



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecountywa.gov](mailto:leticia.neal@piercecountywa.gov), Ext. 7041

## Orville Road East – Traffic Study (MP 13.74 to MP 15.23), CRP 5927

**Background:** The drainage ditches on both sides of Orville Road East are much deeper than typical. Several accidents have occurred where the vehicles have driven into the ditch.

**Problem:** The deeper drainage ditches on both sides of Orville Road East are an increasing risk to traffic. Maintenance has responded to several accidents on this stretch of Orville Road East where vehicles have driven into the ditch.

**Solution Strategy:** Investigate accident statistics for this section of Orville Road East to determine the appropriate countermeasure(s) for safety improvements.

**Funding Source:** The investigative traffic design report to be funded using local funds (County Road Funds).

**Cost Estimate:** TBD

**Project Duration:** TBD



(Orville Rd E & A L Card Rd E, Looking North)



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecountywa.gov](mailto:leticia.neal@piercecountywa.gov), Ext. 7041

## Lorenz Road NW - Embankment Protection – (MP 1.26 to MP 1.89), CRP 5929

**Background:** This section of Lorenz Road is parallel to the shoreline which is eroding due to tidal action. This erosion is continuous and if left unchecked will undermine the road.

**Problem:** Shoreline tidal action has caused erosion of the mostly unarmored slope below Lorenz Road NW. Maintenance crews have repaired small sections of the shoulder as erosion has impacted the road, but the issue is gradually growing and worsening. The continued erosion of the slope below the road and impact to the traveled way require a permanent solution.

**Solution Strategy:** Construct some type of embankment protection. A design report and evaluation of ROW impacts must be done first to determine project costs.

**Funding Source:** The investigative design report to be funded using local funds (County Road Funds).

**Cost Estimate:** TBD

**Project Duration:** TBD



(Lorenz Rd NW, Looking South)





Planning and Public Works  
Leticia Neal, P.E.  
[leticia.neal@piercecountywa.gov](mailto:leticia.neal@piercecountywa.gov), Ext. 7041

### ADA Improvement Program – 2021 (Various locations), CRP 5922

**Background:** Ainsworth Avenue South at 110 Street South and 168 Street East 150' W/O 171 Street Court East to Gem Heights Drive area has been identified as part of the ADA Transition Planning process.

**Problem:** The existing driveways and curb ramps do not meet current ADA requirements.

**Solution Strategy:** This project will construct/improve curb ramps and driveways and could include deficient sidewalks and APS to bring existing pedestrian facilities into compliance of ADA standards within the project limits.

**Funding Source:** This project is fully funded, with engineering and construction programmed for 2020 - 2021 using local funds (County Road Funds).

**Cost Estimate:** Approximately \$360,000.

**Project Duration:** 2020-2021 (estimated).



(Gem Heights and 168 St E, Looking South)



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecountywa.gov](mailto:leticia.neal@piercecountywa.gov), Ext. 7041

### ADA Improvement Program – 2022 (Various locations), CRP 5923

**Background:** The project area of 159 St E / 160 St E from B St E to 7 Av Ct E has been identified as part of the ADA Transition Planning process. This location is prioritized highly within the Plan and provides direct access to Thompson Middle School and indirect access to the nearby Spanaway Middle School.

