



## SKAGIT COUNTY DEPARTMENT OF PUBLIC WORKS

# 2024 ANNUAL BRIDGE REPORT



*Construction of the new “Cedardale Road at Fisher Creek” crossing, installation of the 133-foot long pre-stressed concrete girders, December, 2024.*

**SUBMITTED MARCH, 2025**



**SKAGIT COUNTY DEPARTMENT OF PUBLIC WORKS**  
**2024 ANNUAL BRIDGE REPORT**

*Submitted March 2025*

**This bridge report is prepared annually by the Transportation Programs Section of Skagit County Public Works' Engineering Division to fulfill requirements of the Washington Administrative Code (WAC) 136-20-060. The WAC requires the County Engineer's report of bridge inspections as follows:**

*"Each county engineer shall furnish the county legislative authority with a written resume of the findings of the bridge inspection effort. This resume shall be made available to said authority and shall be consulted during the preparation of the proposed six-year transportation program revision. The resume shall include the county engineer's recommendations as to replacement, repair, or load restriction for each deficient bridge. The resolution of adoption of the six-year transportation program shall include assurances to the effect that the county engineer's report with respect to deficient bridges was available to said authority during the preparation of the program."*

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## ACRONYMS

The following are a list of common acronyms widely used in the Bridge Inspection field:

ADT	Average Daily Traffic
UAS	Unmanned Aircraft System
BIRM	Bridge Inspection Reference Manual
BAC	Bridge Advisory Committee
CFR	Code of Federal Regulations
CRAB	County Road Administration Board
EV#	Emergency Vehicle (# refers to number of axles)
FHWA	Federal Highway Administration
FLBP	Federal Local Bridge Program
NBIS	National Bridge Inventory System
NSTM	Non-redundant Steel Tension Members
PS/PT	Pre-stressed / Post-tensioned
RCW	Revised Code of Washington
SHV	Specialized Haul Vehicle
SU#	Single Unit (# refers to number of axles)
SID	Structure Identification Number
SNBI	Specifications for the National Bridge Inventory
UBIT	Under-Bridge Inspection Truck
WAC	Washington Administrative Code
WSBIM	Washington State Bridge Inspection Manual
WSBIS	Washington State Bridge Inventory System
WSDOT	Washington State Department of Transportation
TIP	Transportation Improvement Program



## EXECUTIVE SUMMARY

The 2024 Annual Bridge Report complies with WAC 136-20-060, which requires that each County Engineer furnish a written resume of the findings of the previous year's inspection effort. This report summarizes Skagit County's bridge inspection program, focusing on the Engineer's recommendations as to replacement, rehabilitation, repair, and load restrictions on the County's deficient bridges. This makes the Annual Bridge Report an important resource in the preparation of the Six Year Transportation Improvement Program and other short and long-term planning tools. Bridge replacement, rehabilitation, and repair projects are prioritized by a rating system that is based on a combination of factors including, but not limited to, an overall condition classification of Good/Fair/Poor, appraisal ratings, traffic data, safety factors, accident history, and funding availability.

For the purpose of national performance measures, the method of assessment to determine the condition classification (Good/Fair/Poor) of a bridge is the minimum (lowest) condition rating code from the following items: Deck, Superstructure, Substructure, or culvert. A condition code of 4 (poor) or less in any of those will assess the entire bridge in Poor Condition.

There are four goals the report strives to attain:

1. Provide inspection findings ensuring safe use by the public.
2. Present proactive maintenance recommendations for maximizing the life of County assets.
3. Identify bridges that may need to be replaced or rehabilitated.
4. Satisfies the reporting requirements set forth by other government agencies.



Dalles Bridge near Concrete (Concrete-Sauk Valley Road)

**HIGHLIGHTS** from the 2024 bridge inspection season include:

- ❖ 66 bridge inspections were performed in Skagit County.
  - ❖ 51 routine inspections performed on Skagit County bridges.
  - ❖ 11 Routine/NSTM inspections performed by WSDOT that required the use of a UBIT and/or special testing equipment.
  - ❖ 1 Interim inspection of the temporary shoring on Old Hwy 99 at Thomas Creek bridge.
  - ❖ 3 routine inspections performed for local agencies: Cities of Mount Vernon & Sedro Woolley.
  
- ❖ Construction was completed on the Bayview-Edison at Joe Leary Slough Bridge Deck Rehabilitation Project (below). The work included shot blasting off the top inch of the deck, repairing any damaged rebar, and filling any delamination voids. Then a new 1.5” polyester polymer concrete overlay was applied to seal the concrete deck and apply a smooth driving surface. Existing drainage and bank armoring were also repaired.



- ❖ The bridge inspection crew enlisted the help of “Genesis I,” the Survey Department’s small Unmanned Aircraft System (sUAS) to discover the presence of delamination in the decks of North Fork Bridge and Lake Cavanaugh Road at Pilchuck Creek. Genesis I used thermal imaging to detect irregularities in concrete. Very little deterioration was found in the deck of North Fork Bridge, however, Lake Cavanaugh Road at Pilchuck Creek has patched spalls and delamination throughout the entire deck and will be a focus of future inspections and maintenance. (See pg #7 for more information).



- ❖ A new 3-sided concrete box culvert was installed on Starbird Road at Fisher Creek, replacing a 6-foot concrete culvert that prevented effective salmon migration. This structure was inspected, inventoried, and added to the National Bridge Inventory System. This project was funded by a PROTECT (Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation) grant that is also replacing another Fisher Creek culvert at Cedardale Road (cover), downstream of the Starbird Road crossing.



- ❖ Skagit County was awarded funding by the Federal Local Bridge Program for all three of its 2022 grant applications:

- ❖ **Skagit River Marblemount Bridge** (see page 14) was awarded \$18.6 Million for Rehabilitation that will include replacement of some damaged/deteriorating members as well as upsizing gusset plates and members with the goal of increasing its load



carrying capacity to handle legal loads. The funding will also go towards cleaning and applying a new protective paint coating. David Evans and Associates, Inc. performed an in-depth climbing inspection (left) and completed the design. The County will be advertising for competitive contractor bids beginning March 13, 2025.



❖ **Old Highway 99 at Thomas Creek** was awarded \$6 Million to replace the 90-year-old timber structure. The substructure of the bridge is failing, requiring temporary shoring to keep it open to legal loads. The new structure will also enhance creek conveyance as the current bridge is routinely submerged during larger flood events. KPFF, Inc. was selected as the design consultant with construction currently scheduled for summer of 2026.

❖ **The Deck Repair Bundle Project** was awarded \$1.6 Million to repair and resurface the decks of three bridges: **F&S Grade Road at Samish River** (right), **Cascade River Bridge**, and **S. Skagit Highway at Pressentin Creek**. Sargent Engineers, Inc. was selected as the design consultant, construction is currently scheduled for spring of 2026.



## BRIDGE INVENTORY SUMMARY

**Skagit County Road Bridges:**

As of December 31, 2024, Skagit County has 110 bridges in the National Bridge Inventory System (NBIS) plus 3 short span bridges that we routinely inspect as well.

- ❖ The current inventory consists of:
  - 6 culverts (2 corrugated metal, 4 concrete)
  - 3 predominately timber bridges
  - 12 predominately steel bridges
  - 92 predominately concrete bridges
  
- ❖ 11 of the 113 bridges requiring special inspection needs are contracted out to WSDOT who have the necessary equipment and expertise (see Specialized Inspections).
  
- ❖ Skagit County has 2 bridges with a condition rating of Poor (See Table 1).

*TABLE 1 – Skagit County bridges considered to be “Poor Condition”*

BRIDGE NUMBER	BRIDGE NAME	DEFICIENCY	FUNDING STATUS
40013	F&S GRADE SAMISH RIVER	Deck	Repair Funding Awarded – Const. 2026
40113	OLD HWY 99 at THOMAS CK	Deck/Substructure	Replacement Funding Awarded – Const. 2026

To see a full listing of the Skagit County Bridge Inventory and their statistics, please refer to “Appendix A – Bridge Inventory”.

**Specialized Inspections:**

Skagit County currently has 11 structures that require specific access assistance, equipment, and professional services during the inspection process. We refer to these inspections as “specialized inspections” that typically involve three types of inspection: (1) **Under-Bridge Inspection Truck (UBIT)** is required for bridges that cannot be given an adequate visual inspection from the ground. (2) Steel bridges with **Nonredundant Steel Tension Members (NSTM)**, usually requiring the use of special inspection equipment. (3) Underwater inspections involve divers for bridges with piers that extend below ordinary low-water levels. Skagit County contracts with the State Bridge Preservation Office (BPO) to perform our specialized type inspections. In 2024, BPO performed 11 specialized inspections (UBIT / NSTM) for Skagit County. In 2025, BPO is scheduled to perform 2 UBIT inspections, both for

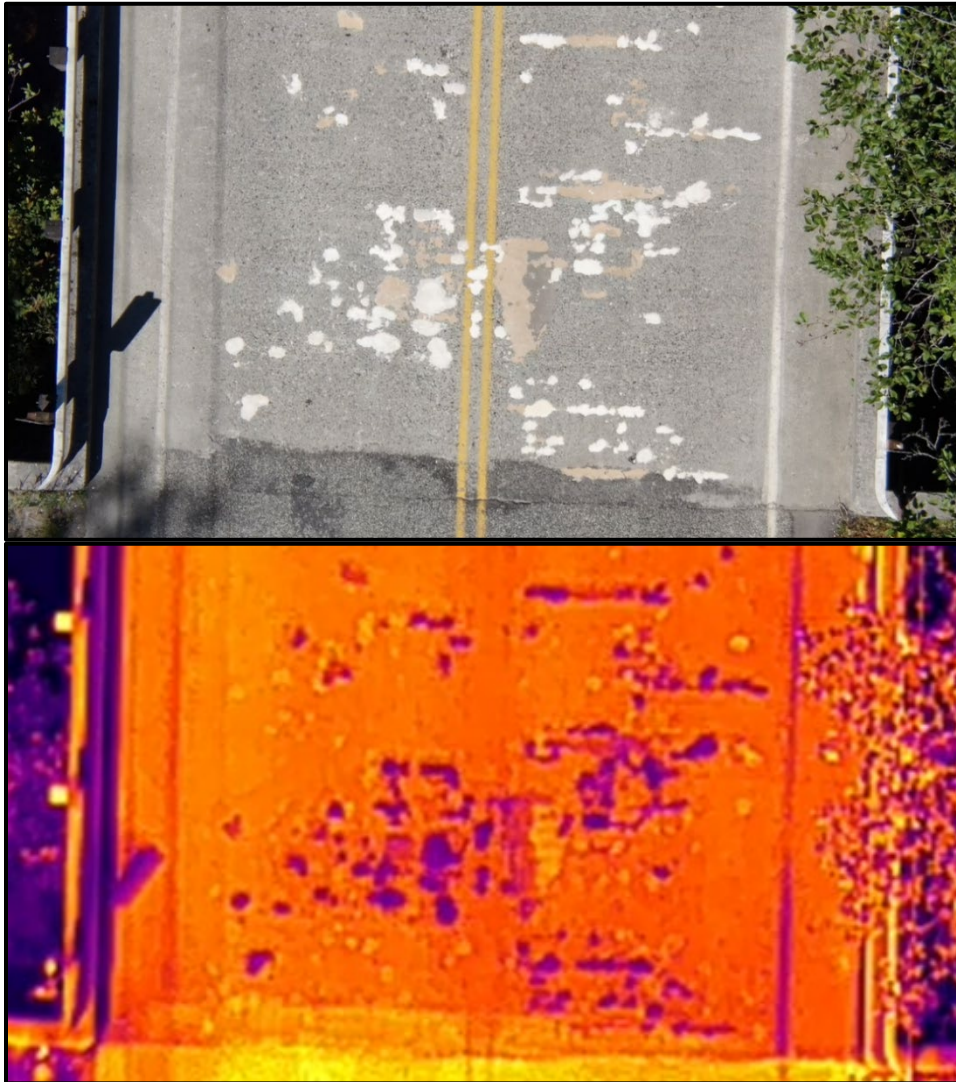


Skagit River Marblemount Bridge, UBIT inspection



local agencies. For more information on our upcoming inspection schedule, please refer to “Appendix B – Routine & Special Inspection Schedule” for details on all our bridges.

The County has added a new form of specialized inspection, a sUAS, to supplement our condition reporting with the recent acquisition of Genesis I by our Survey Department. Now we are able to utilize its capabilities to capture thermal imaging of the deck, as well as a live video and images from underneath the bridge to inspect the girders and soffit, allowing us to pinpoint defects for closer inspection. Genesis I can clearly provide an accurate size and location of existing patches and delamination as demonstrated below.



Thermal imaging of a portion of Lake Cavanaugh Road at Pilchuck Creek Bridge:

The patched spalls and delamination areas heat and cool at different rates than the concrete in good condition. The existing patches of spalled delamination (top photo) show up in the thermal imaging (bottom photo) as dark red spots. The lighter yellow spots indicate delamination in the concrete that will eventually spall and need additional patching.

**Overweight Loads & Load Restricted Bridges:**

The North Fork Bridge and the Dalles Bridge are popular routes for overweight loads. Due to the bridges' NSTM status and deficiencies, all overweight load permits are reviewed on a case-by-case basis. County staff (along with contracted consultants) review the load configuration (number of axles, axle loading and spacing) to determine if the load is safe to cross all the bridges located along the proposed route. If not, restrictions and/or conditions can be put on the load, or an alternative route identified.



Super-load requiring bridge loading analysis.

