



Emergency Response

A Case Study of Bellevue Way Water Main Break

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Utilities

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Information Only

The purpose of this presentation is to provide the Environmental Service Commission with information on how the Utilities Department responded to a recent water main break as an illustration of our emergency response capabilities.



Agenda

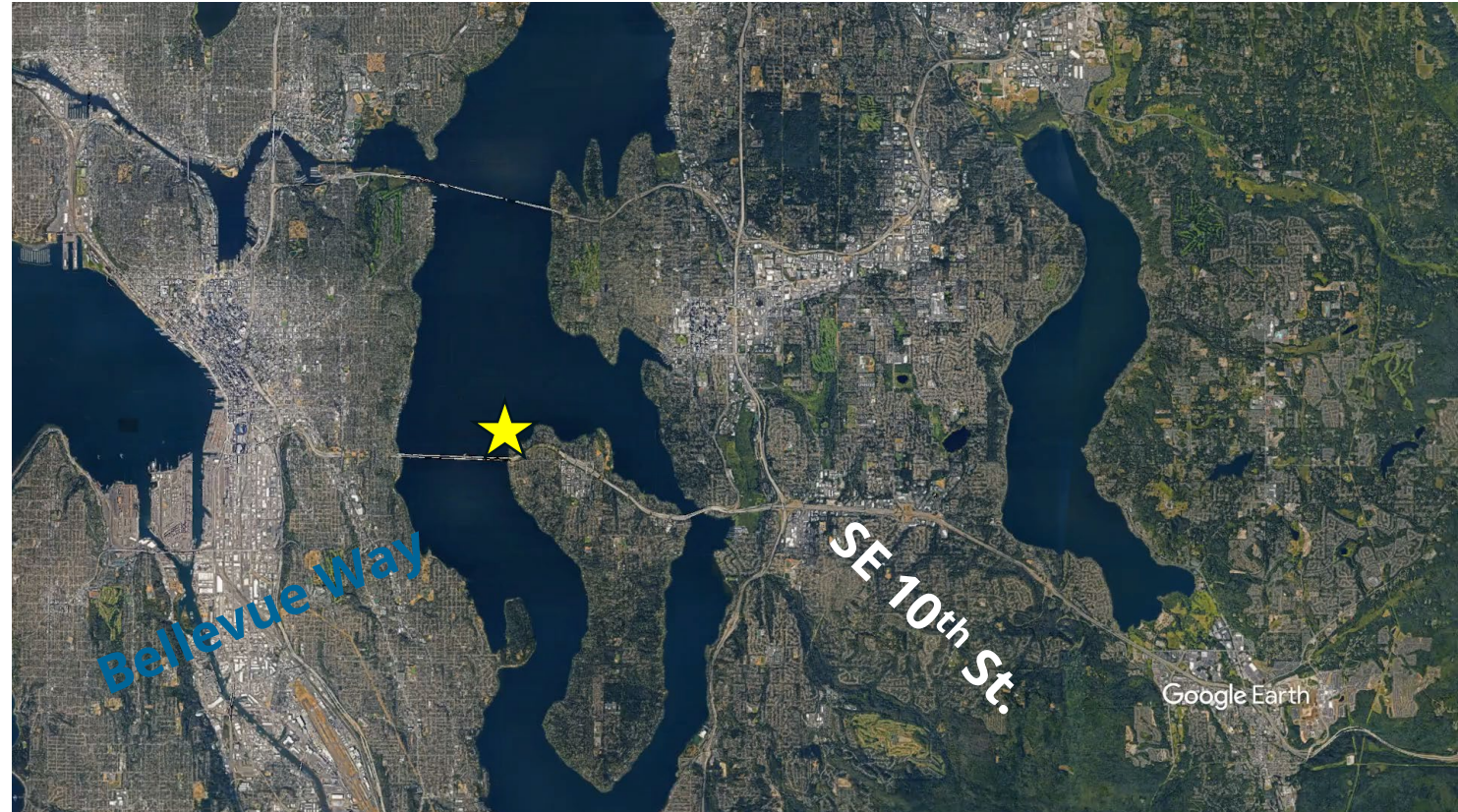
1. Incident Details
2. O&M Response
3. Engineering Coordination
4. Q&A



Water Main Break

Friday, February 2nd, 2024

- Reported at 1:30 am
- 1000+ GPM flowing into intersection of Bellevue Way and SE 10th Street
- 12" AC Main serving West Bellevue 400 zone
- Surrounded by nearby utility infrastructure
 - 8" Water Main underneath
 - Adjacent stormwater catch basin



Graphic: Google Earth Studio



'All-Hands' Response

Utilities
Engineering

Utilities
O&M

Streets
(Transp. Dept.)

