



King County Sewer Interceptor Project Update

Utility Board

September 23, 2020

Agenda

- Project Overview/Background
- Proposed Work Zone & Follow-Up
- Next Steps & UB Questions



Background

- Existing NM/Enatai Interceptor was built in 1970's
- Pipeline upgrades will provide safe and reliable service for the next 50+ years
- Large project crossing multiple jurisdictions and requiring multiple permits:
 - Mercer Island
 - Bellevue
 - DOE
 - Tribes
 - USACE
 - WSDOT
 - Individual Property Owners

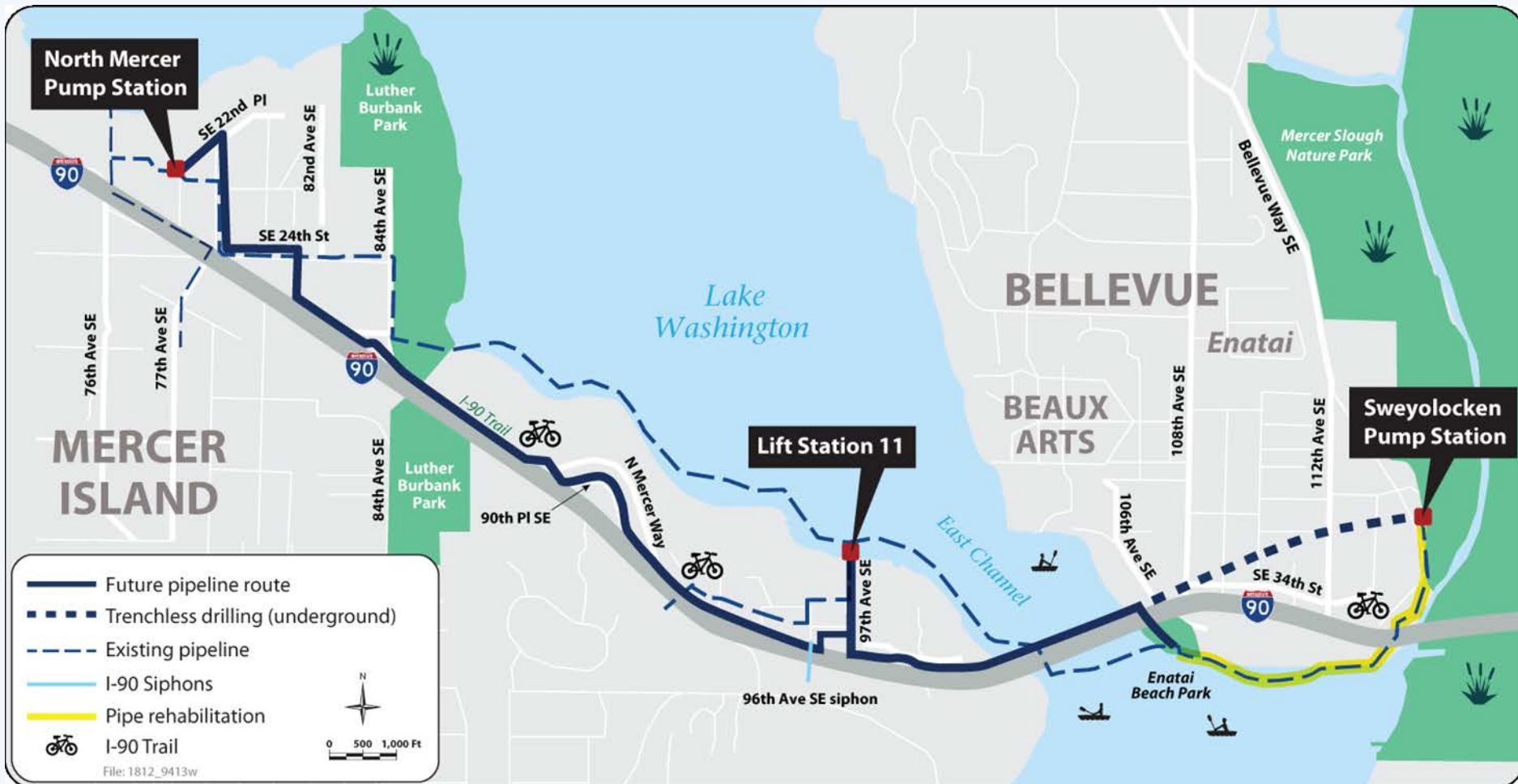


Project Schedule

- Project has been in design for many years with multiple opportunities for Public Engagement
 - Alternative Design Completed in 2015
- Predesign Complete 2016-2017
 - County explored 15 Alternatives before landing on proposed alignment
- Last Update to Utility Board November 2019
- Anticipated Notice to Proceed in September 2021
- Construction Anticipated Q3 2021-2025



