Project Background

Recent Corridor Overview Process

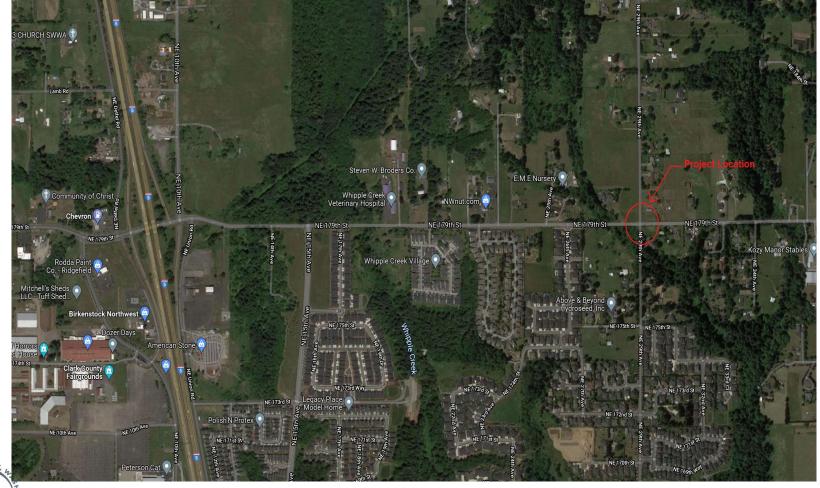
- >Construction Sequencing
- Detour Sequencing
- Annual Funding Strategy





Vicinity Map

• NE 179th St. & NE 29th Ave.





Project Background

- This project will entail the reconstruction of the existing single lane all-way stop controlled intersection to a multi-lane (single-lane striped) roundabout.
- These upgrades are necessary to prevent concurrency failure and accommodate additional traffic volumes associated with future residential and commercial growth in the area.
- Clark Regional Wastewater District and Clark Public Utilities will be expanding and improving their sanitary and water systems as part of this project.
- Improvements to the County's stormwater system is occurring with this project.



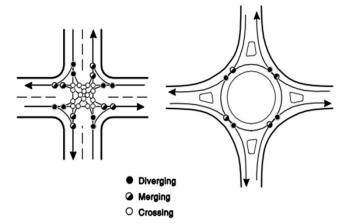
- Roundabout vs Signalized Intersection
- Lane configuration, interim and ultimate
- Traffic Visualization
- Property Impacts
- Bridge vs Culvert at Stream Crossings
- Environmental Impact and Mitigation
- Intersection and Corridor Aesthetics



Roundabout vs Signalized Intersection

- Safety Roundabout projected to have 3x less fatal and injury crashes than signal
- Less queuing, congestion with roundabout option (LOS A vs LOS C)
- Life Cycle costs include safety, vehicle delay, construction costs, and maintenance
 - Roundabout option would be a ~\$5 million lifetime savings over signal
- Documentation summarized in an Intersection Control Evaluation Report







- Initially Constructed as a single lane roundabout
- Constructed footprint large enough to widen to two lane roundabout
- Traffic demand dictates when widening will occur
- Current forecast 2047, interim design projected to last 20+ years





Interim – Single Lane, Future – Double Lane





Traffic Simulation

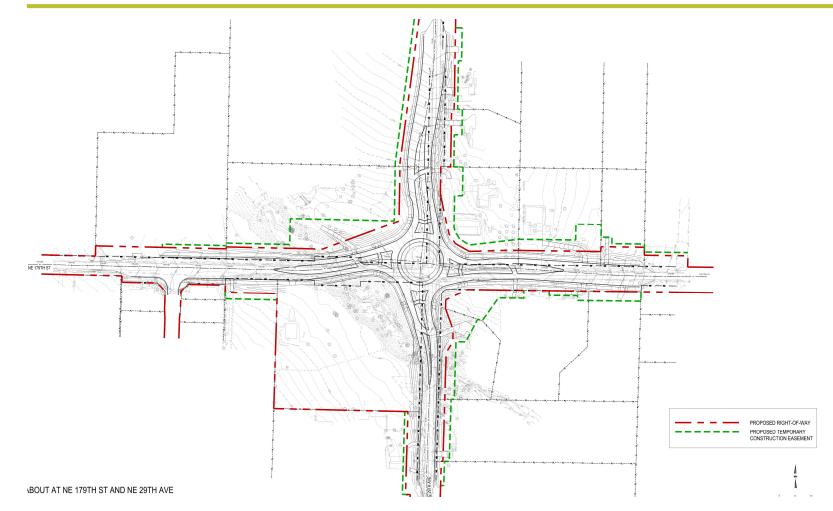
- Opening year interim roundabout design
- Interim Video

