SKAGIT COUNTY DEPARTMENT OF PUBLIC WORKS

2013 ANNUAL BRIDGE REPORT

Construction of South LaVenture Bridge at Maddox Creek 1/4/2013

SUBMITTED FEBRUARY 2014

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This bridge report is prepared annually by the Transportation Section of Skagit County Public Works Engineering Division to fulfill the requirements of the Washington Administrative Code (WAC) 136-20-060 which requires the County Engineer to report on the 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."

Prepared By: _____
Torey Nelson
Bridge Co-Inspector

Reviewed by: _____
Larry Krueger, P.E.
Bridge Inspector
WSDOT Certification No. G1311

Reviewed by: _____
for Forrest Jones
Lead Bridge Inspector
WSDOT Certification No. G1202

Approved by: _____
Paul A. Randall-Grutter, P.E.
County Engineer

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ACRONYMS

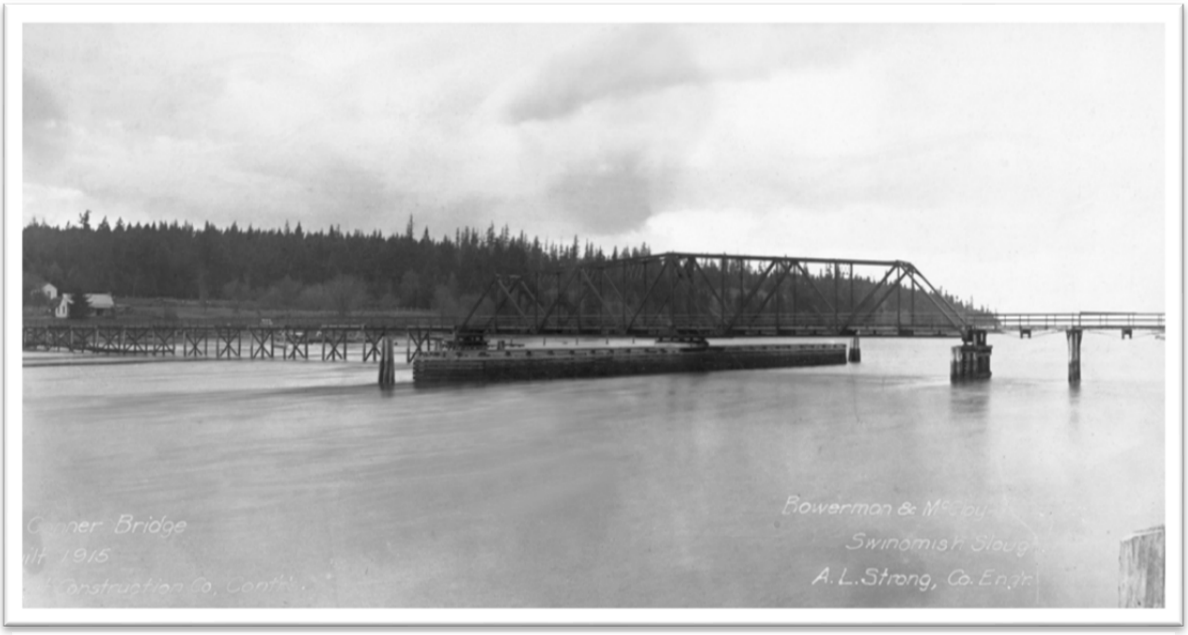
The following are a list of common acronyms widely used in the Bridge Inspection field:

ADT	Average Daily Traffic
BRAC	Bridge Replacement Advisory Committee
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FO	Functionally Obsolete
HBRRP	Highway Bridge Replacement and Rehabilitation Program
NBIS	National Bridge Inspection Standards
SD	Structurally Deficient
SID	Structure Identification Number
SR	Sufficiency Rating
UBIT	Under Bridge Inspection Truck
WAC	Washington Administrative Code
WSDOT	Washington State Department of Transportation
6 Year TIP	Six-Year Transportation Improvement Program

Friday Creek Bridge #3 over Friday Creek

EXECUTIVE SUMMARY

The 2013 Annual Bridge Report has been completed in compliance with WAC 136-20-060, which requires that each County Road Engineer furnish a written resume of the findings of the previous year's inspection effort. This report summarizes the county's 2013 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 a very important resource in the preparation of the Six Year TIP and other short and long term planning tools. Bridge replacement, rehabilitation, and repair projects are prioritized by a rating system that's based on a combination of factors including, but not limited to, structural deficiency, functional obsolescence, sufficiency rating, ADT, safety factors, accident history, and funding availability.