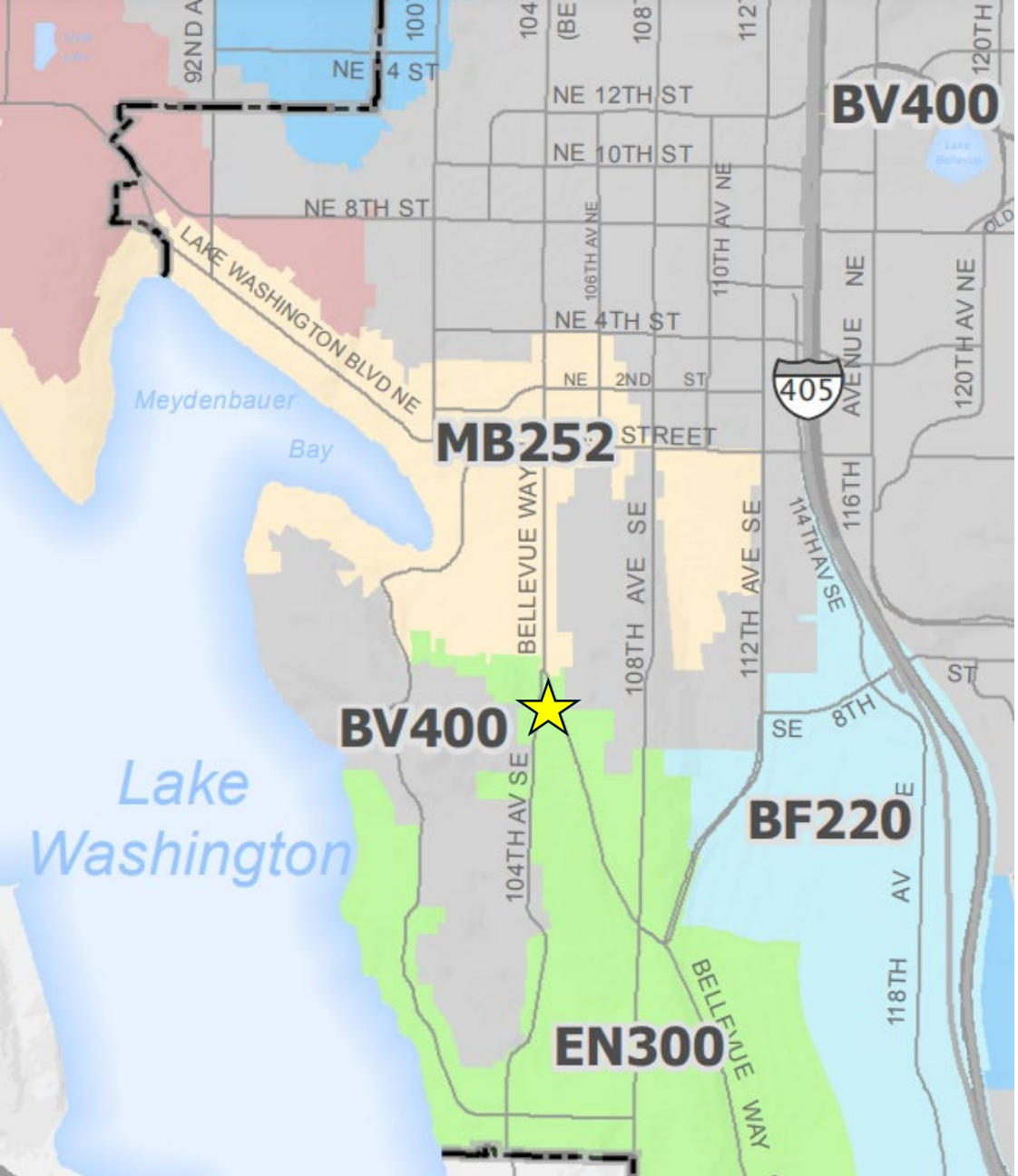
Operations
(SCADA)

