King County
Department of
Natural Resources and Parks
**Wastewater Treatment Division**

# HIDDEN LAKE
Sewer Improvement Project

**From 2006-2009, King County rebuilt ageing sewer infrastructure and provided needed capacity to protect public health, limit overflows to the Puget Sound, and to provide safe, reliable service for the next 50 years in western Shoreline.**

## Hidden Lake Sewer Improvement Project
# New Underground Storage Pipe

### WHAT KING COUNTY BUILT

- A 500,000-gallon underground storage pipe that temporarily stores wastewater during large storms
- Underground odor and flow control structures
- About 1,000 feet of sewer pipe replaced in the streets around the park
- Additional capacity added to the city's stormwater detention pond

### WHY THIS PROJECT WAS NEEDED

- Storing wastewater helps to limit overflows to the Puget Sound, protecting public health and the environment
- Odor control facilities limit impacts to neighbors
- Additional stormwater pond capacity helps to limit flooding during large storms

*Permeable pavers allow maintenance vehicles to access facilities but maintain permeability to rainwater.*

*The 640-feet-long underground storage pipe was constructed with 30-ton concrete segments.*

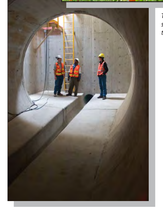
*The only above ground structure is disguised as a tree snag.*

### HOW LONG DID IT TAKE?

Construction began in June 2006. The underground storage pipe was installed by fall 2006 and associated facilities completed by early 2007.

### WHERE ARE ALL THE FACILITIES?

To limit impacts to park users, all facilities are located underground. The only above-ground structure is an odor control stack located at 3rd Avenue Northwest. To help the stack fit into its surroundings, it is disguised as a tree snag.



*County staff tour the completed pipe before operations begin.*

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## Hidden Lake Sewer Improvement Project
# Boeing Creek Trunk Sewer Replacement

### WHAT KING COUNTY BUILT

- Replaced about 1,200 feet of Ronald Wastewater District sewer pipe
- Replaced about 12,000 feet of county sewer pipe
- Replaced about 6,500 feet of water mains for Seattle Public Utilities
- Repaved streets and widened asphalt shoulder in some areas

### WHY THIS PROJECT WAS NEEDED

- New sewer pipe to replace system installed over 40 years ago and needing repair in many sections
- Increased sewer conveyance capacity needed in area
- Design to limit odor problems in some areas
- New, larger capacity water pipes to replacing ageing pipes and provide improved residential and fire service

### HOW LONG DID IT TAKE?

Construction began in August? 2006 at the county's Richmond Beach Pump Station. By summer 2008, the trunk sewer work was completed and area parks and roads were restored.

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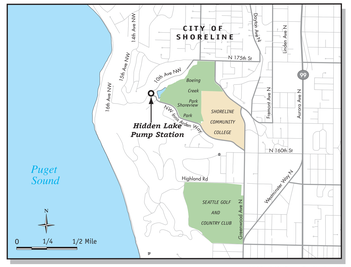
## Hidden Lake Sewer Improvement Project
# Pump Station Replacement

### WHAT KING COUNTY BUILT

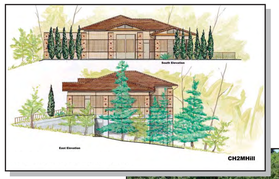
- A new Hidden Lake Pump Station, with pumping capacity of 6.8 mgd
- A cost-effective design that helps the building blend in with the neighborhood
- In winter 2008, landscaping with mostly native plants completed




*Hidden Lake Pump Station Location*

### WHY THIS PROJECT WAS NEEDED

- New pump station to replace facility built in the early 1960's that did not meet current design standards, including noise and odor control
- New pump station to provide safe, reliable service
- Increased capacity to limit overflows to the Puget Sound28




*The pump station and surrounding landscaping are designed to blend in with the surrounding residential neighborhood.*

*New Pump Station Landscaping Plan*

### HOW LONG DID IT TAKE?

Construction began in August 2006 at the county's Richmond Beach Pump Station. By summer 2008, the trunk sewer work was completed and area parks and roads were restored.

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