Project Alignment



Proposed Work Zone

- KC Presented to UB in November 2019; significant concerns expressed regarding the proposed road closure at North Mercer Way



Proposed Work Zone

- Proposed work zone utilizes two lanes for construction and reserves sidewalk for pedestrians until work is near the intersection of Island Crest Way/ SE 26th St
- Existing Site Constraints:
 - I-90 retaining wall
 - Condo retaining wall
 - Narrow roadway width (24 feet)
 - Existing utilities constrain the placement of the new FM
 - Vertically stacked new forcemains required due to space constraints



Proposed Alignment Schedule

Activity	Shorter Duration	Longer Duration
TESC/Traffic Control	1.0 - 1.5 Months	2 Months
Pipe installation		
Initial Restoration (finishing activities that lag behind pipe placement)		
Final Restoration (Paving, striping, etc.)	1.5 weeks (may follow later due to weather)	2 weeks (may follow later due to weather)

- Shorter duration closure - long work hours
 - Option A: 7 am to 7 pm, Mon to Sat.
 - Option B: 7 am to 9 pm, Mon-Sat, 7 am to 6 pm, Sun.
- Longer duration closure - normal work hours
 - 7 am to 3:30 pm, Mon to Fri
- Noise exemption required for work outside of 7am - 8pm weekdays, and 9am - 8pm on Sat, Sun, and Holidays
- Temporary relocation of residents closest to construction will be considered.
- Some activities such as pedestrian crossing improvements aren't considered in this schedule as they have no/minor traffic impacts



Project Timing:

- City & KC ILA (Q4 2020/Q1 2021)
- Notice to Proceed September 2021
- Construction Anticipated Q3 2021-2025

Other Components of Project & Benefits to City:

Pump station 11 (Fruitland Landing) Improvements:

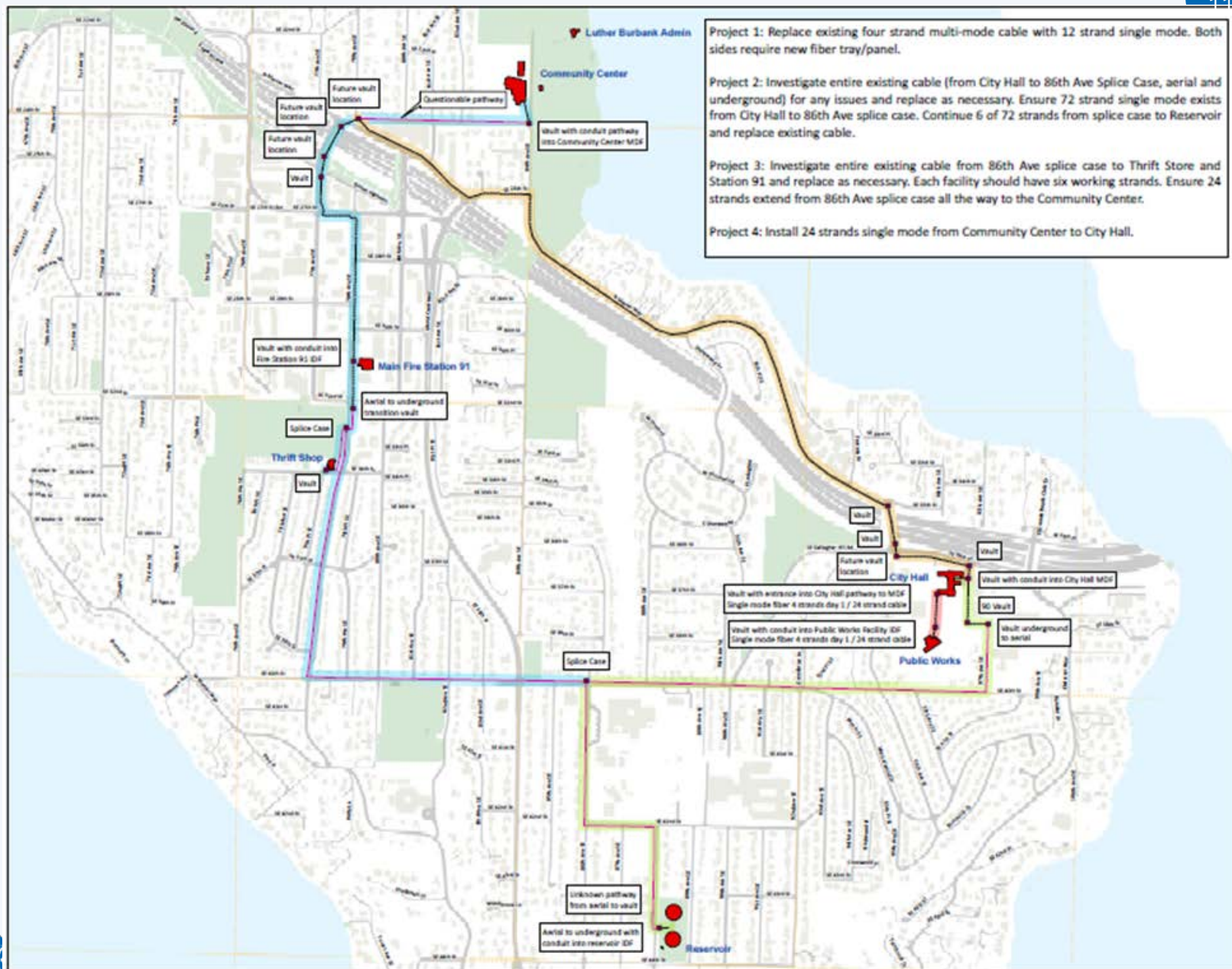
- Originally built in 1960. The pumps were replaced in the 1980's.
- Rebuild and upgrade to meet regulatory standards and reconfigure for ease of maintenance and operation.
- Rehabilitate wet well. Concrete wet well has deteriorated from sewer gases and is in urgent need of rehabilitation.
- Replace pumps to meet operational requirements and extend life.
- Improve safety measures and simplifies safety protocols for maintenance personnel.
- Provide electrical system improvements to meet code and improve reliability.
- City will replace emergency generator, but County will perform related work.