LaConner Bridge - 1915 (Replaced by the Rainbow Bridge)

To qualify as a Structurally Deficient (SD) bridge, an element of the bridge must have a condition rating of 4 (Poor Condition) in one of the following elements: deck, superstructures, substructures, culvert and retaining walls, or have an appraisal rating of 2 or less of the structural evaluation or waterway adequacy.

To qualify as a Functionally Obsolete (FO) bridge an appraisal rating of 3 or less must be given for deck geometry, under clearance, approach roadway alignment, structural evaluation, or waterway adequacy.

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. Satisfy the reporting requirements set forth by other government agencies.

HIGHLIGHTS from this bridge inspection season includes:

- Larry Krueger passed the two week bridge inspection training, awarded his Bridge Inspector Number, and has joined the bridge inspection team.
- 48 routine inspections of Skagit County bridges.
- 2 special inspections on County bridges (2 Underwater)
- 14 routine inspections of local agency (City) bridges.
- 2 special inspections on local agency (City) bridges (2 UBIT)
- Completed construction and inventoried the S. LaVenture Bridge crossing Maddox Creek, raising the County Bridge Inventory to 109 bridges.
- Repairs made to pier caps on the BNSF Railroad Overpass and the South Lake Campbell Road Outlet.
- Federal funding was approved to replace the BNSF Railroad Overpass on Old Hwy 99. Design has begun and staff is working with BNSF on design parameters.
- Currently, Skagit County has 5 structurally deficient bridges, the BNSF Railroad Overpass with a sufficiency rating of 3.00, the North Fork Bridge with a sufficiency rating of 38.81, Friday Creek Bridge with a sufficiency rating of 60.88, Thomas Creek Bridge with a sufficiency rating of 62.88, and Samish River Bridge with a sufficiency rating of 63.18. In addition, we have 15 Functional Obsolete bridges.
- The other local agency bridges inspected are all in good condition. The Town of Concrete's bridge, Baker River Bridge is listed as functional obsolete with a sufficiency rating of 20.67, and is load restricted at 10 Tons to 28Tons depending on axle layout.

BRIDGE INVENTORY

Skagit County Road Bridges:
As of December 31, 2013, Skagit County has an inventory of 109 highway bridges. The South LaVenture Bridge crossing Maddox Creek was added to the Skagit County Bridge Inventory this season. The current 109 Skagit County Bridge Inventory includes:

- 4 predominately made of timber
- 13 predominately made of steel
- 92 predominately made of concrete
- 11 of those are "High Cost Inspection" Bridges requiring a UBIT
- 6 of these are fracture critical bridges.

2013 - Completion of the South LaVenture Road Bridge

Skagit County has 44 bridges that are at least 50 years old. Of those 44 bridges, 8 of them are 70 years or older and 2 of them are over 80 years old, built in 1930.

Parks Department Bridges:
The County Parks and Recreation Department has approached Public Works and requested assistance with a growing inventory of pedestrian bridges (24 total). These have been acquired either through new trail construction or by acquisition of abandoned railroad rights-of-way. Due to staffing issues and work load, Public Works has not been able to provide inspection services at this time. We will continue to work with the Parks and Recreation Department to inventory and inspect them when staffing and work load allows.

Other Local Agency Bridges:
In addition, Public Works provides inspection services to cities upon request. The County works under agreements with cities within the conditions set forth in Revised Code of Washington (RCW) Chapter 39.34, the Inter-local Cooperation Act. The County's services are provided primarily to cities that lack resources and expertise to inspect and maintain their bridge inventory. In 2013 the County provided inspection services on 15 bridges for local agencies.

Baker River Bridge, Town of Concrete

Agencies Served by Skagit County - No. of Bridges:
1. City of Burlington – 2
2. Town of Concrete- 1
3. City of Mount Vernon – 12

BRIDGE INSPECTION PROGRAM, FINDINGS and RECOMMENDATIONS

Bridge inspection is performed in accordance with the National Bridge Inspection Standards (NBIS) in conformance with 23 CFR 650.3. All bridges inspected 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 two years (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 drop. Work orders for repairs may be issued and made. In the case 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.

S. Lake Campbell Road Outlet Rehab

The results of our inspection program are forwarded on to the Washington State Department of Transportation (WSDOT) for review. Once the report has been accepted by WSDOT it is available for the Federal Highway Administration (FHWA), Washington division bridge engineers use. A copy of all final inspection reports are kept on file with Skagit County Public Works.

