ENGINEER'S BRIDGE INSPECTION REPORT

2021

Pierce County
Planning & Public Works

COVER PHOTOS

Bridge #31202-A Steilacoom Ferry Landing
Bridge #28210-A Herron Bay
Bridge #24184-A South Creek Trib. (OK Hwy)

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ENGINEER'S BRIDGE INSPECTION REPORT 2021

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8/10/2021

Office of the County Engineer Division
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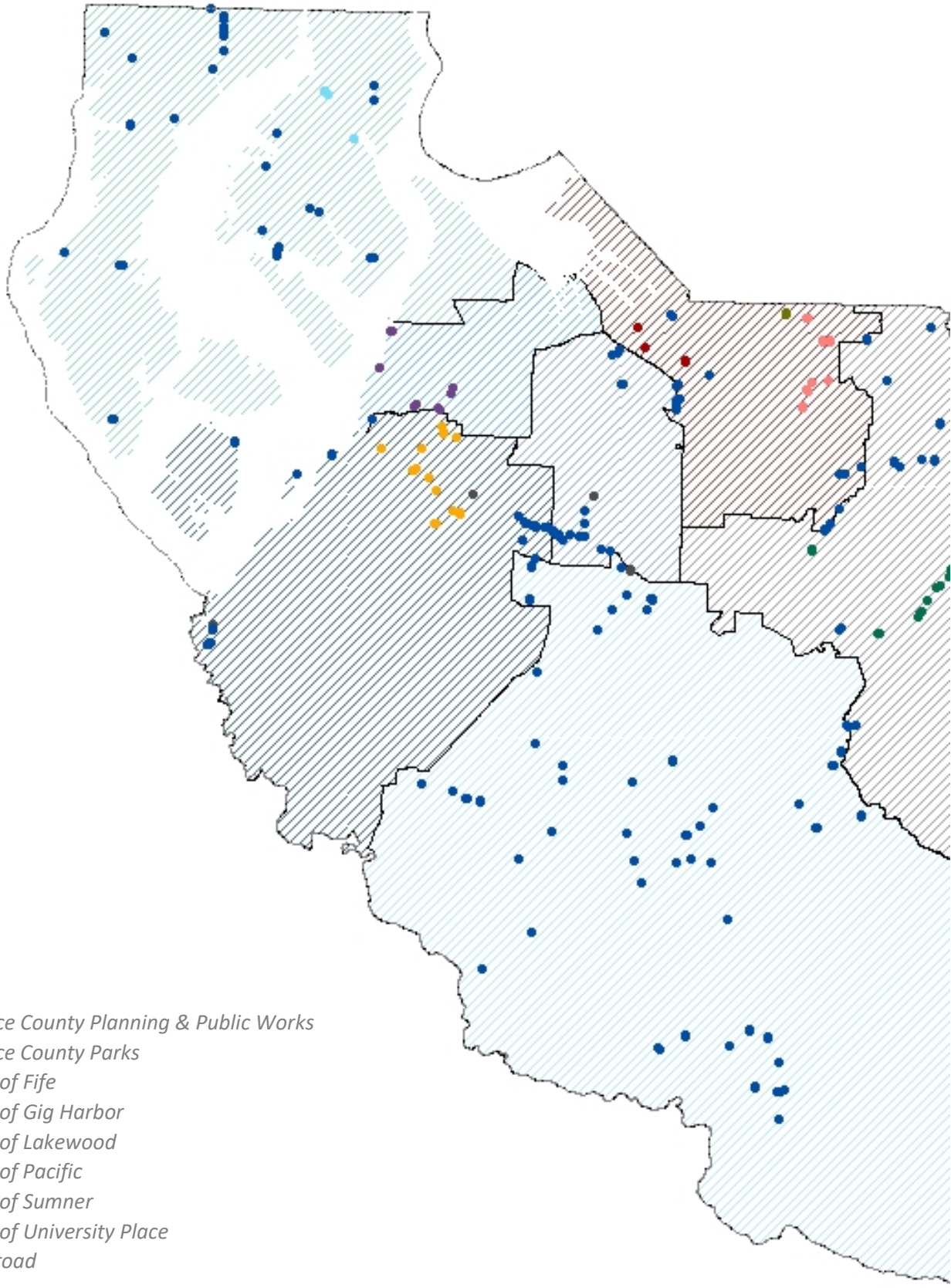
Brian D. Stacy 8-10-2021

Brian D. Stacy, P.E. *Date*


Pierce County Planning & Public Works
Pierce County Parks
City of Fife
City of Gig Harbor
City of Lakewood
City of Pacific
City of Sumner
City of University Place
Railroad

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INTRODUCTION

This report has been completed in compliance with WAC 136-20-060, which requires that the "Engineer's Bridge Inspection Report" be used in conjunction with the preparation and adoption of the Transportation Improvement Program. Its contents have been obtained in accordance with the Washington State Bridge Inventory System (WSBIS) and per the U.S. Department of Transportation, Federal Highway Administration (FHWA) Title 23 - Highways; Part 25, and National Bridge Inspection Standards (NBIS).

The "Engineer's Bridge Inspection Report" dated 2021, is published by Pierce County Planning & Public Works. The information contained herein is a result of the 2019-2020 bridge inspections and is the best available at the date of publication. It is to be used as an informational tool for planning and maintenance activities and reflects the general condition of the County's bridges.

Each year, Pierce County Bridge Engineering personnel inspect approximately half of the County's bridges. In accordance with the National Bridge Inspection Standards, every bridge on the County road system is inspected at a minimum of every 2 years.

The pages within this report summarize the County's 2019-2020 bridge program. The intent of this program is to provide a comprehensive strategy to maintain and preserve the County's bridges and the continuity of the road network of which they are an integral part.

Our primary goals of the bridge program are as follows:

- ✓ *Maintain public safety and confidence by keeping the bridges open and safe for public use.*
- ✓ *Protect public investment by preserving bridge infrastructure.*
- ✓ *Create a systematic and qualitative approach to rehabilitate bridges if possible and replace if necessary when repair and rehabilitation are no longer feasible options.*

Factoids:

- ❖ *Highest Average Daily Traffic: 49,975 (Bridge #23193-B Clover Creek at Canyon Road)*
- ❖ *8 bridges carry over 15,000 vehicles per day each**
- ❖ *Estimated total of 353,968,970 vehicles per year use Pierce County Bridges. Increase of over 4.5 million vehicles from 2019.*

** Excludes city and railroad bridges*

Br. #31221-A Glencove

Br. #4177-B Colegrove Creek

Br. #34195-A Creek

BRIDGE IDENTIFICATION CONVENTIONS

Bridge Number

Each bridge may be located on the County Atlas by utilizing its individual number, name, and location. Each bridge number locates the bridge by Section, Township, and Range. The following is an example of the bridge number naming convention.

Bridge # PRT 23 19 5 - E

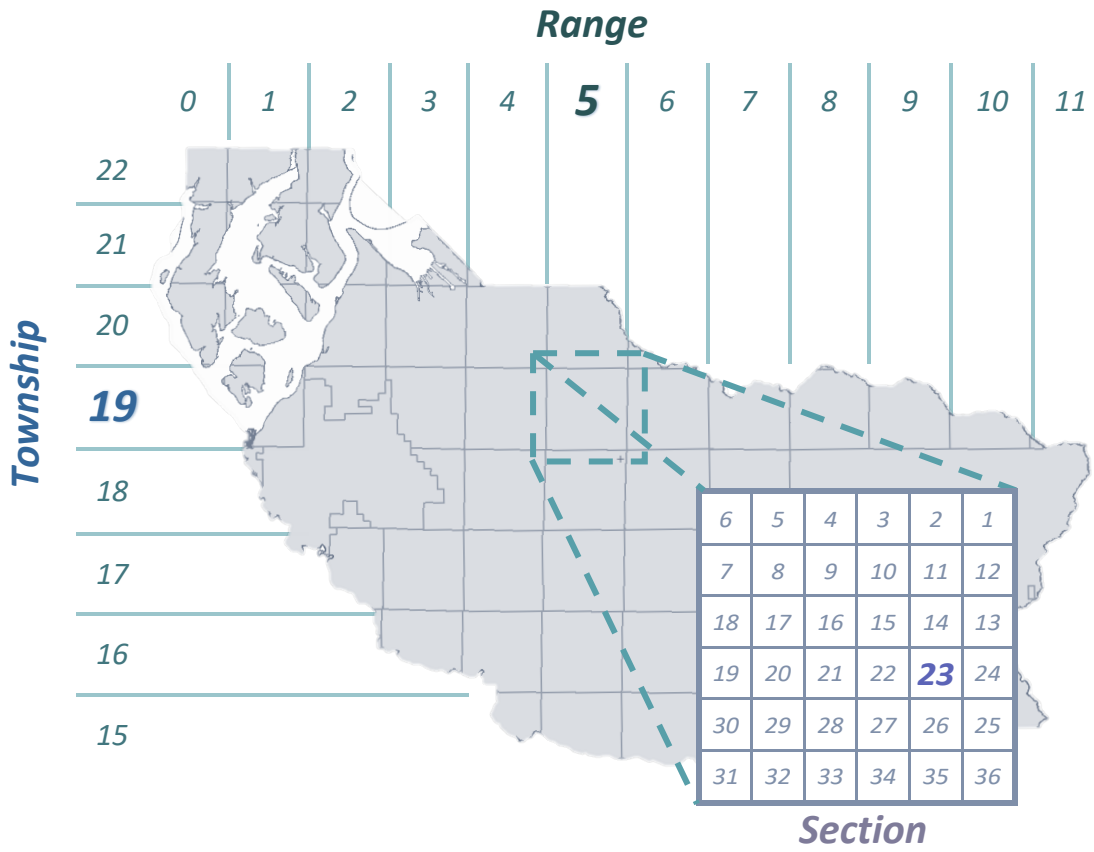
PRT *Optional three letter designation at the beginning of the bridge number refers to a city or Pierce County Parks bridge.*

23 *Either single or double digit number refers to the Section within the Township and Range.*

19 *Double digit number refers to the Township within the Range.*

5 *Either single or double digit number refers to the Range. 0 refers to 1 West, all other numbers refer to East ranges (i.e., 1 means 1 East, 2 means 2 East, etc.) There are no Pierce County Bridges in Range 8 or 11.*

E *Letter refers to a particular bridge located within a Section and as shown on the County Atlas.*



Bridge Name

The bridge name refers to the features which the structure crosses.

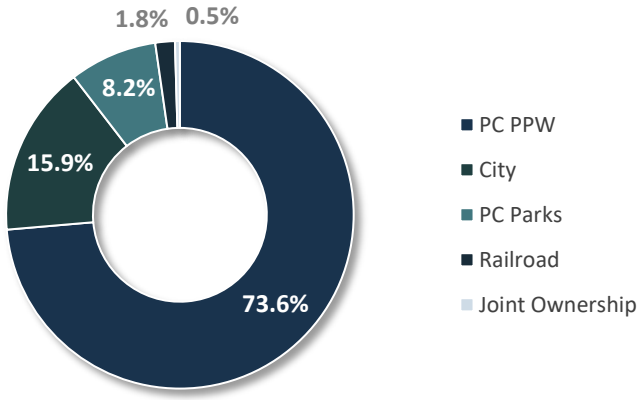
Location

The location is the roadway name carried by or under the bridge structure.

PIERCE COUNTY BRIDGE INVENTORY

Ownership

Pierce County Planning and Public Works inspects and inventories 219 roadway and pedestrian bridge structures. This differs from the 2019-2020 inspection cycle due to adding one new culvert to the inspection inventory (24184-A). The ownership of these 219 bridges breaks out as follows:



Bridges Inspected and Inventoried by Pierce County — 219

Jointly Owned but not Inspected or Inventoried by Pierce County — 1

- **Pierce County Planning and Public Works Bridges** — 162
  - **Highway Bridges** — 159
    - **Highway / Roads** — 153
    - **Joint Ownership P.C. & Other Municipalities** — 3
    - **Ferry Landings** — 3
  - **Surface Water Management (Maintenance Access)** — 1
  - **Sewer Division (Pedestrian Bridge)** — 1
  - **Pedestrian Bridge** — 1
- **City Bridges** — 35
- **Pierce County Parks and Recreation** — 18
- **Railroad Bridges** — 4

STRUCTURE TYPES

Of the 159 highway bridges owned and maintained by Planning and Public Works, 132 bridges are constructed primarily of reinforced concrete. The chart shown below provides a summary of the primary bridge construction material types.