TABLE 2 – Skagit County Load Restricted Bridges

LOAD RESTRICTIONS											
Bridge #	Bridge Name	AASHTO TRUCKS - 1,2,3			SU4 27T	SU5 31T	SU6 34.7T	SU7 38.7T	EV2 28.7T	EV3 43T	POSTED Y/N
		25T	36T	40T							
40001	Lake View Blvd at Nookachamps									36.6	N
40008	South Fork Bridge							27.3	37.0		Y*
40039	Rainbow Bridge				29.4	30.5	32.5	27.3	28.0		Y
40047	Lake Cavanaugh Rd at Pilchuck Cr					32.3	33.3	22.1	31.8		Y
40063	Lyman-Hamilton Hwy at Childs Cr					33.0	34.8		30.5		Y
40070	Skagit River Marblemount	23.8	24.8	24.4	23.5	23.6	24.0	24.0	23.5	23.7	N**
40090	Dalles Bridge		30.6	38.0		29.3	30.1	33.1		35.7	Y
40099	Government Bridge	24.0			22.6	23.8	23.9	24.8	24.1	23.2	Y
40114	Samish River Bridge					29.0	32.0	34.0	26.0	27.0	Y
40115	Old Hwy 99 at Friday Cr Bridge						31.3	32.2	25.0	31.0	Y
40130	Lyman-Hamilton Hwy at Red Cabin Cr									32.7	N
40131	Lyman-Hamilton Hwy at Mannser Cr				25.1	27.0	27.4	28.3	27.6	27.1	Y
40132	Lyman-Hamilton Hwy at Jones Cr				22.1	23.9	24.3	25.5	24.1	24.1	Y
40152	Anacortes Ferry Dock									37.4	N
40153	Guemes Island Ferry Dock									37.4	N
40156	Cedardale Rd at Carpenter Cr						32.3	34.4	25.0	31.4	Y*
40157	Benson Ridge Ln at Carpenter Cr						34.0	35.2		33.1	Y
	* Bridge located within 1-mile of Interstate, therefore EV posting required.										
	** Bridge load restriction mitigated by change from 2-lane to 1-lane bridge.										



**Vertical Clearance Limited Bridges:**  
 Steel Truss Bridges all have sway bracing across the top which creates a vertical limitation to vehicles traveling over the bridge. Below is a list of bridges that have vertical limitations and their vertical measurement which helps when reviewing the route of an oversized load application. Skagit County crews have also posted the height restriction on two of the bridges that are near or below legal height (See Table 3).

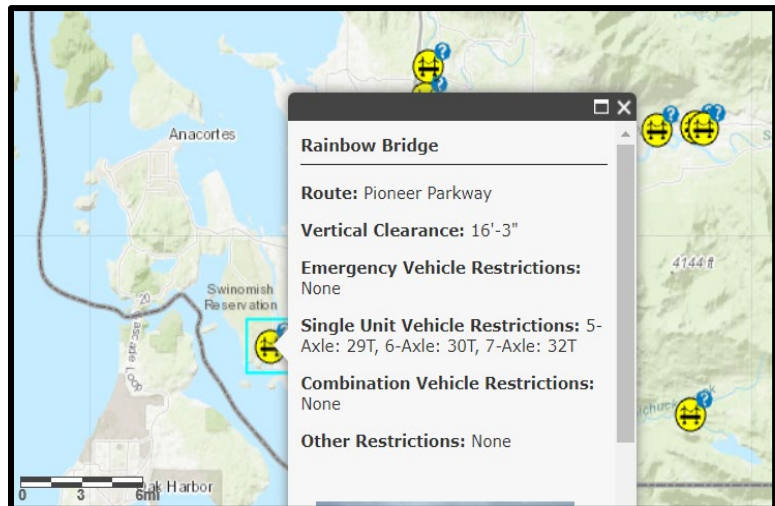


Samish River Bridge - Vertical Clearance Signage

TABLE 3 – Vertical Clearance Limited Bridges

Bridge Number	Bridge Name	Vertical Measurement	Posted Clearance
40114	SAMISH RIVER BRIDGE	14' 06"	14' 3"
40152	ANACORTES FERRY DOCK	16' 00"	
40153	GUEMES ISLAND FERRY DOCK	16' 00"	
40090	DALLES BRIDGE	16' 01"	15' 10"
40039	RAINBOW BRIDGE	16' 07"	
40070	SKAGIT RIVER MARBLEMOUNT	17' 09"	
40099	GOVERNMENT BRIDGE	18' 00"	

In 2022, Skagit County completed re-load rating all NBI bridges which revealed the need for load restricting and posting several County bridges (see Table 2). Due to the number of newly load restricted bridges, Public Works, with the assistance of the GIS Department, launched the interactive [Skagit County Bridge Restriction Map](#) (right) which shows the location, all current restrictions, and any clearance limits (vertical or horizontal) of that bridge. This map is intended to inform the trucking industry of possible restrictions and to plan routes accordingly before they embark. Over-legal truck configurations are still required to obtain a permit for travel on County roads.



The County was recently notified by FHWA that our bridges now also need to be reviewed, and rated for another legal truck configuration; the WA-105 which is an 8-axle tractor trailer with a

gross vehicle weight of 105,500 lbs. This is an unfunded mandate, however the County Road Administration Board (CRAB) is working with State Legislators in an effort to fund this effort for Washington State Counties.

**Local Agency Bridges:**

Skagit County Public Works provides inspection services to cities and towns on a reimbursable basis. The County works with the local agencies under agreement conditions set forth in RCW Chapter 39.34, the Interlocal Cooperation Act. The County’s services are provided primarily to those cities which lack resources and expertise to inspect and maintain their bridge inventory. Currently, the County provides routine inspection services on 17 local municipality bridges.

**No. of Local Agency Bridges Served by Skagit County:**

- ❖ City of Burlington – 2
- ❖ Town of Concrete – 1
- ❖ City of Mount Vernon – 12
- ❖ City of Sedro-Woolley – 2

**Short Span Bridges:**

Short span bridges are defined as spans that are 20-feet or less in length and over 4-feet for timber structures and over 6-feet for steel and concrete structures. Even though inspection reports and bridge information for short span bridges are not routinely reported to WSDOT or FHWA, Skagit County currently has three short span structures inventoried, like Campbell Lake Outlet pictured to the right, with plans to add more crossings that meet the short span definition. Once inventoried, Skagit County can schedule routine inspections and operate these crossings in the same manner as federally reported bridges in our inventory.



Campbell Lake Outlet receiving new timber cap in 2013



Cascade Trail Bridge at Jones Creek

**Parks Department Bridges:**

Skagit County Parks and Recreation Department has approached Public Works and requested assistance with a growing inventory of pedestrian bridges (27 total). These have been acquired either through new trail construction or by acquisition of abandoned railroad rights-of-way. Public Works will continue to work with the Parks and Recreation Department to inventory and inspect as staffing and workload allows.

## BRIDGE INSPECTION PROGRAM, FINDINGS, & RECOMMENDATIONS

Bridge inspections are performed in accordance with the Specifications for the National Bridge Inventory (SNBI) and with 23 CFR 650.3. All bridges reported to the NBIS in the United States are issued a structure identification number (SID). The standards mandate that all public agencies with a bridge inventory inspect and report the findings at a minimum of once every 24 months (routine inspection). The inspector uses these standards to document the current condition of each bridge element listed. The deficiencies are coded to the NBIS and show degree of deterioration in various elements. The three primary elements are the deck, superstructure, and substructure. As deterioration accelerates, the coding values will drop. Work orders for repairs may be issued. In cases where the coding factors are extremely low, recommendations are made for replacement or rehabilitation. Bridges with identified deficiencies may be inspected or monitored at more frequent intervals.

The results of our inspection program are forwarded on to the WSDOT Local Programs Office for review. Once the report has been accepted by WSDOT, it is available for the FHWA and others to use. A copy of all final inspection reports is kept on file with Skagit County Public Works and available online at [www.SkagitCounty.net](http://www.SkagitCounty.net)

FHWA has revamped its methodology used to categorize the overall condition of bridges. They have eliminated the calculated sufficiency rating and established a more simplified Good/Fair/Poor Rating that is a culmination of inspection findings and assigning condition codes to major components of the bridge: Deck, Superstructure, and Substructure.

### Code Condition Rating

G Good 7, or 8

F Fair 5 or 6

P Poor 4, 3, 2, 1, or 0

Currently, Skagit County's inventory consists of 2 Poor bridges, 80 Fair bridges, and 28 Good bridges. However, only half of the bridge inventory has been inspected using the new rating criteria so we expect to see substantial change in these numbers after the 2025 inspection season.

The bridge inspection program recognizes that with limited funding, it is important to identify trends that are affecting the deficiencies of our bridge structures, such as age and materials used in construction. Skagit County Public Works will continue to apply for available funds to assist with deficient bridges that are eligible for Federal Local Bridge Program funds and Surface Transportation Program funds. County bridges not eligible for Federal funds, such as short-span bridges 20-feet in length or less, will have their replacement/rehabilitation needs prioritized by Public Works staff based on; condition rating, staff resource availability, and the Board of Skagit County Commissioners' funding authorization of such projects in the Annual Construction Program. Similarly, for maintenance, repair, and minor rehabilitation work, prioritization is based on County bridge maintenance funds and staff resource availability.

This report also documents projects that have been completed, those that are in the current Six-Year Transportation Improvement Program, and those bridges that are candidates for future replacement/rehabilitation.



## REPLACEMENT & REHABILITATION

The County's current focus is to replace or rehabilitate bridges that are classified as "Poor". We have received, or are currently seeking, funding for a number of bridges that are in need of replacement, rehabilitation and/or preventative maintenance. The bridges identified below are Public Work's current main focus.

### REPLACEMENT

#### **Old Hwy 99 at Thomas Creek Bridge #40113**

This bridge is determined to be in "Poor" condition which made it eligible for replacement funding. The bridge has a deteriorating pile that's been red tagged which would normally require a weight restriction or closure of the bridge. However, County forces were able to quickly permit and install temporary shoring to reduce the loading on the pile. Federal funding was awarded (**\$6 Million**) in 2022 to replace this structure with **construction currently scheduled for 2026**.

#### **Newly recommended Replacement candidates:**

#### **South Skagit Highway at Mill Creek Bridge #40086**



Mill Creek channel upstream of bridge.

Environmental processes have rendered the Mill Creek crossing inadequate for its intended purpose. Mill Creek, located in an alluvial fan, has filled in with large aggregate and decreased the structures' available conveyance, causing the creek to overtop the roadway during the most minor rainfall events. Currently, the channel diverts flow to the east of the bridge and joins with Savage Creek, reducing salmonid habitat. The bridges' Waterway Adequacy has been coded a 2 (frequent overtopping of deck or roadway approaches with severe traffic delays) and therefore eligible for replacement funding. The County will be seeking replacement funds in this year's Call for Projects (April) that coincides with salmon restoration funding for a basin-wide solution.

## North Fork Bridge #40037

The North Fork Bridge has served the County well for 66 years, but its narrow configuration and limited load capacity have rendered it obsolete. Currently, the bridge is in Fair condition and not eligible for Federal Local Bridge Program replacement funds. However, given the importance of the route it serves (connecting Interstate-5 with State Route 20 and serving as an alternative trucking route to the Port of Skagit, the refineries, and Port of Anacortes) we are looking for infrastructure grants, coupled with non-motorized grants and salmon restoration / flood water conveyance grant opportunities.



## REHABILITATION

### Skagit River Marblemount Bridge #40070

The 94-year-old steel truss bridge, providing access from SR-20 to the North Cascade Forest Lands received **\$18.6 Million** in Federal Local Bridge Program in 2022 funding to rehabilitate and strengthen the structure to handle current legal loads. **Construction of this project is scheduled to begin the summer of 2025 and be completed by the fall of 2026.**



Marblemount Bridge – Skagit River

The structure would be posted for load restrictions based upon its current rating, however, considering the low average daily traffic, Public Works elected to reduce the bridge to one-lane with signal controlled two-way traffic operation. With a one-lane configuration, legal trucks are allowed to cross one-at-a-time to avoid a 20-mile detour.

Rehabilitation of the structure will include cleaning and painting, replacement of damaged and/or deteriorating members of the truss and upgrading key members to increase the load carrying capacity of the truss system.



## Newly recommended Rehabilitation candidates:

Although **Rainbow Bridge #40039** (below) does not meet the eligibility requirements for rehabilitation funding, and although the paint/protective coating has faded considerably,



it is still rated in fair condition. However, the bridge has multiple repair needs so preventative maintenance funding could be an option to pursue and then be combined with a cleaning and painting effort. County staff will continue to look for ways to fund these items and hopefully strengthen the bridge so that the current load restrictions can be removed.

## PREVENTATIVE MAINTENANCE

### **Preventative Maintenance – Bridge Deck Repair Bundle**

Like the Bay View-Edison at Joe Leary Bridge, we have several other bridges whose substructure is in very good condition but have deteriorating decks. The bridges mentioned below were bundled together and received Federal Local Bridge Program Funding in 2022 in the amount of **\$1.6 Million** to receive deck maintenance and restore their surface conditions.

**Construction is currently scheduled for 2026.**

- ❖ Cascade River Bridge #40071
- ❖ South Skagit Hwy at Pressentin Creek #40088
- ❖ F & S Grade Rd at Samish River #40013

## **Newly recommended Deck Repair candidates:**

- Lake Cavanaugh Rd at Pilchuck Creek #40047
- Cape Horn Road at Grandy Creek #40068
- South Skagit Hwy at O’Toole Creek #40084

## Newly recommended Paint/Protective Coating candidates:

Painting of steel structures is not only for aesthetic purposes, but it also provides a protective coating to prevent corrosion. The **Guemes Island Ferry Dock #40153** (right) and Anacortes Ferry Dock #40154 are currently the only structures in our inventory with documented paint deterioration eligible for grant funding. Within a saltwater environment, the protective coatings on these steel structures are essential and must be addressed before further deterioration occurs. County staff will be applying for the Federal Local Bridge Program in April for paint and preventative maintenance to address numerous repair needs for both docks.



