

# Welcome



# Kennydale Lakeline Sewer System Improvement Project Open House



*Scan QR code to visit the project website  
[rentonwa.gov/kennydalelakeline](https://rentonwa.gov/kennydalelakeline)*

**Thank you for coming and being active partners in this project!**

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# Why do we need this project?



## The Lakeline is nearing the end of its useful life

The Lakeline sewer system, constructed in 1972, serves 57 homes and Kennydale Beach Park.

The city has maintained and repaired the system to keep it operating as long as possible, but it is nearing the end of its useful life and requires replacement.



*Lakeline cleaning and inspection.*



*Barge and equipment used for Lakeline cleaning/inspections.*

## Previous inspection and condition assessment confirmed need for replacement

The city conducted an evaluation of the Lakeline in 2016 which revealed a partial blockage. An emergency cleaning and inspection project followed in 2018. The city was unable to clean and inspect approximately 20% of the Lakeline due to the many bends, partial blockages, and lack of access points in the sewer system.

The cause of the blockages and the condition of sections of pipe remain unknown.

Following the conditions assessment, the city analyzed alternatives and selected a land-based grinder pump station as the best option to advance into design.



*Corroded piece of the Lakeline pipe.*

# How are we solving this problem?



*Depiction of typical land-based system elements once installed.*

## Land-based system

A new land-based grinder pump system was chosen as the preferred alternative for several reasons:

- Significantly improves accessibility for maintenance and repairs.
- Lower project cost and impact to utility ratepayers.
- Less risk of damage to the environment and water quality during construction and future operations.
- State and federal permitting regulations that require prioritizing reasonable land-based solutions.

## We've listened to your feedback!

- A central electrical system will power the grinder pump stations.
- The central electrical system will include a backup generator.
- The city will provide maintenance of the grinder pump station, force main and electrical system of the grinder pumps.
- Remote monitoring will be integrated alongside standard audible and visual alarms.
- Some drainage and pavement issues will be addressed as part of the construction process.
- Decorative access covers will be installed where appropriate.

# Project Timeline



2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027

Phase 1 - Assessment and Evaluation Phase 2 - Emergency Project Phase 3 - Alternatives Analysis Phase 4 - Preliminary Design Phase 5 - Final Design Phase 6 - Construction

Planning and data collection

Field survey, modeling, lift station pump replacement, measurement of pipe thickness, and emergency project

Property visits to help with Lakeline evaluation

Notifications to property owners of field surveys and Lakeline work

Project update mailer sent out

Alternatives analysis and selection of grinder pump system

Preliminary design engineering, Basis of Design Report

Collecting feedback from property owners

Responding to questions from property owner meetings

Incorporating property owner feedback into developing the scope for final design

Project update mailer sent out

Final design engineering

Project open house

Permitting

Property owner easement coordination

Construction

**Legend**

- ★ We are here
- Project phases
- ◆ Outreach milestones

*Project timeline is subject to change*

Construction timeline is currently anticipated to be 12 to 18 months total, and will be confirmed as a contractor is selected.

# What's happening next?



You'll be seeing more of us in the neighborhood.