Other City Related Improvements:

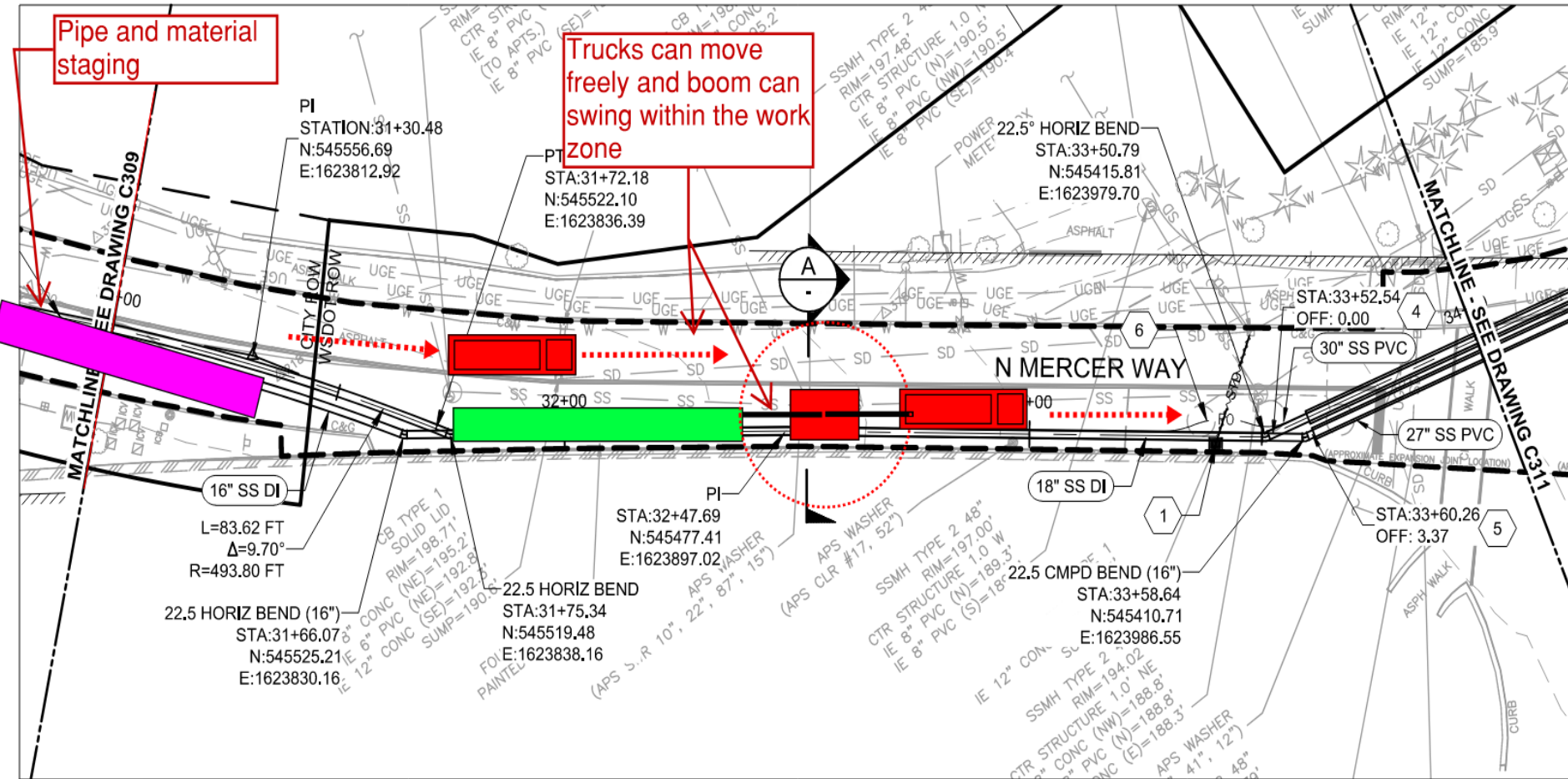
- Sewer Repair/Replacement:
 - Line 400 feet of 10" sewer force main
 - Replace 280 feet of 8" sewer main
 - County will replace and take ownership of ~500 feet of 16" sewer main under I-90 near City Hall
- Water Replacement:
 - Replace 250 feet of 6" water main
- Stormwater Drainage Improvements
 - Convert shallow roadside ditch on 90th Place SE to a piped drainage system
- Roadways and Trails Pavement
- City Fiber Option
 - Link Critical Facilities (City Hall, MICEC, Station 91, Reservoir, Public Works Building)
 - Redundant Fiber ring
 - Communications (SCADA)
 - Control & Data Center (SCADA)



