



CITY OF KIRKLAND

Department of Public Works

123 Fifth Avenue, Kirkland, WA 98033 425.587.3800

www.ci.kirkland.wa.us

MEMORANDUM

To: Kurt Triplett, City Manager
From: Dave Snider, P.E., Interim Capital Projects Manager
Ray Steiger, P.E., Interim Public Works Director
Date: February 3, 2011
Subject: NE 85th Street Emergency Watermain Repair

RECOMMENDATION:

It is recommended that Council authorize the use of water/sewer operating reserve funds for the emergency watermain repair work on NE 85th Street.

BACKGROUND AND DISCUSSION:

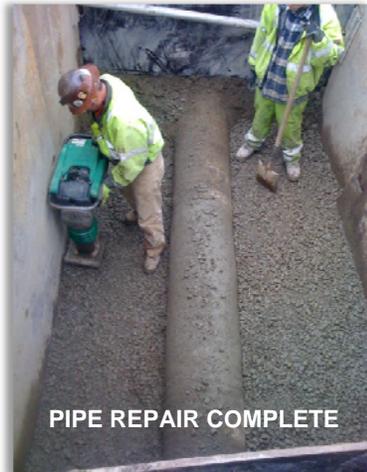
On Thursday, January 20, 2011, City water department maintenance crews detected a leak in the 16-inch transmission watermain in the westbound lanes of the 12100 block of NE 85th Street (Attachment A). This existing watermain is a special material made up of steel reinforced concrete cylinder pipe (RCCP) installed in the early 1960's, and a contractor with specific knowledge and equipment was needed to perform the necessary repair work.

In order to avoid a significant failure of the watermain, the City water crew turned off a portion of the water system along NE 85th Street. While residents and businesses in the area remained in-service, water was re-routed within the system leaving one nearby adjacent fire hydrant without water – a situation that the fire department was immediately made aware of and one that needed to be corrected as soon as possible.



Public Works staff moved quickly to prepare an emergency purchase authorization, pursuant to the Kirkland Municipal Code, KMC 3.85.210, and the City's Purchasing Agent prepared a Procurement Activities Memo regarding the Emergency Purchase for Council approval at their regular meeting of February 1, 2011. The Purchasing Agent also published a public notice in the Daily Journal of Commerce in compliance with the KMC and State law.

Upon the signing of the Emergency Purchase Authorization on Friday, January 21st, Public Works staff contracted with Frank Coluccio Construction Company, a Seattle based contractor experienced with making repairs to RCCP water main. The contractor's work began on the morning of Monday, January 24th and was completed on Thursday, January 27th.



Since 1999, this 60-year old watermain has been repaired four times, between 120th and 128th Avenues NE, each time under an Emergency Purchase Authorization (Attachment B). On October 25, 1999, a major break occurred at the intersection of NE 85th St and 120th Ave NE when Seattle Public Utilities (SPU) failed to notify the City that they switched water supply from the lower pressure Cedar River to the higher pressure Tolt River source. The resulting increase in water pressure delivered to Kirkland's system led to a major rupture in the RCCP transmission main sending water, mud, and debris onto surrounding private properties along 120th Ave NE. A few months later (January 2000) crews detected a new leak in the



12600 block of NE 85th Street (most likely caused by the pressure surge during the previous October event). That leak was repaired over a four day period without a large scale main break and without private property damage. A number of years later (February 2008) crews again noticed a wet spot on the pavement in the 12600 block of NE 85th Street resulting in another repair that took five day to complete. The most recent event of January 20, 2011, involved a four day repair and, similar to prior two incidents, was completed with no damage to private property. The minimal interruption attributed to three of the four events is directly attributable to the rapid response by City Water Crews working in coordination with other Public Works and Purchasing staff who moved quickly in obtaining the necessary emergency purchase approvals, and working closely with a contractor experienced with RCCP repairs.

In 2007, PW staff updated the Comprehensive Water System Plan and took that opportunity to strategize ways to address the aging RCCP within NE 85th Street. The result was the creation of a three-phased CIP Project that re-routes the flows in the existing 16-inch RCCP along NE 85th Street in to a larger 20-inch Ductile Iron main that will be installed along NE 80th Street. The Phase I portion of this multi-phased and approximately \$11 million (overall) Project was completed in 2008; Phase II is currently scheduled to begin design in 2012 with construction to follow in 2013. The Phase III Project is currently shown in the 2011-2016 CIP as an unfunded project with Public Works Trust funds being sought as a key funding source for the planned improvements. Given this most recent repair, staff is reviewing the prioritization and proposed timing of the future Phases and will likely make recommended changes to the timing of both during the next CIP process later this year.



The total amount paid to the Contractor for the latest repair work is estimated to be \$40,000. With the addition of City crew, staff, traffic control, and equipment costs the total expense is closer to \$48,000 -- staff recommends that water/sewer operating reserves be used to pay the Contractor for the work they performed on the repair (Attachment C).