Bridges by Main Span Material	
Reinforced Concrete	132
Steel	14
Timber	9
Aluminum	4


Br. #31157-A Nisqually River (Kern)


Br. #20193-B Enchanted Island

Short Span Bridges

The NBIS defines a bridge as:

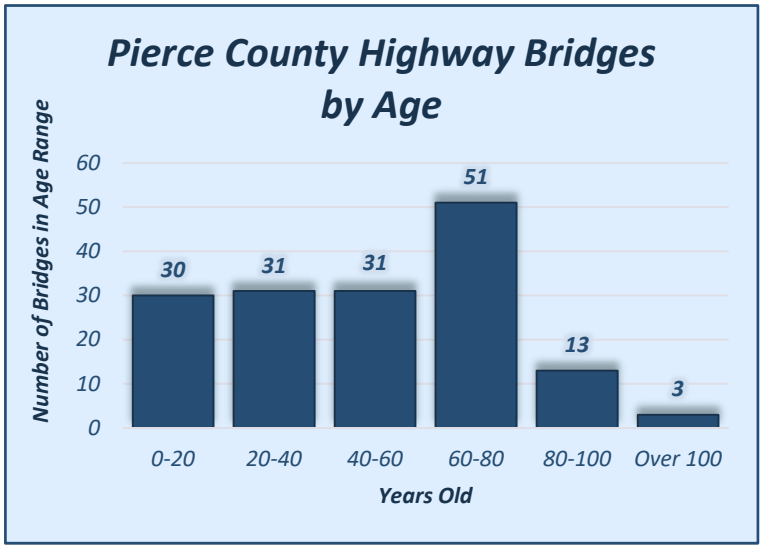
> *"A structure, including supports, erected over a depression or an obstruction, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between undercopings of abutments or spring lines of arches…"*

Consequently, a structure less than 20 feet in length is a short span bridge. The Highway Bridge Replacement and Rehabilitation Program excludes short span bridges from receiving federal funding under this program. Of the 159 highway bridges owned and maintained by Planning and Public Works, 57 are not eligible for federal funding under the program.

Factoids:

- Longest bridge is 2,850 feet long (Bridge #PRT17196-F Foothills Trail Pin Pile Trestle).
- Longest vehicle bridge is 1,950 feet long (Bridge #26211-A Fox Island Bridge).
- 13 bridges have a structure length greater than 300 feet*
- 3 bridges have span lengths greater than 200 feet*
- Oldest bridges are 101 years old (2 bridges built in 1919)

* Excludes city and railroad bridges



INSPECTION FINDINGS AND RATINGS

All the bridge structures owned and maintained by Pierce County Planning and Public Works are inspected and managed in accordance with the National Bridge Inspection Standards (NBIS) 23 CFR 650. The NBIS sets the national standard for the proper safety inspection and evaluation of bridges and applies to all structures defined as highway bridges located on all public roads.

In compliance with the NBIS or other federal mandates, policies or recommendations, Pierce County Bridge Engineering personnel routinely complete the following tasks for all structures on our inventory:

- ✓ *Perform regularly scheduled in-service bridge inspection*
- ✓ *Maintain bridge records*
- ✓ *Maintain bridge inventory*
- ✓ *Submit bridge inventory data to WSDOT for incorporation into National Bridge Inventory*
- ✓ *Maintain current load rating on all NBI structures*
- ✓ *Maintain current scour evaluation on all bridges over water (scour is the removal of sediment such as sand and rocks from the area surrounding the bridge abutment or piers, caused by quickly moving water).*
- ✓ *Maintain sour plan of action for all bridges considered vulnerable to scour*
- ✓ *Quality control and quality assurance program*
- ✓ *Maintain personnel qualification records and an inspector certification program*
- ✓ *Respond to FHWA Technical Advisories, FHWA Action Memoranda, and other policy or information requirements requested by the FHWA Washington Division Bridge Engineer*
- ✓ *Maintain bridge management system*
- ✓ *Bridge repair management*
- ✓ *Manage non-NBIS structures (publicly-owned highway bridges less than 20 feet long)*

Routine Bridge Inspection

A total of 107 routine bridge inspections were completed in the 2020 inspection cycle. Routine inspections are regularly scheduled inspections consisting of observations, measurements, or both, needed to determine the physical and functional condition of the bridge, to identify and document any observable defects or changes since the last inspection, and to ensure that the structure continues to satisfy present service requirements. In addition, repair recommendations are prepared and submitted to the Road Operations Division so that appropriate maintenance and repairs may be completed.

Factoids:

- *Pierce County bridges account for almost 7 miles of roadway*
- *Pierce County inspects nearly 612,000 square feet of bridge deck every 2 years*
- *Out of 159 highway bridges, Pierce County has 147 bridges that cross over water:*
  - *133 fresh water*
  - *10 brackish water*
  - *4 salt water*

Br. #18204-A Puyallup River (66th Av)

Special Inspections

Under Bridge Inspection:

If portions of the bridge during a routine inspection cannot be given close or adequate inspection from the ground, shoreline, or by using simple access equipment, such as ladders, then a special under bridge inspection truck (UBIT) may be utilized to supplement the inspection. Typically, these inspections are conducted with Pierce County Bridge personnel using equipment provided by the WSDOT. A total of 5 UBIT inspections were completed in the 2021 inspection cycle. Future UBIT inspections are scheduled for 2023.


Br. #5177-A Tolmie Creek

Underwater Bridge Inspection:

An underwater inspection is the combined effort of soundings to locate the channel bottom, probing to locate deterioration of substructure and undermining, diving to visually inspect and measure bridge components, or some combination thereof. Typically, the underwater inspections are conducted by WSDOT personnel, under contract with Pierce County Planning and Public Works. A total of 3 underwater bridge inspections were conducted in the 2017 inspection cycle. Future underwater inspections are scheduled for 2022.


Br. #5177-A Tolmie Creek

Fracture-Critical Inspections:

Fracture-critical members or member components are steel tension members or steel tension components of members whose failure would be expected to result in a partial or full collapse of the bridge. A fracture-critical inspection of steel bridges shall include the identification of all fracture-critical members (FCM) and the development of a plan for inspecting such members. A total of 2 fracture-critical bridge inspections (using a UBIT) were conducted in the 2021 inspection cycle. Future fracture-critical inspections are scheduled for 2023.

Under Bridge Inspection Truck (UBIT)	***5***	*(Completed in 2021)*
Underwater Bridge Inspection	***3***	*(Completed in 2017)*
Fracture Critical Inspections	***2***	*(Completed in 2021)*

Inspection Findings and Repairs

Every year, new bridge deficiencies are discovered during routine and special inspections, and general maintenance items are identified. All repair or general maintenance recommendations are submitted to the Pierce County Road Operations Division for appropriate action. County maintenance forces track, monitor and document maintenance activities which allows for repairs to be processed and executed in a timely manner. Some work items are urgent and require immediate action, while others are prioritized and accomplished as appropriate. The primary intent of all repair and maintenance activities is to maintain safety and preserve the service life of the bridge infrastructure. See Recommended Repairs for a list of recommended repairs.


Br. #28210-A Herron Bay


Br. #26200-A Taylor Bay


Br. #14203-A Squally Creek

Sufficiency Rating

The sufficiency rating (SR) formula provides a method of evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service. The sufficiency rating is a percentage in which 100 percent would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient or deficient bridge. The formula considers the following:

1. Structural Adequacy

- Superstructure Overall
- Substructure Overall
- Culverts
- Inventory Rating

2. Serviceability and Functional Obsolescence

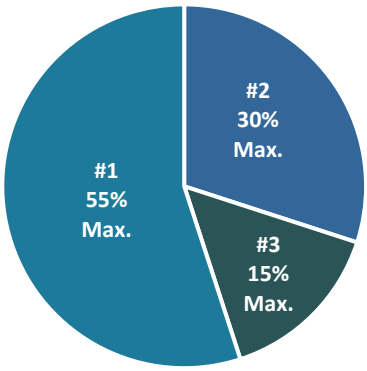
- Main Span Design
- Curb-to-Curb Width
- Approach Roadway
- ADT on Inventory Route
- STRAHNET
- Structural Adequacy
- Deck Geometry
- Underclearance Adequacy
- Alignment Adequacy
- Waterway Adequacy
- Deck Overall
- Min. Vert. Clear. Over Deck
- Lanes On

3. Essentiality for Public Use

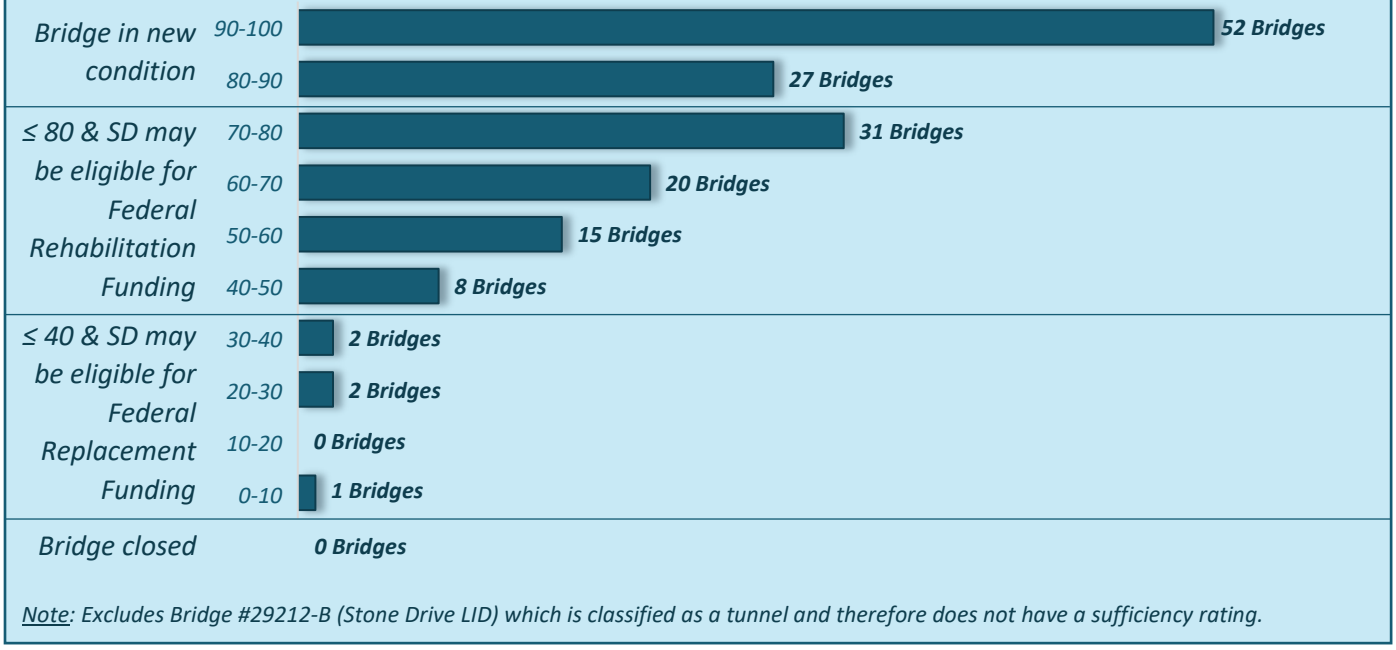
- ADT on Inventory Route
- STRAHNET
- Detour Length

4. Special Reductions

- Detour Length
- Main Span Design
- Bridge Rail
- Transition
- Guardrail
- Terminal



Sufficiency Rating of Pierce County Highway Bridges



Note: Excludes Bridge #29212-B (Stone Drive LID) which is classified as a tunnel and therefore does not have a sufficiency rating.

