



**CITY OF KIRKLAND**  
**Department of Public Works**  
123 Fifth Avenue, Kirkland, WA 98033 425.587.3800  
[www.kirklandwa.gov](http://www.kirklandwa.gov)

---

**MEMORANDUM**

**To:** Kurt Triplett, City Manager

**From:** Aaron McDonald, P.E., Senior Project Engineer  
David Snider, P.E., Capital Projects Manager  
Kathy Brown, Public Works Director

**Date:** April 25, 2019

**Subject:** 3<sup>RD</sup> STREET WATERMAIN PROJECT—PRE-BID UPDATE

**RECOMMENDATION:**

City Council receives an update about the 3<sup>rd</sup> Street Watermain Project (Project), which is soon to be advertised for bids.

**BACKGROUND DISCUSSION:**

Kirkland operates its own domestic water utility, the genesis of which began in 1953. The City assumed responsibility for the operation of the water system constructed by the federal government prior to World War II to serve the communities of Houghton and Kirkland. In general terms, Kirkland's water utility serves nearly all areas of the City south of N.E. 124<sup>th</sup> Street and east of Juanita Bay. The northern areas of Kirkland not served by the City's utility are served by the Northshore Utility District and the Woodinville Water District.

In 2015, the City adopted its legally-required six-year update of its *Comprehensive Water System Plan* (Plan). The Plan contains information such as water demand for the current twenty-year timeframe, fire flow calculations to determine adequate water supply and pressure, and system deficiencies. From the Plan, a prioritized list of recommended projects was identified and used to develop the water utility's capital improvement program. Replacing aged and sub-standard water system infrastructure is an on-going priority to ensure a safe, reliable, and resilient water supply. Replacing the 3<sup>rd</sup> Street watermain is one such priority project and is in the 2019-2024 Capital Improvement Plan.

This Project originally was in the scope of work for the 2017 Water System Improvements, which consisted of three projects: 4<sup>th</sup> Street watermain replacement (WA-0154), Kirkland Way watermain replacement (WA-0161), and the 3<sup>rd</sup> Street watermain replacement (WA-0153). Both the 4<sup>th</sup> Street and Kirkland Way projects were completed and accepted by the City Council on December 11, 2018. Staff did not proceed with the 3<sup>rd</sup> Street project for three reasons. One was that during pre-construction utility locates, an abandoned utility line was discovered that was not factored in to the then-final engineering drawings. The second is that a new condominium project was soon to be under construction on 3<sup>rd</sup> Street north of Central Way that would have required cutting into the new water line and its related new paving shortly after the 3<sup>rd</sup> Street project would have been complete. Finally, certain construction progress

issues associated with the 4<sup>th</sup> Street and Kirkland Way improvements meant that the contractor would not be able to begin the 3<sup>rd</sup> Street project until winter. This segment of 3<sup>rd</sup> Street has some considerably steep grades, which could have led to construction difficulties during the rainy months. Given all these circumstances, staff determined that it should not begin the 3<sup>rd</sup> Street work at that time. The 3<sup>rd</sup> Street schedule was removed from scope of work for the 2017 Water System Improvements Project as part of a change order.

Staff also anticipated that the 3<sup>rd</sup> Street project would require a budget increase to pay for the cost of some reengineering required because of the discovery of the abandoned utility line. With the adoption of the 2019-2024 CIP, a revised budget for this Project was established at \$875,000.

Now, with an engineer’s estimated construction cost of \$970,300, including contingency, staff has identified a potential project funding shortfall of \$331,800 (see Table 1, below). The actual shortfall, if any, won’t be known until bids are submitted and opened.

**Table 1: Expensed Expenses vs. Funding**

Items	Engineer’s Estimate
Design/Insp./CM/Staff/Permitting	\$236,500
Construction/Contingency	\$970,300
<b>TOTAL</b>	<b>\$1,206,800</b>
	<b>Funding</b>
Design/Insp./CM/ Staff/Permitting	\$197,000
Construction/Contingency	\$678,000
<b>TOTAL</b>	<b>\$875,000</b>
<b>Estimated Funding Shortfall</b>	<b>(\$331,800)</b>