Attachments: (3)

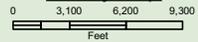


NE 85th Street Emergency Watermain Repair





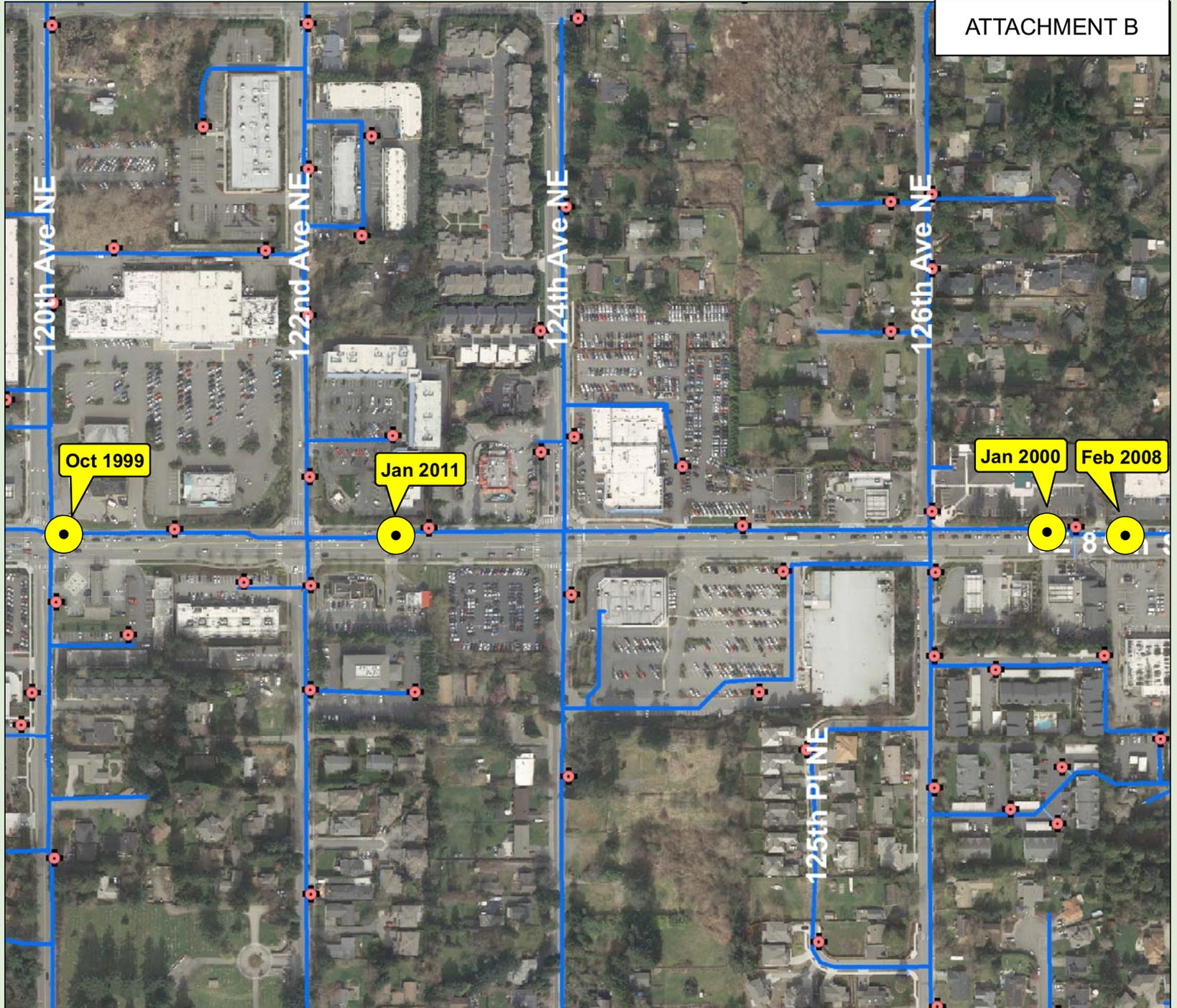
Vicinity Map



● Emergency Watermain Repair Work



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NE 85th Street Emergency Watermain Repair History

FISCAL NOTE

CITY OF KIRKLAND

Source of Request							
Ray Steiger, Interim Public Works Director							
Description of Request							
Request for funding of \$40,000 from the Water/Sewer Operating Reserve for the emergency repair of a watermain leak on NE 85th Street. The repair work was authorized by the City Manager pursuant to KMC 3.85.210 and reported to the Council at regular meeting on February 15, 2011. The amount requested is the estimated external cost.							
Legality/City Policy Basis							
Fiscal Impact							
One-time use of \$40,000 of the Water/Sewer Operating Reserve. The reserve is able to fully fund this request.							
Recommended Funding Source(s)							
Reserve	Description	2012 Est End Balance	Prior Auth. 2011-12 Uses	Prior Auth. 2011-12 Additions	Amount This Request	Revised 2012 End Balance	2012 Target
	Water/Sewer Operating Reserve	1,979,380	0	0	40,000	1,939,380	N/A
	There are no prior 2011-12 Authorized Uses of the Water/Sewer Operating Reserve						
Revenue/Exp Savings							
Other Source							
Other Information							
Prepared By	Neil Kruse, Senior Financial Analyst				Date	February 4, 2011	