M/V Guemes Ferry Anacortes Terminal – Transfer Span

## MAINTENANCE AND REPAIR

The majority of bridge maintenance and repair work is performed by County Forces. This includes cleaning, minor painting, deck repair/patching and rail repair. The major maintenance projects being worked on now include:



South Skagit Highway at Finney Creek

### Debris Removal:

Debris is an ongoing issue for many of our bridges. To improve staff efficiency and response time, the County's Environmental Services secured programmatic HPAs for clearing debris from problem bridges. Common debris locations include Farm-to-Market at Samish River Bridge (#40034) and South Skagit Hwy at Finney Creek (#40089) pictured left. That blockage required waiting for low flows and cutting most of the logs.

### **Bridge Maintenance:**

#### **Concrete-Sauk Valley Temporary Bridge #40091**

The temporary bridge was installed to maintain regionwide access when the culvert at North Osterman Creek failed due to storms and massive head cutting from the unpredictable geomorphology of the nearby Sauk River. Due to the bridge's lack of substructure, it is considered scour critical and has a Scour Plan of Action in place directing County staff to monitor site conditions during rainfall events. Recently, County forces successfully permitted and installed Super Sacks, filled with river rock, along the banks of Osterman Creek to prevent further channel migration towards the ends of the bridge. The temporary structure will remain until the permanent crossing is designed and ready for construction. This crossing was submitted for FEMA funding and recently received more than \$770,000 in FEMA funding to begin design of a new bridge. Once the design is complete, the County will submit the estimated construction cost to FEMA to secure additional funding.



Temporary Bridge over North Osterman Creek, looking upstream.



Super-sacks filled with stream gravel are placed to armor bank and slow down channel migration.

### **General Maintenance:**

In addition to the above-mentioned repairs, Skagit County's staff performs various minor maintenance and repairs throughout the year. These maintenance and repair efforts include, but are not limited to:

- Patching decks due to spalling or material loss
- Replacing the loss of armor/rock around bridge abutments
- Repairing bridge rail and guardrail
- Leveling bridge approaches
- Spot repainting
- Removal of vegetation encroaching on or blocking access to the bridge for inspection purposes
- Replacing damaged or worn signage



Hard Creek Bridge on Cascade River Road experienced some scour along the eastern bank that is undermining the road base retaining wall. A temporary patch was installed by County crews in November to prevent further erosion. A permanent solution will be constructed in summer of 2025.



Cascade River Road at Hard Creek Bridge, looking north, upstream.



Scoured channel bank undermining retaining wall along east bank.

Refer to “Appendix C – Bridge Maintenance List” for a full listing of outstanding and recently completed repairs.

## GLOSSARY OF BRIDGE TERMINOLOGY

**Abutment**—a substructure supporting one end of a single-span, or the extreme end of a multi-span superstructure and, in general, retaining or supporting the approach fill.

**Backwall**—the top-most portion of an abutment functioning *primarily* as a retaining wall to contain approach roadway fill.

**Bent**—a supporting unit of the beams of a span made up of one or more column or column -like members connected at their top-most ends by a cap, strut, or other horizontal member.

**Bracing**—a system of tension or compression members, or a combination of these, connected to the parts to be supported or strengthened by a *truss* or frame. It transfers wind, dynamic, impact, and vibratory stresses to the substructure and gives rigidity throughout the complete assemblage. Can also refer to diagonal members that tie two or more columns of a bent together.

**Cap**—the horizontally-oriented, top-most piece or member of a bent serving to distribute the beam loads upon the columns and to hold the beams in their proper relative positions.

**Chord**—in a truss, the upper-most and the lower-most longitudinal members, extending the full length of the truss.

**Compression**—a type of stress involving pressing together; tends to shorten a member; opposite of tension.

**Culvert**—a pipe or small structure used for drainage under a road, railroad or other embankment. A culvert with a span length greater than 20-feet is included in the National Bridge Inventory and receives a rating using the NBI scale.

**Deck**—portion of a bridge that provides direct support for vehicular and pedestrian traffic.

**Elastomeric pads**—rectangular pads made of neoprene, found between the substructures and superstructure, that bears the entire weight of the superstructure. Elastomeric pads can deform to allow for thermal movements of the superstructure.

**Endwall**—the wall located directly under each end of a bridge that holds back approach roadway fill. The endwall is part of the abutment.

**Pier**—a structure comprised of stone, concrete, brick, steel, or wood that supports the ends of the spans of a multi-span superstructure at an intermediate location between abutments. A pier is usually a solid structure as opposed to a bent, which is usually made up of columns.

**Pile**—a rod or shaft-like linear member of timber, steel, concrete, or composite materials driven into the earth to carry structure loads into the soil.

**Pin Pile**—a series of two-inch-diameter pipes driven in a line into the ground to support the timber planks of a small retaining wall, typically used to prevent erosion under a bridge abutment.



**Post or column**—a member that resists compressive stresses, in a vertical or near vertical position.

**Scour**—erosive action of removing streambed material around bridge substructure due to water flow. Scour is of particular concern during high-water events.

**Short-span bridge**—these bridges span 20 feet or less, have a single span and are typically supported by timber piles or shallow concrete footings. The term can also refer to a large diameter culvert.

**Soffit**—the underside of the bridge deck or sidewalk.

**Spall**—a concrete deficiency wherein a portion of the concrete surface is popped off from the main structure due to the expansive forces of corroding steel rebar underneath. This is especially common on older concrete bridges.

**Stringer**—a longitudinal beam (less than 30' long) supporting the bridge deck, and in large bridges, framed into or upon the floor beams.

**Substructure**—the abutment, piers, grillage, or other structure built to support the span or spans of a bridge's superstructure and distributes all bridge loads to the ground surface. Includes abutments, piers, bents, and bearings

**Superstructure**—the entire portion of a bridge structure which primarily receives and supports traffic loads and in turn transfers the reactions to the bridge substructure; usually consists of the deck and beams or, in the case of a truss bridge, the entire truss.

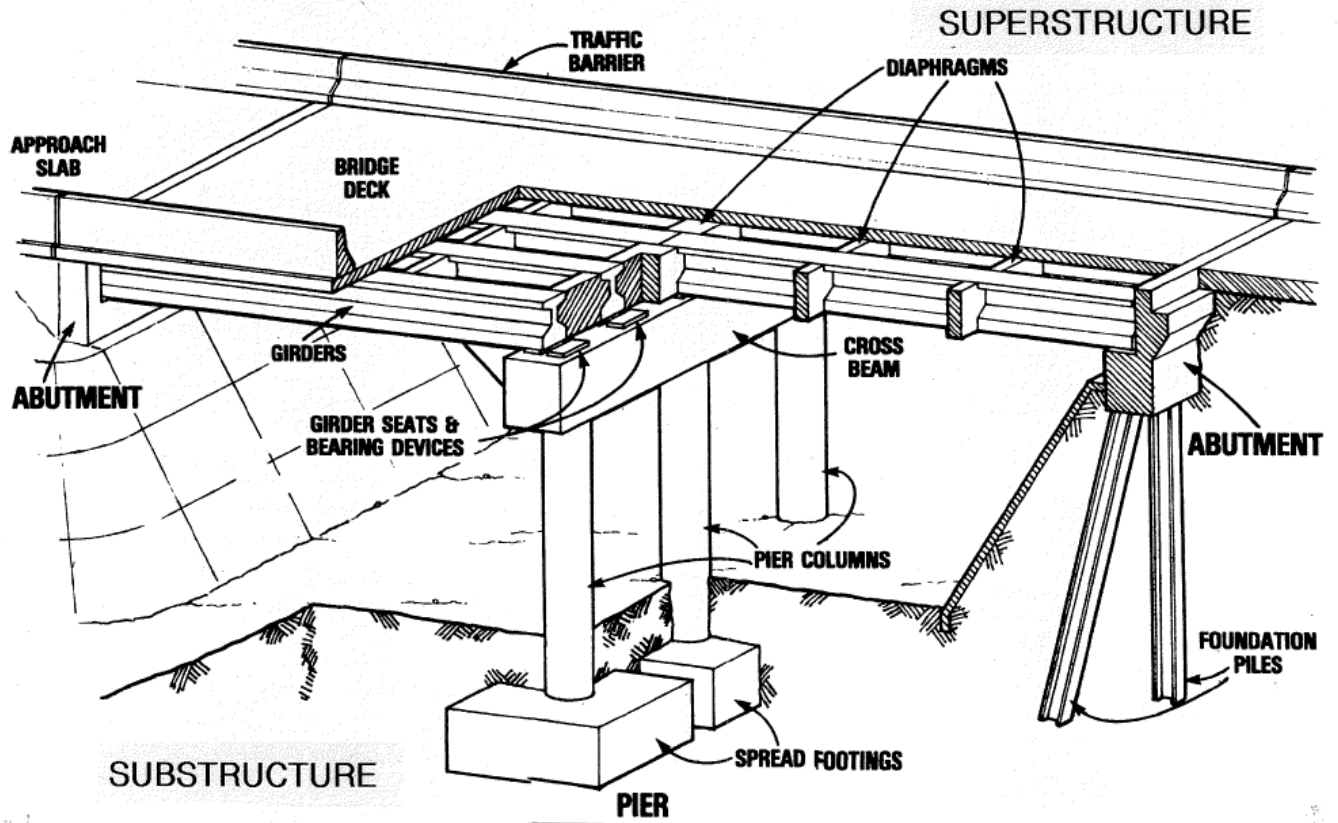
**Tension**—type of stress involving an action which pulls apart.

**Trestle**—a bridge structure consisting of beam spans supported upon bents. Trestles are usually made of timber and have numerous diagonal braces, both within each bent and from bent to bent.

**Wingwall**—walls that slant outward from the corners of the overall bridge that support roadway fill of the approach.

# ELEMENTS OF A BRIDGE

## BASIC BRIDGE PARTS



APPENDIX A - BRIDGE INVENTORY

BRIDGE NUMBER	BRIDGE NAME	YEAR BUILT /REBUILT	LENGTH (feet)	WIDTH (feet)	AVG DAILY TRAFFIC	TRUCK %	MAIN MATERIAL	DESIGN TYPE	OVERALL CONDITION
40001	LAKE VIEW BLVD/NOOKACHAMPS	1954	77.0	25.5	690	8	Concrete	Tee Beam	Fair
40002	SWAN ROAD at NOOKACHAMPS	1976	126.0	28.0	1100	8	Concrete	Girder	Fair
40003	FRANCIS RD at NOOKACHAMPS CR	1979	130.0	28.0	4694	4	Concrete	Girder	Fair
40004	FRANCIS RD at SLOUGH	1958	50.0	24.0	4694	4	Concrete	Tee Beam	Fair
40005	NOOKACHAMP HILLS CULVERT	2008	30.9	29.2	470	6	Steel	Culvert	Good
40008	SOUTH FORK BRIDGE	1972	908.0	28.0	4719	12	Steel	Girder	Fair
40009	COOK RD at DD14 DITCH	2000	37.5	40.0	16617	9	PS/PT Concrete	Girder	Good
40011	GREEN RD at THOMAS CR	1958	51.0	24.0	54	7	Concrete	Tee Beam	Fair
40012	COOK RD at BRICKYARD CR	2000	54.0	44.0	15887	8	PS/PT Concrete	Girder	Good
40013	F&S GRADE SAMISH RIVER	1974	102.0	28.0	630	10	PS/PT Concrete	Girder	Poor
40014	GRIPP RD at SAMISH R	1976	83.5	28.0	679	12	PS/PT Concrete	Girder	Fair
40015	PRAIRIE RD S at SAMISH R	1974	83.0	28.0	1583	9	PS/PT Concrete	Girder	Fair
40016	PRAIRIE RD W at SAMISH R	1975	104.0	28.0	1539	11	PS/PT Concrete	Girder	Fair
40017	PRAIRIE RD FRIDAY CR	1975	78.0	28.0	2757	9	PS/PT Concrete	Girder	Fair
40018	FRIDAY CREEK 1ST BRIDGE	1962	61.0	20.0	165	8	PS/PT Concrete	Tee Beam	Fair
40019	FRIDAY CREEK 2ND BRIDGE	1979	74.0	28.0	184	7	PS/PT Concrete	Tee Beam	Fair
40020	FRIDAY CREEK 3RD BRIDGE	1961	61.0	20.0	165	8	PS/PT Concrete	Tee Beam	Fair
40021	FRIDAY CREEK 4TH BRIDGE	1961	61.0	20.0	184	7	PS/PT Concrete	Tee Beam	Fair
40022	FRIDAY CREEK 5TH BRIDGE	1977	69.0	28.0	184	7	PS/PT Concrete	Girder	Fair
40023	FRIDAY CREEK 6TH BRIDGE	1963	61.0	24.0	184	7	PS/PT Concrete	Tee Beam	Fair
40024	FRIDAY CREEK 7TH BRIDGE	1964	61.0	24.0	237	8	PS/PT Concrete	Tee Beam	Fair
40025	FRIDAY CREEK 8TH BRIDGE	1977	59.0	28.0	234	8	PS/PT Concrete	Girder	Fair
40026	FARM-TO-MARKET N DITCH	1951	32.0	26.0	1231	7	Concrete	Channel Beam	Fair
40027	BAY VIEW-EDISON at SAMISH SL	1965	38.0	26.5	1026	4	PS/PT Concrete	Channel Beam	Fair
40028	BAY VIEW-EDISON at SAMISH R	1965	222.7	26.0	1026	4	Concrete	Slab	Fair
40029	BAY VIEW-EDISON JOE LEARY	1955	100.2	29.8	588	8	Concrete	Tee Beam	Good
40030	THOMAS RD at SAMISH R	1973	91.0	28.0	216	23	PS/PT Concrete	Girder	Fair
40031	PULVER ROAD at JOE LEARY	1955	39.0	24.0	928	10	Concrete	Tee Beam	Fair
40032	FARM-TO-MARKET S DITCH	1950	21.0	26.0	920	8	Concrete	Slab	Fair
40033	FARM-TO-MARKET at NEUMAN	1950	60.0	26.0	920	8	Concrete	Slab	Fair
40034	FARM-TO-MARKET SAMISH R	1963	158.0	26.0	920	8	Concrete	Slab	Fair
40035	BAY VIEW-EDISON / BIG INDIAN	1992	71.0	34.1	1176	8	PS/PT Concrete	Girder	Fair
40036	FARM-TO-MARKET JOE LEARY	1950	72.0	26.0	981	7	Concrete	Slab	Fair
40037	NORTH FORK BRIDGE	1959	726.0	24.0	3693	10	Steel	Girder	Fair
40038	LACONNER WHITNEY at SL	1962	68.0	26.0	5550	6	PS/PT Concrete	Girder	Fair
40039	RAINBOW BRIDGE	1957	797.0	24.0	3101	7	Steel	Arch Thru	Fair
40041	E JOHNSON RD at CARPENTER CR	1981	50.1	24.0	85	14	PS/PT Concrete	Girder	Fair
40042	MILLTOWN at BIG DITCH	1957	50.0	24.2	413	8	Concrete	Tee Beam	Fair
40043	CONWAY HILL at CARPENTER CR	1980	60.0	14.0	95	8	PS/PT Concrete	Girder	Fair
40044	PIONEER HWY at BIG DITCH	1987	81.0	37.2	9442	9	PS/PT Concrete	Slab	Good
40045	PIONEER HWY at FISHER SL	1987	114.0	37.2	9516	12	PS/PT Concrete	Slab	Good
40046	LK CAVANAUGH RD at BEAR	1967	51.8	28.0	578	10	PS/PT Concrete	Girder	Fair
40047	LK CAVANAUGH RD at PILCHUCK	1970	56.5	28.0	578	10	PS/PT Concrete	Girder	Fair
40048	LK CAVANAUGH RD CULVERT	1998	21.5	0.0	604	16	Steel	Culvert	Good
40051	BEAVER LAKE RD at NOOKACHAMPS	1977	73.0	28.6	186	13	PS/PT Concrete	Girder	Fair
40052	TAYLOR RD at WALKER CR	1985	42.0	16.0	40	15	PS/PT Concrete	Girder	Good
40054	KNAPP RD at NOOKACHAMPS	1977	73.0	28.2	405	10	PS/PT Concrete	Girder	Fair
40055	PRAIRIE RD E at SAMISH R	1956/2012	76.0	24.4	894	10	Concrete	Tee Beam	Fair
40060	BURMASTER RD at COAL CR	1958	26.0	24.3	353	9	Concrete	Tee Beam	Good
40061	MINKLER RD at WISEMAN CR	1967	40.8	28.0	936	7	PS/PT Concrete	Girder	Fair