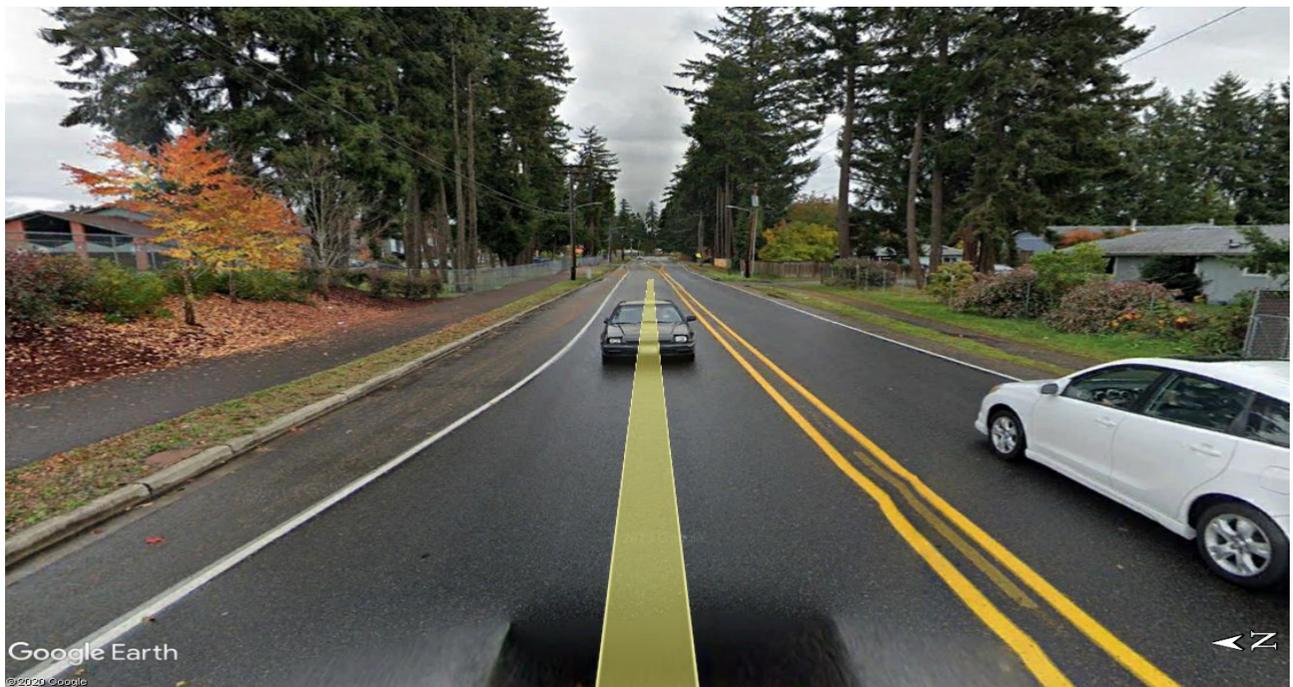
**Problem:** The existing curb ramps, driveways, sidewalks and APS are not in compliance with current ADA requirements.

**Solution Strategy:** This project will construct/improve curb ramps and driveways and could include replacement of deficient sidewalks and APS to bring the entire existing pedestrian network within the project into compliance of ADA standards within the project limits.

**Funding Source:** This project is fully funded, with engineering and construction programmed for 2020 - 2022 using local funds (County Road Funds).

**Cost Estimate:** Approximately \$515,000.

**Project Duration:** 2020-2022 (estimated).



(159 St E / 160 St E, Looking East)



Planning and Public Works  
Letticia Neal, P.E.  
[letticia.neal@piercecountywa.gov](mailto:letticia.neal@piercecountywa.gov), Ext. 7041

### Woodland Av E / 104 St E (Intersection), CRP 5924

**Background:** The existing intersection of Woodland Avenue East and 104 Street East currently operates as an all-way stop controlled intersection with a single approach lane for all movements.

**Problem:** 104 Street East is classified as a secondary arterial with an AADT of 6,425 – 6,925. Woodland Avenue East is classified as a collector arterial with an AADT of 6,925 – 8,900. This intersection currently ranks number 5 on the Traffic Signal Priority Array, meeting three different signal warrants – 4 Hour, Peak Hour and Crash Experience.

**Solution Strategy:** A traffic design report is needed to determine the ultimate needs of the intersection.

**Funding Source:** The traffic design report to be funded using local funds (County Road Funds).

**Cost Estimate:** \$50,000 for the traffic design report. Project costs including construction TBD.

**Project Duration:** TBD



(Woodland Avenue East at 104 Street East, Looking North)



Planning and Public Works  
Letticia Neal, P.E.  
[letticia.neal@piercecountywa.gov](mailto:letticia.neal@piercecountywa.gov), Ext. 7041

## ROW – MILWAUKEE AV E / VALLEY AV E, CRP 5925

**Background:** CRP 5890 (Milwaukee AV E / Valley AV E) will construct a new traffic signal system with left-turn lanes on all approaches and an eastbound right-turn lane. In the future, additional storage capacity for these turn lanes will be needed. This project is to preserve the ultimate right of way needed for these future improvements.

**Problem:** CRP 5890 is currently being designed and can be completed without the ultimate ROW but is forecasted to fail in the future, due to queueing and blocking issues.

**Solution Strategy:** Create a set of ultimate ROW plans to have on record when the need arises in the future.

**Funding Source:** The ultimate ROW plans to be funded using local funds (County Road Funds).

**Cost Estimate:** TBD

**Project Duration:** TBD



(Milwaukee Av E / Valley Av E, Looking North)



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecounitywa.gov](mailto:leticia.neal@piercecounitywa.gov), Ext. 7041

### 159 STREET SOUTH / 159 STREET EAST (SR-7 to B St E), CRP 5926

**Background:** As the area's population has increased, so has the pedestrian traffic. The lack of a sidewalk connection on 159 Street South / 159 Street East between SR-7 and B Street East has been identified as an area of concern for pedestrian safety and is included in the Parkland-Spanaway-Midland Community Plan as a Premier project.