The County's inventory of aging bridges that contain timber components are rapidly deteriorating, as indicated by the recent repairs that have taken place.

The South Lake Campbell Road Bridge recently had two timber pier caps replaced by the Skagit County Road Crew. And the Old Highway 99 BNSF Railroad Overpass received epoxy injections on two pier caps to prevent any further crushing that was occurring.

Old Highway 99 BNSF Railroad Overpass

There are other factors that go into developing the overall health of a bridge. Sufficiency Rating (SR) is a score calculated based on the number of all the factors that are reviewed by the inspector. The SR is a number from *0* to *100,* with *100* being an entirely sufficient bridge, and *0* being an entirely insufficient or deficient bridge, as defined by FHWA. Items that go into the determination of the SR include load bearing capacity, average daily traffic, availability and length of detour, the geometry of the bridge, and the scour action of bridges passing over a waterway, among others. Normally, bridges with a SR less than *80* are eligible

for federal rehabilitation funding and bridges with a SR less than *50* are eligible for federal replacement funding. In the latest BRAC call-for-projects (2013), the criteria requires that only bridges with a SR less than *40* and listed as Structurally Deficient (SD) were eligible for federal replacement funds. As of December 31, 2013 the County has 2 SD bridges with a SR less than *40* that meets these criteria. There are also rehabilitation funds and resurfacing funds available for bridges through BRAC with a SR rating 80 or below.

If the underside of the bridge deck cannot be given close or adequate inspection from the ground (the bridge crosses a deep ravine, for example) or from the shore (the bridge crosses a wide body of water), then a special inspection using a boat or an **U**nder-**B**ridge **I**nspection **T**ruck (UBIT) is required.

North Fork Bridge - UBIT Inspection

In 2013, there were 2 UBIT inspections, and 2 underwater inspections. These special inspections were performed on the Baker River Bridge and Riverside Bridge for Town of Concrete and the City of Mount Vernon respectively. (See our Master List of 2013 inspections and list of special inspections, attached as "Exhibit A," for details on inspection frequencies and schedules for all of our UBIT and underwater bridge inspections).

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. As referenced in this report, we are experiencing an increase in the number of repairs to our older timber structures.

Skagit County Public Works will continue to apply for available funds to assist with deficient bridges that are eligible for Federal Highways Bridge Program funds and Surface Transportation Program funds. County bridges not eligible for Federal funds, such as short-span bridges (less than 20' in length), will have their replacement/rehabilitation needs prioritized by Public Works staff, based on structural deficiency, resource availability, and the Board of Skagit County Commissioners authorization to fund the project in the Annual Construction Program. Similarly, for maintenance, repair, and minor rehabilitation work, prioritization is based on County bridge maintenance funds and staff availabilities.

This report also points out projects that have been completed, those that are in the current Six Year TIP and those bridges that are candidates for future replacement/rehabilitation.

EXHIBIT A – 2013 Routine and Special Inspection Schedule

Bridge Name	Bridge #	Routine Insp. Year	UBIT INSP. Year	UBIT Freq. Mo	Under Water	Under Water Insp. Year
FRIDAY CREEK -1ST BRIDGE	40018	May-13				
FRIDAY CREEK - 2ND BRIDGE	40019	May-13				
FRIDAY CREEK - 3RD BRIDGE	40020	May-13				
FRIDAYCREEK - 4TH BRIDGE	40021	May-13				
FRIDAY CREEK - 5TH BRIDGE	40022	May-13				
FRIDAY CREEK - 6TH BRIDGE	40023	May-13				
FRIDAY CREEK - 7TH BRIDGE	40024	May-13				
FRIDAY CREEK - 8TH BRIDGE	40025	May-13				
BEAR CREEK - LAKE SAMISH RD	40106	May-13				
FRIDAY CREEK - LAKE SAMISH RD	40109	May-13				
NEFF'S CROSSING - OLD HWY 99 NORTH	40112	May-13				
SILVER CREEK - ALGER- CAIN LK RD	40117	May-13				
SAMISH RIVER - F & S GRADE ROAD	40013	May-13				
SAMISH RIVER- GRIPP ROAD	40014	May-13				
FRIDAY CREEK - OLD HWY 99 NORTH	40115	May-13				
SILVER CREEK - OLD HWY 99 NORTH	40116	May-13				
RED CREEK - HELMICK ROAD	40163	May-13				
SAMISH RIVER - PRAIRIE ROAD	40015	Jun-13				
SAMISH RIVER - PRAIRIE RD	40016	Jun-13				
FRIDAY CREEK - PRAIRIE RD	40017	Jun-13				
SAMISH RIVER - PRAIRIE RD	40055	Jun-13				
THOMAS CREEK- OLD HWY 99 NORTH	40113	Jun-13				
DRAINAGE DITCH - FARM TO MARKET RD	40026	Jun-13				
SAMISH RIVER - THOMAS RD	40030	Jun-13				
DRAINAGE DITCH - PULVER RD	40031	Jun-13				
DRAINAGE DITCH - FARM TO MARKET RD	40032	Jun-13				
JOE LEARY RD - FARM TO MARKET RD	40036	Jun-13				
FLINN ROAD BRIDGE	40161	Jun-13				
MCELROY SLOUGH CULVERTS	40162	Jun-13				
JOE LEARY - BAYVIEW EDISON RD	40029	Jun-13				
NEUMAN SLOUGH - FARM TO MARKET RD	40033	Jun-13				
SAMISH RIVER - FARM TO MARKET RD	40034	Jun-13				

