

Project 19-2 2020 Water Main Replacement (Manhattan CI Replacement)



Highline Water District maintains several small diameter cast iron (CI) water mains in the general location of 2nd Place SW between SW 171st St and SW 176th St in the Maple Lane subdivision of Normandy Park. Typically, CI mains are not the District’s highest priority for replacement; however, these unlined, 6-inch diameter pipes were constructed in the late 1950’s by the Normandy Park Water Company. Over the years, the inside of unlined pipe corrodes, and the buildup of rust deposits (tubercles) potentially causes flow restrictions and water quality issues. This area is one of the few locations of record where the District has unlined, cast iron pipes still in service.

Most of these pipes are within easements in undeveloped, sensitive areas with limited valving and redundancy. One pipe crosses under a seasonal stream tributary to Miller Creek. Many pipes are on private property under steep banks, trees or retaining walls. The District experienced previous ruptures and the location complicates repairs due to

limited access.

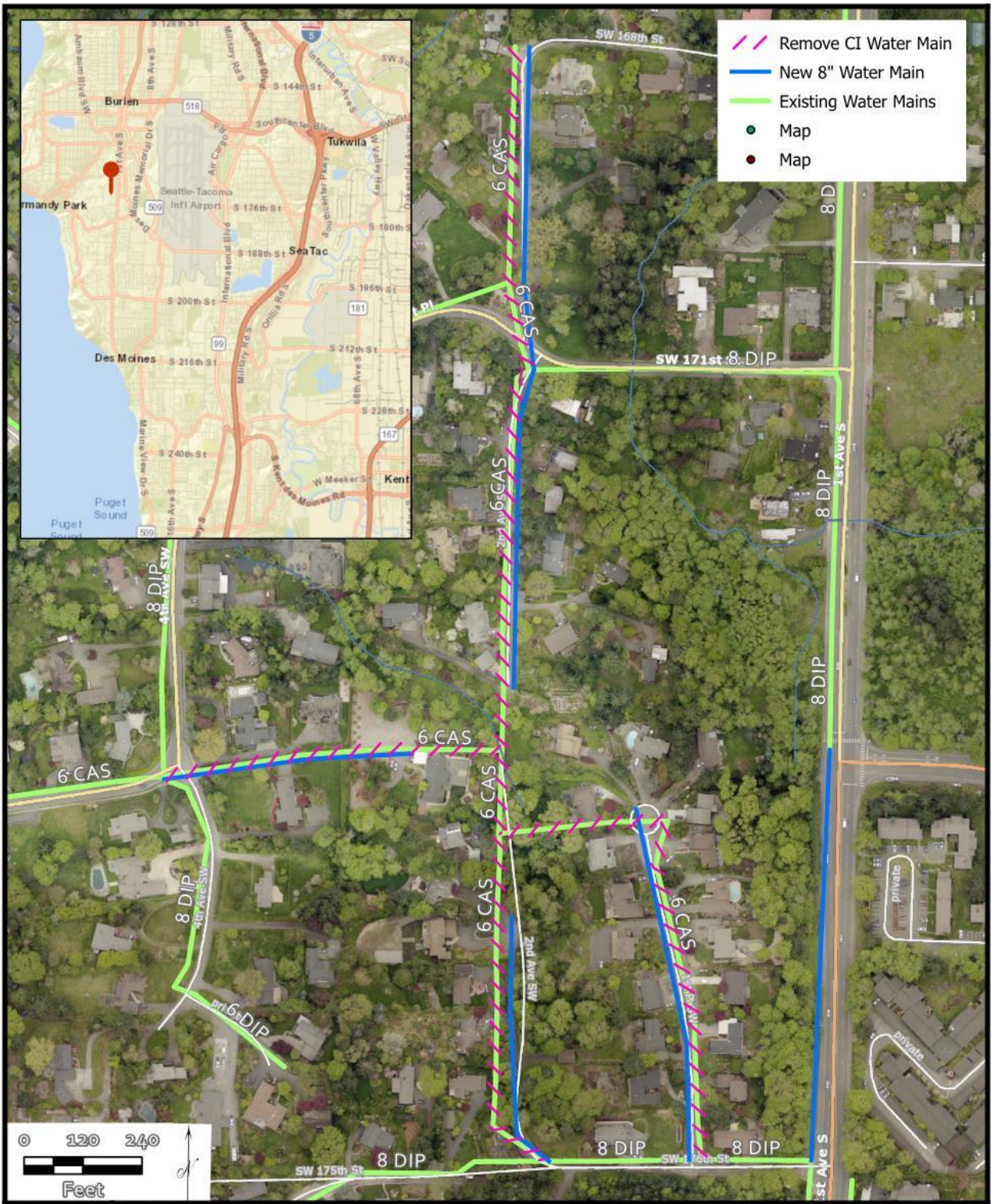
The total footage of pipe requiring replacement is approximately 5,400 LF. Due to complexity of access, the District must first study alternatives to determine the most feasible method replace the main. Solutions may include trenchless technologies, like pipe bursting or directional drilling, or more traditional open cut methods.

In 2020, the District began the planning effort. The District selected Carollo Engineers to perform the alternative analysis. They completed their work in early summer and provided several recommendations for design concepts.

Due to Covid related concerns, the addition of two unscheduled city projects to the CIP, and the goal of not raising water rates in 2021, the District delayed the design and construction efforts of the project to 2022. Because of several unscheduled projects developing in 2021, including Huntington Park, SR509 Phase 2, and King County Lake to Sound Trail all requiring replacement work, this project will be delayed to beyond 2023. A detailed budget will be prepared in subsequent years and the project number will be updated to reflect the future



CIP.



DATE:
11/12/2020

SCALE:
AS SHOWN



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Kent, WA 98032
Serving the Southwest Metropolitan Area since 1946

**19-2 Manhattan Cast Iron
Water Main Replacement**

Sheet:
1 of 1