Functionally Obsolete (FO)

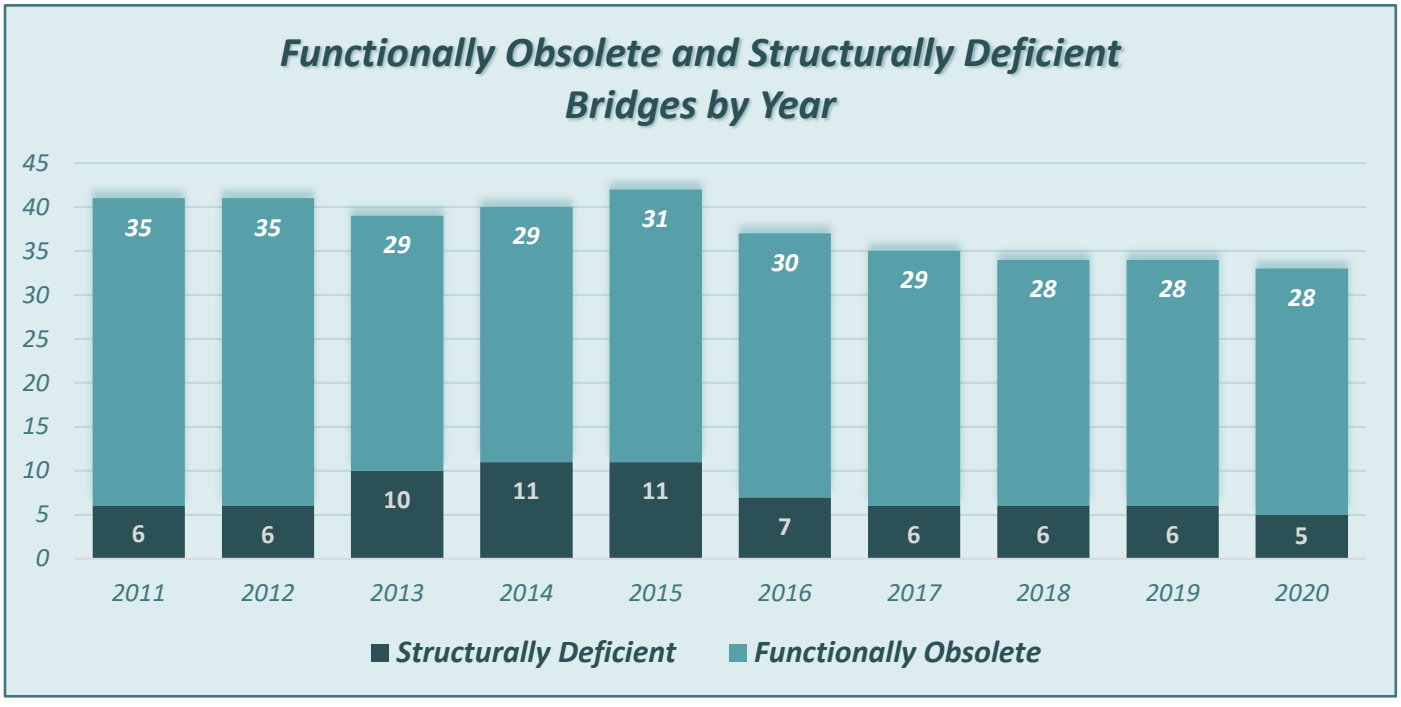
A bridge is considered to be functionally obsolete if it has deck geometry, load carrying capacity, clearance or approach roadway alignment that no longer meets the criteria for the system of which the bridge is a part. Examples include bridges with inadequate lane widths or shoulder widths, insufficient vertical clearances to serve the traffic demand, or bridges that may be occasionally flooded.

Structurally Deficient (SD)

Bridges are considered structurally deficient where significant load carrying elements are found to be in poor or worse condition due to deterioration and/or damage, or the adequacy of the waterway opening provided by the bridge is determined to be extremely insufficient to the point of causing intolerable traffic interruption. Any bridge classified as structurally deficient is excluded from the functionally obsolete category. Bridges that are both structurally deficient and functionally obsolete are reported together as structurally deficient bridges.

Structurally Deficient Bridges:

Bridge No.	Bridge Name	Location	Sufficiency
26211-A	FOX ISLAND	FOX ISLND BR RD NW	6.23
29202-A	CHAMBERS CREEK	CHAMBERS CK RD W	21.06
31221-A	GLENCOVE	CRAMER RD NW	27.63
19204-B	CLARKS CREEK	66 AV E	72.41
19204-C	CLARKS CREEK	66 AV E	74.41



Functionally Obsolete Bridges:

Bridge No.	Bridge Name	Location	Sufficiency
18204-A	PUYALLUP RIVER (66th Av)	66 AV E	47.35
20193-B	ENCHANTED ISLAND	MOUNTAIN VIEW BLVD	47.37
24164-B	LITTLE MASHEL	GROE RD E	51.81
19204-A	CLARKS CREEK (Stewart)	IRR STEWART AV E	56.07
24164-A	MASHEL RIVER	ALDER CUTOFF RD E	57.65
14193-A	CLOVER CREEK (25th Av)	25 AV E	57.85
34183-A	S FORK MUCK CRK (8th Av E)	8 AV E	58.95
19204-D	CLARKS CREEK (56th St)	56 ST E	60.90
7195-D	FENNEL CREEK	McCUTCHEON RD E	65.25
14193-B	CLOVER CREEK (Waller Rd)	WALLER RD E	66.95
22174-D	TANWAX CREEK	352 ST E	67.53
6175-B	TACOMA RAIL MTN. DIV. OC	ORVILLE RD E	68.94
17193-A	SPANAWAY CREEK	138 ST S	69.04
24199-B	WHITE RIVER EAST	CRYSTAL RVR RANCH	70.89
16205-A	LAKE TAPPS BANKERS IS	45 ST E	70.98
16193-K	CLOVER CREEK (138th St)	138 ST E	72.72
12173-A	S FORK MUCK CRK (320th St)	320 ST E	72.89
19185-A	KAPOWSIN CREEK (Orville Rd)	ORVILLE RD E	73.19
17193-F	CLOVER CREEK (Tule Lk Ct)	TULE LAKE CT S	73.54
14203-A	SQUALLY CREEK	48 ST E	73.94
19204-E	CLARKS CREEK	66 AV E	75.57
8183-A	TACOMA RAIL MTN. DIV. OC	8 AV S	75.74
5174-A	SOUTH FORK MUCK CRK TRIB	304 ST E	77.62
26200-A	TAYLOR BAY	76 ST SW	78.95
24199-A	WHITE RIVER WEST	CRYSTAL RVR RANCH	80.95
17193-E	CLOVER CREEK (Tule L Av)	TULE LAKE AV S	87.36
16196-A	SOUTH PRAIRIE CREEK	LOWER BURNETT RD E	89.45
17164-A	OHOP CREEK	OHOP VALLEY RD E	94.90

LOAD, HEIGHT OR GEOMETRIC RESTRICTIONS

Load Restrictions

Every highway bridge is required to have a "Load Rating" calculation documented and in the permanent bridge file. The Load Rating establishes how much weight a given bridge can safely carry for several standard vehicle axle load configurations. Load limit posting of a structure shall occur when the operating rating factor for any of the legal loads or specialized hauling vehicles is less than 1.0. As a result of new federal mandates, additional truck load configurations were analyzed. The requirement resulted in 9 additional bridges requiring load limit posting. As of May 2019, there are a total of 13 load restricted bridges owned by the County. The following table lists the posted bridges and their associated limits:

Bridge No.	Bridge Name	Facility Carried	Posting		
26211-A	FOX ISLAND	FOX ISLD BR RD FI	Weight Limit:	Single Unit Vehicles:	
				4 - 6 Axles	21 Tons
				7 + Axles	24 Tons
				Tractor & Trailer	29 Tons
				Truck & Trailer	37 Tons
31221-A	GLENCOVE	CRAMER RD NW	Weight Limit:	Single Unit Vehicles:	
				4 - 5 Axles	19 Tons
				6 + Axles	22 Tons
				Tractor & Trailer	32 Tons
				Truck & Trailer	40 Tons
34182-B	LACAMAS CREEK	280 ST S	Weight Limit:	Single Unit Vehicles:	
				4 - 5 Axles	26 Tons
				6 + Axles	30 Tons
29202-A	CHAMBERS CREEK	CHAMBERS CK RD W	All trucks over 15 tons stop before crossing		
			Weight Limit:	Truck	21 Tons
				Tractor & Trailer	25 Tons
				Truck & Trailer	40 Tons
				Single Unit Vehicles:	
				4 Axles	21 Tons
				5 Axles	23 Tons
				6 Axles	25 Tons
				7 Axles	31 Tons
13173-A	SOUTH FORK MUCK CREEK	332 ST E	Weight Limit:	Single Unit Vehicles:	
				4 - 5 Axles	15 Tons
				6 + Axles	18 Tons
				Tractor & Trailer	25 Tons
				Truck & Trailer	31 Tons
20183-A	MUCK CREEK	8 AV S	Weight Limit:	Single Unit Vehicles:	
				4 - 5 Axles	22 Tons
				6 + Axles	25 Tons
34183-A	SOUTH FORK MUCK CREEK	8 AV E	Weight Limit:	Single Unit Vehicles:	
				4 - 5 Axles	25 Tons
				6 + Axles	27 Tons

Bridge No.	Bridge Name	Facility Carried	Posting		
14193-B	CLOVER CREEK (Waller Rd)	WALLER RD E	Weight Limit:	Single Unit Vehicles: 4 - 5 Axles 5 + Axles	 27 Tons 31 Tons
20193-B	ENCHANTED ISLAND	MOUNTAIN VIEW BLVD	Weight Limit:	Single Unit Vehicles: 4 - 5 Axles 6 + Axles	 22 Tons 24 Tons
17164-B	OHOP CREEK OVERFLOW	OHOP VALLEY RD E	Traffic delineated to the center of bridge Weight Limit:	 12 Tons	
23164-B	TACOMA RAIL MTN. DIV. OC	ALDER CUTOFF RD E	Weight Limit:	Single Unit Vehicles: 4 - 5 Axles 6 + Axles Tractor & Trailer Truck & Trailer	 20 Tons 23 Tons 33 Tons 40 Tons
35186-C	CARBON RIVER (KOLISCH)	KOLISCH RD E	Weight Limit:	Single Unit Vehicles: 4 Axles 5 Axles 6 Axles 7 Axles	 27 Tons 29 Tons 29 Tons 30 Tons
33157-A	TENAS CREEK	MURRAY RD E	Weight Limit:	Single Unit Vehicles: 4 - 5 Axles 6 + Axles	 22 Tons 24 Tons

Note:

The Federal Highway Administration (FHWA) has released requirements regarding the load rating of Specialized Hauling Vehicles (SHV) for bridges contained in the National Bridge Inventory (NBI). As defined in the American Association of Highway and Transportation Officials (AASHTO) Manual for Bridge Evaluation (MBE), these vehicles are closely-spaced, multi-axle, single unit trucks such as dump trucks, construction vehicles, solid waste trucks, and other hauling trucks that were introduced by the trucking industry during the last decade. The Federal Highway Administration load rating mandate requires that all bridges are re-evaluated and posted as appropriate by December 31, 2022.

Height Restrictions

The maximum legal vehicle height permitted on state highways is 14 feet (RCW 46.44.020). At the direction of the MUTCD, and through operational experience, a 15-inch buffer (which includes 3 inches for frost heave) has been added to the 14-foot maximum legal height, setting the minimum LOW CLEARANCE signing threshold at 15'-3". The following table lists the posted bridges and their associated limits:

Bridge No.	Bridge Name	Restricted Facility	Posted Low Clearance
18204-A	PUYALLUP RIVER (66th Av)	66 AV E	14'-6"
PRT34195-C	SR-162 OVERCROSSING	STATE ROUTE 162	14'-3"

Other Geometric Restrictions

Other operational restrictions may be placed on bridge structures as a result of past experience and limitations of standard transport vehicles. As a result of operational restrictions, one bridge in the County has been posted as listed in the table below:

Bridge No.	Bridge Name	Restricted Facility	Posting
18204-A	PUYALLUP RIVER (66th Av)	66 AV E	Prohibited, trailers longer than 28 feet

PROPOSED NEW BRIDGES

Bridge No.	Bridge Name	Location	Reason	CRP
18204-H [(1)]	PUYALLUP RIVER (New replacement bridge for #18204-A)	TBD	New alignment. Canyon Road Northerly Extension	5498
19204-F [(1)]	CLARKS CREEK	CANYON ROAD - EXTENSION	New roadway extension.	5498
19204-G [(1)]	BNSF RALROAD	CANYON ROAD - EXTENSION	New roadway extension.	5643

[(1)] *Bridges currently funded for PE utilizing Federal and Pierce County Road Funds.*

Br. #18204-A Puyallup River (66th Av)

Proposed Br. #18204-H Puyallup River

BRIDGES RECOMMENDED FOR REMOVAL

Bridge No.	Bridge Name	Location	Reason	CRP	Sufficiency	FO/SD
18204-A [(1)]	PUYALLUP RIVER (New replacement bridge will be #18204-H)	66 AV E	New alignment. Canyon Road Northerly Extension	5498	47.35	FO

(1) Bridges currently funded for PE utilizing Federal and Pierce County Road Funds.