**Problem:** Lack of pedestrian facilities between SR-7 and B Street East on 159 Street South / 159 Street East, create public safety concerns.

**Solution Strategy:** To add sidewalk and shared-use paved shoulders on both sides of road and connect to existing sidewalks at SR-7 and B Street East. Install LED pedestrian scale lighting to illuminate the sidewalk to increase pedestrian safety. The existing two-way left turn lane will be extended to B Street East.

**Funding Source:** The project was awarded federal STP funds in 2020. The local match will be County Road Funds.

**Cost Estimate:** \$1,039,000 – (\$513,000 (STP)/\$526,00 (CRF))

**Project Duration:** TBD



(159 St E & B St E, Looking West)



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecountywa.gov](mailto:leticia.neal@piercecountywa.gov), Ext. 7041

### **Artondale Dr NW - Culvert Replacement (MP 0.45 to MP 0.54), CRP 5928**

**Background:** Due to the poor alignments for the ditch and culvert, excessive maintenance has been required to maintain proper operation for this segment of the drainage system on Artondale Dr NW.

**Problem:** Significant drainage and sediment enters the ditch from the hillside on the south side of Artondale to the southwest of the culvert. The ditches adjacent to the current culvert fill with sediment and vegetation which blocks the culvert and decreases flow through the culvert.

**Solution Strategy:** Realign the drainage culvert and adjacent ditch to reduce repetitive maintenance concerns. There could also be a water quality benefit as well.

**Funding Source:** The investigative design report to be funded using local funds (County Road Funds).

**Cost Estimate:** TBD

**Project Duration:** TBD



*(Artondale under road drainage culvert)*



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecounitywa.gov](mailto:leticia.neal@piercecounitywa.gov), Ext. 7041

## C STREET SOUTH (Garfield St S to Tule Lk Rd S), CRP 5930

**Background:** C Street South provides key non-motorized access to the Garfield Center of Local Importance including direct access to the Pacific Lutheran University, commercial businesses, a network connection to a Pierce Transit station and Pacific Avenue.

**Problem:** The pedestrian and bicycle facilities are lacking on C St S. The Parkland-Spanaway-Midland Community Plan has identified this as a premier project.

**Solution Strategy:** The project will construct pedestrian and bicycle facilities and associated amenities.

**Funding Source:** This project could be competitive for future grant funding opportunities however, initial engineering work must be completed to fully understand the project impacts, costs, and schedule. Initial engineering work will be done using County Road Funds (CRF).

**Cost Estimate:** TBD

**Project Duration:** TBD



(C St S just before 122 St S, Looking North)



Planning and Public Works  
Leticia Neal, P.E.  
[leticia.neal@piercecountywa.gov](mailto:leticia.neal@piercecountywa.gov), Ext. 7041

### **121 STREET SOUTH (8 Av Ct S to C St S), CRP 5931**

**Background:** Provides key non-motorized access to the Garfield Center of Local Importance including direct access to the Pacific Lutheran University, commercial businesses, a network connection to a Pierce Transit station and Pacific Avenue.

**Problem:** The pedestrian and bicycle facilities are lacking on 121 St S. The Parkland-Spanaway-Midland Community Plan has identified this as a high priority project.

**Solution Strategy:** The project will construct pedestrian and bicycle facilities and associated amenities.

**Funding Source:** This project could be competitive for future grant funding opportunities however, initial engineering work must be completed to fully understand the project impacts, costs, and schedule. Initial engineering work to be completed using County Road Funds (CRF).

**Cost Estimate:** TBD

**Project Duration:** TBD



(121 St S just West of Park Av S, Looking West)



## CANYON RD EAST - ASPHALT OVERLAY (138 St E to 116 St E), CRP 5932

**Background:** The existing HMA (asphalt) surface was paved in 2008 when the corridor was widened to its current configuration. Canyon Rd E has very high traffic volumes and is in need of preservation.

**Problem:** The road exhibits pavement distresses throughout the project limits. This segment was identified by M&O as needing an overlay in 2023. Most of the existing curb ramps no longer meet current ADA standards and will be replaced.

**Solution Strategy:** This project will provide for the preservation of Canyon Road East by grinding and overlaying the existing asphalt pavement roadway between the concrete curbs. The project will also replace non-complaint ADA curb ramps.

