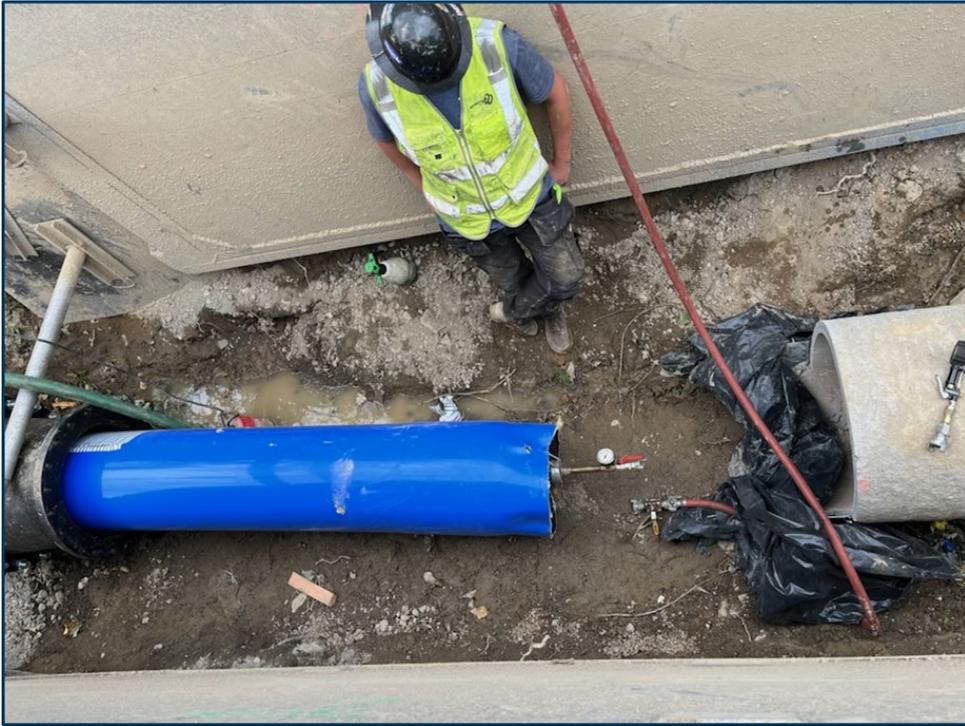




Long-Term Water Infrastructure Response & Alternatives

AB 6530 | October 1, 2024



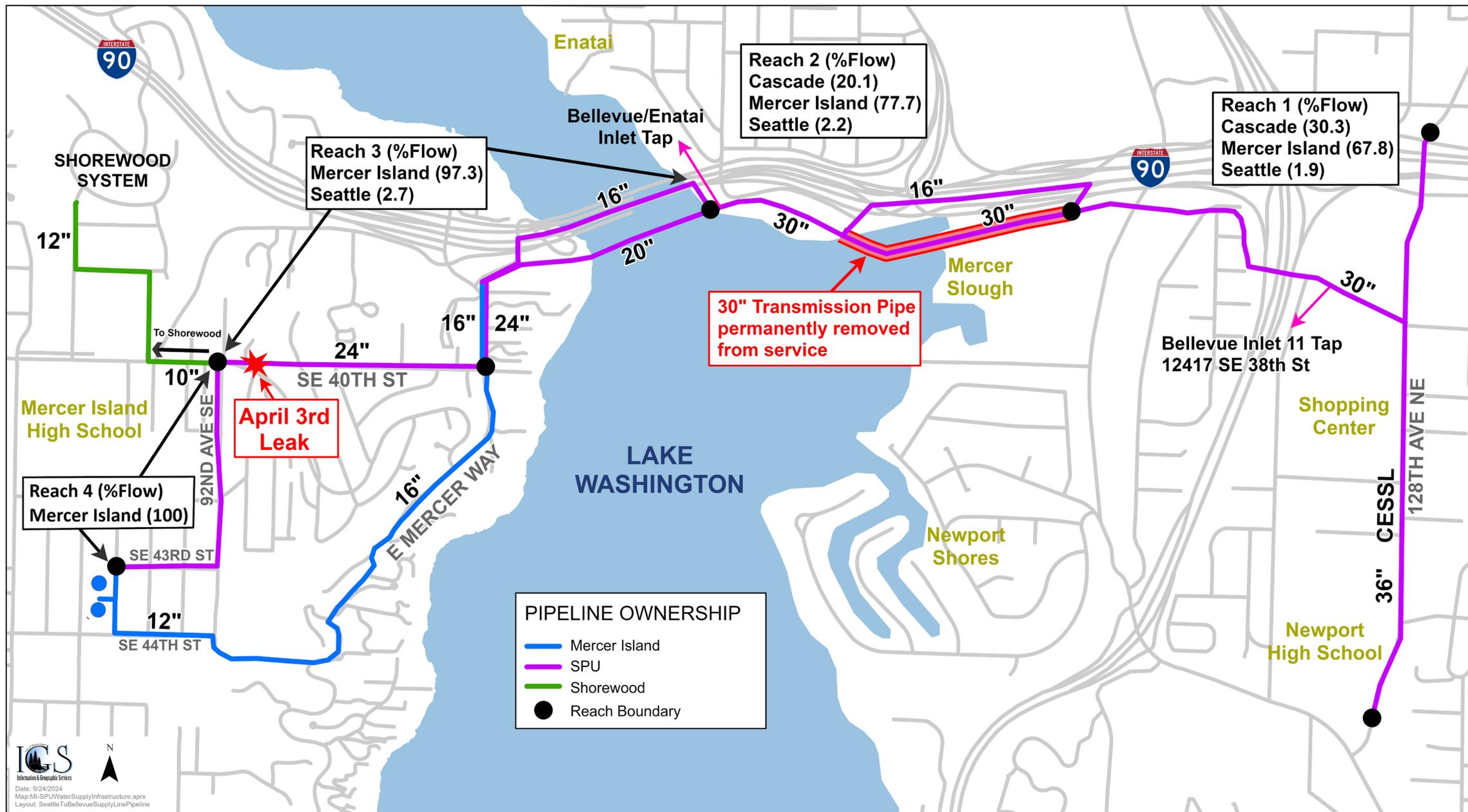


Agenda

- Overview of SPU Supply
- Site of April Leak
- Timeline of Events & Activities
- Alternative Supply line Option
- Long-Term Service to Shorewood
- Planning Level Cost Estimate
- Next Steps & Recommendation