Br. #18204-A Puyallup River (66th Av)


Br. #18204-A Puyallup River (66th Av)

Br. #18204-A Puyallup River (66th Av)

BRIDGES RECOMMENDED FOR REHABILITATION


Br. #26200-A Taylor Bay


Br. #2211-F Lay Inlet

Bridge No.	Bridge Name	Location	Comments	Reason	Sufficiency	FO/SD
17164-B [1]	OHOP CREEK OVERFLOW	OHOP VALLEY RD E	Repair / replace stringers, pile caps and deck.	The substructure and timber stringers are deteriorating. The bridge is posted for weight restrictions and traffic is routed to the center of the bridge to avoid deteriorating stringers.	36.63	-
2211-F [1]	LAY INLET	86TH AV NW	Reconstruct both approach roadways, headwalls, and wingwalls.	The existing headwalls are deteriorating, allowing roadway approach material to spill through the headwall.	68.81	-
19185-A [2]	KAPOWSIN CREEK (Orville Rd)	ORVILLE RD E	Provide riprap along all exposed areas of the abutment footing and repair the undermining sections with concrete.	The existing abutment footings are exposed and undermined due to scour.	73.19	FO
26200-A [1]	TAYLOR BAY	76TH ST SW	Replace the cap at the west abutment and reconstruct the headwall and wingwalls.	The existing west abutment cap is deteriorating and there is sloughing/ undermining below the headwall, causing settlement in the approach roadway.	78.95	FO
8174-A [2]	S FORK MUCK CRK (320th St)	320 ST E	Provide riprap along all exposed areas of the abutment footing and repair the undermining sections with concrete.	The existing abutment footings are exposed and undermined due to scour.	85.54	-

[1] *Bridge recommended for rehabilitation. No funds are currently available.*

[2] *Currently in the process of securing permits. Pierce County Maintenance and Operations will do repairs.*

BRIDGES RECOMMENDED FOR DECK REHABILITATION

Bridge No.	Bridge Name	Location	Comments	Reason	Sufficiency	FO/SD
5177-A [1]	TOLMIE CREEK	FAIRFAX FOREST RD	Rehabilitate deck with a polymer overlay	Deteriorating concrete deck	68.55	-
34182-B	LACAMAS CREEK (280 St S)	280 ST S	Replace deck with a voided slab or corrugated steel and an asphalt overlay	Deteriorating concrete deck planks	69.48	-
19204-B	CLARKS CREEK	66 AVE E	Rehabilitate deck with a polymer overlay	Structurally deficient - deteriorating concrete deck	72.41	SD
19204-C	CLARKS CREEK	66 AVE E	Rehabilitate deck with a polymer overlay	Structurally deficient - deteriorating concrete deck	74.41	SD
25164-A [2]	LITTLE MASHEL	ALDER CUTOFF RD E	Rehabilitate deck with a polymer overlay	Deteriorating asphalt concrete pavement	78.17	-
1191-A	KETRON ISL FERRY LANDING	FERRY LANDING	Rehabilitate trestle and approach slab with a polymer overlay	Deteriorating concrete surface	78.89	-
17173-A [3]	LACAMAS CREEK	16 AV S	Rehabilitate deck with a polymer overlay	Deteriorating concrete deck	81.80	-
33206-A [3]	DINGLE BASIN	SUMNER BUCKLEY HWY	Rehabilitate deck with a polymer overlay	Deteriorating concrete deck	83.85	-
17193-D [2]	CLOVER CREEK (10th Av)	10 AV S	Rehabilitate deck with a polymer overlay	Deteriorating concrete deck	84.99	-
12173-B [3]	SOUTH FORK MUCK CREEK (304th St)	304 ST E	Rehabilitate deck with a polymer overlay	Deteriorating asphalt concrete pavement	98.59	-

[1] *Currently funded with Western Federal Lands – Federal Lands Access Program (FLAP) grant. Projected construction in 2024-2025.*

[2] *Submitted application for BRAC funds.*

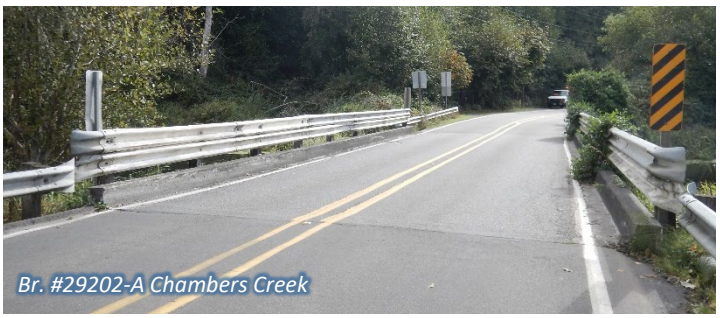
[3] *Scheduled for construction in Summer 2021.*

Br. #25164-A Little Mashel

Br. #34182-B Lacamas Creek (280 St S)

Br. #17193-D Clover Creek (10th Av)

BRIDGES RECOMMENDED FOR REPLACEMENT


Br. #29202-A Chambers Creek


Br. #34183-A South Fork Muck Creek (8th Av E)


Br. #26211-A Fox Island


Br. #24164-A Mashell River

Bridge No.	Bridge Name	Location	Reason	CRP	Sufficiency	FO/SD
26211-A [1]	FOX ISLAND	FOX ISLND BR RD NW	Structurally deficient - narrow width, design load lower than current design standard	5807	6.23	SD
29202-A [2]	CHAMBERS CREEK (Bridge jointly owned with City of University Place)	CHAMBERS CREEK RD W	Functionally obsolete - narrow width and structural capacity	-	21.06	SD
31221-A [3]	GLENCOVE	CRAMER RD NW	Functionally obsolete & structurally deficient - narrow width, deteriorating structural condition, design load, and approach geometrics.	5871	27.63	SD
11203-E [2]	SWAN CREEK	PIONEER WAY E	Narrow bridge and the hydraulic opening may require modifications	-	47.41	-
24164-A [2]	MASHELL RIVER	ALDER CUTOFF ROAD	Functionally obsolete - narrow width, design load, and geometrics	-	57.65	FO
34183-A [2]	SOUTH FORK MUCK CREEK (8th Av E)	8TH AV EAST	Functionally obsolete - narrow width and deteriorating structural condition of the deck	-	58.95	FO
7195-F [2]	CANYON FALLS CREEK	McCUTCHEON RD E	Streambed aggregation reducing hydraulic capacity	5846	95.42	-

[1] *Consultant has completed a funding feasibility study.*

[2] *Bridges recommended for replacement. No funds are currently available.*

[3] *Currently funded by BRAC and Pierce County Road Funds. Scheduled for construction in 2023.*

RECOMMENDED FISH PASSAGE AND DRAINAGE IMPROVEMENT PROJECTS

Bridge No.	Bridge Name	Location	Reason	CRP
13221-A [(1)]	PURDY CREEK	160 ST NW	Culvert replacement project	D199
16221-D [(2)]	MINTER CREEK	118 AV NW	Culvert replacement project	
17221-A [(3)]	HUGE CREEK	160 ST NW	Culvert replacement project	D441
26172-A [(4)]	BRIGHTON CREEK	HARTS LAKE RD S	Culvert replacement project	
6163-A [(5)]	HORN CREEK	HARTS LAKE RD S	Culvert replacement project	5916
31195-B [(6)]	HORSEHAVEN CREEK	188 ST E	Culvert replacement project	D231
31195-C [(6)]	HORSEHAVEN CREEK	150 AV E	Culvert replacement project	D230
34195-A [(7)]	CREEK	PATTERSON RD E	Culvert replacement project	5868
4177-B [(8)]	COLEGROVE CREEK	FAIRFAX FOREST RD E	Culvert replacement project	5861
4177-C [(8)]	FAIRFAX DRAINAGE	FAIRFAX FORREST RD E	Culvert replacement project	5861

(1) *Culvert replacement project funded with Pierce County Surface Water Management Funds for PE. Anticipate FBRB funds for construction. Currently scheduled for construction in 2023.*

(2) *Culvert replacement project funded with Pierce County Surface Water Management Funds for PE. Anticipate FBRB funds for construction.*

(3) *Funded with Pierce County Surface Water Management Funds and RCO Grant. Currently under construction, anticipated completion in 2021.*

(4) *Culvert replacement project funded with Pierce County Surface Water Management Funds for PE. Anticipate Flood Control Opportunity funds for construction. Currently scheduled for construction in 2024.*

(5) *Culvert replacement project funded with Pierce County Road Funds for PE. Scheduled for construction in 2024.*

(6) *Culvert replacement project funded with Pierce County Surface Water Management Funds. Currently scheduled for construction in 2022.*

(7) *Culvert replacement project funded with Pierce County Road Funds and Puget Sound Regional Council (PSRC). Scheduled for construction in 2024.*

(8) *Bridges currently funded with Western Federal Lands – Federal Lands Access Program (FLAP) grant. Projected construction in 2024-2025.*


Br. #6163-A Horn Creek

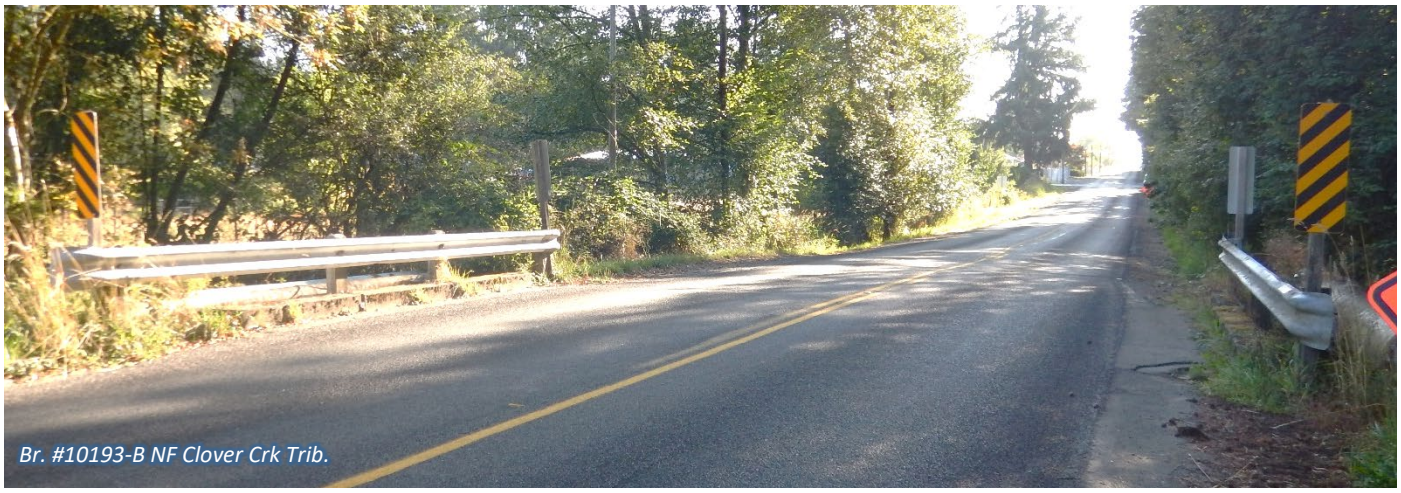

Br. #4177-B Colegrove Creek


Br. #4177-C Fairfax Drainage


Br. #31195-B Horsehaven Creek

BRIDGES RECOMMENDED FOR BRIDGE RAIL RETROFIT

Br. #9174-A S Fork Muck Crk (Webster)



Br. #10193-B NF Clover Crk Trib.

Bridge No.	Bridge Name	Location	Comments
14203-A	SQUALLY CREEK	48 ST E	Provide thrie-beam bridge railing and transitions
10193-B	NF CLOVER CRK TRIB.	128 ST E	Provide thrie-beam bridge railing and transitions
12173-A	S FORK MUCK CRK (320th St)	320 ST E	Provide thrie-beam bridge railing and transitions
29222-A	CRESCENT CREEK	CRESCENT VALLEY DR	Provide thrie-beam bridge railing and transitions
14193-A	CLOVER CREEK (25th Av)	25 AV E	Provide thrie-beam bridge railing and transitions
9174-A	S FORK MUCK CRK (Webster)	WEBSTER RD E	Provide thrie-beam bridge railing and transitions
10193-A	NF CLOVER CRK TRIB.	121 ST E	Provide thrie-beam bridge railing and transitions
8191-B	SCHOOL HOUSE CRK	ECKENSTAM JOHNSON	Provide w-beam bridge railing and terminals
17193-D	CLOVER CREEK (10th Av)	10 AV S	Provide thrie-beam bridge railing and transitions
9173-A	CREEK	304 ST E	Provide thrie-beam bridge railing and transitions

Note: Recommendations are based on the 2021 draft "Bridge Rail Priority Program."

BRIDGES RECOMMENDED FOR SEISMIC RETROFIT

Bridge No.	Bridge Name	Location	Comments
6175-B	TACOMA RAIL MTN DIV OVERCROSSING	ORVILLE RD E	Provide beam seat extensions and earthquake restraints for the superstructure
35186-C	CARBON RIVER (KOLISCH)	KOLISCH RD E	Provide beam seat extensions and earthquake restraints for the superstructure

Br. #6175-B Tacoma Rail Mtn. Div. OC

Br. #6175-B Tacoma Rail Mtn. Div. OC

Br. #35186-C Carbon River (Kolisch)

Br. #35186-C Carbon River (Kolisch)

RECOMMENDED REPAIRS

Contact Pierce County Planning and Public Works – Bridge Engineering for detailed repair recommendations.