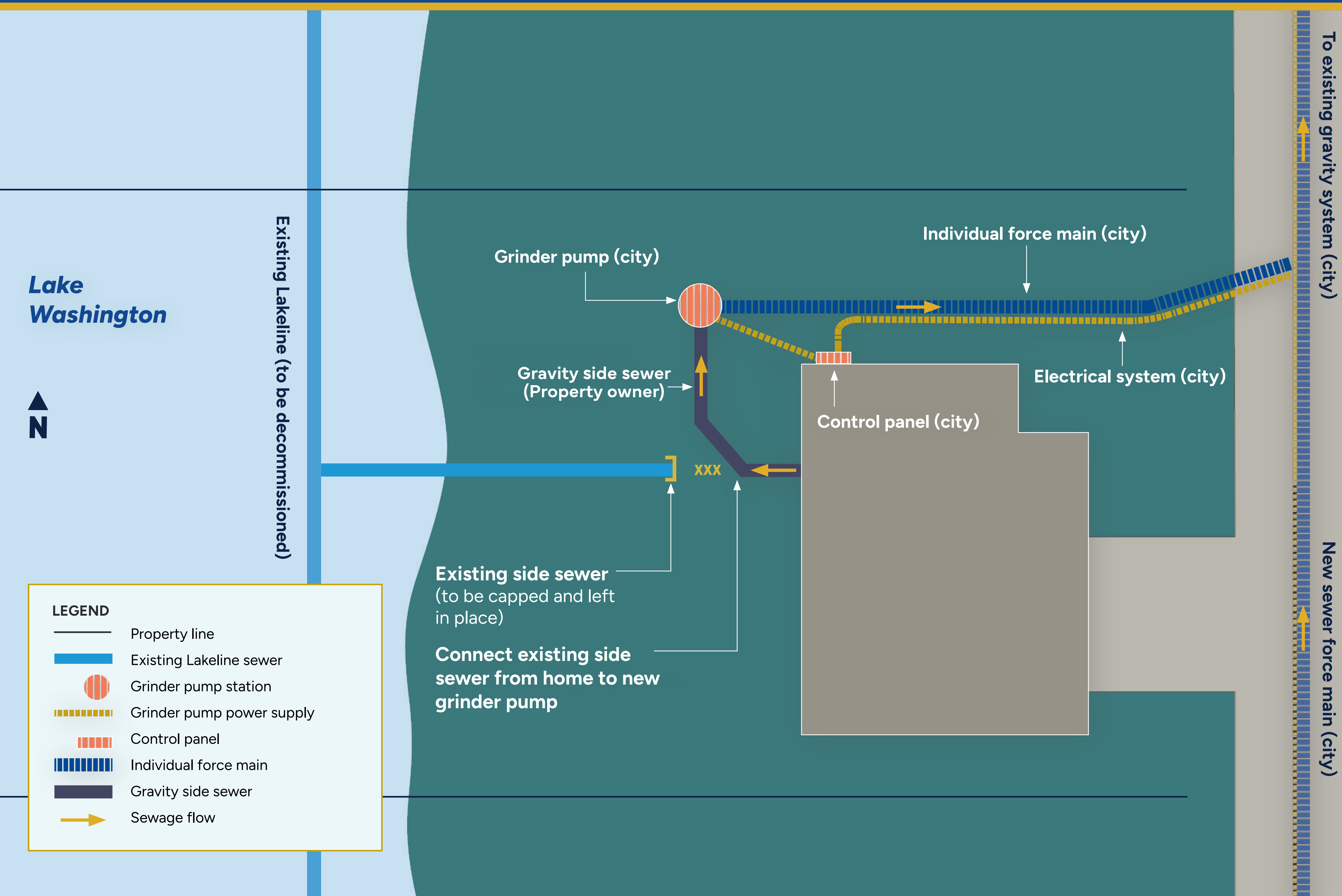
## Some things we have planned next include:

- **Conducting soil investigations**, including soil borings to collect samples within the public right-of-way and on King County properties.
- **Visiting the project sites to confirm and document existing conditions.** Please note, we will not enter your property without arranging for your permission in advance.
- **Collecting supporting details for final design** (such as types of plants/vegetation, decking materials, and walkway materials that may require restoration) and documenting any changes in property conditions since our previous visits.
- **Meeting with you individually** to discuss the details of your property, easements, and answer questions about the project.



*Drill rig used to obtain soil borings.*

# Example grinder pump system



## How does it work?

- Wastewater from the home will be stored in the grinder pump tank. The tank has been sized to accommodate 24 hours of storage.
- Once wastewater reaches a set level in the tank, the pump will turn on and discharge into an individual force main.
- Effluent will be collected in a common force main for discharge into the city's gravity wastewater system in Lake Washington Blvd. N.

*This graphic is for illustration purposes only.*

## Grinder pump terminology

**Grinder pump wet well:** A tank that collects sewage from the home until the pump is triggered to discharge to the force main.

**Grinder pump:** A pump that breaks down debris for discharge into the small diameter force main.

**Force main:** A small diameter pressurized pipe that conveys sewage to a gravity main at a higher elevation.

**Electrical:** Power will be provided by the city's new centralized system that will include a backup generator.

**Control panel:** The brain of the operation that reads the level in the tank, turns on the pumps, and monitors for errors.

**Alarm system:** Should there be a malfunction, the control panel will call city maintenance crews to come fix the problem. An audible and visual alarm will also alert property owners to an issue.

# What is a grinder pump station?



## Grinder pump station equipment

- A grinder pump system consists of a wet well, grinder pump, control panel, and piping to connect it all together.
- The system connects to an external power system, with a central back-up generator.
- A warning light, audible alarm, and cellular alert will inform property owners and city staff when maintenance is needed.
- The city will own, operate, and maintain the grinder pump system. This includes preventative maintenance, planned corrective maintenance, and 24 hour/day emergency maintenance.

## How to care for a grinder pump

- Don't flush grease, glass, metal, shells, rocks, diapers, rags, cloth, plastic, gasoline, motor oil, flammable material, or explosives.
- Send clean water through the grinder pump system prior to leaving your home unoccupied for longer than several weeks.
- Keep the grinder pump and control panel easily accessible for maintenance.