APPENDIX A - BRIDGE INVENTORY

BRIDGE NUMBER	BRIDGE NAME	YEAR BUILT /REBUILT	LENGTH (feet)	WIDTH (feet)	AVG DAILY TRAFFIC	TRUCK %	MAIN MATERIAL	DESIGN TYPE	OVERALL CONDITION
40062	UTOPIA RD at BLACK SLOUGH	1984	144.0	26.0	77	23	PS/PT Concrete	Girder	Fair
40063	LYMAN HAMILTON HWY at CHILDS CR	1948	32.0	24.0	525	8	Concrete	Tee Beam	Fair
40065	CONRAD RD at SUTTER CR	2011	73.0	15.7	23	1	PS/PT Concrete	Slab	Good
40066	HAMILTON CEMETERY RD at MUDDY CR	1965	51.3	26.0	171	10	Concrete	Tee Beam	Good
40067	CAPE HORN RD at ALDER CR	1972	41.0	28.0	227	5	PS/PT Concrete	Channel Beam	Fair
40068	CAPE HORN RD at GRANDY CR	1967	51.0	28.0	391	6	PS/PT Concrete	Girder	Fair
40069	CONRAD RD at SWIFT CR	1981	39.0	24.0	23	1	PS/PT Concrete	Girder	Fair
40070	SKAGIT RIVER MARBLEMOUNT	1930	662.0	20.0	608	11	Steel	Truss Thru	Fair
40071	CASCADE RIVER BRIDGE	1967	180.0	26.3	294	7	PS/PT Concrete	Girder	Fair
40072	CASCADE RIVER RD at MONOGRAM	1945/1979	22.0	26.0	188	4	Concrete	Slab	Fair
40073	CASCADE RIVER RD AT LOOKOUT CR	1981	191.0	28.0	188	4	Steel	Girder	Good
40074	CASCADE RIVER RD at MARBLE CR	1982	120.0	26.1	188	4	PS/PT Concrete	Girder	Fair
40075	CASCADE RIVER RD at SIBLEY CR	1997	23.8	28.0	188	4	Concrete	Slab	Good
40076	CASCADE RIVER RD at HARD CR	1997/2016	46.0	17.7	84	4	Concrete	Slab	Good
40077	CASCADE RIVER RD at MINERAL PARK	1986	71.0	18.0	84	4	PS/PT Concrete	Girder	Fair
40080	S SKAGIT HWY at PARKER CR	1996	26.0	0.0	1437	17	Concrete	Culvert	Good
40081	S SKAGIT HWY at DAY CR	1961	160.0	24.0	825	11	PS/PT Concrete	Girder	Fair
40082	S SKAGIT HWY at LORETTA CR	1961	85.0	24.0	825	11	PS/PT Concrete	Girder	Fair
40083	S SKAGIT HWY at CUMBERLAND CR	1961	50.0	24.0	635	12	PS/PT Concrete	Girder	Fair
40084	S SKAGIT HWY at O'TOOLE CR	1959	66.0	24.0	635	12	PS/PT Concrete	Girder	Fair
40085	S SKAGIT HWY at DAVIS SLOUGH	2014	63.3	34.9	610	5	PS/PT Concrete	Girder	Good
40086	S SKAGIT HWY at MILL CR	1969	40.8	28.0	635	12	PS/PT Concrete	Channel Beam	Fair
40088	S SKAGIT HWY at PRESENTIN CR	1966	85.0	26.6	635	12	PS/PT Concrete	Girder	Fair
40089	S SKAGIT HWY at FINNEY CR	1954	122.0	26.0	635	12	Steel	Girder	Good
40090	DALLES BRIDGE	1952	506.0	26.0	2562	6	Steel	Arch Thru	Fair
40091	CONCRETE-SAUK VALLEY TEMP BR	2021	131.0	13.7	158	11	Steel	Truss Thru	Good
40092	CONCRETE-SAUK VALLEY at MILLER CR	1999	27.7	0.0	158	16	Concrete	Culvert	Good
40093	UPPER FINNEY CREEK BRIDGE	1952/2023	210.0	14.2	41	10	Concrete	Tee Beam	Good
40094A	ROCKPORT CASCADE at ILLABOT CR	1970	92.5	28.0	262	15	Concrete	Girder	Fair
40094B	RYAN CROSSING at ILLABOT CR	2018	105.0	27.4	262	15	PS/PT Concrete	Girder	Good
40094C	HOLLOW CEDAR at ILLABOT CR	2018	105.0	27.4	262	15	PS/PT Concrete	Girder	Good
40095	ROCKPORT CASCADE RD at JORDAN CR	1969	56.4	28.0	304	7	Concrete	Girder	Good
40099	GOVERNMENT BRIDGE	1930/1953	304.0	14.0	158	11	Steel	Truss Thru	Fair
40101	BAKER LAKE RD at BEAR CR	1966	85.0	26.0	714	23	PS/PT Concrete	Girder	Fair
40106	LAKE SAMISH RD at BEAR CR	1959	50.0	24.0	491	6	Concrete	Tee Beam	Fair
40109	LAKE SAMISH RD at FRIDAY CR	1965	53.0	26.0	5124	6	PS/PT Concrete	Girder	Fair
40110	BURLINGTON NORTHERN OVERPASS	2018	411.0	38.0	5771	15	PS/PT Concrete	Girder	Good
40112	NEFFS CROSSING	2006	107.8	41.0	4372	10	PS/PT Concrete	Slab	Fair
40113	OLD HWY 99 at THOMAS CR	1934	52.0	30.0	5234	10	Timber	Girder	Poor
40114	SAMISH RIVER BRIDGE	1934	385.0	24.0	3113	11	Steel	Truss Thru	Fair
40115	OLD HWY 99 at FRIDAY CR	1956	122.0	26.0	2682	8	Concrete	Slab	Fair
40116	OLD HWY 99 at SILVER CR	1934	38.0	25.0	1687	9	Concrete	Tee Beam	Fair
40117	ALGER CAIN LAKE RD at SILVER CR	1992	102.0	34.2	4286	5	PS/PT Concrete	Tee Beam	Good
40120	BAKER LAKE RD at W FORK GRANDY CR	1968	62.0	28.0	725	18	PS/PT Concrete	Girder	Fair
40126	MARCHS POINT PIPELINE	1960	44.3	28.4	678	14	Concrete	Slab	Fair
40129	LYMAN HAMILTON HWY at MUDDY	1955/1997	65.0	30.0	198	4	PS/PT Concrete	Girder	Good
40130	LYMAN HAMILTON HWY at RED CABIN	1954	23.0	26.0	253	6	Concrete	Slab	Fair
40131	LYMAN HAMILTON HWY at MANNSE	1954	51.8	26.0	260	6	Concrete	Slab	Fair
40132	LYMAN HAMILTON HWY at JONES	1955	52.0	26.0	253	6	Concrete	Slab	Good
40140	BAKER LAKE RD at E GRANDY CR	1968	40.8	28.0	725	18	PS/PT Concrete	Channel Beam	Fair

APPENDIX A - BRIDGE INVENTORY

BRIDGE NUMBER	BRIDGE NAME	YEAR BUILT /REBUILT	LENGTH (feet)	WIDTH (feet)	AVG DAILY TRAFFIC	TRUCK %	MAIN MATERIAL	DESIGN TYPE	OVERALL CONDITION
40141	BAYVIEW STATE PARK	1969	62.0	26.0	751	10	PS/PT Concrete	Girder	Fair
40142	CAMPBELL LAKE OUTLET	1962	19.0	20.0	57	4	Concrete	Channel Beam	Fair
40147	STARBIRD RD at FISHER CR	2024	22.7	28.0	843	10	Concrete	Culvert	Good
40151	NICHOLSON at CHILDS CR	1979	29.0	15.0	40	5	PS/PT Concrete	Slab	Good
40152	ANACORTES FERRY DOCK	1925/1976	205.0	15.0	500	7	Steel	Movable Lift	Fair
40153	GUEMES ISLAND FERRY DOCK	1925/1981	165.0	15.0	500	7	Steel	Movable Lift	Fair
40156	CEDARDALE RD at CARPENTER CR	1934	84.0	36.0	613	14	Timber	Girder	Fair
40157	BENSON RIDGE LN at CARPENTER CR	1983	52.2	30.0	46	4	Timber	Girder	Fair
40159	MINKLER RD at COAL CR	1984	29.0	34.0	1136	8	Concrete	Slab	Fair
40161	FLINN ROAD at MCELROY SL	2006	48.0	19.6	20	0	PS/PT Concrete	Slab	Good
40162	BLANCHARD RD at MCELROY SL	2007	28.6	26.0	40	1	Concrete	Culvert	Good
40163	HELMICK RD at RED CR	2007	150.0	36.0	642	8	PS/PT Concrete	Girder	Fair
40164	S LAVENTURE RD at MADDOX CR	2013	80.0	50.0	8284	5	PS/PT Concrete	Girder	Fair
<b>LOCAL AGENCY BRIDGES</b>									
<b>CITY OF BURLINGTON</b>									
BURLINN-2	NORTH BURLINGTON BLVD	1997	25.7	34.0	4635	12	PS/PT Concrete	Culvert	Good
BURLINN-3	GOLDENROD BRIDGE	2005	115.5	40.0	2679	9	PS/PT Concrete	Girder	Good
<b>TOWN OF CONCRETE</b>									
CONCRETE1	BAKER RIVER	1916/2004	269.0	18.0	150	12	Concrete	Arch Deck	Fair
<b>CITY OF MOUNT VERNON</b>									
MV-1	RIVERSIDE BRIDGE	2004	850.0	60.0	21640	5	PS/PT Concrete	Girder	Good
MV-2	HOAG STEWARD OVERPASS	2003	60.2	64.5	21640	5	PS/PT Concrete	Girder	Fair
MV-3	ELEANOR LANE A	2006	29.7	30.0	460	7	Concrete	Culvert	Good
MV-4	SKAGIT HIGHLANDS PARKWAY	2003	37.0	32.0	800	5	Concrete	Culvert	Good
MV-5	LANDMARK DRIVE	1994	52.0	28.0	500	5	PS/PT Concrete	Slab	Good
MV-6	EAGLEMONT DRIVE	1995	20.0	0.0	800	5	Steel	Culvert	Fair
MV-7	J OFF BEAVER POND DR S	2006	25.8	19.0	50	1	Aluminum	Culvert	Good
MV-8	BEAVER POND DR SOUTH	2004	30.0	28.0	200	5	PS/PT Concrete	Slab	Good
MV-9	BEAVER POND DR NORTH B	2002	54.0	28.0	300	5	PS/PT Concrete	Slab	Good
MV-10	OLYMPIC LANE	2004	67.3	22.0	50	5	Concrete	Slab	Good
MV-11	BEAVER POND DR NORTH A	2001	42.0	28.0	400	5	PS/PT Concrete	Slab	Good
MV-12	LAVENTURE RD CULVERT	2010	29.0	44.0	8575	5	Concrete	Culvert	Good
<b>CITY OF SEDRO WOOLLEY</b>									
SW-1	KLINGER STREET BRIDGE	2002	34.1	36.0	1620	5	PS/PT Concrete	Slab	Good
SW-2	NORTH REED STREET BRIDGE	2002	30.0	40.0	906	5	PS/PT Concrete	Slab	Fair
* Due to FHWA change in coding definitions, "Overall Condition" is currently in flux for bridges on 2025 inspection schedule.									