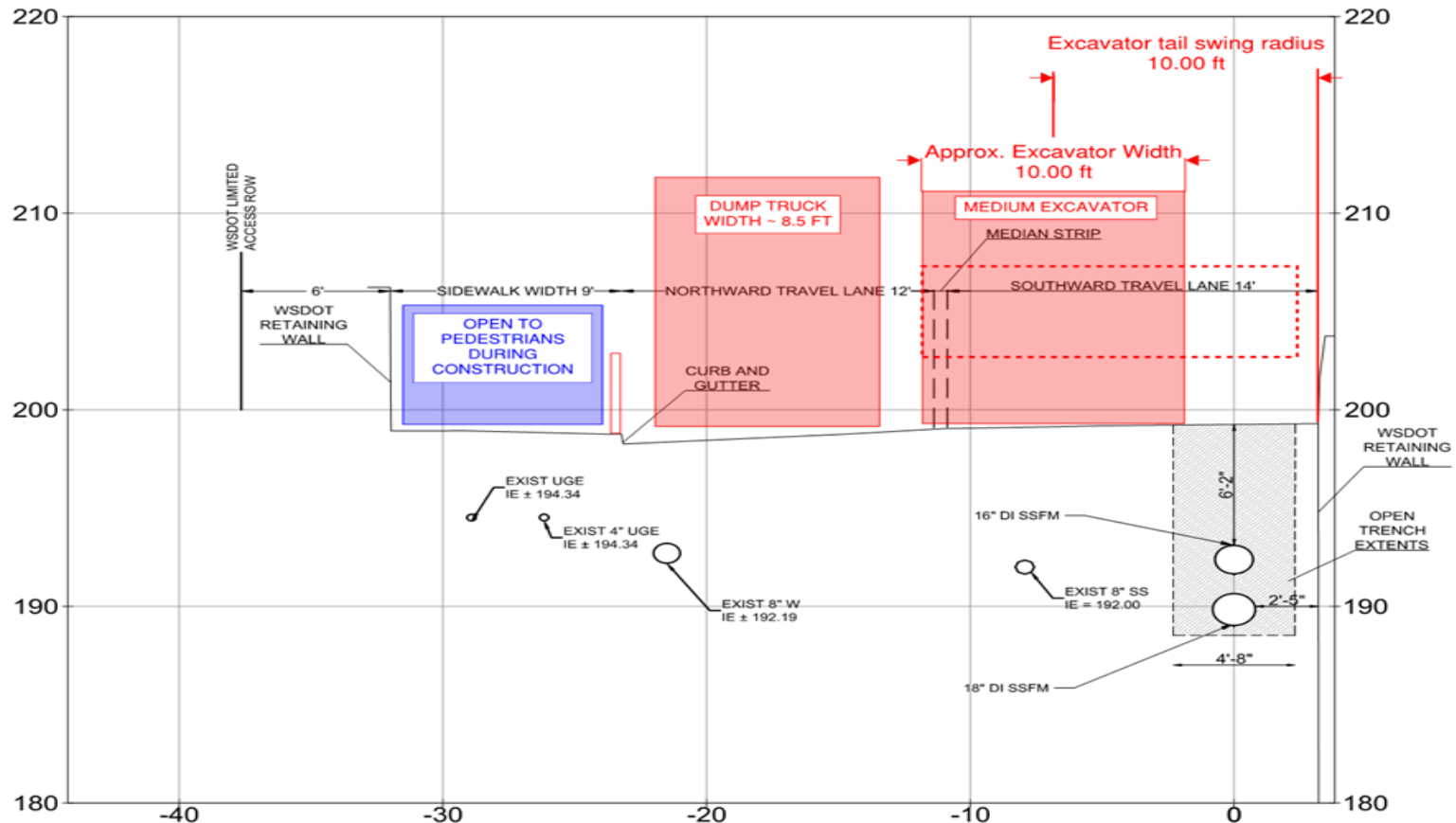


Questions & Discussion





NMW Typical Construction Layout



Considered Alternatives

- Alignment in Planter Strip
- Reduced Work Zone Width
- Convert Sidewalk to Lane