Bridge Name	Bridge #	Routine Insp. Year	UBIT INSP. Year	UBIT Freq. Mo	Under Water	Under Water Insp. Year
SAMISH RIVER - FARM TO MARKET RD	40034	Jun-13				
INDIAN SLOUGH - BAYVIEW EDISON RD	40035	Jun-13				
TEXACO PIPELINE - MARCH POINT RD	40126	Jun-13				
SULLIVAN SLOUGH - LACONNER WHITNEY RD	40038	Jun-13				
CARPENTER CREEK - P. JOHNSON RD	40041	Jun-13				
CAMPBELL LAKE OUTLET - S CAMPBELL LK RD	40142	Jun-13				
NOOKACHAMPS CREEK BRIDGE- BIG LAKE	40001	Jun-13				
SLOUGH BRIDGE - DD #14 DITCH	40009	Jun-13				
BRICKYARD CREEK	40012	Jun-13				
NOOKACHAMPS CR - KNAPP RD	40054	Jun-13				
CASCADE RIVER - ROCKPORT CASCADE RD	40071	Jul-13				
BLACK SLOUGH - UTOPIA RD	40062	Jul-13				
BAYVIEW STATE PARK - BAYVIEW EDISON RD	40141	Jul-13				
BNSF RR OVERPASS - OLD HWY 99 NORTH	40111	Jul-13				
SINCLAIR ISLAND DOCK - JACKSON RD	40160	Aug-13				
SUTTER CREEK BRIDGE	40065	Aug-13				
OTTER POND BRIDGE (CULVERT)	40005	Aug-13				
RED CABIN CREEKBRIDGE	40130	May-14				
CHILDS CREEK LYMAN HWY	40063	May-14				
WISEMAN CRK MINKLER ROAD	40061	May-14				
MUDDY CRK-HAMILTON CEM	40066	May-14				
COAL CREEK BRIDGE	40159	May-14				
BURMASTER ROAD	40060	May-14				
MUDDY CREEK BRIDGE	40129	May-14				
JONES CREEK BRIDGE	40132	May-14				
CHILDS CRK BRIDGE	40151	May-14				
MANNSER CREEK BRIDGE	40131	May-14				
MINERAL PARK BRIDGE	40077	Jun-14				
SAMISH RIVER SLOUGH	40027	Jun-14				
MARBLE CREEK BRIDGE	40074	Jun-14				
MONOGRAM CK CASCADE RD	40072	Jun-14				
SIBLEY CREEK BRIDGE	40075	Jun-14				
SWIFT CREEK CONRAD RD	40069	Jun-14				