Overview of SPU Supply

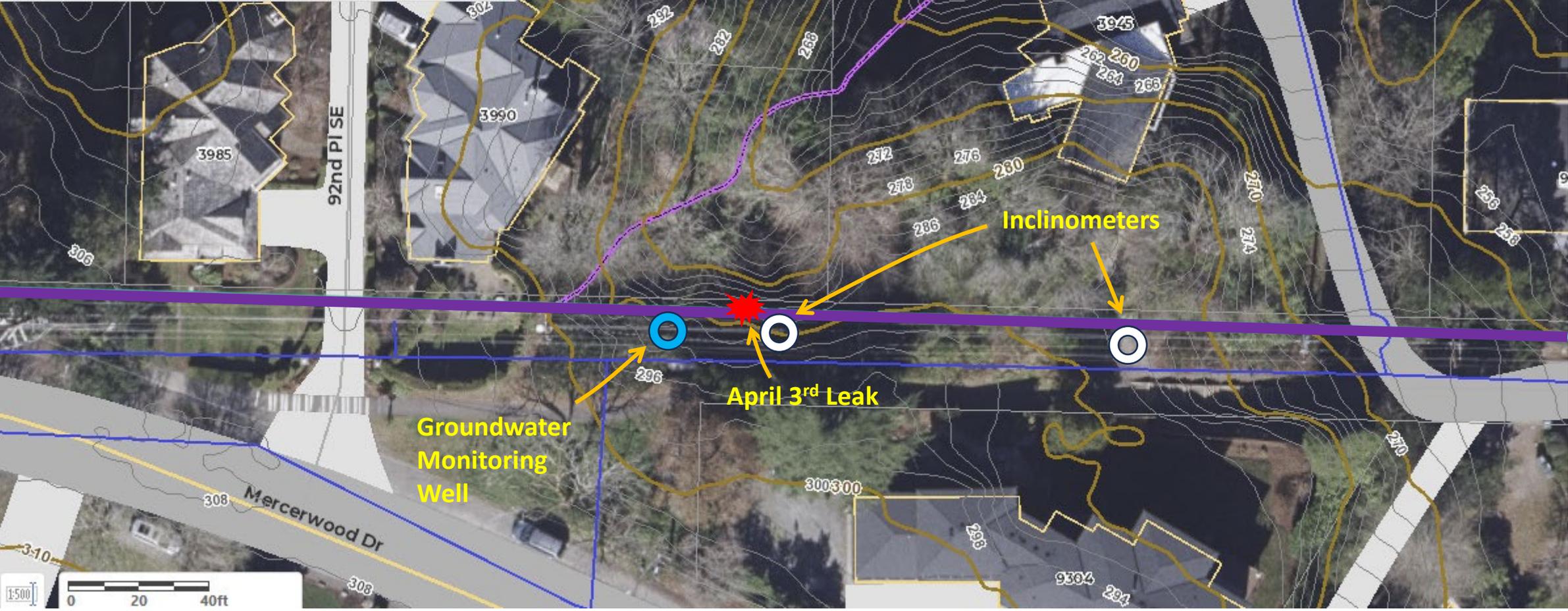


Date: 9/24/2024
 Map: MI-SPUWaterSupplyInfrastructure.aprx
 Layout: SeattleToBellevueSupplyLinePipeline

Site of Leak

Material: Cast Iron 24"
Install Year: 1956
Ownership: SPU

[View Additional Details](#)



Timeline of Events & Activities

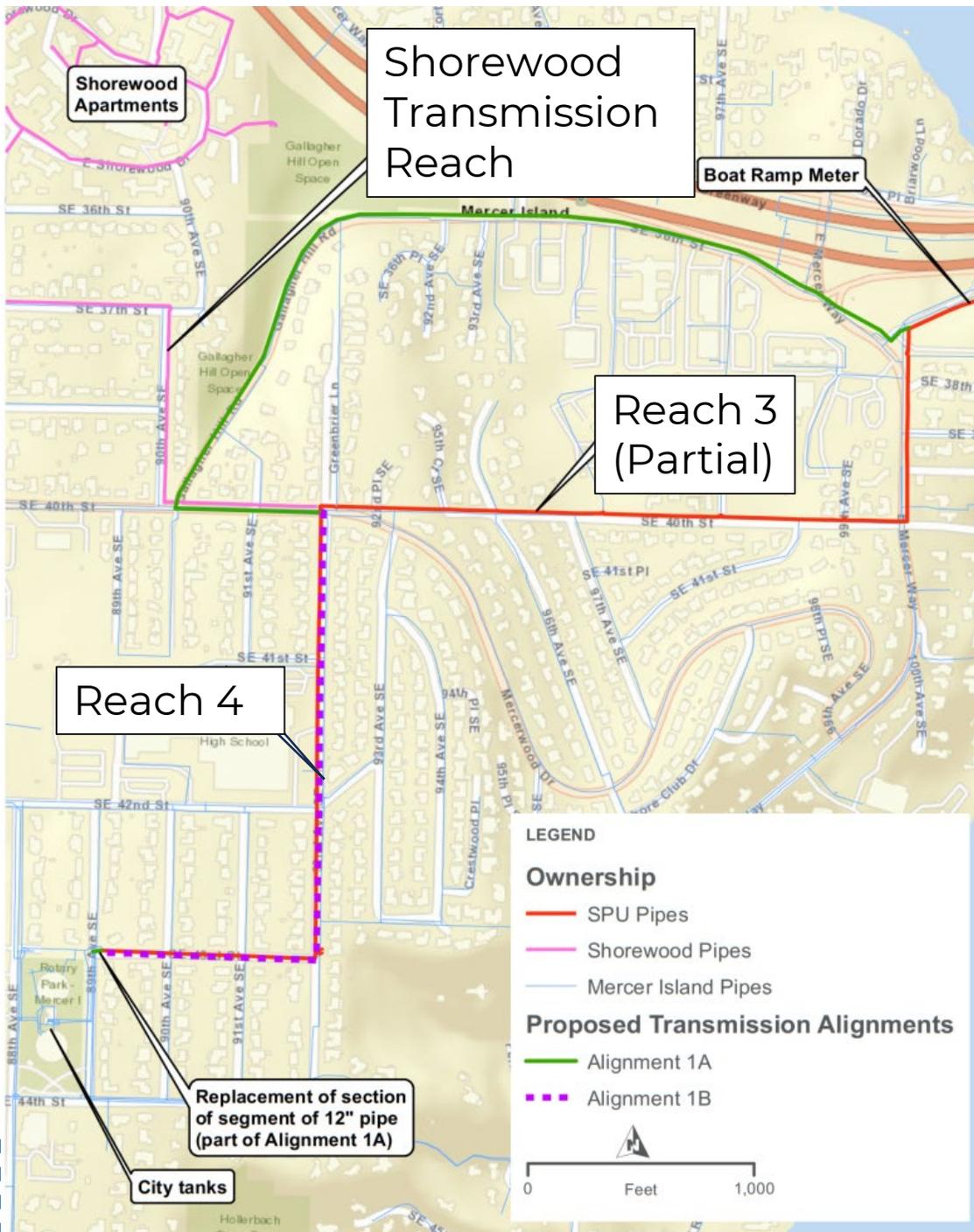
	April	May	June	July	August	Sept	OBJECTIVE
Leak ● Emergency Response	Status Updates	Community Mtgs	Conservation Request	Pipe repair status updated regularly	• Repair complete • End emergency • Appreciation for community support		<i>Communicate with our Community</i>
	Activate Bypass; Serve Shorewood	Evaluate SPU Repair Plan	Remove 6" AC Pipe in same corridor	Support Repair Execution	• Repair complete • Restore system configuration		<i>Maintain & Restore Water Supply</i>
	SPU Supply pressures sometimes low	Slope on 40th is at-risk; as is pipe	Strengthen Emergency Well Capabilities		• New pipeline & Alignment • Slope stability study • Resolution to Shorewood supply		<i>Analyze data, learn and plan for the future</i>