- 2047 ultimate design
- <u>Ultimate Video</u>





Property Impacts



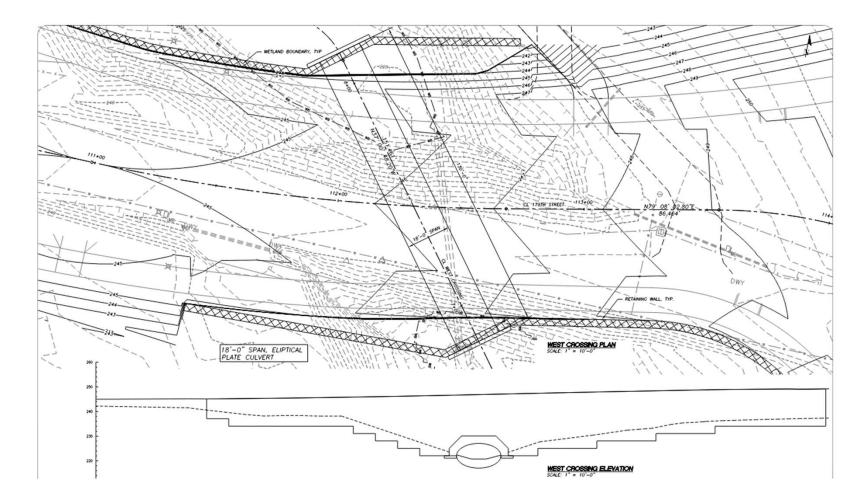


Bridge vs Culvert at Stream Crossings



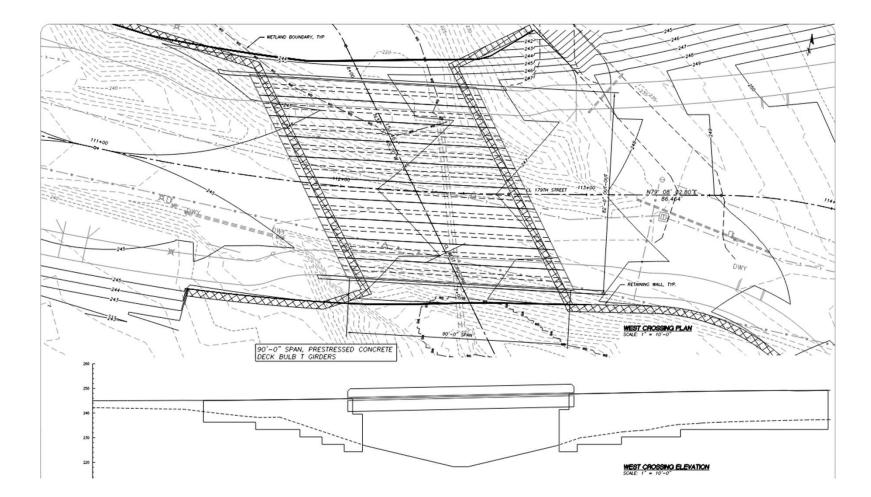


Culvert Option





Bridge Option





- Coho salmon and steelhead trout have been documented per WDFW
- Culvert under 29th is broken and is a fish barrier
- Habitat north of NE 179th is of low quality, east of 29th is better, in a biodiverse corridor that is protected with decent fish habitat
- •Wetlands are present, both near the stream and some upland



