

**Ronald Wastewater District - Sanitary Sewer Rehabilitation
Project Summary: Echo Cove Bypass (10-A)**

Neighborhoods: Echo Lake

Permits: City of Shoreline Right-of-Way Permit

Project Areas: Aurora Ave N between N 192nd St and N 195th St

Condition Assessment: The District conducted a special area study to identify areas of increased flow due to land use changes. This information was entered into the District’s hydraulic model which predicted the lines that would be over capacity. The Echo Lake trunk was upsized to avoid overflows into Echo Lake.

Cost/Construction:

Engineer’s Estimate: \$440,340 (w/o tax)

Contractor’s Bid Price: \$490,800 (w/o tax)

Change Orders: N/A

Final Construction Cost: \$380,311 (w/o tax)

Cost per lineal foot main line: \$452.75 per LF

Engineer: Scott Christensen, P.E., Darrel Frame, P.E., CHS Engineers, LLC

Inspector: David Jensen, CHS Engineers

Contractor: Buno Construction, LLC

Replacement/Rehabilitation:

18” Ductile Iron Sanitary Sewer: 840 LF

Manholes Installed (48”): 5

Side Sewers Replaced: 1

Manholes Replaced (60” saddle): 1

Private Replacement/Participation:

Number of private side sewers in project: 1

Number of property owners that signed up (signed ROE): 1

House #	Street	ROE	Old Material	New Material	Replacement		Size	Notes
					Side Sewer	Stub (to edge of R/W)		
19502	N 195 th St	ESMT	Unknown	PVC	X		4”	SS replaced