Water
Maintenance

Stormwater
Maintenance

Wastewater
Maintenance

Water
Quality



Bellevue 400 Zone

- BV400 Zone—large pressure zone feeding Downtown
- West BV400 zone served primarily by 12" AC main under SE 10th St
- Operations Standby saw rapid drop in pressure on SCADA at Meydenbauer Pump Station—indication of nearby WMB
- Operations Standby notified Water Maintenance Standby and used pump station to maintain system pressure during repairs

Traffic Control & Site Excavation

- Streets Maintenance established traffic control & closed northbound lanes of Bellevue Way
- Wastewater Maintenance personnel operated heavy equipment
- Stormwater Maintenance operated Vactor and dump trucks to remove excavated materials





Water Main Repair

Water Maintenance personnel:

- Operated nearby water valves to reduce flow
- Cut away effected portions of water main
- Installed temporary section of 12" composite pipe
- Restored water system pressure & flow

Water Quality

- Identified area of localized pressure loss.
- Coordinated with WA Dept. of Health to determine Boil Water Notice area.



Boil Water Notice

- Type 4 Water Main Break – Loss of system pressure & potential system backflow
- Sent 5 water samples immediately for testing at SPU lab on Friday
- Received results 48 hours later— all absent of bacteriological matter
- Lifted boil water notice on Sunday



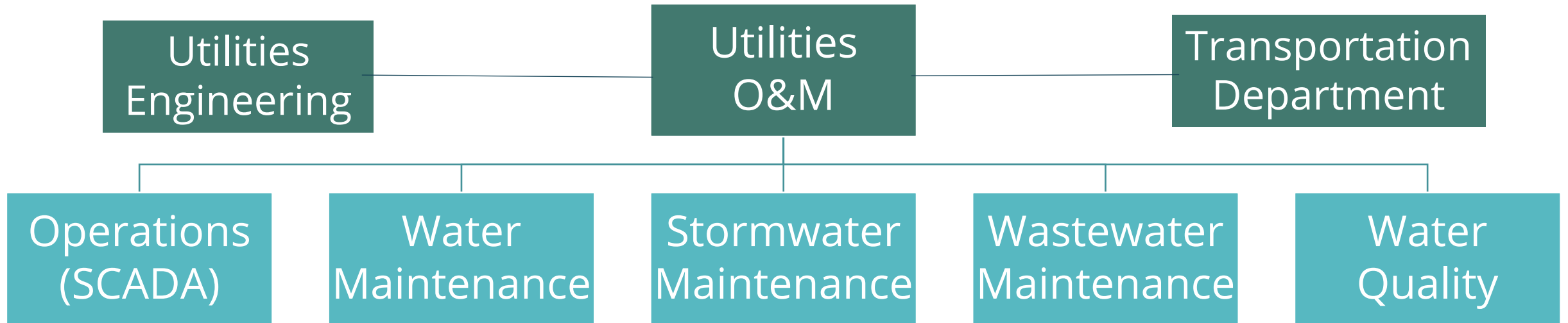


Communications

Utilities Public Information Officer:

- Provided communications guidance to incident command structure
- Gave on-scene interviews to three local news networks
- Posted information across social media platforms
- Published advisories on the City of Bellevue Website