Alternative Supply Line

- Align ownership & control with responsibility
- Generational investment in system resilience
- Improve resiliency & reliability; reduce risk to vulnerable area

Three Distinct SPU Pipe Reaches

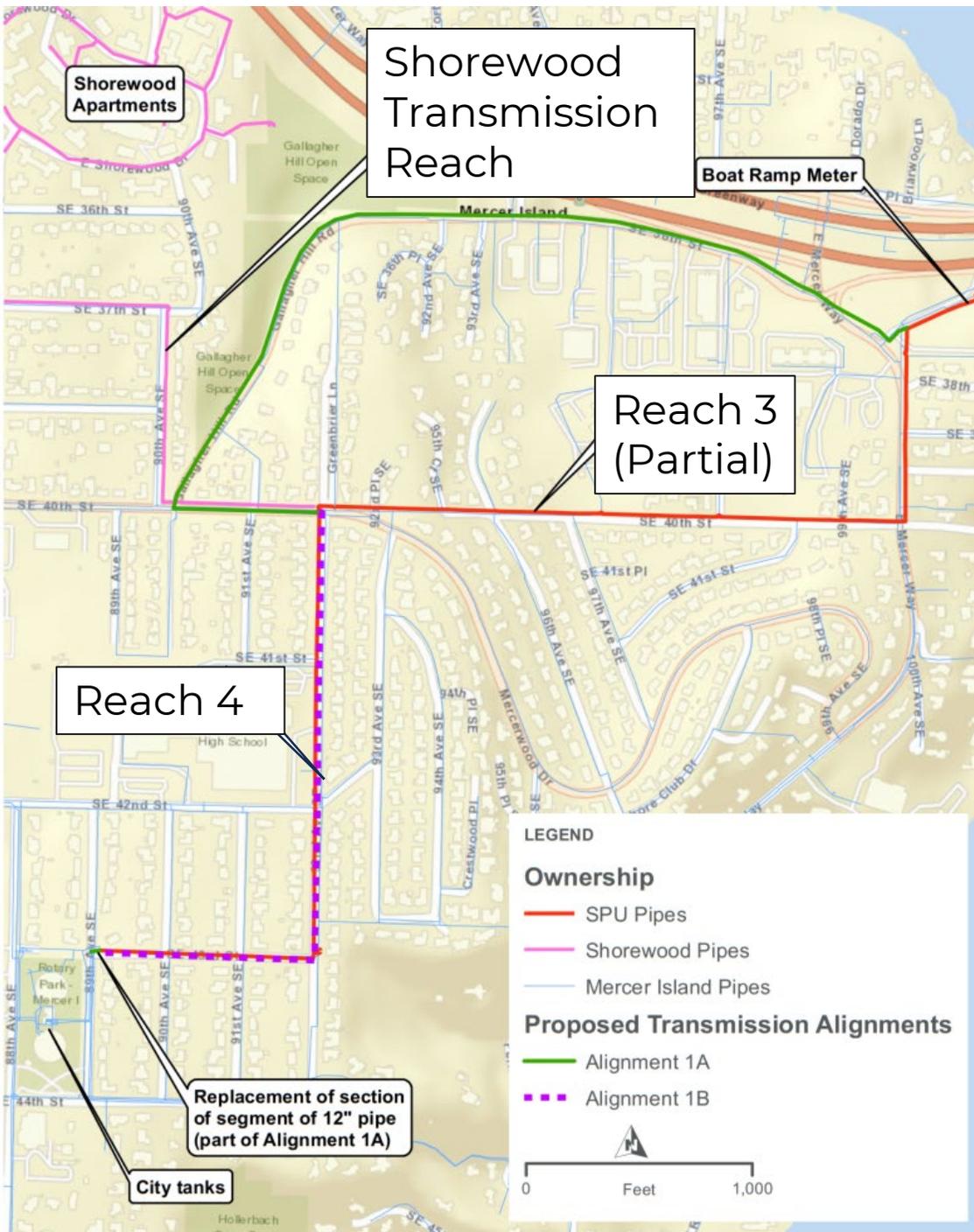
- SPU Reach 3 (Partial) - 97.2% City Cost Responsibility
- SPU Reach 4 - 100% City Cost Responsibility
- Shorewood Transmission Pipe (Private)– 0% MI Cost Responsible
 - Older Asbestos Cement Pipeline
 - At risk for failure