APPENDIX B - ROUTINE AND SPECIAL INSPECTION SCHEDULE

BRIDGE NUMBER	BRIDGE NAME	LOCATION	INSP. TYPE	INSP FREQ (months)	LAST INSP	NEXT INSP.	INSP HRS
<b>2025 INSPECTION SEASON</b>						↓	
40113	OLD HWY 99 at THOMAS CK	1.4 N JCT COOK RD.	Interim	6	28-Aug-24	Feb-25	0.5
40018	FRIDAY CREEK 1ST BRIDGE	0.3 N. of JCT w/ Old 99	Routine	24	10-May-23	May-25	1.5
40019	FRIDAY CREEK 2ND BRIDGE	0.4 N JCT OLD 99	Routine	24	10-May-23	May-25	1.5
40020	FRIDAY CREEK 3RD BRIDGE	0.45 N JCT OLD HWY 99 N	Routine	24	10-May-23	May-25	1.5
40021	FRIDAY CREEK 4TH BRIDGE	0.59 N JCT OLD 99	Routine	24	10-May-23	May-25	1.5
40022	FRIDAY CREEK 5TH BRIDGE	0.6 N JCT OLD 99 N	Routine	24	17-May-23	May-25	1.5
40023	FRIDAY CREEK 6TH BRIDGE	1.55 N JCT Old 99	Routine	24	17-May-23	May-25	1.5
40024	FRIDAY CREEK 7TH BRIDGE	2.16 N JCT OLD 99 N	Routine	24	17-May-23	May-25	1.5
40025	FRIDAY CREEK 8TH BRIDGE	2.24 N JCT OLD 99 N	Routine	24	17-May-23	May-25	1.5
40115	OLD HWY 99 at FRIDAY CK	4.3 N JCT COOK RD.	Routine	24	17-May-23	May-25	1.5
40106	LAKE SAMISH RD at BEAR CK	2.0 NW JCT I-5	Routine	24	24-May-23	May-25	1.5
40109	LAKE SAMISH RD at FRIDAY CK	0.25 E JCT INTERSTATE 5	Routine	24	24-May-23	May-25	1.5
40116	OLD HWY 99 at SILVER CK	0.4 SE JCT LAKE SAMISH RD	Routine	24	24-May-23	May-25	1.5
40117	ALGER CAIN LAKE RD at SILVER CK	0.34 E JCT OLD HWY 99	Routine	24	24-May-23	May-25	1.5
40034	FARM-TO-MARKET SAMISH R	5.9 N JCT SR 20	Routine	24	07-Jun-23	Jun-25	1.5
40026	FARM-TO-MARKET N DITCH	7.7 N JCT SR 20	Routine	24	14-Jun-23	Jun-25	1
40033	FARM-TO-MARKET at NEUMAN	6.1 N JCT SR20	Routine	24	14-Jun-23	Jun-25	1
40036	FARM-TO-MARKET JOE LEARY	5.0 N JCT SR 20	Routine	24	14-Jun-23	Jun-25	1
40161	FLINN ROAD at MCELROY SLOUGH	300 Ft E Blanchard Rd	Routine	24	14-Jun-23	Jun-25	1
40162	BLANCHARD RD at MCELROY SLOUGH	0.05 N JCT LEGG ROAD	Routine	24	20-Jun-23	Jun-25	1
40030	THOMAS RD at SAMISH R	0.3 N JCT ALLEN WEST RD	Routine	24	21-Jun-23	Jun-25	1.5
40065	CONRAD RD at SUTTER CK	0.59 E JCT SR20	Routine	24	23-Jun-23	Jun-25	1
40085	S SKAGIT HWY at DAVIS SLOUGH	13.9 E JCT SR-9	Routine	24	23-Jun-23	Jun-25	1
40091	CONCRETE-SAUK VALLEY TEMP BR	13.2 MI SE OF SR 20	Routine	24	23-Jun-23	Jun-25	1
40071	CASCADE RIVER BRIDGE	0.04 S JCT CASCADE RD	Routine	24	28-Jun-23	Jun-25	2
40062	UTOPIA RD at BLACK SLOUGH	0.5 E JCT Hoehn Road	Routine	24	12-Jul-23	Jul-25	1
40163	HELMICK RD at RED CK	1.1 N JCT SR 20	Routine	24	12-Jul-23	Jul-25	1
40029	BAY VIEW-EDISON JOE LEARY	5.8 N JCT SR-20	Routine	24	19-Jul-23	Jul-25	1.5
40031	PULVER ROAD at JOE LEARY	.6 S JCT SR 11	Routine	24	19-Jul-23	Jul-25	1
40110	BURLINGTON NORTHERN OVERPASS	0.25 N JCT COOK ROAD	Routine	24	26-Jul-23	Jul-25	8
40035	BAY VIEW-EDISON / BIG INDIAN	0.4 N JCT SR20	Routine	24	27-Jul-23	Jul-25	1
40141	BAYVIEW STATE PARK	3.5 N JCT SR 20	Routine	24	27-Jul-23	Jul-25	1
40009	COOK RD at DD14 DITCH	0.5 E JCT INTERSTATE 5	Routine	24	23-Aug-23	Aug-25	1
40012	COOK RD at BRICKYARD CK	MP 5.38 COOK RD	Routine	24	23-Aug-23	Aug-25	1
40112	NEFFS CROSSING	1.0 N JCT COOK RD.	Routine	24	23-Aug-23	Aug-25	1
40001	LAKE VIEW BLVD/NOOKACHAMPS	0.25 S JCT SR9	Routine	24	25-Aug-23	Aug-25	2
40005	NOOKACHAMP HILLS CULVERT	0.75 E JCT SR 9	Routine	24	25-Aug-23	Aug-25	0.5
40054	KNAPP RD at NOOKACHAMPS	0.1 E JCT SR 9	Routine	24	25-Aug-23	Aug-25	1
CONCRETE1	BAKER RIVER	0.1 N MAIN ST	UBIT	24	30-Aug-23	Aug-25	1
MV-1	RIVERSIDE BRIDGE	0.7 N JCT SR 538	UBIT	24	30-Aug-23	Aug-25	2
40038	LACONNER WHITNEY at SL	3.83 S JCT SR 20	Routine	24	13-Sep-23	Sep-25	1
40041	E JOHNSON RD at CARPENTER CK	1.0 E JCT CEDARDALE ROAD	Routine	24	13-Sep-23	Sep-25	1
40126	MARCHS POINT PIPELINE	1.6 N JCT SR 20	Routine	24	13-Sep-23	Sep-25	1
40013	F&S GRADE SAMISH RIVER	0.14 S JCT PRAIRIE RD	Routine	24	20-Sep-23	Sep-25	1
40014	GRIPP RD at SAMISH R	0.1 E JCT PRAIRIE ROAD	Routine	24	20-Sep-23	Sep-25	1
40015	PRAIRIE RD S at SAMISH R	2.21 E JCT OLD HWY 99	Routine	24	20-Sep-23	Sep-25	1
40016	PRAIRIE RD W at SAMISH R	3.8 E JCT OLD HWY 99	Routine	24	20-Sep-23	Sep-25	1
40017	PRAIRIE RD FRIDAY CK	0.17 Mi E of OLD HWY 99	Routine	24	20-Sep-23	Sep-25	1
40055	PRAIRIE RD E at SAMISH R	0.5 W JCT SR 9	Routine	24	20-Sep-23	Sep-25	1
40142	CAMPBELL LAKE OUTLET	0.39 W JCT SR 20	Short Span	48	22-Sep-21	Sep-25	1
BURLINN-2	NORTH BURLINGTON BLVD	1.02 MI SO OF COOK RD	Routine	24	29-Sep-23	Sep-25	1
BURLINN-3	GOLDENROD BRIDGE	.3 N. of W. MCCORQUEDALE	Routine	24	29-Sep-23	Sep-25	1
40164	S LAVENTURE RD at MADDOX CK	0.5 E JCT I-5	Routine	24	19-Oct-23	Oct-25	1.5
MV-2	HOAG STEWARD OVERPASS	RIVERSIDE DR JCT HOAG ST	Routine	24	25-Oct-23	Oct-25	3
MV-3	ELEANOR LANE A	0.1 E JCT OLD HIGHWAY 99	Routine	24	19-Oct-23	Oct-25	0.5

APPENDIX B - ROUTINE AND SPECIAL INSPECTION SCHEDULE

BRIDGE NUMBER	BRIDGE NAME	LOCATION	INSP. TYPE	INSP FREQ (months)	LAST INSP	NEXT INSP.	INSP HRS
MV-4	SKAGIT HIGHLANDS PARKWAY	0.4 N JCT E DIVISION ST	Routine	24	19-Oct-23	Oct-25	0.5
MV-5	LANDMARK DRIVE	EAST OF JCT S WAUGH RD	Routine	24	27-Oct-23	Oct-25	0.5
MV-6	EAGLEMONT DRIVE	0.1 S JCT BEAVER POND N	Short Span	48	20-Oct-21	Oct-25	0.5
MV-7	J OFF BEAVER POND DR S	0.07 SE JCT PARKVEIW LN	Routine	24	25-Oct-23	Oct-25	0.5
MV-8	BEAVER POND DR SOUTH	0.5 N JCT EAGLEMONT DR	Routine	24	25-Oct-23	Oct-25	0.5
MV-9	BEAVER POND DR NORTH B	AT JCT PARKVEIW LN	Routine	24	25-Oct-23	Oct-25	0.5
MV-10	OLYMPIC LANE	0.02 JCT BEAVER POND DR N	Routine	24	27-Oct-23	Oct-25	0.5
MV-11	BEAVER POND DR NORTH A	0.2 N JCT EAGLEMONT DR	Routine	24	27-Oct-23	Oct-25	0.5
<b>2026 INSPECTION SEASON</b>							
40070	SKAGIT RIVER MARBLEMOUNT	0.03 E JCT SR 20	NSTM	24	12-Mar-24	Mar-26	12
40073	CASCADE RIVER ROAD AT LOOKOUT CK	7 MI E JCT SR 20	Routine	24	13-Mar-24	Mar-26	2
40037	NORTH FORK BRIDGE	5.5 W JCT INTERSTATE 5	NSTM	24	18-Mar-24	Mar-26	4
40099	GOVERNMENT BRIDGE	0.14 NW JCT SR 530	NSTM	24	19-Mar-24	Mar-26	5
40090	DALLES BRIDGE	1.5 S JCT SR 20	NSTM	24	20-Mar-24	Mar-26	6
40008	SOUTH FORK BRIDGE	1.0 W JCT INTERSTATE 5	UBIT	24	21-Mar-24	Mar-26	3
40114	SAMISH RIVER BRIDGE	2.6 N JCT COOK RD.	NSTM	24	21-Mar-24	Mar-26	4
40093	UPPER FINNEY CREEK BRIDGE	4.6 W CONC SAUK VALLEY RD	Routine	24	08-Apr-24	Apr-26	1.5
40039	RAINBOW BRIDGE	0.95 JCT MORRIS ON MAPLE	NSTM	24	09-Apr-24	Apr-26	8
40060	BURMASTER RD at COAL CK	1.2 E JCT MINKLER	Routine	24	17-May-24	May-26	1
40061	MINKLER RD at WISEMAN CK	0.5 W JCT SR 20	Routine	24	17-May-24	May-26	1
40063	LYMAN HAMILTON HWY at CHILDS CK	0.8 E JCT SR 20	Routine	24	17-May-24	May-26	1
40151	NICHOLSON at CHILDS CK	0.1 S JCT SR 20	Routine	24	17-May-24	May-26	0.5
40159	MINKLER RD at COAL CK	0.1 E JCT SIMS ROAD	Routine	24	17-May-24	May-26	1
40129	LYMAN HAMILTON HWY at MUDDY CK	0.3 M W HAMILTON	Routine	24	22-May-24	May-26	1
40130	LYMAN HAMILTON HWY at RED CABIN CK	0.18 E JCT HEALY RD	Routine	24	22-May-24	May-26	1
40131	LYMAN HAMILTON HWY at MANNSEY CK	0.17 W JCT HAMIL CEM RD	Routine	24	22-May-24	May-26	1.5
40132	LYMAN HAMILTON HWY at JONES CK	0.28 E JCT PIPELINE ROAD	Routine	24	22-May-24	May-26	1.5
40066	HAMILTON CEMETERY RD at MUDDY CK	0.5 W JCT SR 20	Routine	24	30-May-24	May-26	1
40067	CAPE HORN RD at ALDER CK	0.75 E JCT SR 20	Routine	24	30-May-24	May-26	1
40068	CAPE HORN RD at GRANDY CK	2.25 W JCT SR 20	Routine	24	30-May-24	May-26	1
40027	BAY VIEW-EDISON at SAMISH SL	0.4 W JCT FARM TO MARKET	Routine	24	05-Jun-24	Jun-26	1.5
40028	BAY VIEW-EDISON at SAMISH R	0.5 W JCT SR 537	Routine	24	05-Jun-24	Jun-26	2
40074	CASCADE RIVER RD at MARBLE CK	8.3 E JCT SR 20	Routine	24	18-Jun-24	Jun-26	1
40075	CASCADE RIVER RD at SIBLEY CK	10 E JCT SR 20	Routine	24	18-Jun-24	Jun-26	1
40076	CASCADE RIVER RD at HARD CK	12.7 E JCT SR 20	Routine	24	18-Jun-24	Jun-26	1
40077	CASCADE RIVER RD at MINERAL PARK	16.02 E JCT SR 20	Routine	24	18-Jun-24	Jun-26	1
40069	CONRAD RD at SWIFT CK	0.2 E JCT SR 20	Routine	24	21-Jun-24	Jun-26	1
40094A	ROCKPORT CASCADE at ILLABOT CK	4.2 E JCT SR 530	Routine	24	21-Jun-24	Jun-26	1
40095	ROCKPORT CASCADE RD at JORDAN CK	0.71 SW JCT N CASCADE HW	Routine	24	21-Jun-24	Jun-26	1
40092	CONCRETE-SAUK VALLEY at MILLER CK	9 MI SE OF SR 20	Routine	24	26-Jun-24	Jun-26	1
40080	S SKAGIT HWY at PARKER CK	7.25 E JCT SR-9	Routine	24	18-Jul-24	Jul-26	1
40081	S SKAGIT HWY at DAY CK	9.0 E JCT SR 9	Routine	24	18-Jul-24	Jul-26	3
40082	S SKAGIT HWY at LORETTA CK	11 MI E JCT SR9	Routine	24	18-Jul-24	Jul-26	1
40088	S SKAGIT HWY at PRESENTIN CK	18.5 E JCT SR9	Routine	24	23-Jul-24	Jul-26	1
40089	S SKAGIT HWY at FINNEY CK	19.0 E JCT SR 9	Routine	24	23-Jul-24	Jul-26	2
40083	S SKAGIT HWY at CUMBERLAND CK	11.5 E JCT SR 9	Routine	24	24-Jul-24	Jul-26	1
40084	S SKAGIT HWY at O'TOOLE CK	15.0 E JCT SR 9	Routine	24	24-Jul-24	Jul-26	1
40086	S SKAGIT HWY at MILL CK	17.0 E JCT SR9	Routine	24	24-Jul-24	Jul-26	1
40042	MILLTOWN at BIG DITCH	0.02 E JCT SR 530	Routine	24	31-Jul-24	Jul-26	1
40043	CONWAY HILL @ CARPENTER	0.5 E JCT INTERSTATE 5	Routine	24	31-Jul-24	Jul-26	1
40044	PIONEER HWY at BIG DITCH	0.23 E JCT MILLTOWN ROAD	Routine	24	31-Jul-24	Jul-26	1.5
40045	PIONEER HWY at FISHER SL	1.5 SW JCT INTERSTATE 5	Routine	24	31-Jul-24	Jul-26	1.5
40002	SWAN ROAD at NOOKACHAMPS	0.37W JCT BABCOCK/MUDLAKE	Routine	24	22-Aug-24	Aug-26	1
40003	FRANCIS RD at NOOKACHAMPS CR	2.8 W JCT SR9	Routine	24	21-Aug-24	Aug-26	1
40004	FRANCIS RD at SLOUGH	2.0 W JCT SR9	Routine	24	21-Aug-24	Aug-26	1
40046	LK CAVANAUGH RD at BEAR	8.0 E JCT SR 9	Routine	24	14-Aug-24	Aug-26	1