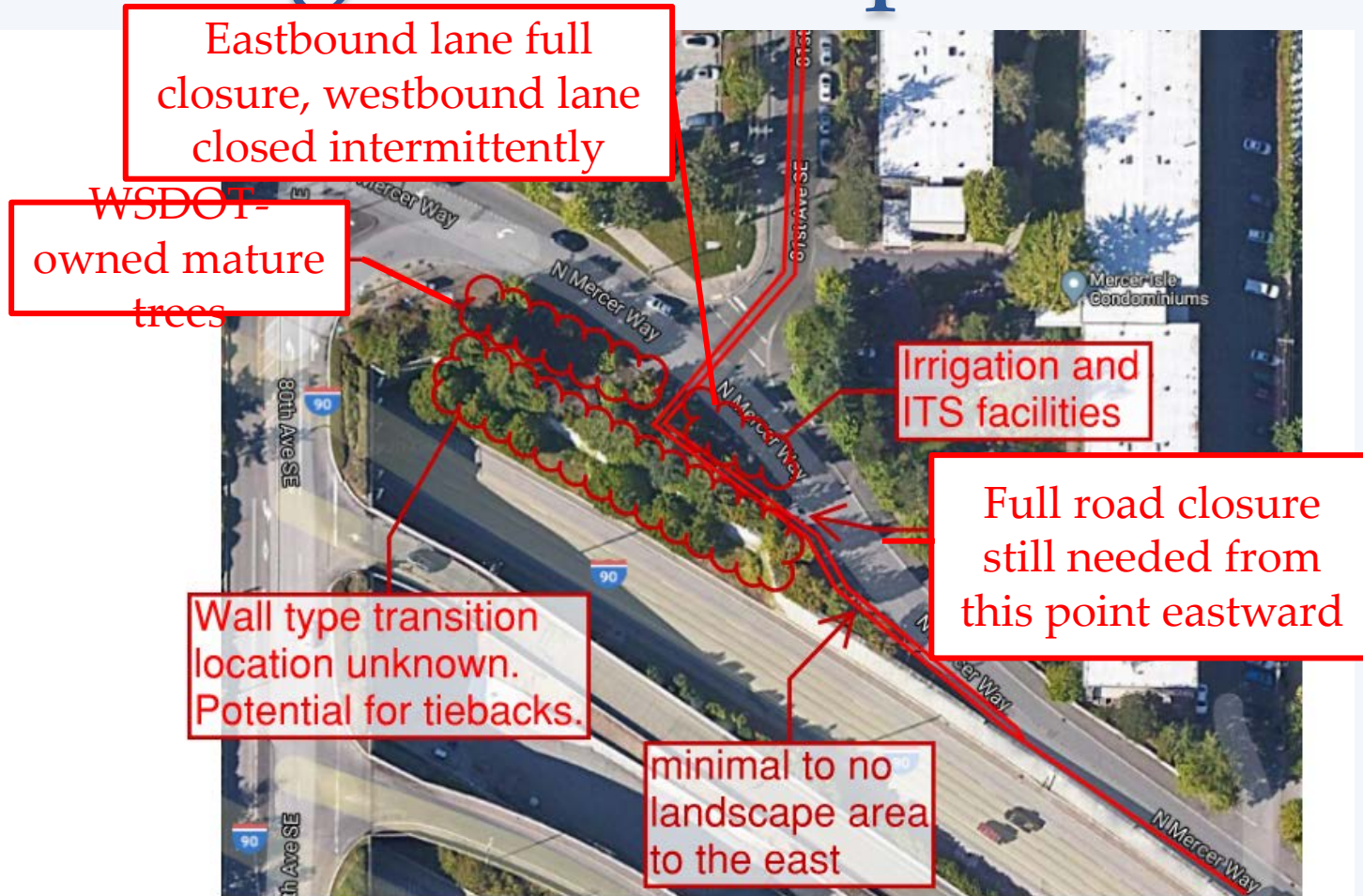
Alternative: Planter Strip

Note: this alternative still requires closure of NMW further east, and still requires lane closures and traffic control on NMW. This would also increase additional construction time.

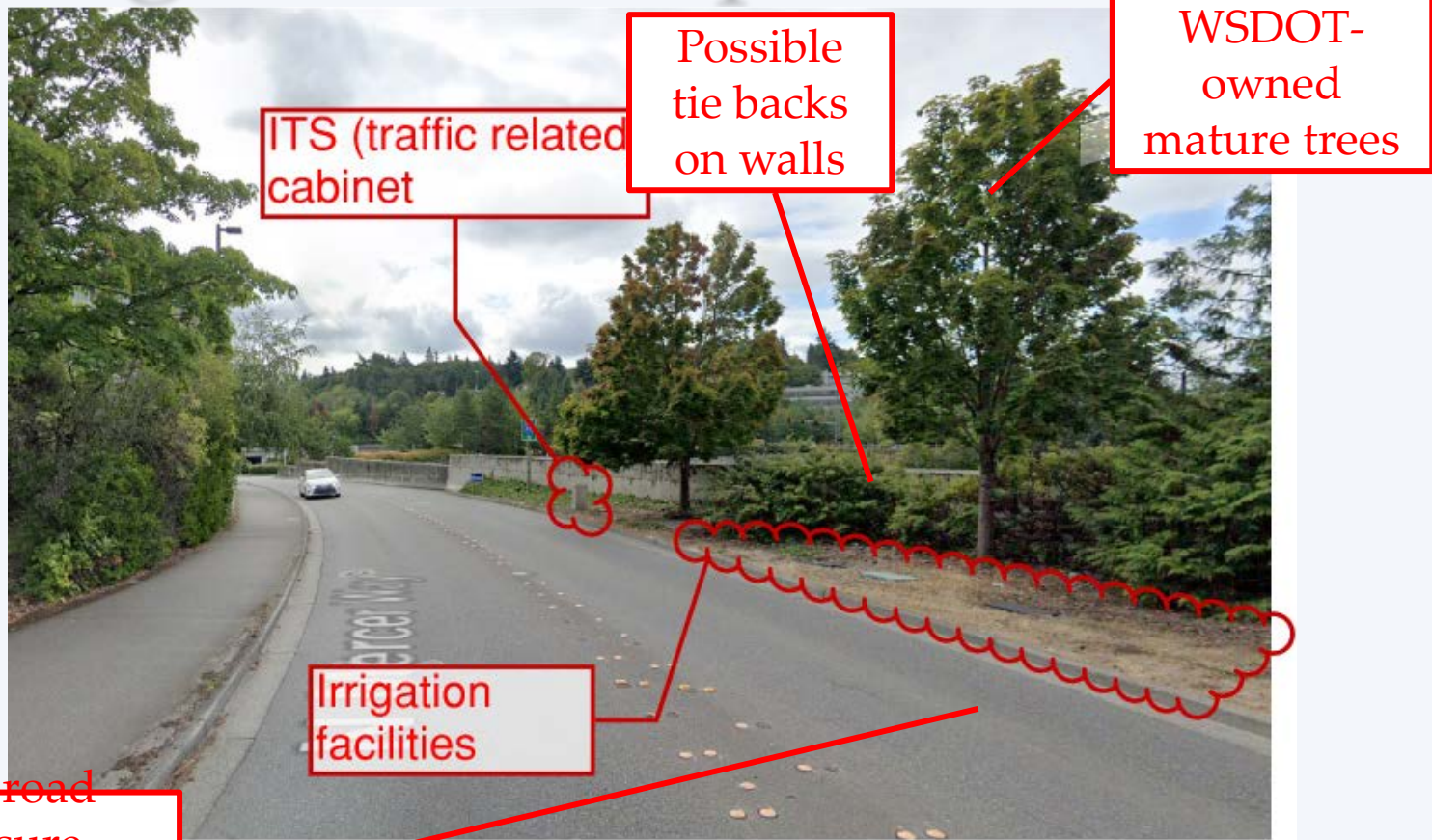
- Infeasible for the following reasons:
 - Possibility of tie-backs used for 80th Ave SE abutment (per WSDOT feedback)
 - Mature WSDOT-owned trees in the planter strip, with mitigation required
 - Existing WSDOT ITS (traffic related) equipment and irrigation facilities located in the planter strip