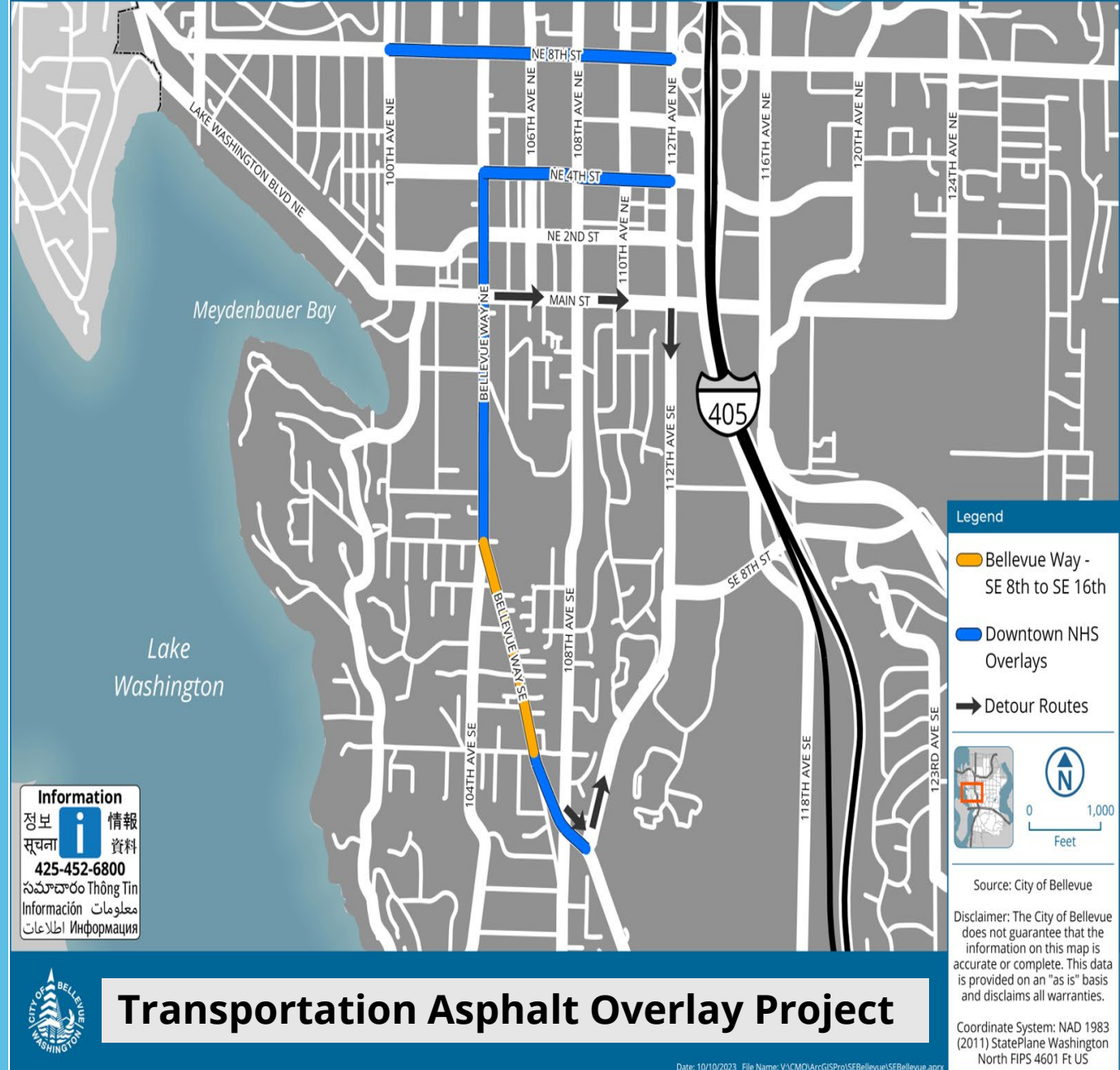
Collaboration Between Divisions



Coordination occurred between departments and divisions for permanent infrastructure restoration in the most efficient and cost-effective manner.