Priority Code "1"

High Priority – Structural integrity and safety involved.

Priority Code "2"

Regular Priority – General bridge structural repair work not requiring immediate response.

Priority Code "3"

Low Priority – General minor maintenance or other work to be accomplished as time and money permit.

Note: Bridges are organized by Section, Township and Range

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
26200-A	TAYLOR BAY	76 ST SW	1. Crack seal the deck joints of the bathtub units.	2	10-Apr-19
			2. Remove vegetation from the NW corner of the bridge.	2	
			3. Replace pile E (the south pile) at bents 3, 4, 5, 6 and 7. Replace pile A (the north pile) at bent 4.	2	
			4. At the west abutment, replace north half of the pile cap.	2	
28210-A	HERRON BAY	NORTH HERRON RD NW	1. Fill in the void in the approach shoulder at the guardrail post at the NE corner of the bridge.	2	04-Jun-20
35210-A	HOME BRIDGE	KEY PENINSULA HWY	1. Replace the bolt in the guardrail at the SE terminal, 2nd post from the end.	2	18-Jun-19
4181-A	BNSF RAILROAD OVERPASS	NISQUALLY RD SW	1. Repair the east 20' of the expansion joint at abutment 1 (south end).	2	02-Sep-20
			2. Clean the catch basin located in the bridge deck, along the west shoulder of span 4.	2	
			3. Replace the missing three aluminum balusters in the west BP railing. Tighten the loose bottom channel cover.	2	
			4. Repair the latch at the access hatch located under the NE corner of span 4 and provide a new padlock.	2	
1191-A	KETRON ISL FERRY LANDING	FERRY LANDING	1. Clean off the growth and rust, then paint the top two walers (horizontal steel members) of both pontoon guides.	2	05-Oct-20
			2. Overlay the approach span and adjunct approach slab with Polyester Polymer Concrete.	3	
			3. Remove the apron's MMA overlay surface and replace with Polyester Polymer Concrete.	3	
			4. Pressure wash the top of the pontoon twice yearly as per the Ferry Landings HPA.	2	
			5. Paint the soffit of the apron.	2	
			6. Lubricate (grease) both cylinder bearing sliding plates. The upper sliding plate has zerk fittings along the toe of its sides. The zerk fittings most likely will require replacement to facilitate greasing.	2	

Recommended Repairs (continued)


Br. #1191-A Ketron Isl Ferry Landing


Br. #33201-A Anderson Isl Ferry Landing


Br. #33201-A

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
1191-A	KETRON ISL FERRY LANDING	FERRY LANDING	7. Conduct a low water inspection with the RV Dewy to determine which HMW plastic rubbing strips require reattaching or replacement on the pontoon guides and fenders (wingwalls).	2	05-Oct-20
			8. Clean and paint the weld, base plates, and bolts on the spherical bearing on the pontoon.	2	
			9. Paint the welds on the apron lift beam (transverse beam near the transfer span).	2	
			10. Wash and paint apron hinges.	2	
			11. Replace spherical and cylinder bearings at Pier 2.	2	
33201-A	ANDERSON ISL FERRY LANDING	YOMAN RD AI	1. Epoxy inject cracks in the end diaphragm of the transfer span at pier 10.	2	28-Oct-20
			2. Remove the apron's MMA overlay surface and replace with Polyester Polymer Concrete.	2	
			3. Paint the welds on the apron lift beam (transverse beam near the transfer span).	2	
			4. Change pump house filter (replacement filter is currently sitting in the pump house).	2	
			5. Investigate the apron hinges to determine if additional repairs are required. Items to be investigated include: - Loose bolts attaching the back of the hinge to the end diaphragm. - Condition of pin keepers. - Additional welding of the top hinge knuckle to the bottom of the apron. - Line boring of the apron bushings/pins.	2	
			6. Trim back the vegetation from around the pump house.	2	
			7. Clean the vegetation from the gutter line located at the lower (Puget Sound side) edge of the parking lot.	2	
			8. Wash and paint apron hinges.	2	
			9. Design (engineer) a repair for the 3 pin hinge bearings and the steel cross beam they beam the attach to.	2	
			10. Seal the base of the pontoon vent stacks and access hatch(s).	2	

Recommended Repairs (continued)

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
33201-A	ANDERSON ISL FERRY LANDING	YOMAN RD AI	11. Investigate the operations of the apron lift cylinders. The upper and lower limits of the apron lift appear to be low with respect to the top of the water elevation.	2	28-Oct-20
			12. Replace spherical and cylinder bearings at Pier 10.	2	
			13. Paint the soffit of the apron.	2	
			14. Trim the trees adjacent to Yoman Road, at the lower parking lot entrance, to provide site distance for school buses. Trim the lower branches, at the trunk, for a height of 10 feet above the adjacent ground.	2	
			15. Pressure wash the top of the pontoon twice yearly as per the Ferry Landings HPA.	2	
			16. Clean and paint the weld, base plates, and bolts on the spherical bearing on the pontoon.	2	
			17. Repair both sides of the gate overhangs, as pieces of the metal piping are rusty and deteriorating.	2	
2211-F	LAY INLET	86 AV NW	1. Reconstruct both headwalls and all four wingwalls with ecology blocks, or gabions, etc.	2	18-Jun-19
24211-C	ARTONDALE CREEK	ARTONDALE DR NW	1. Remove vegetation from the guardrail on the south side of the roadway.	3	07-Aug-20
26211-A	FOX ISLAND	FOX ISLND BR RD NW	1. Replace the light bulbs in all four red navigation lights: - The red navigation lights are located at the base of the main span piers. - Use 100 watt equivalent LED light bulbs to ensure a long life. - The NW red navigation light is currently burned out.	1	30-Apr-19
			2. Service the navigation lights' photo cell on the NW approach to the bridge (mainland side). It was observed that the navigation lights are not turning off during daylight hours.	2	
			3. Repair settlement/erosion at the NE corner of the bridge (mainland side) and install a missing guardrail post.	2	
			4. Bridge deck has spalling and potholes with exposed rebar in multiple locations. The majority of the spalling and potholes occur in the northbound lane. Break out any loose concrete, clean exposed rebar and patch with an approved patching material.	2	


Br. #26211-A Fox Island


Br. #26211-A Fox Island


Br. #24211-C Artondale Creek

Recommended Repairs (continued)


Br. #29202-A Chambers Creek


Br. #34182-B Lacamas Creek (280 St S)

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
16221-A	MINTER CREEK	118 AV NW	1. Place riprap along the edge of the abutment footings, first noted 8-18-2004. 2. Remove debris piles at the inlet and outlet of the culvert. 3. Replace the NE guardrail terminal section.	2 2 2	21-Jul-20
29221-A	MINTER CREEK	CREVISTON DR NW	1. Remove the tree trunk, rootball, and vegetation on the east bank.	2	21-Jul-20
31221-A	GLENCOVE	CRAMER RD NW	1. Rehabilitate / repair concrete bathtub units.	2	26-Sep-19
34182-B	LACAMAS CREEK (280 St S)	280 ST S	1. Patch the deck planks with Kwik Bond Polyester Polymer at the following locations: a. The first plank from the west, near the NW corner (1 SF spall with exposed rebar). b. The sixth plank from the west, near the centerline of bridge (1 SF spall with exposed rebar).	2	25-Jun-20
29202-A	CHAMBERS CREEK	CHAMBERS CK RD W	1. Replace the SE wooden guardrail post attached to the bridge. (Joint Ownership). 2. Repair the bent guardrail section located near midspan on the east side of the bridge (Joint Ownership). 3. Repair the shoulder area embankment located at the SE corner of the bridge. (Pierce County).	2 2 2	05-Oct-20
31202-A	STEILACOOM FERRY LANDING	FERRY LANDING	1. Replace the 2" gate valve with a 2" ball valve or add a 2" ball valve to the water line before the 2" gate valve to provide for complete water shutoff. Currently the gate valve constantly leaks. 2. Pressure wash the bird guano from the Waiting Facility Roof. 3. At the main ferry slip, conduct a low water inspection with the RV Dewy to determine which HMW plastic rubbing strips require reattaching or replacement on the pontoon guides and fenders (wingwalls). 4. Replace spherical bearing and the two cylinder bearings located cat Pier 10. 5. Paint the welds on the apron lift beam (transverse beam near the transfer span).	2 2 2 2 2	07-Oct-20

Recommended Repairs (continued)

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
31202-A	STEILACOOM FERRY LANDING	FERRY LANDING	6. Contact BNSF to repair / re-install their rubber joint filler along the track where pedestrians and vehicles cross onto the ferry landing.	2	07-Oct-20
			7. Pressure wash the top of the pontoon twice yearly as per the Ferry Landings HPA.	2	
			8. Wash debris out from between the apron and transfer span (under the apron lips).	2	
			9. Wash and paint apron hinges.	2	
			10. Rebuild the wooden enclosure around the heat pump with a material (other than wood) that allows for air circulation. Prepare and paint the siding adjacent to the enclosure.	2	
			11. Replace the main lift cylinder in the pontoon and replace the spherical bearing and lift column above the lift cylinder. Also replace the semi-spherical bearings at the top and bottom of the lift cylinder.	2	
			12. Paint the soffit of the apron.	2	
			13. Clean and paint the weld, base plates, and bolts on the spherical bearing on the pontoon.	2	
			14. Vactor out the standing water from the inside of the Pontoon.	2	
			15. Replace several of the florescent light bulbs, and/or their fixtures, inside the pontoon.	2	
6173-A	LACAMAS CREEK (40 Av S)	40 AV S	1. Grind off asphalt on the bridge deck and 20' north and south of the bridge. Install an asphalt reinforcing grid and repave approach roadway and bridge deck.	2	25-Jun-20
17173-A	LACAMAS CREEK	16 AV S	1. Paint the stringers.	3	05-Aug-20
			2. Overlay the deck with a polyester overlay.	2	
28173-D	HORN CREEK	8 AV S	1. Remove the debris jam located on below the bridge at the east edge of the bridge.	1	05-Aug-20
8183-A	TACOMA RAIL MTN. DIV. OC	8 AV S	1. Patch the washout on the north approach roadway, west side, about 80 feet south of the guardrail terminal.	2	18-Sep-20
			2. Replace all of the deck joints with silicone sealer.	2	


Br. #17173-A Lacamas Creek


Br. #28173-D Horn Creek

Recommended Repairs (continued)


Br. #8193-B Clover Creek (Span Loop)


Br. #20193-B Enchanted Island

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
34183-A	S FORK MUCK CRK (8th Av E)	8 AV E	1. Repair the NW guardrail end terminal.	2	18-Sep-20
8193-D	CLOVER CREEK (Span Loop)	SPANAWAY LOOP RD S	1. At the SE approach guardrail, replace the 8th block from the bridge and re-align rotated blocks.	2	29-Jul-20
14193-B	CLOVER CREEK (Waller Rd)	WALLER RD E	1. Reattach the guardrail terminal to the timber post at the SE corner	1	19-Aug-19
15193-A	NF CLOVER CRK (14th Av)	14 AV E	1. Repair the scour along both abutments and the distressed area of the NW masonry abutment. 2. Replace the south cap and adjunct end diaphragms.	2 2	15-Jul-20
15193-E	MEADOW CREEK FOOTBRIDGE	PEDESTRIANS	1. Clear encroaching vegetation within 5'-0" of the structure.	2	26-Aug-19
16193-C	CLOVER CREEK (136th St)	136 ST E	1. Clear out the debris and garbage from under the bridge.	2	26-Aug-19
16193-H	CLOVER CREEK (133rd St)	133 ST S	1. Remove the transient camping debris from under the bridge.	2	23-Sep-19
16193-K	CLOVER CREEK (138th St)	138 ST E	1. Remove transient debris from under the bridge.	2	23-Sep-19
16193-R	CLOVER CREEK (Park Av)	PARK AV S	1. Remove debris, garbage, etc. from under the bridge and the adjacent embankments.	2	29-Jul-20
16193-T	CLOVER CREEK (134th St)	134 ST S	1. Remove transient debris downstream of bridge; debris will restrict downstream water flow.	2	23-Sep-19
16193-V	DRAINAGE DITCH (134th)	134 ST S	1. Remove debris and vegetation within 5'-0" of the bridge that is blocking the channel on both sides and under the bridge.	2	23-Sep-19
17193-D	CLOVER CREEK (10th Av)	10 AV S	1. Grind and overlay the deck with a polyester concrete.	2	29-Jul-20
20193-B	ENCHANTED ISLAND	MOUNTAIN VIEW BLVD	1. Remove the failed asphalt curb on both sides of the bridge: - Grind the bridge asphalt overlay down to the metal pan. - Remove loose/failed asphalt from the pans. - Tack coat and fill in the pans with 3/8 asphalt and compact with a vibrating plate.	2	15-Jul-20
36193-A	TACOMA RAIL MTN. DIV. OC	176 ST E	1. Clean up the debris/garbage under the bridge.	3	25-Jun-20