APPENDIX B - ROUTINE AND SPECIAL INSPECTION SCHEDULE

BRIDGE NUMBER	BRIDGE NAME	LOCATION	INSP. TYPE	INSP FREQ (months)	LAST INSP	NEXT INSP.	INSP HRS
40047	LK CAVANAUGH RD at PILCHUCK	8.7 E JCT SR 9	Routine	24	14-Aug-24	Aug-26	2
40048	LK CAVANAUGH RD CULVERT	1.1 SE JCT SR 9	Routine	24	14-Aug-24	Aug-26	1
40051	BEAVER LAKE RD at NOOKACHAMPS	3.0 SE JCT SR 9	Routine	24	28-Aug-24	Aug-26	1
40052	TAYLOR RD at WALKER CK	4.3 E JCT SR 9	Routine	24	28-Aug-24	Aug-26	1
40113	OLD HWY 99 at THOMAS CK	1.4 N JCT COOK RD.	Routine	24	28-Aug-24	Aug-26	1
40147	STARBIRD RD at FISHER CK	0.7 MI E OF CEDARDALE RD	Routine	24	19-Dec-24	Aug-26	4
40156	CEDARDALE RD at CARPENTER CK	0.75 S JCT SR 534	Routine	24	28-Aug-24	Aug-26	1
40094B	RYAN CROSSING at ILLABOT CK	4.2 E JCT SR 530	Routine	24	04-Sep-24	Sep-26	1
40094C	HOLLOW CEDAR at ILLABOT CK	4.2 E JCT SR 530	Routine	24	04-Sep-24	Sep-26	1
40101	BAKER LAKE RD at BEAR CK	9.5 NE JCT SR 20	Routine	24	04-Sep-24	Sep-26	1
40120	BAKER LAKE RD at W FORK GRANDY CK	2. NE JCT SR 20	Routine	24	04-Sep-24	Sep-26	1
40140	BAKER LAKE RD at E GRANDY CK	4.0 NE JCT SR 20	Routine	24	04-Sep-24	Sep-26	1
40011	GREEN RD at THOMAS CK	0.01 S KELLEHER RD	Routine	24	25-Sep-24	Sep-26	1
SW-1	KLINGER STREET BRIDGE	0.2 MI N of COOK ROAD	Routine	24	25-Sep-24	Sep-26	1
SW-2	NORTH REED STREET BRIDGE	0.4 MI N of SR20	Routine	24	25-Sep-24	Sep-26	1
40157	BENSON RIDGE LN at CARPENTER CK	1.2 E ON STACKPOLE	Routine	24	30-Sep-24	Sep-26	1
MV-12	LAVENTURE RD CULVERT	0.05 MI N OF BLACKBURN	Routine	24	30-Sep-24	Sep-26	1
40152	ANACORTES FERRY DOCK	0.41 N JCT SR 20	NSTM	24	29-Oct-24	Oct-26	2.5
40153	GUEMES ISLAND FERRY DOCK	GUEMES ISLAND	NSTM	24	29-Oct-24	Oct-26	2.5
<b>FUTURE INSPECTIONS OF NOTE</b>							
40153	GUEMES ISLAND FERRY DOCK	GUEMES ISLAND	UW	60	24-May-22	May-27	3
40152	ANACORTES FERRY DOCK	0.41 N JCT SR 20	UW	60	25-May-22	May-27	4
40032	FARM-TO-MARKET S DITCH	7.5 N JCT SR 20	Short Span	48	14-Jun-23	Jun-27	0.5
40037	NORTH FORK BRIDGE	5.5 W JCT INTERSTATE 5	UW	60	28-Sep-22	Sep-27	2
MV-1	RIVERSIDE BRIDGE	0.7 N JCT SR 538	UW	60	28-Sep-22	Sep-27	2.5
40072	CASCADE RIVER RD at MONOGRAM	7.37 E JCT SR 20	Short Span	48	18-Jun-24	Jun-28	0.5
40008	SOUTH FORK BRIDGE	1.0 W JCT INTERSTATE 5	UW	60	11-Sep-23	Sep-28	1

APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT
40001	LAKE VIEW BLVD at NOOKACHAMPS	1	Brush exposed rebar and patch spalls in the soffit and girders.	
		2	Sidewalk: Repair sidewalk approach where rebar is exposed (north end).	
		3	Upgrade rails to meet current standards.	
		M	Bank protection: armor missing upstream end on the right bank.	
40002	SWAN ROAD at NOOKACHAMPS	2	Replace rotted bridge rail post: #9 from NE corner. Rotted block out: #9 from SE corner.	
		3	Reapply protective coating to diaphragm / cross bracing.	
40003	FRANCIS RD at NOOKACHAMPS CR	1	Level approaches at both ends of bridge.	8/22/24
		3	Remove sand and rat droppings from abutments and pier caps	
40004	FRANCIS RD at SLOUGH	3	Rotten spacer block - 13th post from bridge, NW quadrant. Replace 1st post at NW Quad - Updated 2020	
40008	SOUTH FORK BRIDGE	1	Remove timber debris from Pier 3 (and Pier 2 if any is visible at time of repair).	9/11/23
		2	Clean bird guano from lateral gusset plates and girder bottom flanges in steel Spans 1, 2 and 3.	
		2	Replace the following bolts and tighten to the proper torque: Girder 1C, first diaphragm west of Pier 2. Girder 2B, south side at the first lateral bracing east of Pier 2.	
		2	Remove loose concrete from girder ends, clean exposed reinforcement/strands and coat with a rust inhibitor and epoxy sealant at the following locations: Girder 4B and 4C at Pier 4	
		3	Ramp/feather patch east approach roadway with ACP to provide a smooth transition on and off the bridge.	
		M	Monitor movement of prestressed concrete girders at diaphragms over Piers 5 - 8.	
40009	COOK RD at DD14 DITCH	1	Crack seal transverse cracks at both ends of bridge and cracking in the wheel paths.	
		3	SE guardrail is not fastened to 7th and 8th posts	
		3	Grout open crack in NE corner of concrete rail	
		3	Patch spall with grout in G2 near east abutment	
40011	GREEN RD at THOMAS CK	2	Wood piles holding guardrail and fill on abutments has failed and will need to be replaced	
40012	COOK RD at BRICKYARD CK	1	Crack seal transverse cracking over each bridge joint. and longitudinal cracking in pavement (updated 2021)	8/23/23
40013	F&S GRADE SAMISH RIVER	1	Patch exposed rebar in deck, apprx 4 linear feet	
		2	A/C level roadway / shoulder approaches	9/20/23
40014	GRIPP RD at SAMISH R	2	A/C level east approach	9/20/23
		2	Brush and patch exposed rusty rebar in top flanges of girder 3, 4, & 5. (14 LF)	
		M	Upstream right bank has steep, exposed banks that are susceptible to continued erosion. MONITOR	
		M	Timber rail posts show many checks.	
40015	PRAIRIE RD S at SAMISH R	1	Repair armoring along south abut (downstream end) and remove debris - rewritin 2023.	
		3	Brush and patch exposed rebars in top flange of girders.	
40016	PRAIRIE RD W at SAMISH R	2	Impact damage to NW section of guardrail.	9/20/23
40017	PRAIRIE RD FRIDAY CK	M	Continue to monitor channel migration to the east.	
40018	FRIDAY CREEK 1ST BRIDGE	2	Patch exposed rebar in girders #1 #2 #3 & #4 and Soffits.	
		2	Replace failed armoring on abutment #2 (south)	
		3	Remove moss from deck curbing - revised 2021	5/10/23
		3	Remove failing protective coating on rail posts. Repaint or upgrade bridge rails to current standards. Rewritten 2023	
40019	FRIDAY CREEK 2ND BRIDGE	3	Patch spalls in girders with exposed rebar	
40020	FRIDAY CREEK 3RD BRIDGE	2	Drain: repair drain downspout on upstream side - it has broken off.	
		3	Pressure wash moss off curbing and girders	5/10/23



APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT
		3	Remove failed protective coating on guardrail posts and repaint or upgrade rails to standard	
		M	Monitor armor loss and scour hole under Abut#1	
40021	FRIDAY CREEK 4TH BRIDGE	1	Wire brush and patch exposed rusty rebar on girders 1, 2, and 4	
		3	SE drain pipe needs repairs	
		3	Upgrade guardrail to standard.	
		M	bank erosion 30' upstream	
40022	FRIDAY CREEK 5TH BRIDGE	2	G4 - remove spalled concrete, wire brush 8' of exposed rusty rebar, cover with grout or epoxy.	
		2	Replace failed armoring along Abut #1 and backfill approach roadway material.	
40023	FRIDAY CREEK 6TH BRIDGE	2	Brush and patch rusty exposed rebar in the girders.	
		3	Replace missing down spout on drain	
		3	Curbs covered with moss, clean for inspection.	
		M	Monitor deformation in bearing pads.	
40024	FRIDAY CREEK 7TH BRIDGE	2	Wire brush and patch areas of rusty exposed rebar in girders	
		3	Pressure wash curbs	5/17/23
		3	Remove failed protective coating on rail posts and reapply.	
		M	Armor sloughing under abutment#2, losing some approach road material	
		M	bank erosion, undercutting vegetation upstream left bank	
40025	FRIDAY CREEK 8TH BRIDGE	3	Wire brush and grout exposed rusty rebar in girders.	
		3	Previous asphalt patch at roadway approach has failed. Re-patch (2)	
		M	Monitor exposed abutment #2 cap.	
40026	FARM-TO-MARKET N DITCH	3	Patch spall on outside of rail at connection (8th post from North)	
40027	BAY VIEW-EDISON at SAMISH SL	2	Brush and patch spalls with exposed rebar in the girders.	
40028	BAY VIEW-EDISON at SAMISH R	3	Paint guardrail posts	
		M	Monitor undermining of gabion baskets at Pier 1 and impacts on approach roadway fill.	
40029	BAY VIEW-EDISON JOE LEARY	1	Patch newly exposed rebar in the deck	6/20/24
		1	Recently repaired drainage in SW corner could use additional patching/material (much worse 2021)	6/20/24
		1	Backfill material loss under slumping SW gabion	6/20/24
		2	Guardrail - 1st post on NE quadrant and SE quadrant are broken and rotten and need replaced.	7/19/23
		3	Guardrail - block out missing in southwest leg.	7/19/23
		M	Sink hole found along southern bank, just upstream of Pier 2	
40030	THOMAS RD at SAMISH R	2	Replace missing bolts and nuts (3) on bridge rails.	
		2	Brush and patch spalls in the girders	
40031	PULVER ROAD at JOE LEARY	2	Brush and patch spalls in the girders.	
40032	FARM-TO-MARKET S DITCH	1	Patch potholes at south approach	
40033	FARM-TO-MARKET at NEUMAN	2	Patch pothole in southeast corner	
		M	Settlement at both approaches (rewritten 2023)	
40034	FARM-TO-MARKET SAMISH R	2	Guardrail not attached to bridge, missing transition rails.	
		3	Damaged steel pedestrian rail mounted on conc rail (1 x 8 LF).	
40035	BAY VIEW-EDISON / BIG INDIAN	2	SE guardrail missing 4 nuts and 1 bolt.	
		3	Brush and patch exposed rebar in girders.	
		M	Losing bank armoring at east end of south abutment	
40036	FARM-TO-MARKET JOE LEARY	1	A/C Level Approach Roadway, south end, northbound lane.	
		2	Sweep deck/unplug drains.	
		3	Brush and patch spalls in slab	
		M	Repetitive issue of approach settlement. Long term repair may require dig out and install of a backwall support (gabion baskets), and backfill with suitable material.	

APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT
40037	NORTH FORK BRIDGE	1	Extend Pier 6 and 8 bearing base plates with steel plates, similar to the Pier 7 retrofit. Up to 40% of the bearing area has been lost.	3/18/24
		1	Repair channel markers to restore them to a functional state.	
		2	Patch the potholes in Span 8. Scale loose concrete around spalls, clean rusty bars, epoxy coat exposed bars, patch spalls.	
		2	Repair or replace both east and west abutment slope drains to prevent further erosion.	
		2	Clean out the sand, gravel, and debris in Pier 1, west abutment.	
		M	Monitor the movement of the piers at the east end of the structure (Pier 7, 8 and 9) including the tipping of Pier 8 to the east. The current means of measurement with a plumb bob used over a 50-60 ft. height cannot be accurately reproduced which resulted	
		M	Monitor flame cuts in the pin hanger plates at the following locations: Hanger at Girder 3C, west hinge, south plate has four flame cut notches, each 1/2" long by 1/16" deep. Hanger at Girder 3B, east hinge, north plate has a 1/2" long by 1/16" deep flame	
40038	LACONNER WHITNEY at SL	1	Crack seal transverse cracks over the bridge joints.	
		2	Paint the bridge rail posts, are peeling and rusty.	
40039	RAINBOW BRIDGE	1	Reposition the bronze bearing plates at Bearing 4-17C and Stringer Bearing 5A that extend beyond the bearing base plates. Add a keeper bar to the bearing plates to prevent the bronze plate from "walking out" after repositioning.	
		1	Clean all the open panel joints over the floor beams and re-seal them with poured rubber or other flexible joint compound.	
		1	At the following locations, clean corrosion to bare steel and paint with organic zinc primer and urethane paint to match existing color. Pay special attention to the following locations: Stringer 13B cope at Floorbeam 13 Stringer 14D cope at Floorbeam 14	
		1	At the top rib of the east arch, between U6 and U7, locate the end of the crack that is extending into the rib with dye penetrant. Stop drill a 13/16" diameter hole centered at the end of the crack. Provide a 3/4" A325 bolt.	
		1	Remove debris from around the bearings at Piers 4 and 5 and at Span 4, Panel Points 4 and 17. Clean and remove laminar and pack rust down to solid steel and paint with a rust inhibitor.	
		1	At the following locations, remove loose concrete from around the spalled areas in the soffit. Clean exposed rebar to bare metal and paint with epoxy. Do not patch. Span 4 Panel 2 Span 4 Panel 4 Span 4 Panel 5 Span 4 Panel 8 Span 4 Panel 12	
		1	Remove loose and delaminated concrete from spalled areas in the deck. Clean and paint exposed reinforcement, and patch with an epoxy based compound or other approved material. Do not use asphalt. Spalled areas are located in: Span 4, Panel 2, SB and NB	
		1	Remove loose and delaminated concrete from deteriorating patching and spalled areas in the open concrete joints. Clean and paint exposed reinforcement with epoxy, reform joint to match existing gap and patch with concrete. Reseal joint with poured rubber	

APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT
		1	At the following locations, drill out the broken or missing rivets and replace with a an A325 bolt: West arch south face of the Panel Point 3 strut connection. (Two rivets) West arch U10 to U11 west face splice. (Three rivets)	
		2	Replace the missing bird screens throughout the arch. Verify locations prior to completing repair.	
		2	Remove material accumulated on bridge. Where corrosion is found, clean to bare steel and paint. See following locations: Box beam at PP 17, Arch bracing near Pier 5, Pier 4 and 5 footings, Inside arch ribs.	
		M	Monitor cracking around welded access holes in top rib of arch. At the east arch between U6 and U7, the cracking has spread into the arch. West Arch: U6-U7, U7-U8, U8-U9, U9-U10, U10-U11, U14-U15. East Arch: U3-U4, U6-U7, U7-U8, U10-U11, U14-U15. FPP/DWH	
		M	Monitor cracking of welds for connection of the lateral cross-bracing to the bottom flanges of the stringers in Panel 5. If cracks propagate into base metal, take corrective action to stop further propagation. FPP/DWH 2022 - No changes. DWH/PFK 2024 - N	
40041	E JOHNSON RD at CARPENTER CK	2	Clean off abutment seat and around bearing pads. Can't see to inspect.	
		3	Steel diaphragms need paint treatment.	
40042	MILLTOWN at BIG DITCH	2	Deck in need of seal coat.	
		3	Clean girders and pier caps of bird guano	
40043	CONWAY HILL @ CARPENTER	3	Guardrail posts need replaced - 2nd from east bank, downstream side. 4th post from west bank, upstream side.	
40044	PIONEER HWY at BIG DITCH	1	Replace rotten guardrail posts. NE Quad - Post 1 & 2, SE Quad - Posts 1, 2, & 3, SW Quad - Posts 1 & 2	
40045	PIONEER HWY at FISHER SL	2	Catch basin in NE corner needs to be vactored, also asphalt patching between grate and road shoulder.	
		3	Guardrail - Post 1 in SE and SW quads and Posts 2 & 3 in NW quad needs replaced. (updated 2024)	
		M	Scour hole from road runoff between Abut #2 and tidegate structrue	
40046	LK CAVANAUGH RD at BEAR	2	Brush and patch rust exposed rebar in girders.	
		2	Add gabion baskets to both abutments to prevent loss of approach road fill.	
		2	Dig out and patch areas of delamination.	
40047	LK CAVANAUGH RD at PILCHUCK	1	Exposed rebar in deck needs patched. Deck rehab needed soon.	8/14/24
		2	Install gabion baskets at both bridge abutments to retain road approach fill material.	
		3	Remove trees at NE and NW corners. Hindering inspections.	
40048	LK CAVANAUGH RD CULVERT	M	Debris accumulating at inlet and outlet. MONITOR	
40051	BEAVER LAKE RD at NOOKACHAMPS	M	Channel migrating to the east upstream of bridge.	
40052	TAYLOR RD at WALKER CK	M	Creek migrating towards western approach roadway.	
		M	Channel migration to the east. Continue to Monitor for lost armoring.	
40054	KNAPP RD at NOOKACHAMPS	1	Brush and patch failing patches over pick points	8/25/23
		M	Bank sloughing in NW corner under abutment.	
40055	PRAIRIE RD E at SAMISH R	1	A/C level approach roadway at east end of bridge.	
		1	Remove large woody debris from intermediate pier.	
		M	Monitor eastern channel migration upstream of bridge during high flows.	
40060	BURMASTER RD at	3	Cover or cut away exposed rebar of damaged curbing at abutment #1.	

APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT
	COAL CREEK	3	Repair spalls in concrete curbing at rail posts (south side) approx. 2'.	
		3	Paint rail posts	
		M	Void in armoring along Abut #2, 3' deep - MONITOR	
40061	MINKLER RD at WISEMAN CREEK	2	Clean out organics, repair/replace joint seal. A/C level West approach, westbound lane.	
		2	Clean and seal spall in Girder #5.	
		2	Remove woody debris under the bridge. 2024 - most naturally removed from high flow velocities.	
		M	2 failed gabion baskets along Abut#2, quarry spalls dumped out.	
40062	UTOPIA RD at BLACK SLOUGH	2	Patch spalling occurring at the outside girder joints over middle pier	7/12/23
		2	Clear vegetation growing through guardrail out into roadway.	
		3	Remove barb wired fencing from bridge.	
		3	Replace rotten blockout along guardrail in NW quadrant	
40063	LYMAN HAMILTON HWY at CHILDS CREEK	2	Brush rebar and patch spall at NW abutment/girder joint.	5/17/24
		3	Missing nut on guardrail post: 2nd post from the west end, downstream side. Guardrail post rotten: 3rd post from southwest end.	
		3	Pressure wash balluster rails and sides.	
		M	Spacer blocks on bridge rail retrofit are showing signs of rot.	
40065	CONRAD RD at SUTTER CREEK	M	Approach road settlement, west end.	
40066	HAMILTON CEMETERY RD at	1	A/C level west approach - 2" of settlement.	
		3	Pressure wash curbs.	
40067	CAPE HORN RD at ALDER CREEK	1	Replace guardrail posts (2) - #3 upstream side, #2 downstream side.	5/30/24
		1	Crackseal transverse cracks over bridge joints - 56 LF	
		2	Brush and patch exposed rebar in girders (12 LF)	
		2	Repair or replace damaged gabion basket	
		3	Pressure wash moss off of bridge	
		M	Upstream channel migration to the west. Stream approaching bridge at angle now with higher velocities at Abutment #2	
40068	CAPE HORN RD at GRANDY CREEK	2	Patch spalls with exposed rebar in the deck (6 SF).	
		M	Meandering channel upstream of bridge. Monitor for encroachment into approach roadway.	
40069	CONRAD RD at SWIFT CREEK	1	Replace lost grout in deck at girder pick points.	
		2	Brush and patch exposed rebar in girder channels.	
40070	SKAGIT RIVER MARBLEMOUNT	1	Install signage for Load Restrictions. Per Washington State Bridge Inspection Manual M 36-64.12; WSBIS Item 1293 Code "R" = "Posted for other load-capacity restriction (speed, number of vehicles on structure, etc.).	
		1	Bottom chords of both north and south trusses have a few areas of debris that inhibits inspection (areas are primarily over land at ends of truss spans).	
		1	Clean debris from bottom chords prior to each UBIT inspection (majority of debris can be seen and ma	
		1	Remove loose ACP and patch pothole at east abument joint in the eastbound lane. Feather patch both approaches to provide a smooth transition onto the structure.	
		1	Replace split spacer block at northeast corner.	
		1	Remove debris from upstream face of Pier 4. (This is a recurrent problem, consider the installation of a shark or debris deflector).	
		1	Remove loose or spalled concrete from the spalled deck surface over Span 1. Clean and paint any exposed rebar and patch with an approved material.	
		2	On the south curb and rail exterior, remove loose concrete from around the spalled areas. Clean exposed rebar to bare steal and paint with epoxy. Do not patch.	
		2	Trim vegetation below Span 2 before next scheduled UBIT inspection in March, 2026.	



APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT
		2	Throughout the truss and floor system, scale rust down to bare metal, perform necessary corrosion repairs (See "Structural Steel Corrosion Repair" in the Files tab) and paint with organic zinc primer.	
		2	Paint system failure is widespread, with numerous rus Replace missing nut at Truss span Bearing 2A at the southwest corner for the masonry plate and tighten loose nut at the southeast corner.	
40071	CASCADE RIVER BRIDGE	1	Patch spalls in deck (8 SF)	
		1	Rehabilitate deck	
		2	Clean drains - plugged with debris	
		3	Replace thrie beam transition at nw corner. Damaged from fallen tree.	
		M	River mainstem appears to be shifting South, upstream of bridge - MONITOR	
40072	CASCADE RIVER RD at MONOGRAM	M	Impact damage to concrete channel liner, possible water penetration and losing material.	
		M	Upstream berm leaking water.	
40073	CASCADE RIVER ROAD AT LOOKOUT CREEK	1	Remove unstable boulder at the NW corner before it rolls down the slope and impacts Pier 2. DWH/JFT 2024- Repair verified as boulder has fallen. Replaced with REPAIR #10004.	3/18/24
		1	Design and install slope stabilization measures at the NW corner to prevent further rock fall damage to Pier 2. Remove the boulders resting against the base of the Pier 2 columns.	
		1	Remove moss growth and debris from horizontal surfaces of the girders and steel columns, particularly the exterior girder bottom flanges and Pier 2 struts.	
		2	At both abutment approaches, patch the ACP pothole with ACP.	
		M	Monitor embankment erosion at the NW corner. Drain flow path has eroded bank and become very steep, and is causing boulders to let loose and impact the Pier 2 substructure. Continue to monitor until slope stability measures are installed. SMT/TRM 2020- No	
40074	CASCADE RIVER RD at MARBLE CREEK	3	SE guardrail endtreatment is damaged, but still functioning.	
		M	East abutment wingwalls both settling. Improve onsite drainage.	
40075	CASCADE RIVER RD at SIBLEY CREEK	2	Pressure wash deck and remove material between panels	6/18/24
40076	CASCADE RIVER RD at HARD CREEK	1	Scour hole located under shotcrete Abut#2 side. REWRITTEN 2024 - Large scour hole needs filled and armored.	
		M	Monitor Southwest retaining wall - slightly out of plum	
40077	CASCADE RIVER RD at MINERAL PARK	1	Sweep deck - 1" of mud and gravel.	
		1	Fill potholes in west approach. East approach repaired. (Rewritten 2024)	
		2	Spill through abutments need additional retaining material for approach roadway fill. Dig out approaches and back fill with large rock and material.	
		3	Fallen tree damage to Guardrail, NE quadrant.	6/18/24
40080	S SKAGIT HWY at PARKER CREEK	M	Small scour hole forming - MONITOR	7/18/24
40081	S SKAGIT HWY at DAY CREEK	1	Remove debris on Pier #3 (west intermediate pier)	
		2	Wire brush and patch exposed rusty rebar in the girders	
		2	Brush and patch spall with exposed rebar on outside pier restrainer.	
		M	Monitor for debris and localized scour.	
40082	S SKAGIT HWY at LORETTA CREEK	1	2.5" deep pothole on eastbound approach	7/18/24
		2	Patch deck areas with exposed rebar, 20' from west end.	
		2	Wire brush and seal exposed rebar in girders.	
		3	Reapply protective coating to steel rail posts.	
40083	S SKAGIT HWY at CUMBERLAND CREEK	2	Replace guardrail post: NW Quad, 5th post & SE quad, 3rd post.	
		2	Rails need a new protective coating applied and post #6, downstream side, is rotten and needs replaced.	

APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT
		M	Armoring at Abut#2 is failing and falling into the creek, causing settlement at approach roadway. - MONITOR	
40084	S SKAGIT HWY at O'TOOLE CREEK	2	Rail post protective coating failing - remove and reapply.	7/24/24
		M	Monitor right bank repair upstream of bridge. Large rootwad cabled to riprap was installed in 9/2003.	
		M	Loss of armoring is causing sloughing behind Abut #2. May be causing material loss and dips at the approaches. Updated 2020	
40086	S SKAGIT HWY at MILL CREEK	2	Replace damaged wood guardrail posts on downstream side.	7/24/24
		2	Replace failed patch in westbound lane.	7/24/24
		2	Patch exposed rebar in the girders.	
40088	S SKAGIT HWY at PRESENTIN CREEK	1	Deck in need of sealing or rehabilitation. - Planned for 2025	
		2	Remove and reapply protective coating on steel rail posts.	
		2	A/C level east approach - Planned for 2025	
		M	Upstream channel migrated into east channel, west is filling with sediment - MONITOR	
40089	S SKAGIT HWY at FINNEY CREEK	1	Clear debris from Piers 2 & 3	10/8/24
		1	Repair to West abutment seat under girder 1 failed. Rebar exposed.	
40090	DALLES BRIDGE	1	Truss members at both ends of the bridge have heavy moss growth that is blocking drainage, including the transverse member / restrainer block over Piers 3 and 4, (L3 and L15). Clean affected members and open drilled holes for drainage to prolong paint li	
		1	Remove accumulated debris from fixed bearings for inspection.	
40091	CONCRETE-SAUK VALLEY TEMPORARY BR	1	Install countermeasures to armor toe of bank and prevent further channel migration.	
		2	Guardrail nuts and bolts loose/missing: Section 2 & Section 10/11	
		M	Monitor North bank and migration towards abutment. Armoring may be necessary. Updated 12/7/21	
40093	UPPER FINNEY CREEK BRIDGE	1	Splice weld damaged rebar and patch spalls in soffit (4)	8/30/23
		2	Clear moss and debris from rails and deck.	9/18/23
		2	Remove fallen boulders from behind Pier 3.	9/18/23
		3	Patch spall in North rail.	
		M	Monitor cracks in Pier 3 column near top end around weak point. (Repair verified out as unnecessary; monitoring is part of routine inspection procedure, and no significant change since 2006.)	4/8/24
40094A	ROCKPORT CASCADE at ILLABOT CREEK	2	Deck cracking needs sealing.	
		2	Alligator cracking and settlement at east approach	
		3	Replace rubber joints	
		M	Spread footings susceptible to erosion. Top of footing 12' below bottom of girder.	
40094B	RYAN CROSSING at ILLABOT CREEK	2	Crack seal transverse cracking in pavement over bridge joints.	
40094C	HOLLOW CEDAR at ILLABOT CREEK	1	Settlement in west bound approach with alligator cracking in asphalt.	
		2	Crack seal asphalt at bridge joints.	
40095	ROCKPORT CASCADE RD at	3	Previous scour repair on east bank could use some additional rip-rap.	
		M	Settlement at west roadway approach.	
40099	GOVERNMENT BRIDGE	1	Replace steel sleeper channel in Span 3 (21st sleeper channel from the west end).  Defect monitoring history: 2014: 12" and 4" tears. No changes. 2016: Horizontal web tears measure 12" and 7-3/4". Length increased by 3-3/4". 2018: Horizontal web tears mea	
		1	Remove corrosion and spot paint steel members that have rust pitting. See "VISUAL NSTM INSPECTION REPORT" for locations.	
		1	Secure or remove section of broken steel grid deck in Span 2, Panel 3.	
		2	Repair or replace the blocking and support for the north side metal bridge railing, in Span 2 between Panel Points L1 and L2.	

APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT
		M	Monitor the steel deck and sleeper channels in areas of cracked welds and laminar tears. Noted defects are in Span 1, Span 2 curb and grate to channel connections primarily within Panels 1 and 9, Span 3 sleeper channels. 2024 - DPV/MJA - No change.	
40101	BAKER LAKE RD at BEAR CREEK	1	Additional potholes and failing patches in deck and at road/bridge joints	9/4/24
		1	Sweep shoulders and clear scuppers	9/4/24
		3	Brush and patch exposed rusty rebar in girders and abutment.	
		M	Losing approach road fill material behind abutments.	
40106	LAKE SAMISH RD at BEAR CREEK	2	Abutment fill protection is sloughing. Remove / replace gabion basket	
		2	Seal the deck with polymer overlay	
		3	Remove failed protective coating and reapply or upgrade rails.	
		3	Add material to shoulders at deck joint, 2" to 6" on both sides.	
40109	LAKE SAMISH RD at FRIDAY CREEK	2	Repair loose Type III sign southwest corner.	5/24/23
		2	Brush and patch exposed rebar in girders.	
		3	Remove failed protective coating on rail posts and reapply or upgrade system.	
		M	Armoring sloughing along Abut #1 - Monitor	
40110	BURLINGTON NORTHERN OVERPASS	2	Remove vegetation from MSE wall joint, NE wall.	8/4/23
		2	Seal cracks on deck over pier caps with epoxy resin	
		3	Clear debris from expansion joints on deck joint.	
		3	Tighten screws on multiple electrical panels located on concrete rails.	
		M	Monitor cracking occurring on bottom flange of girders, marked and dated.	
40112	NEFFS CROSSING	3	Sweep deck and clean out debris in expansion joints.	
40113	OLD HWY 99 at THOMAS CREEK	1	Patches in driving surface are failing	
		2	Replace or reinforce rotted timber abutment planks along bottom of both abutments.	
		3	Replace rotten timber deck planks on each end of span 3	
40114	SAMISH RIVER BRIDGE	1	Restore riprap around Pier 3.	
		1	Clean sand and debris from bottom chord. North half of bridge can probably be reached from below with a ladder.	
		1	Repair cope cracks at the following locations: Stringer 3A at FB 3: 1/2" crack.  See "Cope Crack Repair Detail" in the Files tab for repair procedure and other details.	
		2	At west truss, vertical L2-U2, tighten the bolt at the upper sway to the proper torque.	
40115	OLD HWY 99 at FRIDAY CREEK	1	Vactor out clogged drains (2)	
		1	Replace damaged rail (~40') SE quad - Revised 2021	
		2	Replace Post 1, NW rail - rotten	
		3	Replace multiple rotten spacer blocks (2 east rail, 6 west rail)	
40116	OLD HWY 99 at SILVER CREEK	1	Seal deck cracking: thin polyester overlay or chipseal.	
		3	Brush and patch spalls/delam in girders (4 SF)	
40117	ALGER CAIN LAKE RD at SILVER CREEK	1	Patch exposed rebar in deck (1 SF)	
40120	BAKER LAKE RD at W FORK GRANDY	1	Replace failed armoring below west abutment.	
		3	Remove debris and vegetation along curbs.	9/4/24
40126	MARCHS POINT PIPELINE	2	Wire brush and patch spalls in underside of span 2 & 3 slab.	
40129	LYMAN HAMILTON HWY at MUDDY CREEK	1	Clear debris hung up along west abutment.	
40130	LYMAN HAMILTON HWY at RED CABIN CREEK	2	NE guardrail end treatment damaged - Replace	
		2	East approach needs Asphalt patch and poured rubber joint seal.	
		3	Backfill sloughing shoulder, NW corner.	
		3	Concrete baluster rail needs pressure washed.	5/22/24

APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT	
40131	LYMAN HAMILTON HWY at MANNSEER CREEK	2	Replace missing rubber joint filler.		
40132	LYMAN HAMILTON HWY at JONES CREEK	2	Apply new rubber joint sealer to east abutment.	5/22/24	
		3	Remove moss and debris from concrete bridge rails.		
		M	Woody debris hung up on pier 3 causing local scour.		
40140	BAKER LAKE RD at E GRANDY CREEK	1	Wire brush and patch exposed rusty rebar. (60 LF)		
		2	Remove debris and vegetation along curbing		
		3	The SW rail and end treatment need to be raised. Currently top of rail is at 17"		
40141	BAYVIEW STATE PARK	2	Clean out debris along joints.	7/19/23	
		2	Remove failed bridge rail paint and reapply protective coating.		
40142	CAMPBELL LAKE OUTLET	2	Wire brush and patch spalled out pick points.		
		M	Watch for insect damage to piles and caps.		
40151	NICHOLSON at CHILDS CREEK	2	Clear vegetation and debris from expansion joints.		
		2	Rotten block out posts #'s 1 2 & 5 on downstream side, 6 & 7 on upstream side.		
40152	ANACORTES FERRY DOCK	1	Repair the crack in the bridge seat joint header, right wheel line when looking offshore. Crack in steel plate is approximately 2 ft. long and may be repaired by cleaning and welding.	11/7/24	
		1	Repair cracked locations in the apron: The right two longitudinal supports for the apron are cracked at hinge beam. Right second and third lips are cracked on the underside. Left tip of apron beam/curb is cracked.	3/15/23	
			1		Replace the missing non-skid metal surfacing on the apron and walkways.
			1		Girder 3A is gouged on the bottom flange. Grind and polish smooth. Touch-up protective coating on Girder 3A.
		1	Clean exposed steel and coat with a rust inhibitor. Patch section loss with exposed rebar in Girder 2A along top flange and underneath steel header located at Pier 3.		
		1	Apron Repairs: Repair the Right apron to hinge beam stiffener vertical weld crack and bottom pipe to beam crack.		
		2	Left wingwall has portion of missing rub face material. Replace damaged area.		
		2	Repair the crack in the connection of the grid deck to Stringer 4D at Floorbeam 3, near the centerline of the deck.		
		2	Transfer span framing has scattered rust blooms in the girders, floorbeams, stringer clip angles, and bottom diagonals. Steel headframe has bolt heads and nuts with rust blooms. Clean to bright steel, prime, and spot paint.		
		2	Repair or replace breakwater connection plate at 8th pile.		
		2	At the Apron to transfer span hinge cover plate, reset the pin so it goes through all the cover plates.		
		2	Replace bolts that have nuts with over 50% section loss. Paint new bolts and nuts to prevent corrosion.	10/29/24	
			2		Seal vertical crack located at Pier 2 diaphragm.
3	Many of the PVC utility supports have slipped out of place from the utility hanger. Secure them in place at the utility hanger.				
3	Reset dislodged spacer blocks.				
40153	GUEMES ISLAND FERRY DOCK	1	Clean and spot paint all steel areas which have corrosion. 10/2024 Repair verified out and repalced with REPAIR #10033.	10/29/24	
		1	The apron has several areas of cracking. Repair the following locations: Right longitudinal strut is cracked at the connection to the hinge beam. Left tip of apron beam/curb is cracked.	10/29/24	
		1	Hinge beam is cracked on the outer and bottom face near the middle of the beam. Beam is 6" x 12" HSS. Repair location. County was notified of defect at time of inspection.	10/29/24	



APPENDIX C - BRIDGE MAINTENANCE LIST

BRIDGE NUMBER	BRIDGE NAME	PRI-ORITY	REPAIR DESCRIPTION	CLOSED OUT
		1	Apron crack repairs: Right Longitudinal Strut, outside face 5" vertical crack. Left longitudinal strut, at hinge beam bottom of pipe section 2.5" lateral crack and outside face 6" vertical crack. Apron beam/curb seaside stiffeners have corroded away, evalu	10/29/24
		1	In the transfer span stringer to floorbeam connections, replace all nuts that have 30%-100% section loss after being cleaned.	
		1	Replace the missing non-skid surfacing on the Apron.	
		1	Paint is breaking down throughout bridge elements and should be replaced. At very minimum, remove corrosion and paint the following locations: 8201 Steel Girder - 80% of bottom flange paint has failed. Left girder from FB0 to FB1, exterior face has comple	
		2	Rail base/curb is spalled at Pier 1. Remove loose material, coat any exposed rebar and patch with concrete.	
		2	Apron lip repair Repair cracks in the welds in the horizontal bar. Remove all rust and debris from bottom of Apron Lips, paint and evaluate for need of replacement.	
		2	Replace upper clevis pin on right hoist platform. This pin has insufficient grip length causing threads in bearing.	
		2	Transfer span has several welded on attachments that have rusted off. Re weld or clamp attachments in place.	
40156	CEDARDALE RD at CARPENTER CREEK	1	Brush and patch exposed rebar in deck (7 LF)	8/28/24
		1	Repair cable rail, sw quadrant.	
		2	Replace all block outs with 6" blocks on rails. Updated 2020	
40157	BENSON RIDGE LN at CARPENTER CREEK	1	Deck board SW End (8' x 10") and SE end (4' x 6") needs to be filled or replaced.	9/30/24
		2	Impact Damage to NW Corner of Guardrail,	
		2	Clear debris from expansion joints.	
		3	Tighten deck/girder cleats.	
		3	Top rail on West side of bridge showing deterioration, replace beam	
40159	MINKLER RD at COAL CREEK	1	Install missing guardrail posts SE quadrant.	5/17/24
		1	Coal Creek in need of sediment management project and remove debris from underneath bridge. Updated 2020	5/17/24
		1	Replace all rail posts that are damaged (6 upstream side, 2 downstream side)	5/17/24
		2	Asphalt joints need A/C leveling.	
		2	Clean and seal section loss on upstream side of slab.	
40161	FLINN ROAD at MCELROY SLOUGH	3	Clear weeds and patch spalls in deck at joint of Abut #2	6/14/23
		3	Sweep deck	
40162	BLANCHARD RD at MCELROY SLOUGH	2	Re-weld fence post to base plate located on SE wingwall.	6/20/23
		2	Replace broken guardrail post on the NE end treatment.	
		3	Replace grout in wingwall joints and around culverts.	
40163	HELMICK RD at RED CREEK	3	Sweep and patch low spot in shoulder along southbound lane	7/12/23
		M	Creek eroding both banks and nearing abutment piles.	
40164	S LAVENTURE RD at MADDOX CREEK	1	Replace damaged guardrail in NW quad (2 sections)	10/19/23
		M	Maddox Creek migrating towards west abutment wall - Monitor	