Modernizing the Supply Line

Replacement Considerations

- Geography & rights-of-way constrain options
- Portion in WSDOT right-of-way
- Opportunity for Coordinated improvements
 - Replace Asbestos-Cement Pipe in Gallagher Hill Rd.
 - Roadway and Sidewalk Improvements
- Abandonment of Reach 3 segment
 - Redundancy (problematic maintenance, and continued risk)
 - Shorewood solution dependent
- Portion of existing SPU line remains in service (purple dashed line)
 - Transfer of ownership for Reach 4



Planning Level Cost Estimates



Description	Estimated Cost ¹
24" Restrained Joint Ductile Iron Pipe (RJDIP) Design, Construction Mgmt., Admin & Permitting ²	\$2,247,000
24" RJDIP Construction subtotal	\$8,981,000
Subtotal – New Supply Transmission Project	\$11,228,000
AC Pipe removal (in path of new transmission line) ³ Upsizing the 12-inch near the tanks.	\$1,812,000
Replace 8-inch along Gallagher Hill Rd ³	\$1,336,500
New vault with control valve and flow meter at boat ramp ³	\$2,314,500
Connect Shorewood at 88th Ave SE and 90th Ave SE ^{3,4}	\$2,082,000
Total project cost	\$18,773,000

Notes:

1. Costs are Best Estimate +50% values (Class 5 planning level opinion of probable cost).
2. Design and related services sum to be approximately 25% of the construction cost.
3. Estimates include Design, Construction Mgmt., Admin, Permitting & construction.
4. Decision to proceed subject to discussion & approval from SPU, Shorewood, and City policymakers, and further evaluation of appropriate cost allocations.

Next Steps



Include Project to design and construct a new 24-inch ductile iron transmission line in the 2025-2030 Capital Improvement Plan.



Staff to evaluate optimal project delivery and funding approaches and return to Council with recommendation and appropriation request.



Begin negotiations with SPU regarding ownership and explore alternatives for service to Shorewood Apartments; amend Wholesale Service Contract



Submit capital funding request to Washington State Legislature.



Recommendation

Direct staff to include the design and construction of a new 24-inch transmission line in the 2025-2030 Capital Improvement Plan; negotiate a preferred pipeline alignment and ownership from Seattle Public Utilities; identify long-term solutions to serve the Shorewood Apartments; prepare an amended Wholesale Service Contract; and return to the City Council with a recommended project funding plan.

In addition, direct the City Manager to prepare a capital funding request for submission to the Washington State Legislature and include this request as part of the City's 2025 Legislative Priorities. Further, authorize the Mayor and Deputy Mayor to commence conversations with State legislative representatives about this project and the corresponding capital funding request.