Recommended Repairs (continued)

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
14203-A	SQUALLY CREEK	48 ST E	1. Trim back the encroaching vegetation at all 4 corners of the bridge	2	23-May-19
11164-B	LYNCH CREEK	SKI PARK RD E	1. Remove remnants of pipe and debris from underneath the structure.	2	06-Jul-20
14164-A	LYNCH CREEK	LYNCH CREEK RD E	1. Repair/Patch open concrete joints. 2. Patch the spall in the approach roadway of the SW corner of the bridge.	3 2	11-Jun-20
15164-B	OHOP VALLEY EXTENSION	OHOP VALLEY EXT RD	1. Replace the block at the 10th guardrail post from the NW corner of the bridge.	2	29-Aug-19
17164-A	OHOP CREEK	OHOP VALLEY RD E	1. Replace the block on the 6th guardrail post from the NW corner of the bridge	2	29-Aug-19


Br. #11164-B Lynch Creek


Br. #17164-B Ohop Creek Overflow


Br. #24164-B Little Mashel


Br. #25164-A Little Mashel

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
17164-B	OHOP CREEK OVERFLOW	OHOP VALLEY RD E	1. Replace the two missing "round traffic delineator posts" adjacent to and on the bridge deck. 2. Replace deficient stringers and deck.	2 2	09-Oct-20
23164-B	TACOMA RAIL MTN. DIV. OC	ALDER CUTOFF RD E	1. Rework the drainage in the NE corner of the bridge approach.	2	16-Jul-19
24164-B	LITTLE MASHEL	GROE RD E	1. Trim vegetation encroaching/covering the guardrail at the west end of the bridge. 2. Clean the deck and repair/replace both approach roadways (about 10 feet on both sides of the bridge). Both approaches are about 2" higher than the deck at the road centerline, and up to 1" lower than the deck at the wheel lines.	2 2	16-Jul-19
25164-A	LITTLE MASHEL	ALDER CUTOFF RD E	1. Repair / Replace the SW traffic terminal. 2. Grind and repave the entire deck overlay, plus 10 feet on both sides of the bridge.	2 2	16-Jul-19

Recommended Repairs (continued)

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
25164-B	TACOMA RAIL MTN. DIV. OC	ALDER CUTOFF RD E	1. Replace the following guardrail elements on the west side of the bridge and west approach roadway: a. The wooden guardrail post at the SW corner of the bridge. b. The block at the 5th guardrail post from the NW corner and the bent w-beam section at this post.	2	16-Jul-19
4174-B	SOUTH FORK MUCK CRK TRIB	288 ST E	1. Repair both approach roadways. There is settlement up to 1-1/2" at both bridge to roadway interfaces.	2	11-Jun-20
5174-A	SOUTH FORK MUCK CRK TRIB	304 ST E	1. Repair the pothole on the east end of the bridge in the west bound lane.	2	11-Jun-20
8174-A	S FORK MUCK CRK (320th St)	320 ST E	1. Install (place) concrete along the entire length of the west abutment, and adjunct wingwalls. Key the concrete 18" below the lower edge of the abutment and wingwalls. 2. Repair settlement in both approaches. Grind and repave the full width of the bridge, and the approach pavement adjacent to the bridge deck.	2 2	26-Aug-20
8174-B	S FORK MUCK CRK (Lebor Dev)	LEBOR DEVORE RD E	1. Clear vegetation within 10' of the bridge and guardrail. 2. Replace all the pedestrian railing on top of both traffic barriers using steel BP-Railing (~100 feet).	2 3	26-Aug-20
36184-A	S FORK MUCK CRK (284th St)	284 ST E	1. Remove the debris and vegetation from the shoulders of the road.	2	12-Aug-20
6204-A	HYLEBOS CREEK	62 AV E	1. Chip spalled areas of the bathtub webs to sound concrete. Clean and epoxy paint (with zinc) the exposed rebar in the bathtub units.	2	17-Jul-20
6204-B	HYLEBOS CREEK	8 ST E	1. Repair the sluffing (erosion) at the SE corner of the approach roadway shoulder.	2	17-Jul-20
17204-A	WAPATO CREEK (VALLEY AV)	IRR VALLEY AV E	1. Raise the guardrail at the NE corner to be 27" above edge of pavement. 2. Replace the 4 broken guardrail posts at the NW corner, post numbers 5, 6, 7 and 8 from the end. Remove the transient debris from under the bridge 3. at the SW corner.	2 2 2	12-Aug-20


Br. #36184-A S Fork Muck Crk (284th St)


Br. 17204-A Wapato Creek (valley Av)

Recommended Repairs (continued)


Br. #18204-A Puyallup River (66th Av)


Br. #19204-C Clarks Creek


Br. #6175-B Tacoma Rail Mtn. Div.

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
18204-A	PUYALLUP RIVER (66th Av)	66 AV E	1. Vacuum then flush the truss lower panel points (joints and gusset plates) with water.	2	09-Apr-19
			2. Replace the Vertical Clearance sign at the South Portal.	2	
			3. Spot paint the peeling paint areas on all structural members and pedestrian railings as needed.	3	
			4. Straighten all the bent steel.	3	
			5. Replace the lower gusset of the cross braces (upper sway braces) located on the west truss at panel point U6 and U10.	3	
			6. Clean debris from the abutments adjacent to the girder bearings.	2	
			7. Install an assist beam (steel girder) under the NW edge of the north approach slab.	2	
19204-A	CLARKS CREEK (Stewart)	IRR STEWART AV E	1. Clear the encroaching vegetation within 10 feet of the bridge.	2	22-Jul-19
19204-B	CLARKS CREEK	66 AV E	1. Clear the encroaching vegetation (including tree branches at the west side) within 10 feet of the bridge.	2	22-Jul-19
			2. Patch the pothole located at the west wheel line of the southbound lane.	2	
19204-C	CLARKS CREEK	66 AV E	1. Patch the pothole located at the east wheel line of the northbound lane.	2	22-Jul-19
			2. Clear the encroaching vegetation (including tree branches at the NW side) within 10 feet of the bridge.	2	
19204-D	CLARKS CREEK (56th St)	56 ST E	1. Clear the encroaching vegetation within 10 feet of the bridge.	2	22-Jul-19
19204-E	CLARKS CREEK	66 AV E	1. Remove the vegetation that is encroaching on the approach guardrails.	2	22-Jul-19
5175-C	KAPOWSIN CREEK	ORVILLE RD E	1. Patch the ACP overlay in the southbound lane.	2	23-Aug-19
6175-B	TACOMA RAIL MTN. DIV. OC	ORVILLE RD E	1. Reattach the NW guardrail terminal and raise the terminal so the guardrail is 27" high. Remove debris from shoulder in front of guardrail.	2	23-Aug-19
			2. Remove trees and vegetation that is encroaching on Spans 3 and 4 on the south side of bridge.	2	
			3. Clear sidewalks and drains of moss and debris.	2	
			4. Clean and patch spalled and potholed deck areas with approved polyester polymer concrete material.	2	

Recommended Repairs (continued)

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
17185-B	PUYALLUP RIVER (Orville)	ORVILLE RD E	1. Replace the 2nd guardrail post from the NW corner of the bridge. Replace the 4th guardrail post from the SE corner of the bridge.	2	15-May-19
17185-C	FISK CREEK	BROOKS RD E	1. Treat (kill to the root) then remove the encroaching vegetation (mostly English Ivy) from under and adjacent to the bridge. 2. Replace the timber rails along the east side of the bridge. 3. Spot paint with zinc rich spray paint, the exposed rebar that has delaminated (flakey rust) since the 2018 repairs. 4. Repair the approach roadway shoulder at the SE, SW and NW corners of the bridge.	2 2 2 2	15-May-19
19185-A	KAPOWSIN CREEK (Orville Rd)	ORVILLE RD E	1. Repair undermining and exposed footings.	2	12-Aug-20
6195-A	PUYALLUP RIVER (96th St)	96 ST E	1. Replace the charred guardrail blocks at the SW guardrail. Throughout all of the guardrail, rotate all blocks to their correct orientation. 2. Trim trees and remove vegetation within 10' from all corners and sides of the bridge. 3. Clear the debris at the base of pier 3 and from under span 1 (the western most span). 4. At both the both approach roadways, adjacent to the bridge abutments: a. Grind 4 to 5 inches of the existing asphalt down to sound asphalt or gravel top course. b. Grind and remove the existing asphalt overlay on the bridge deck over the abutments. c. Adjust catch basins as necessary. d. Pre-level the approaches and around the catch basins. e. The wearing course of the approach roadway shall extend onto the bridge deck where the overlay was ground. 5. Patch the failed areas of the asphalt overlay in the east bound lane	2 2 2 2 2	19-Aug-20
7195-A	PUYALLUP RIVER (128th St)	128 ST E	1. Crack seal the approach roadways on both sides of the bridge. 2. Patch the settlement in the paved shoulders at the catch basins in the NW, SW and SE corners of the bridge. 3. Trim trees and remove vegetation within 10' from all corners and sides of the bridge.	2 2 2	19-Aug-20


Br. #17185-B Puyallup River


Br. #17185-C Fisk Creek


Br. #7195-A Puyallup River (128th St)

Recommended Repairs (continued)


Br. #7195-F Canyon Falls Creek


Br. #31195-A Puyallup River (Orting)


Br. #16205-A Lake Tapps Bankers Is

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
7195-D	FENNEL CREEK	McCUTCHEON RD E	1. Crack seal and patch the raveling ACP at pavement seats. 2. Crack seal the south approach at the south abutment.	2 2	05-Jul-19
7195-F	CANYON FALLS CREEK	McCUTCHEON RD E	1. Clear the vegetation from the shoulders of the bridge.	2	19-Aug-20
31195-A	PUYALLUP RIVER (Orting)	ORTING KAPOWSIN HW	1. Replace the two damaged/missing pedestrian railing sections on the south side of the bridge. (Railing section 3 and 24, numbered west to east). 2. Remove debris and moss growth from both sidewalks. Remove any vegetation encroaching on the bridge within 10 feet. 3. Remove all transient debris under Spans 1 and 3.	3 2 2	25-Sep-20
8205-A	CWA CANAL (Conni)	SUMNER TAPPS HWY E	1. Remove the transient debris at the north abutment. 2. Grind and repave roughly 25 SF of traverse asphalt cracking in the southbound lane near the center of the bridge. 3. Clean the debris along the sidewalk near the barriers on both sides of the bridge.	2 2 2	28-Sep-20
16205-A	LAKE TAPPS BANKERS IS	45 ST E	1. Grind and repave the west approach roadway. Grind a minimum of 6' from the edge of the bridge to provide a smooth transition. 2. Patch and repave both sidewalk approaches to the sidewalk that runs along the north side of the bridge.	2 2	28-Sep-20
26205-A	CWA CANAL (Barkubien)	BARKUBIEN RD E	1. Repair the settlement at both approach roadways.	2	29-Sep-20
26205-B	CWA CANAL (Vandermark)	218 AV E	1. Repair both approaches of the northbound lane.	2	29-Sep-20
33205-B	CATTLE PASS (Sumner Buckley)	SUMNER BUCKLEY HWY	1. Repair the bent guardrail located at the NW end above the structure.	2	28-Sep-20
34205-A	FENNEL CREEK (Kelly Lk Rd)	KELLY LAKE RD E	1. Clear vegetation within 10 feet of the bridge.	2	28-Sep-20
25156-B	HERSHEY CREEK	MT TAHOMA CANYON	1. Reinstall the SE clearance marker post as it was laying on the ground	2	14-Jul-20

Recommended Repairs (continued)