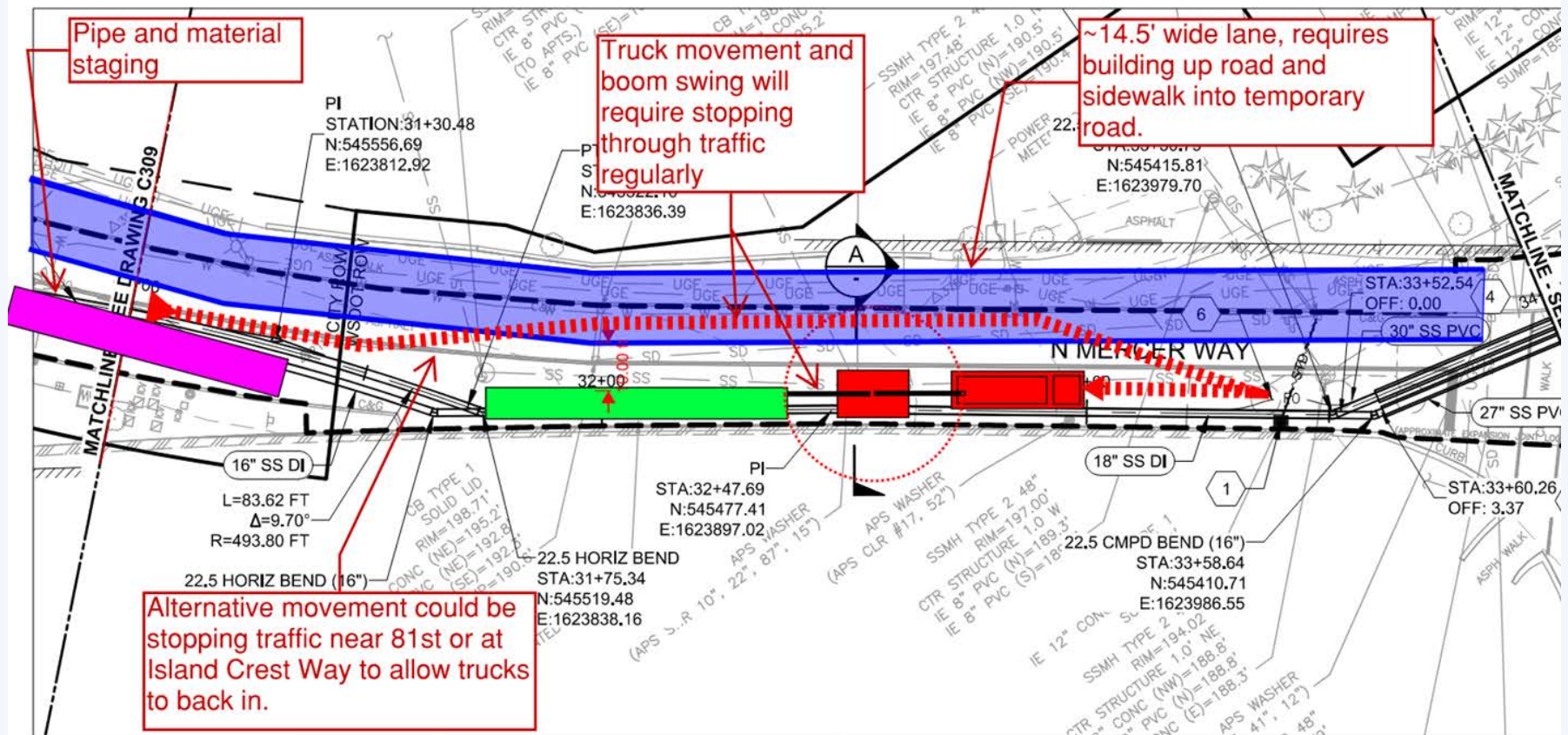
Considered Alternative: Alignment in planter strip