# Your Property



## What is an easement?

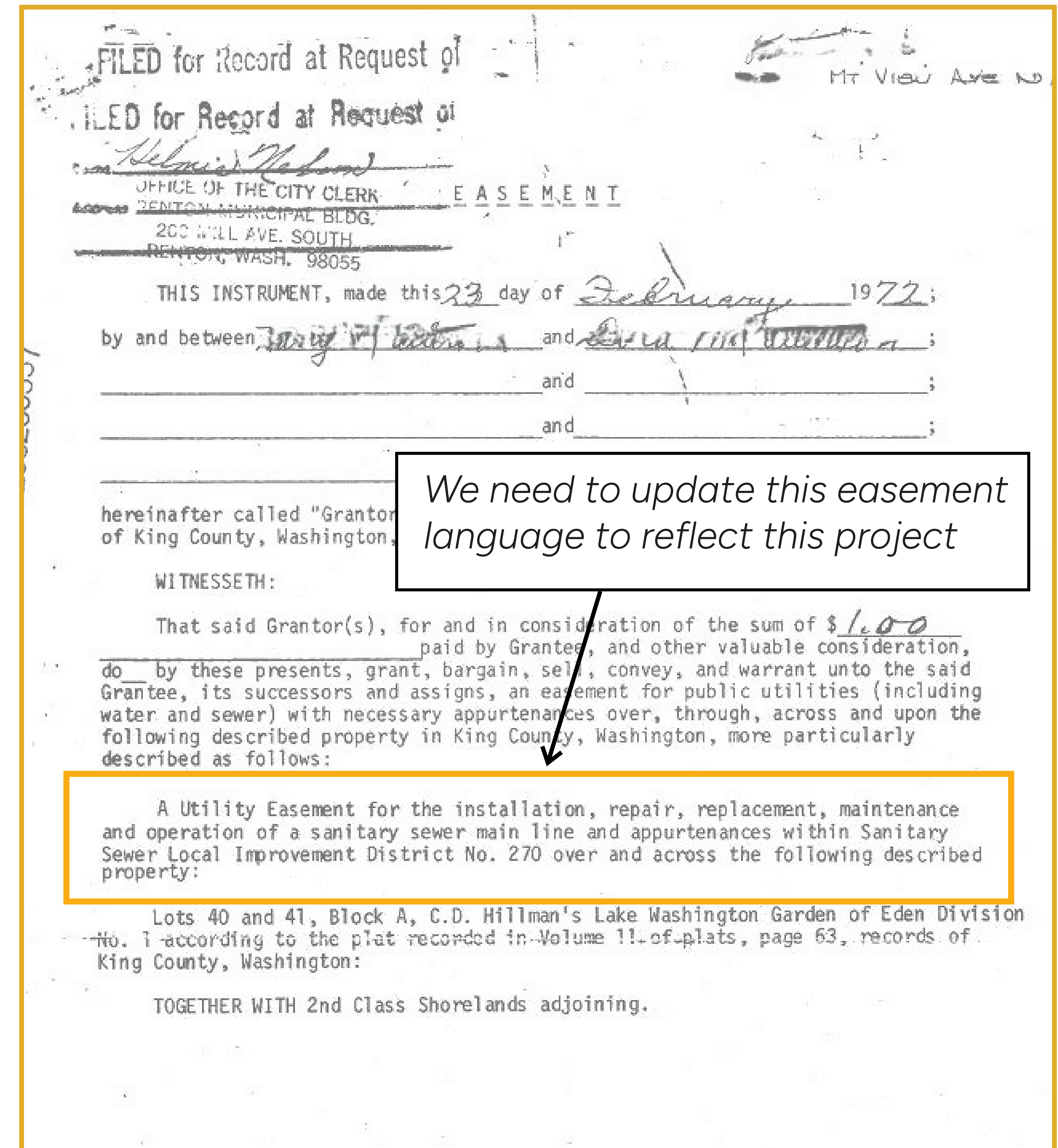
An easement is a property right that allows a person or entity to use another person's property for a specific purpose. It does not grant ownership of the land, but rather a right to use it only in the ways described in the easement document. Easements are commonly used for utilities, access roads, and pathways.

Most properties have existing blanket easements to the city for the Lakeline. The easement is what allows the city to operate, maintain, repair, and replace the Lakeline system. The current easements are outdated, and need to be revised to reflect the new system.

## Why does the city need to amend the existing easement?

In order to relocate and maintain the new system, which will ensure continued service for you and the community, an amendment to the existing easement is needed.

The revised easements will have more accurate, current language with clearer rights to protect both the property owner and the city.



Existing easements will need to be updated to reflect the new system.



# Your Property



## What is the easement process?

**1**

The city has developed the new easement documents.

We are here



**2**

The city's team will meet individually with owners to discuss the new documents and answer questions. This is currently scheduled for summer and fall of 2024.

**3**

Every property owner will have a chance to review the documents, including the city reimbursing up to \$750 for your own independent legal review.

**4**

Once agreed upon, the new easements will be signed, notarized, and recorded with King County.