Environmental Impacts and Mitigation

Alt.	Approx. Wetland Category	Permanent Wetland Impact (acres) (Category II Wetland)	Wetland Mitigation Ratio (Wetland Creation)	Wetland Mitigation Acreage Needed (acres)	Temporary Wetland Impact (acres)	Perm./Temp. Wetland Buffer Impact Combined (acres)	Perm./Temp. Stream Buffer Impact Combined (acres)	Perm. Stream Impact (acres)
West	t Crossing		10-	-				
1	11	0.04	3:1	0.12	0.08	0.32	within wetland buffer	0.05
2	. 11	0.04	3:1	0.12	0.08	0.32	within wetland buffer	0.05
3	.11	0.06	3:1	0.18	0.08	0.34	within wetland buffer	0.05
4	. 11	0.01	3:1	0.03	0.05	0.28	within wetland buffer	0
5		0	3:1	0	0.04	0.25	within wetland buffer	0
Sout	h Crossing	g						
1	11	0.04	3:1	0.12	0.07	0.41	within wetland buffer	0.05
2	11	0.04	3:1	0.12	0.07	0.41	within wetland buffer	0.05
3	1	0.05	3:1	0.15	0.08	0.44	within wetland buffer	0.05
4	11	0.03	3:1	0.09	0.04	0.44	within wetland buffer	0
5	11	0	3:1	0	0.03	0.44	within wetland buffer	0

Table 3—Approximate Wetland and Stream Mitigation Areas

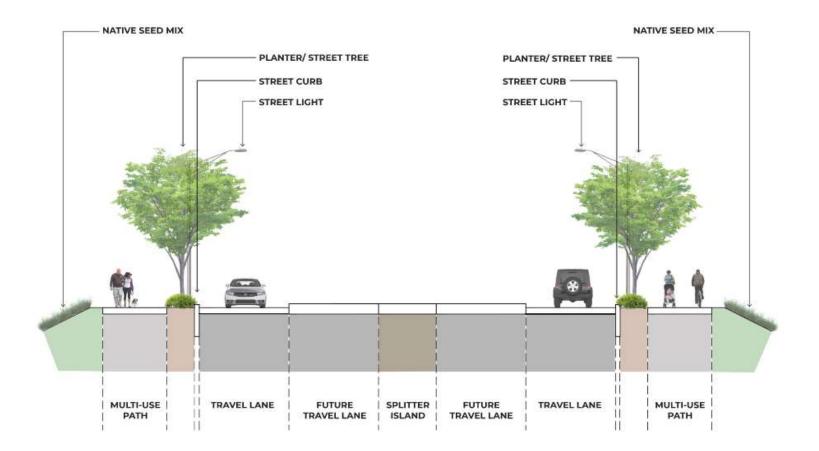


Intersection and Corridor Aesthetics

- 1. Retaining Walls, visible and not visible from the street
- 2. Fencing
- 3. Stormwater Facilities
- 4. Illumination poles
- 5. Pedestrian accommodations
- 6. Crosswalks (hardscape)
- 7. Planter strip (between curb and shared path)
- 8. Truck aprons and Splitter Islands
- 9. Center of the roundabouts



Cross Section of NE 179th





Center of Roundabout Opportunities





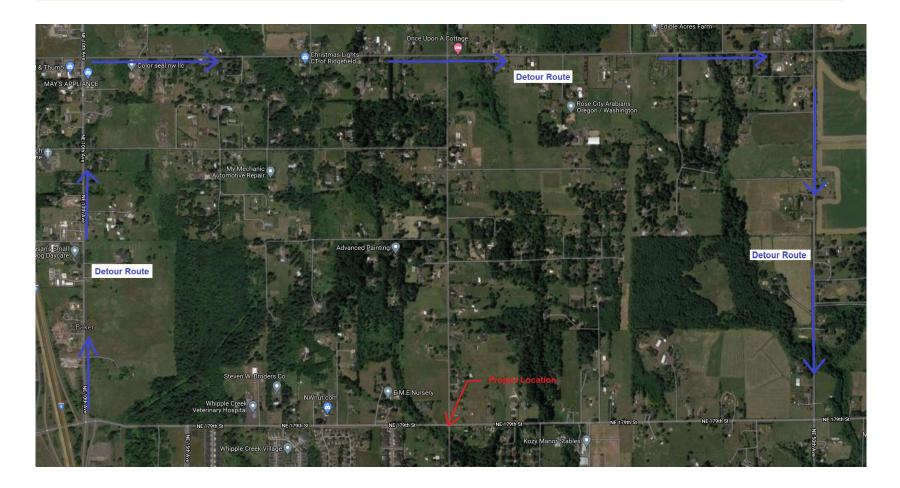


Road Closure





Detour Route





Project Funding

- Federal Grant
- Traffic Impact Fees
- County Road Funds
- Clark Public Utilities Water
- Clark Regional Wastewater District