Bellevue Way Asphalt Repaving

- Transportation Department plans to implement an asphalt repaving project this summer.
- This project covers Bellevue Way in the vicinity of the watermain break.
- Desire to not disturb new pavement for another WM break

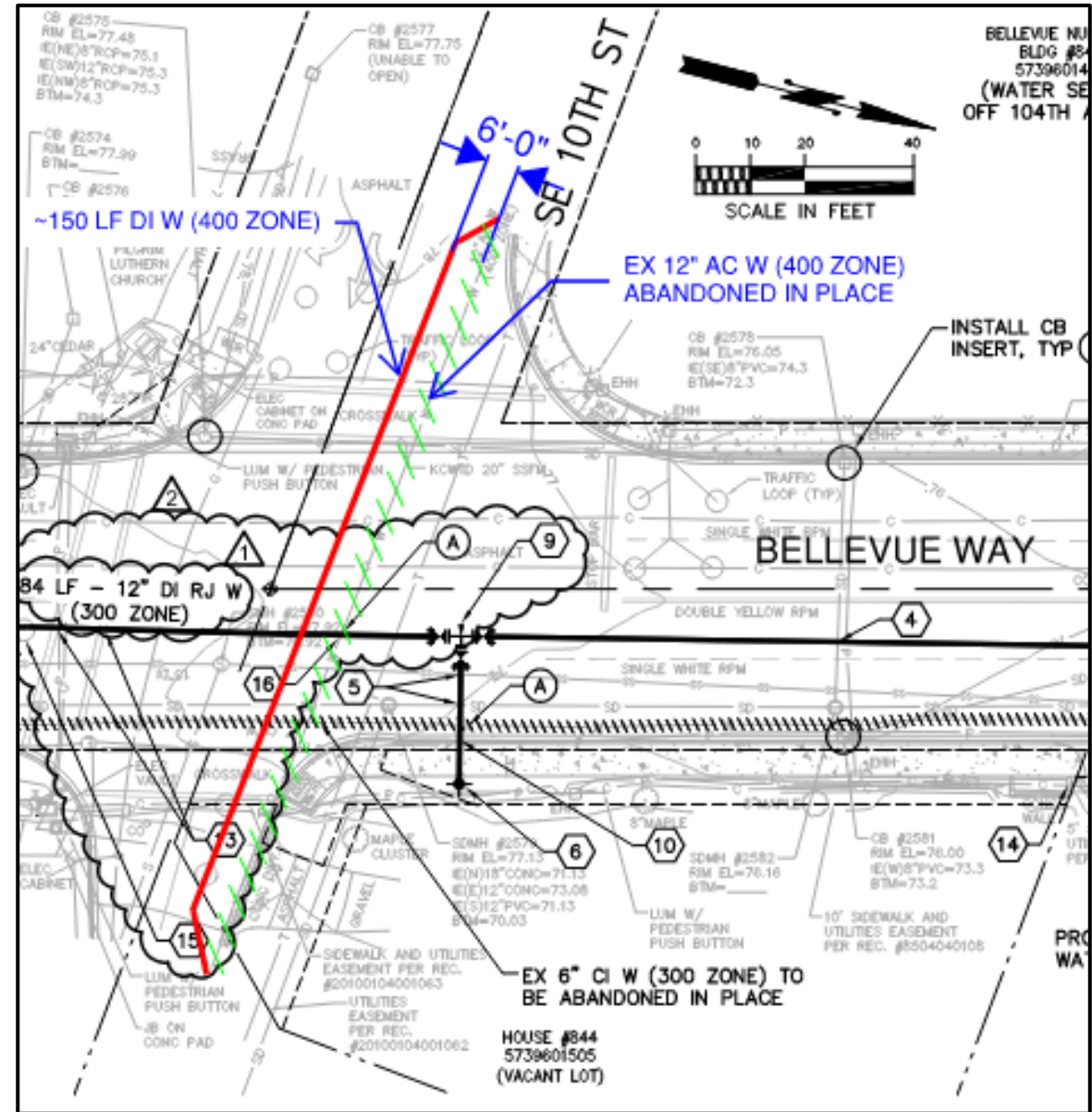


Transportation Asphalt Overlay Project



Watermain Replacement

- Decision made quickly to replace the 12" AC main through the intersection of Bellevue Way and SE 10th Street
- Change order implemented to a current Utilities watermain replacement construction contract



Three Key Takeaways

- Large watermain breaks involve an “All Hands Response” with multiple divisions and departments.
- Utilities ensures the safety and health of our community through well-orchestrated emergency response.
- Our coordination ensures efficiencies that save on time and money, plus reduce impacts to the public.



Questions?

Thank you!