**Funding Source:** This project received a federal STP award for a 2023 for Construction Phase. The Design phase and Construction phase match to be County Road Funds (CRF).

**Cost Estimate:** \$2,974,000 – (\$750,000 (STP) / \$2,224,000 (CRF))

**Project Duration:** Construction 2023



(Canyon Rd E & 122 St E, Looking North)



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecountywa.gov](mailto:leticia.neal@piercecountywa.gov), Ext. 7041

## KETRON ISLAND FERRY LANDING - DOLPHINS

**Background:** The existing Ketron Island Ferry Landing was constructed in 1996 and the anticipated service life for the existing steel dolphins is approximately 30 years. Due to the nature of their intended service, and the anticipated life cycle indicated above, it is necessary to periodically repair or replace these structures.

**Problem:** The existing Ketron Island Ferry Landing was constructed in 1996 and the anticipated service life for the existing steel dolphins is approximately 30 years. Since the Ketron Island Ferry landing is the only lifeline access to the Island, an emergency may cause unavoidable and lengthy lapses in service and access to the Island. Addressing this preservation project early may avoid unacceptable service delays in the future.

**Solution Strategy:** Remove the four existing steel pile dolphins and replace them with new steel pile dolphins of similar design and location.

**Funding Source:** County Road Funds (CRF)

**Cost Estimate:** \$2,202,000

**Project Duration:** TBD



*(Ketron Island Ferry Landing)*



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecounitywa.gov](mailto:leticia.neal@piercecounitywa.gov), Ext. 7041

## M/V Christine Anderson – Convert to Electric Propulsion

**Background:** The constant use of the M/V Christine Anderson in the transporting of vehicles and people to and from the islands creates a substantial amount of harmful emissions out into the environment.

**Problem:** The outdated, inefficient diesel engines create a significant amount of pollution and are not fuel efficient.

**Solution Strategy:** Evaluate and study converting the M/V Christine Anderson to electric propulsion. This will support the Pierce County 2030 Sustainability Plan and reduce pollution and fuel consumption.

**Funding Source:** Planning to pursue Washington State CRAB funding to accomplish this project.

**Cost Estimate:** TBD

**Project Duration:** TBD



*(Steilacoom Ferry Terminal)*



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecounitywa.gov](mailto:leticia.neal@piercecounitywa.gov), Ext. 7041

## M/V Christine Anderson Re-Engining

**Background:** The constant use of the M/V Christine Anderson in the transporting of vehicles and people to and from the islands creates a substantial amount of harmful emissions out into the environment.

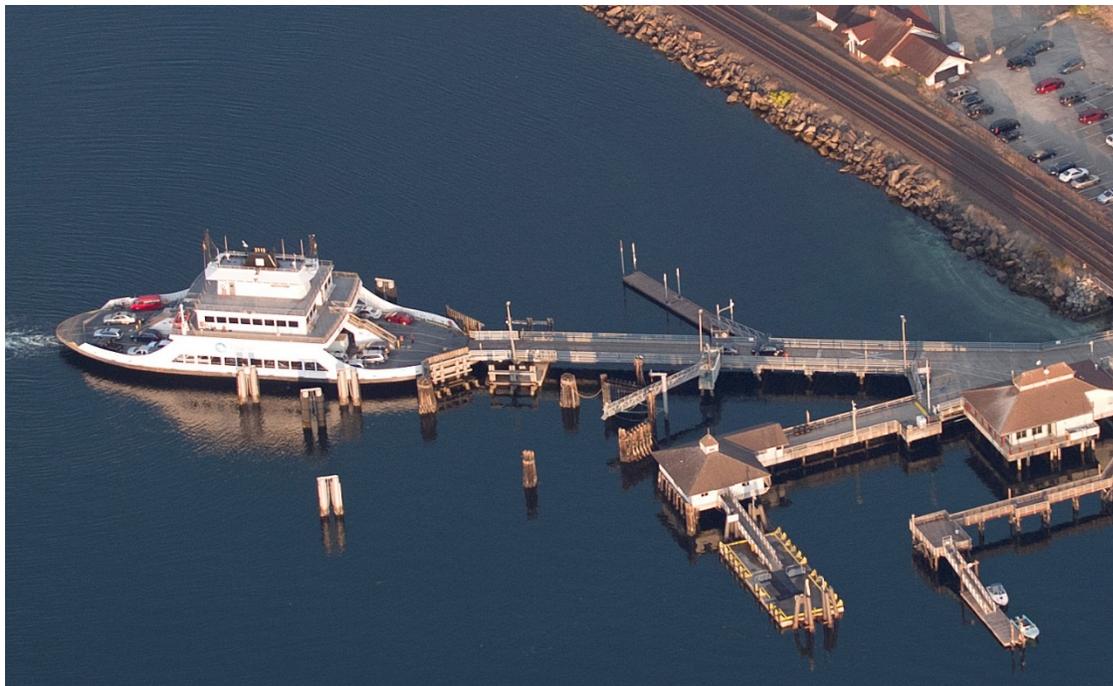
**Problem:** The outdated, inefficient diesel engines create a significant amount of pollution and are not fuel efficient.