Bridge No.	Bridge Name	Location	Repair Recommendations	Priority	Insp. Date
35186-B	EVANS CREEK	FAIRFAX FOREST RD	1. Patch (fill in) the settlement at gutter lines (shoulders) of the approaches with asphalt. Fill in spalled (settled) pavement at the East approach in the westbound Lane.	2	03-Sep-20
35186-C	CARBON RIVER (KOLISCH)	KOLISCH RD E	1. Remove the tree branch that has lodged itself below span 1 (west span) and up into the stringers of span 1.	2	11-Apr-19
31157-A	NISQUALLY RIVER (KERN)	KERNAHAN RD E	1. Clear the encroaching vegetation from the approach guardrails at the west end of the bridge.	2	14-Jul-20
33157-A	TENAS CREEK	MURRAY RD E	1. Guardrail Repairs: - Replace 3 split blocks on the SE corner of the bridge. - Straighten 4 tilted blocks on the south approach (east side of bridge). - Reattach the 2nd to last guardrail post bolt on the south end (east side of the bridge).	2	14-Jul-20
4177-C	FAIRFAX DRAINAGE	FAIRFAX FORREST RD	1. Remove vegetation from the culvert bottom and sides at the outlet end.	2	03-Sep-20
5177-A	TOLMIE CREEK	FAIRFAX FOREST RD	1. Repair or replace the damaged/missing guardrail blocks located at: - The NW approach guardrail, the 1st and 3rd block from the end of the bridge. - The SW approach guardrail, the 9th block from the end of bridge. - The NE approach guardrail, the 2nd - 7th block from the end of the bridge. Also, at the NE approach guardrail: - Replace the damaged end terminal closest to the bridge. - Replace the 10th post from the end of the bridge. 2. Fill in the void under the concrete traffic barrier located at the SW corner of the bridge. 3. Patch the spalled and delamination area of the deck using Polyester Polymer Concrete.	2 2 2	11-Apr-19

Br. #35186-C Carbon River (Kolisch)

Br. #5177-A Tolmie Creek

APPENDIX A – BRIDGE INVENTORY

Pierce County Planning and Public Works Highway and Road Bridges

Note: Bridges are organized by Section, Township and Range

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
26200-A	TAYLOR BAY	76 ST SW	1957	185	78.95
2210-B	VAUGHN BAY	SOUTH VAUGHN RD NW	2010	219	98.69
28210-A	HERRON BAY	NORTH HERRON RD NW	1954	60	67.29
35210-A	HOME BRIDGE	KEY PENINSULA HWY	1995	321	94.92
35210-B	WESTERN HOME	HERRON RD NW	1996	70	99.60
15220-C	ROCKY CREEK	144 ST NW	2007	30	97.73
23220-A	EAST FORK ROCKY CREEK	WRIGHT BLISS RD NW	1999	60	97.19
4181-A	BNSF RAILROAD OVERPASS	NISQUALLY RD SW	2004	642	81.04
4181-B	RED SALMON CREEK	MOUNTS RD SW	1954	15	72.42
8191-B	SCHOOL HOUSE CRK	ECKENSTAM JOHNSON	2013	13	77.82
8191-C	SCHOOL HOUSE CRK (Oro Bay Rd)	ORO BAY RD	2013	13	85.20
2211-F	LAY INLET	86 AV NW	1941	36	68.81
10211-A	ROSEDALE BAY	KOPACHUCK DR NW	2000	223	99.18
22211-A	WARREN CREEK	WARREN DR NW	2011	24	99.90
24211-A	ARTONDALE CREEK	WOLLOCHET DR NW	1933	6	75.49
24211-C	ARTONDALE CREEK	ARTONDALE DR NW	2005	14	97.88
26211-A	FOX ISLAND	FOX ISLND BR RD NW	1954	1950	6.23
16221-A	MINTER CREEK	118 AV NW	1940	17	75.83
16221-B	MINTER CREEK	118 AV NW	1978	23	97.93
16221-C	MINTER CREEK	118 AV NW	1997	37	92.86
16221-D	MINTER CREEK	118 AV NW	1947	12	72.25
16221-E	MINTER CREEK	118 AV NW	2005	28	85.34
17221-A	HUGE CREEK	160 ST NW	1943	6	53.78
21221-A	LITTLE MINTER CREEK	118 AV NW	2005	16	99.02

Pierce County Planning and Public Works Highway and Road Bridges (continued)

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
29221-A	MINTER CREEK	CREVISTON DR NW	1954	23	86.96
31221-A	GLENCOVE	CRAMER RD NW	1954	60	27.63
1172-C	LACAMAS CREEK (288 St S)	288 ST S	2015	46	99.47
34182-B	LACAMAS CREEK (280 St S)	280 ST S	1959	22	69.48
36182-A	LACAMAS CREEK (56 Av S)	56 AV S	1972	25	96.89
29212-B	STONE DRIVE LID	STONE DR NW	2009	69	
29222-A	CRESCENT CREEK	CRESCENT VALLEY DR	1940	14	75.03
32222-A	CRESCENT CREEK	CRESCENT VALLEY DR	1941	14	83.93
6173-A	LACAMAS CREEK (40 Av S)	40 AV S	1972	19	88.40
9173-A	CREEK	304 ST E	1940	16	63.26
12173-A	S FORK MUCK CRK (320th St)	320 ST E	1934	59	72.89
12173-B	S FORK MUCK CRK (304th St)	304 ST E	2008	90	98.59
13173-A	S FORK MUCK CRK (332nd St)	332 ST E	1953	40	52.94
17173-A	LACAMAS CREEK	16 AV S	1960	23	81.80
28173-D	HORN CREEK	8 AV S	1958	17	49.70
31173-A	CATTLE PASS	ALLEN RD S	1937	8	58.33
8183-A	TACOMA RAIL MTN. DIV. OC	8 AV S	1965	113	75.74
20183-A	MUCK CREEK	8 AV S	1947	32	56.04
28183-A	NF MUCK CREEK (8th Av)	8 AV E	2017	99	97.06
34183-A	S FORK MUCK CRK (8th Av E)	8 AV E	1953	32	58.95
36183-A	NF MUCK CREEK (Weiler Rd)	WEILER RD E	1920	17	57.39
8193-D	CLOVER CREEK (Span Loop)	SPANAWAY LOOP RD S	1993	39	91.22
10193-A	NF CLOVER CRK TRIB.	121 ST E	1967	19	88.37
10193-B	NF CLOVER CRK TRIB.	128 ST E	1967	19	79.52
10193-C	NF CLOVER CRK (Golden/118 St)	GOLDEN GIVEN RD E	2014	6	98.52
14193-A	CLOVER CREEK (25th Av)	25 AV E	1963	23	57.85
14193-B	CLOVER CREEK (Waller Rd)	WALLER RD E	1952	34	66.95
15193-A	NF CLOVER CRK (14th Av)	14 AV E	1976	21	39.52
15193-B	NF CLOVER CRK (Golden)	GOLDEN GIVEN RD E	1987	10	80.28
15193-D	NF CLOVER CRK TRIB.	BROOKDALE RD E	1969	20	68.93
16193-C	CLOVER CREEK (136th St)	136 ST E	2001	16	98.88
16193-H	CLOVER CREEK (133rd St)	133 ST S	1970	46	92.14
16193-K	CLOVER CREEK (138th St)	138 ST E	1953	22	72.72
16193-Q	CLOVER CREEK (C St)	C ST S	1967	34	90.03
16193-R	CLOVER CREEK (Park Av)	PARK AV S	1967	34	92.05
16193-S	CLOVER CREEK (A St)	A ST S	1970	62	92.07
16193-T	CLOVER CREEK (134th St)	134 ST S	1970	41	92.13
16193-U	NF CLOVER CRK (B St)	B ST E	1970	34	92.13
16193-V	DRAINAGE DITCH (134th)	134 ST S	1950	16	52.95
17193-A	SPANAWAY CREEK	138 ST S	1952	31	69.04
17193-D	CLOVER CREEK (10th Av)	10 AV S	1967	34	84.99

Pierce County Planning and Public Works Highway and Road Bridges (continued)


Br. #11203-B BNSF Railroad Overpass


Br. #17164-A Ohop Creek

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
17193-E	CLOVER CREEK (Tule L Av)	TULE LAKE AV S	1967	34	87.36
17193-F	CLOVER CREEK (Tule Lk Ct)	TULE LAKE CT S	1976	32	73.54
20193-A	SPANAWAY CREEK	MILITARY RD S	1952	10	92.09
20193-B	ENCHANTED ISLAND	MOUNTAIN VIEW BLVD	1952	103	47.37
23193-A	CLOVER CREEK (152nd St)	152 ST E	1967	18	70.94
25193-A	CLOVER CREEK (Military)	MILITARY RD E	1938	12	68.92
25193-B	CLOVER CREEK (Canyon Rd)	CANYON ROAD EAST	2010	13	79.31
29193-A	COFFEE CREEK	SPANAWAY LOOP RD S	2004	27	89.37
35193-A	DRAINAGE	176 ST E	2011	12	96.74
36193-A	TACOMA RAIL MTN. DIV. OC	176 ST E	2011	76	95.92
11203-B	BNSF RAILROAD OVERPASS	IRR GAY RD E	1985	115	97.88
11203-E	SWAN CREEK	IRR PIONEER WAY E	1953	21	47.41
11203-I	CLEAR CREEK	31 AV CT E	1971	43	83.93
14203-A	SQUALLY CREEK	48 ST E	1937	265	73.94
11164-B	LYNCH CREEK	SKI PARK RD E	1953	41	61.94
14164-A	LYNCH CREEK	LYNCH CREEK RD E	1954	170	53.79
15164-B	OHOP VALLEY EXTENSION	OHOP VALLEY EXT RD	1997	98	99.98
17164-A	OHOP CREEK	OHOP VALLEY RD E	1988	59	94.90
17164-B	OHOP CREEK OVERFLOW	OHOP VALLEY RD E	1959	22	36.63
18164-A	OHOP CREEK	PETERSON RD E	1919	30	94.99
18164-B	OHOP CREEK OVERFLOW	PETERSON RD E	1919	54	94.34
23164-B	TACOMA RAIL MTN. DIV. OC	ALDER CUTOFF RD E	1946	276	45.53
24164-A	MASHEL RIVER	ALDER CUTOFF RD E	1937	162	57.65
24164-B	LITTLE MASHEL	GROE RD E	1976	62	51.81
25164-A	LITTLE MASHEL	ALDER CUTOFF RD E	1978	75	78.17
25164-B	TACOMA RAIL MTN. DIV. OC	ALDER CUTOFF RD E	1946	26	92.78
36164-A	CATTLE PASS	ALDER CUTOFF RD E	1937	8	47.88

Pierce County Planning and Public Works Highway and Road Bridges (continued)

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
4174-A	SOUTH FORK MUCK CRK TRIB	WEBSTER RD E	1951	25	96.79
4174-B	SOUTH FORK MUCK CRK TRIB	288 ST E	1942	23	82.91
5174-A	SOUTH FORK MUCK CRK TRIB	304 ST E	1955	64	77.62
8174-A	S FORK MUCK CRK (320th St)	320 ST E	1967	26	85.54
8174-B	S FORK MUCK CRK (Lebor Dev)	LEBOR DEVORE RD E	1996	55	98.64
9174-A	S FORK MUCK CRK (Webster)	WEBSTER RD E	1954	36	83.74
22174-D	TANWAX CREEK	352 ST E	1954	30	67.53
24184-A	SOUTH CREEK TRIB. (OK Hwy)	ORTING KAPOWSIN HW	2020	20	98.20
29184-A	NF MUCK CREEK (70th Av)	70 AV E	1953	20	48.79
34184-A	SOUTH CREEK TRIB. (288th St)	288 ST E	2008	13	99.44
35184-A	SOUTH CREEK (288th St)	288 ST E	2008	22	99.44
36184-A	S FORK MUCK CRK (284th St)	284 ST E	1953	11	64.56
6204-A	HYLEBOS CREEK	62 AV E	1951	22	55.89
6204-B	HYLEBOS CREEK	8 ST E	1951	22	70.67
17204-A	WAPATO CREEK (VALLEY AV)	IRR VALLEY AV E	1994	55	91.49
19204-A	CLARKS CREEK (Stewart)	IRR STEWART AV E	1941	60	56.07
19204-B	CLARKS CREEK	66 AV E	1950	71	72.41
19204-C	CLARKS CREEK	66 AV E	1950	68	74.41
19204-D	CLARKS CREEK (56th St)	56 ST E	1939	62	60.90
19204-E	CLARKS CREEK	66 AV E	1927	36	75.57
5175-C	KAPOWSIN CREEK	ORVILLE RD E	2006	113	97.27
6175-B	TACOMA RAIL MTN. DIV. OC	ORVILLE RD E	1954	144	68.94
17185-B	PUYALLUP RIVER (Orville)	ORVILLE RD E	1998	367	92.43
17185-C	FISK CREEK	BROOKS RD E	1947	16	59.36
19185-A	KAPOWSIN CREEK (Orville Rd)	ORVILLE RD E	1920	35	73.19
30185-C	KAPOWSIN CREEK (264 St)	264 ST E	1953	30	85.54
6195-A	PUYALLUP RIVER (96th St)	96 ST E	1985	381	95.63
6195-B	DRAINAGE DITCH	RIVERSIDE DR E	2000	11	77.69


Br. #4174-A South Fork Muck Creek Trib.


