer Rehabilitation
Project Summary: Briarcrest CIP No. 2 (10-B)**

House #	Street	ROE	Old Material	New Material	Replacement		Size	Notes
					Side Sewer	Stub (to edge of R/W)		
1512	NE 147 th St	Y	PVC/ABS	HDPE	X		4"	SS replaced
1517	NE 147 th St		Conc/PVC	HDPE		X	6"	Part replaced then connected to ex. 6" PVC
1523/1523A	NE 147 th St	Y	Conc	HDPE	X		4"	SS replaced
1520	NE 147 th St	Y	Unknown	HDPE	X		4"	Mostly replaced then connected to unknown ex. pipe
1528	NE 147 th St	Y	Unknown	HDPE	X		4"	Two (2) separate SS connections made to front (ex. 4" ABS/corrugated) and side of house
1529	NE 147 th St	Y	Unknown	HDPE	X		4"	SS replaced
1533	NE 147 th St	Y	Unknown	HDPE	X		4"	SS replaced
1532	NE 147 th St	Y	AC	HDPE	X		4"	SS replaced
1539	NE 147 th St		Unknown	HDPE	X		4"	Part replaced then connected to ex. 4" PVC
1546	NE 147 th St		Unknown	HDPE		X	6"	Part replaced then connected to ex. 6" PVC
1548	NE 147 th St	Y	Conc/ABS	HDPE	X		4"	SS replaced
1545	NE 147 th St	Y	Unknown	HDPE	X		4"	SS replaced
1550	NE 147 th St	Y	Conc	HDPE	X		4"	SS replaced
14707	17 th Ave NE	Y	Unknown	HDPE	X		4"	SS replaced
1551	NE 147 th St	Y	Unknown					Not replaced
1553	NE 147 th St	Y	Unknown					Not replaced
14601	17 th Ave NE	Y	Unknown	HDPE	X		4"	Mostly replaced then connected to unknown ex. pipe
1550	NE 146 th St	Y	Unknown	HDPE	X		4"	SS replaced

**Ronald Wastewater District - Sanitary Sewer Rehabilitation
Project Summary: Briarcrest CIP No. 2 (10-B)**

House #	Street	ROE	Old Material	New Material	Replacement		Size	Notes
					Side Sewer	Stub (to edge of R/W)		
1546	NE 146 th St	Y	Conc	HDPE	X		4"	SS replaced
14521	17 th Ave NE	Y	PVC					Not replaced
1551	NE 146 th St	Y	Conc	HDPE	X		4"	SS replaced
14500A	15 th Ave NE	Y	PVC	HDPE	X		6"	Mostly replaced then connected to unknown ex. pipe
1530	NE 146 th St	Y	Conc	HDPE	X		6"	SS replaced
1750	NE 145 th St	Y	AC	HDPE	X		6"	SS replaced
1750	NE 145 th St	Y	AC	HDPE	X		6"	SS replaced
1750	NE 145 th St	Y	AC	HDPE	X		6"	SS replaced
1728	NE 145 th St	Y	Conc or AC	HDPE	X		4"	SS replaced
1722	NE 145 th St	Y	Conc/Clay/PVC	HDPE	X		4"	SS replaced
1710/1712	NE 145 th St	Y	Unknown	HDPE	X		4"	SS replaced
1710/1712	NE 145 th St	Y	Clay	HDPE	X		6"	SS replaced
1700	NE 145 th St	Y	Clay	HDPE	X		4"	SS replaced