**Solution Strategy:** Re-engine the main engines on the Christine Anderson, replacing the current unregulated diesel engines with new, cleaner burning, lower emission Tier3/4 diesel engines. This will support the Pierce County 2030 Sustainability Plan and reduce fuel consumption.

**Funding Source:** Planning to pursue Washington State CRAB funding to accomplish this project.

**Cost Estimate:** TBD

**Project Duration:** TBD



*(Steilacoom Ferry Terminal)*



Planning and Public Works

Leticia Neal, P.E.

[leticia.neal@piercecountywa.gov](mailto:leticia.neal@piercecountywa.gov), Ext. 7041

## M/V Steilacoom II Reduction Gear

**Background:** The M/V Steilacoom drive system is experiencing ongoing maintenance issues because the reduction gear is not specifically designed for the existing drive system.

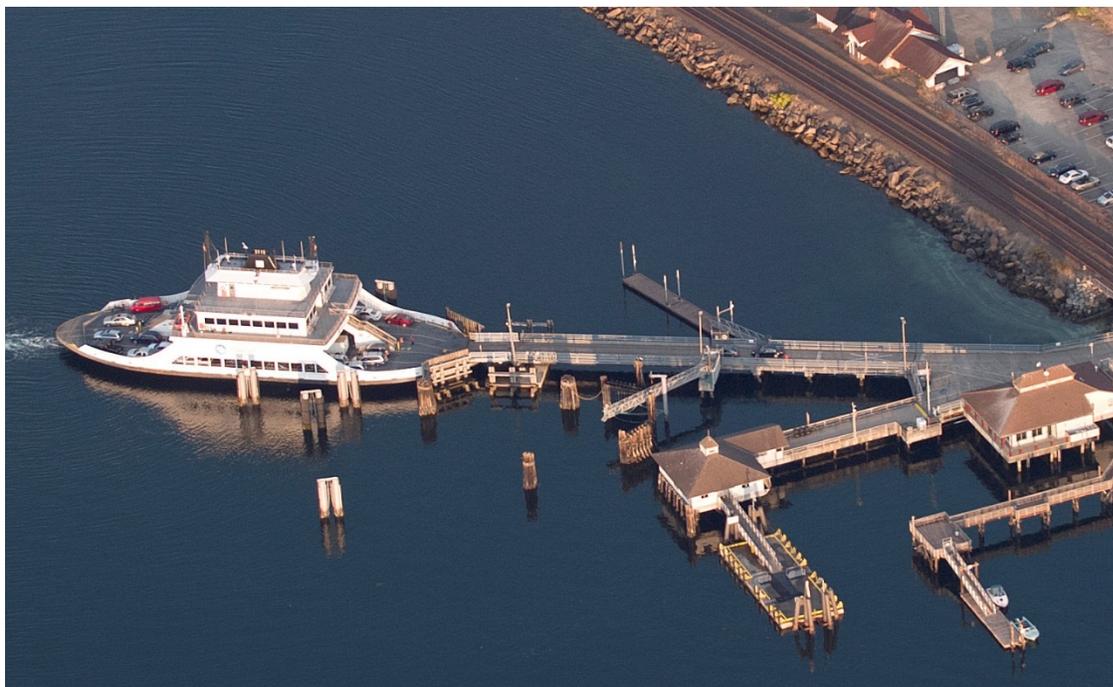
**Problem:** The current American made reduction gear installed is not what was specifically designed for the existing drive system, causing ongoing reliability issues.

**Solution Strategy:** Replace the current reduction gear with a ZF model that is designed specifically for the system.

**Funding Source:** Planning to pursue Washington State CRAB funding to accomplish this project. Due to the Buy American requirement, federal funding to purchase the proper reduction gear hasn't been available.

**Cost Estimate:** TBD

**Project Duration:** TBD



*(Steilacoom Ferry Terminal)*