Br. #17185-B Puyallup River (Orville)

Pierce County Planning and Public Works Highway and Road Bridges (continued)

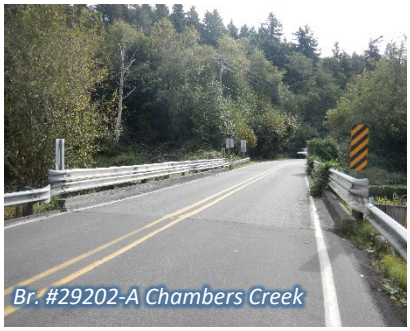
Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
7195-A	PUYALLUP RIVER (128th St)	128 ST E	1987	411	95.42
7195-D	FENNEL CREEK	McCUTCHEON RD E	1951	30	65.25
7195-F	CANYON FALLS CREEK	McCUTCHEON RD E	1999	12	95.42
31195-A	PUYALLUP RIVER (Orting)	ORTING KAPOWSIN HW	1997	455	68.75
3205-A	CATTLE PASS	EDWARDS RD E	1953	11	74.12
8205-A	CWA CANAL (Conni)	SUMNER TAPPS HWY E	1977	215	59.09
16205-A	LAKE TAPPS BANKERS IS	45 ST E	1970	206	70.98
24205-B	CATTLE PASS	BUCKLEY TAPPS HWY	1953	11	70.29
26205-A	CWA CANAL (Barkubien)	BARKUBIEN RD E	1975	170	86.29
26205-B	CWA CANAL (Vandermark)	218 AV E	1966	125	81.58
32205-A	VAN OGLE CREEK	92 ST E	1997	9	67.59
33205-A	FENNEL CREEK (Sumner Buckley)	SUMNER BUCKLEY HWY	1995	13	98.01
33205-B	CATTLE PASS (Sumner Buckley)	SUMNER BUCKLEY HWY	1995	12	97.01
34205-A	FENNEL CREEK (Kelly Lk Rd)	KELLY LAKE RD E	1950	17	70.31
34205-B	FENNEL CREEK (214 Av)	214 AV E	1997	22	96.93
25156-B	HERSHEY CREEK	MT TAHOMA CANYON	1997	12	96.89
27186-A	FAIRFAX DRAINAGE	FAIRFAX FOREST RD	2007	16	92.20
35186-B	EVANS CREEK	FAIRFAX FOREST RD	1975	100	79.31
35186-C	CARBON RIVER (KOLISCH)	KOLISCH RD E	1937	150	48.35
16196-A	SOUTH PRAIRIE CREEK	LOWER BURNETT RD E	1986	99	89.45
20196-A	WILKESON CREEK	JOHNS RD E	1946	72	82.84
33206-A	DINGLE BASIN	SUMNER BUCKLEY HWY	1978	101	83.85
33157-A	TENAS CREEK	MURRAY RD E	1983	47	64.01
4177-A	JUNE CREEK	FAIRFAX FOREST RD	2005	18	93.83
4177-B	COLEGROVE CREEK	FAIRFAX FOREST RD	1955	13	92.20
4177-C	FAIRFAX DRAINAGE	FAIRFAX FORREST RD	1955	10	92.20
5177-A	TOLMIE CREEK	FAIRFAX FOREST RD	1939	165	68.55
5177-B	POCH CREEK	FAIRFAX FOREST RD	1996	47	76.60
24199-A	WHITE RIVER WEST	CRYSTAL RVR RANCH	1973	119	80.95
24199-B	WHITE RIVER EAST	CRYSTAL RVR RANCH	1956	125	70.89
111710-A	SILVER CREEK 1	CRYSTAL MNT BLVD	2015	32	81.73
131710-A	SILVER CREEK 2	CRYSTAL MNT BLVD	2016	32	64.37
241710-A	SILVER CREEK 3	CRYSTAL MNT BLVD	2016	29	81.73

Br. #24199-A White River West

Ferries

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
1191-A	KETRON ISL FERRY LANDING	FERRY LANDING	1998	186	78.89
33201-A	ANDERSON ISL FERRY LANDING	YOMAN RD AI	1984	344	69.93
31202-A	STEILACOOM FERRY LANDING	FERRY LANDING	1998	192	85.96


Br. #31202-A Steilacoom Ferry Landing


Br. #29202-A Chambers Creek


Br. #8181-A Old Pacific Hwy Bridge

Joint Ownership

Bridge No.	Bridge Name	Location	Joint Owner	Yr. Built	Length	Sufficiency
29202-A	CHAMBERS CREEK	CHAMBERS CK RD W	CITY OF UNIVERSITY PLACE	1946	65	21.06
18204-A	PUYALLUP RIVER (66th Av)	IRR 66 AV E	CITY OF FIFE	1931	345	47.35
31157-A	NISQUALLY RIVER (KERN)	KERNAHAN RD E	LEWIS COUNTY	1994	336	87.03
8181-A [(1)]	OLD PACIFIC HWY BRIDGE	NISQUALLY RIVER	THURSTON COUNTY	1998	325	90.91

[(1)] Bridge #8181-A is inventoried and inspected by Thurston County under Bridge #O-11.

Pierce County Planning and Public Works Pedestrian Bridge

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
15193-E	MEADOW CREEK FOOTBRIDGE	PEDESTRIANS	1976	72	-


Br. #20202-A Pedestrian Overpass


Br. #35193-B Pond-Topping

Sewer Division

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
20202-A	PEDESTRIAN OVERPASS	CHAMBERS CK RD W	2010	952	-

Surface Water Management

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
35193-B	POND - TOPPING	POND ACCESS ROAD	2005	30	75.99


Br. #PRT18196-B South Prairie Ck (Fire Sta P-Pile)


Br. #PRT28196-A Wilkeson Creek


Br. #PRT13194-B Puyallup River Truss


Br. #PRT17196-B Switchback (Steel Plate Arch)

Pierce County Parks and Recreation Services

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
PRT13194-B	PUYALLUP RIVER TRUSS	FOOTHILLS TRAIL	1904	155	-
PRT23195-B	FISH PASSAGE	FOOTHILLS TRAIL	2005	14	-
PRT23195-C	FISH PASSAGE	FOOTHILLS TRAIL	2005	14	-
PRT23195-D	FISH PASSAGE	FOOTHILLS TRAIL	2005	14	-
PRT23195-E	FISH PASSAGE	FOOTHILLS TRAIL	2005	14	-
PRT27195-D	CARBON RIVER	FOOTHILLS TRAIL	1904	248	-
PRT27195-E	FORESTED DRAINAGE (Carbn Rvr)	FOOTHILLS TRAIL	1904	192	-
PRT33195-B	VOIGHTS CREEK	FOOTHILLS TRAIL	1904	134	-
PRT34195-C	SR-162 OVERCROSSING	FOOTHILLS TRAIL	1956	212	-
PRT17196-B	SWITCHBACK (Steel Plate Arch)	FOOTHILLS TRAIL	2017	51	-
PRT17196-C	S. PRAIRIE CK (Cascade Jct. N)	FOOTHILLS TRAIL	1910	160	-
PRT17196-D	SPIKETON DITCH TRUSS	FOOTHILLS TRAIL	2009	94	-
PRT17196-E	S. PRAIRIE CK (Timber Arch)	FOOTHILLS TRAIL	2009	392	-
PRT17196-F	PIN PILE TRESTLE	FOOTHILLS TRAIL	2017	2,850	-
PRT18196-A	S PRAIRIE CK (Fire Station)	FOOTHILLS TRAIL	1910	143	-
PRT18196-B	S PRAIRIE CK (Fire Sta P-Pile)	FOOTHILLS TRAIL	2017	160	-
PRT28196-A	WILKESON CREEK	FOOTHILLS TRAIL	2002	104	-
PRT8196-A	SWITCHBACK (Timber Pin Pile)	FOOTHILLS TRAIL	2017	30	-

Railroad Bridges

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
33191-A	BNSF RAILROAD UC	BNSF RAILROAD	2018	66	-
3193-A	TACOMA RAIL MTN. DIV. UC	TACOMA RAIL RR	1997	102	-
24193-A	TACOMA RAIL MTN. DIV. UC	TACOMA RAIL RR	1964	84	-
LKW12192-A [(1)]	BNSF RAILROAD UC	BNSF RAILROAD	1935	110	-

[(1)] Bridge #LKW12192-A is owned by BNSF Railroad but is inventoried under an agreement with the City of Lakewood.


Br. #3193-A Tacoma Rail Mtn. Div. OC


Br. #FIF12203-B Union Pacific RR OC


Br. #FIF1203-B Wapato Creek (Alexander)

City Bridges – Fife

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
FIF1203-A	WAPATO CREEK (Old HW 99)	PACIFIC HWY E	1928	20	94.00
FIF1203-B	WAPATO CREEK (Alexander)	ALEXANDER AV E	1999	12	80.56
FIF1203-C	54th AV / FIFE DITCH	54th Avenue East	2018	22	95.91
FIF12203-B	UNION PACIFIC RR OC	FRANK ALBERT RD E	1993	160	78.49
FIF18204-C	WAPATO CREEK (70th Ave)	70 AV E	2009	24	82.06


Br. #GIG25221-C McCormick Crk Tributary


Br. #GIG6212-A Donkey Creek

City Bridges – Gig Harbor

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
GIG25221-C	McCORMICK CREEK	BURNHAM DR NW	2006	12	89.38
GIG25221-D	McCORMICK CRK TRIBUTARY	CANTERWOOD BLVD NW	2009	18	91.16
GIG6212-A	DONKEY CREEK	N HARBORVIEW DR	2013	77	81.65

City Bridges – Gig Harbor Parks

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
GHP7212-A	CUSHMAN TRAIL TRESTLE	CUSHMAN TRAIL	2011	410	-

City Bridges -Lakewood

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
LKW2192-C	CLOVER CREEK (Gravly Lk)	GRAVELLY LK DR SW	1938	48	87.29
LKW3192-A	STEILACOOM LAKE	INTERLAAKEN DR SW	1927	682	34.43
LKW3192-C	PONCE DELEON CREEK	BROOK LN SW	1952	14	75.73
LKW11192-A	CLOVER CREEK (Bridgeport)	BRIDGEPORT WY SW	1937	43	77.91
LKW11192-B	CLOVER CREEK (Pacific H)	PACIFIC HWY SW	1937	59	71.50
LKW14192-A	SOUND TRANSIT RR OC	PACIFIC HWY SW	1959	41	80.29
LKW26202-A	FLETT CREEK (75th St)	75 ST W	1970	125	87.05
LKW26202-C	FLETT CREEK (Custer)	CUSTER RD W	1970	19	67.77
LKW26202-D	FLETT CREEK (Bridgeport)	BRIDGEPORT WY W	1970	19	63.59
LKW33202-A	PEDESTRIAN TUNNEL	STEILACOOM BLVD SW	1935	10	47.48
LKW34202-A	STEILACOOM LAKE OUTFALL	STEILACOOM BLVD SW	1939	48	42.98
LKW35202-A	FLETT CREEK (Lakewood Dr)	LAKEWOOD DR SW	1972	43	74.40


Br. #LKW34202-A Steilacoom Lake Outfall


Br. #LKW26202-C Flett Creek (Custer)


Br. #LKW14192-A Sound Transit RR OC


Br. #ROY34182-C Muck Creek

City Bridges -Roy

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
ROY34182-C	MUCK CREEK	WARREN STREET	2013	70	98.90

City Bridges – Sumner

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
SUM1204-A	WHITE RIVER (Stewart Rd)	STEWART RD E	1952	232	59.75
SUM12204-C	CWA TAILRACE (148th Av)	148 AV E	1949	102	67.98
SUM13204-A	WHITE RIVER (Tacoma Av)	TACOMA AV E	1999	200	98.34
SUM24204-A	WHITE RIVER (Cannery Way)	CANNERY WAY	2019	304	92.03
SUM24204-D	WHITE RIVER (Fryar Av)	FRYAR AV	1949	232	54.82
SUM7205-A	CWA TAILRACE (E Valley)	EAST VALLEY HWY E	1997	95	90.46
SUM18205-A	SALMON CREEK	EAST VALLEY HWY E	1950	11	44.50

Br. #SUM24204-A White River (Canary Way)

City Bridges -University Place

Bridge No.	Bridge Name	Location	Year Built	Length	Sufficiency
UPL9202-A	DAY ISLAND	DAY ISL BRIDGE RD	1957	600	36.10
UPL17202-A	MEMORY LANE	MEMORY LN W	1963	52	54.49
UPL22202-A	PEACH CREEK	CHAMBERS CK RD W	1988	270	91.71
UPL23202-A	LEACH CREEK	53 ST W	1952	21	61.61
UPL23202-B	LEACH CREEK	CIRQUE DR W	1981	46	88.73
UPL26202-B	LEACH CREEK	BRIDGEPORT WY W	2005	30	82.04

Br. #UPL9202-A Day Island