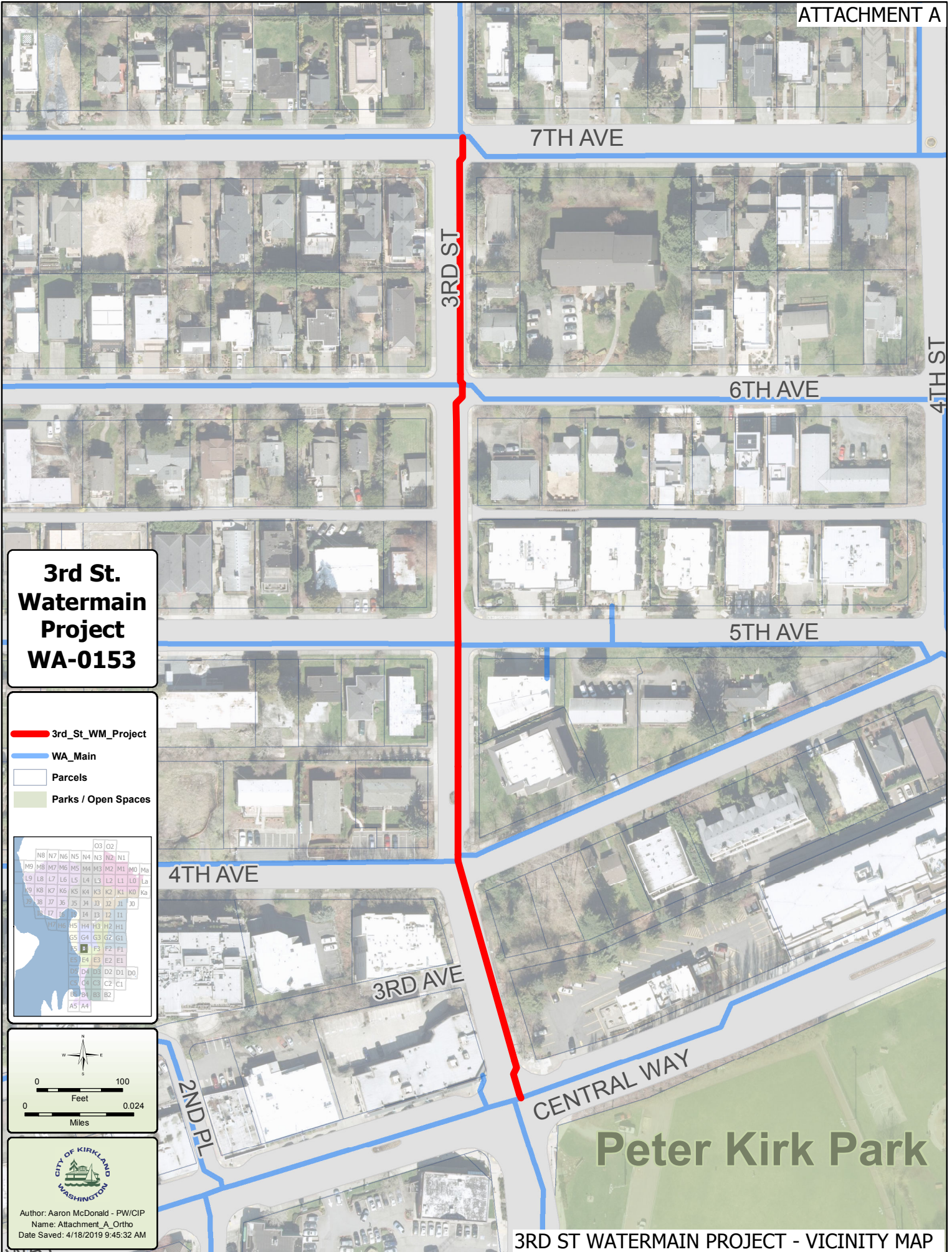
Engineering consultants in this region have been struggling to project contractor and material pricing in their estimates because of the continued robust construction climate and its commensurate demand on materials, equipment, and crews. Staff noted, however, that the current estimate for this Project is similar on a linear-foot basis with the currently ongoing 6<sup>th</sup> Street South Watermain Replacement project.

Though we do not yet have a bid in hand and thus don’t know for certain that there will be a funding shortfall, the City plans for such circumstances. The City’s utility rates are established to adequately fund operations, capital improvements for the utility systems, and to establish reserves. The reserves enable the City pay for unforeseen expense, whether in operations or the capital program, including funding budget shortfalls for approved capital projects.

Recognizing that time of year influences the bids received (earlier in the year generally leads to more favorable bids because contractors prefer to line-up work for the summer construction season), staff will be moving forward with the bidding process now. Once bids are received and analyzed, staff will determine if additional funds are needed to complete the project. Staff will return to City Council with a recommended action and a source of additional funds, if needed.

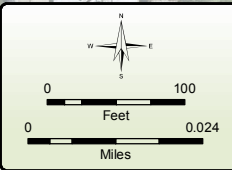
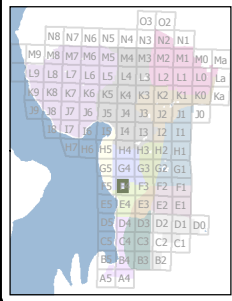
Attachment A: Vicinity Map





**3rd St.  
Watermain  
Project  
WA-0153**

- 3rd\_St\_WM\_Project
- WA\_Main
- Parcels
- Parks / Open Spaces



Author: Aaron McDonald - PW/CIP  
 Name: Attachment\_A\_Ortho  
 Date Saved: 4/18/2019 9:45:32 AM

**3RD ST WATERMAIN PROJECT - VICINITY MAP**