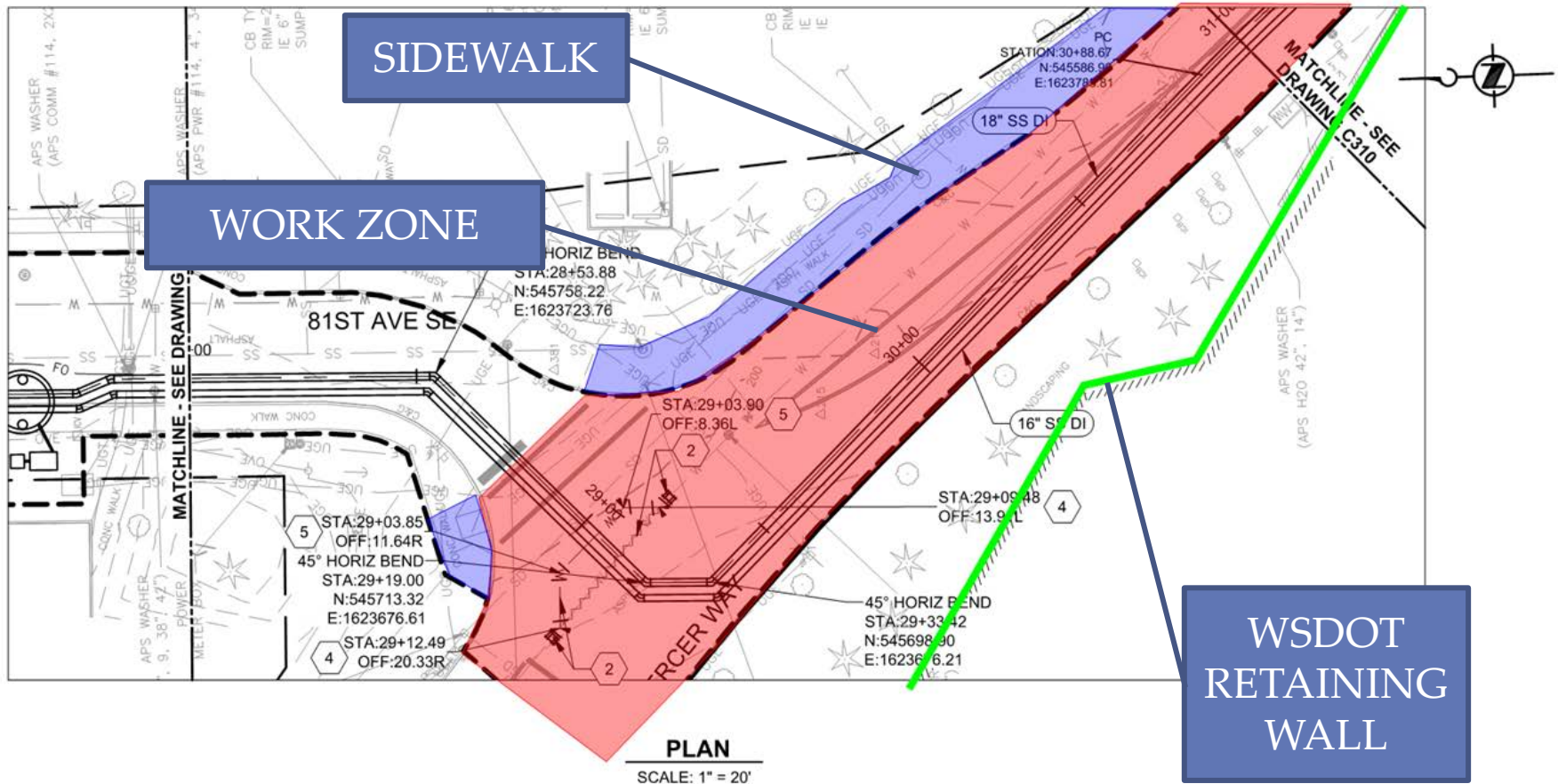
Considered Alternative: Alignment in planter strip



Considered Alternative Temporary Sidewalk Conversion



North Mercer Way Configuration



TYPICAL
CONSTRUCTION
SECTION
(NEXT SLIDE)



WSDOT RETAINING WALL