Current Project Schedule

- Property Acquisition Process (April, 2022 March, 2023)
- Environmental Permitting (April,2021 March,2023)
- Bid Opening / Award Spring, 2024
- Anticipated Start of Construction Summer, 2024
- Substantial Completion Summer, 2026

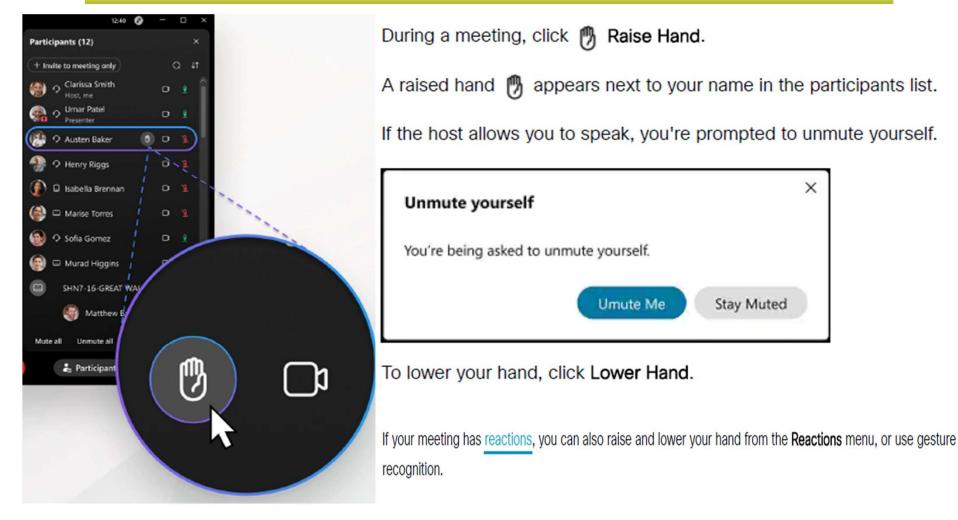


Contact Information

- Project Manager
 - Scott Sawyer
 - 564-397-4364
 - scott.sawyer@clark.wa.gov
- Project Email Address: <u>179thstreetproject@clark.wa.gov</u>
- NE 179th St. Project Website: <u>https://clark.wa.gov/public-works/ne-179th-st-ne-29th-ave</u>
- Public Works Customer Service: <u>pubwks.cservice@clark.wa.gov</u>



Questions





Corridor Project Planning Display - Roundabout at Delfel Rd.& Interim NE 50th Ave. Optio	n
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Design/ROW/Environmental Construction (

Project		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	PE		ROW	Construction	Total
NE 10th Ave. (TACC)														\$1,580,	000	\$1,402,000	\$9,618,000	\$12,600,000
Delfel Rd. Realignment (Roundabout - Multi-Project Stormwater)														\$1,400,	000	\$2,400,000	\$11,700,000	\$15,500,000
I-5/179th St. Interchange Reconstruction														N/A		N/A	N/A	N/A
179th St. (Interchange Improvements to NE 15th Ave. Improvements)														\$204,0	00	\$212,800	\$2,483,200	\$2,900,000
NE 15th Ave. (NE 179th St. to NE 10th Ave.) & (15th Ave. to NE 26th Ave.)														\$3,077,	000	\$1,720,000	\$23,203,000	\$28,000,000
NE 179th St. & NE 29th Ave. Intersection														\$1,994,	000	\$2,285,000	\$19,321,000	\$23,600,000
NE 179th St. & NE 50th Ave. Intersection - Interim Project														\$179,2	00	\$200,000	\$720,800	\$1,100,000

Total \$83,700,000