Bridge Name	Bridge #	Routine Insp. Year	UBIT INSP. Year	UBIT Freq. Mo	Under Water	Under Water Insp. Year
GRANDY CREEK WEST FORK	40120	Jul-14				
GRANDY CREEK EAST	40140	Jul-14				
BEAR CK-BAKER LK ROAD	40101	Jul-14				
JORDAN CREEK BRIDGE	40095	Jul-14				
GRANDY CRK.CAPEHORN ROAD	40068	Jul-14				
ILLABOT CREEK BRIDGE	40094	Jul-14				
CULVERT AT LAKE CREEK	40048	Jul-14				
PILCHUCK CREEK CAVANAUGH	40047	Jul-14				
BEAR CREEK CAVANAUGH	40046	Jul-14				
LOWER FINNEY CREEK BR.	40089	Jul-14				
PRESSENTIN CREEK	40088	Jul-14				
MILLER CREEK	40092	Jul-14				
DRAINAGE DITCH	40044	Jul-14				
DRAINAGE DITCH MILLTOWN	40042	Jul-14				
CARPENTER CK CONWAY HILL	40043	Jul-14				
FISHERS SLOUGH	40045	Jul-14				
LORETTA CREEK	40082	Jul-14				
PULVER ROAD @ JOE LEARY	40031	Jul-14				
PARKER CREEK BRIDGE	40080	Jul-14				
CUMBERLAND CK	40083	Jul-14				
O'TOOLE CREEK BR.	40084	Jul-14				
DAY CREEK	40081	Jul-14				
NOOKACHAMPS BEAVER LK RD	40051	Aug-14				
CARPENTER CRK. BRIDGE	40156	Aug-14				
TAYLOR ROAD WALKER CREEK	40052	Aug-14				
FRANCIS NOOKACHAMPS	40003	Aug-14				
SWAN ROAD BRIDGE	40002	Aug-14				
SLOUGH FRANCIS ROAD	40004	Aug-14				
MILL CREEK	40086	Aug-14				
BENSON RIDGE LN	40157	Sep-14				
GREEN ROAD THOMAS CREEK	40011	Sep-14				

Bridge Name	Bridge #	Routine Insp. Year	UBIT INSP. Year	UBIT Freq. Mo	Under Water	Under Water Insp. Year
SPECIAL / HIGH COST INSPECTIONS						
DALLES BRIDGE	40090		Mar-14	24		
GOVERNMENT BRIDGE	40099		Mar-14	24		
GUEMES ISLAND FERRY DOCK	40153		Oct-14	24	60	May-17
LOOKOUT CREEK BRIDGE	40073		Mar-14	**48**		
NORTH FORK BRIDGE	40037		Mar-14	24		
RAINBOW BRIDGE	40039		Apr-14	24		
SAMISH RIVER BRIDGE	40114		Mar-14	24		
SKAGIT RIVER MARBLEMOUNT	40070		Mar-14	24		
SOUTH FORK BRIDGE	40008		Mar-14	**48**	60	Sep-13
UPPER FINNEY CREEK BRIDGE	40093	Mar-14	Mar-18	**72**		
ANACORTES FERRY DOCK	40152		Oct-14	24	60	May-17
SAMISH RIVER NEAR EDISON	40028	Jun-14			60	Sep-13
LOCAL AGENCY BRIDGES						
BAKER RIVER BRIDGE	Conc. -1	July -13	Aug-13	**48**		
NORTH BULINGTON BLVD - OLD HWY 99 NORTH	Burlinn-2	Sep-13				
GOLDEN ROD BRIDGE	Burlinn-3	Sep-13				
RIVERSIDE BRIDGE	MV - 1	Aug-13	Aug-13	**48**	60	Sep-17
HOAG STEWARD OVERPASS	MV - 2	Nov-13				
ELEANOR LANE	MV - 3	Oct-13				
SKAGIT HIGHLANDS PARKWAY	MV - 4	Oct-13				
LANDMARK DRIVE	MV - 5	Oct-13				
EAGLEMONT DRIVE	MV - 6	Oct-13				
J OFF BEAVER POND DR. S.	MV - 7	Oct-13				
BEAVER POND DR SOUTH	MV - 8	Oct-13				
BEAVER POND DR NORTH B	MV - 9	Oct-13				
OLYMPIC LANE	MV - 10	Oct-13				
BEAVER POND DR NORTH A	MV - 11	Oct-13				
LAVENTURE BRIDGE (BOX CULVERT)	MV - 12	Sep-14				

LOAD RESTRICTED BRIDGES

In 2012, a load rating was performed on the Burlington Northern Santa Fe (BNSF) Overpass due to deteriorating pile caps. The load rating indicated that in its current state, the bridge should be load rated at 8 tons. But due to the importance of this route for freight and goods and the nearby quarries, Skagit County crews installed temporary shoring at the deteriorating pile cap locations. This allowed the overpass to remain open to handle legal loads; no overweight loads are permitted at this time.

The North Fork Bridge is a viable route for legal limit loads. However, due to various deficiencies with the bridge, overweight load permits are reviewed on a case by case basis. We review axle loading, number of axles, and how the load is distributed among those axles to determine if the load is safe to cross the bridge.

In the Town of Concrete, the Baker River Bridge is restricted to loads based on the AASHTO Vehicle Types ranging from 10 tons to 28 tons.

The Pulver Road @ Joe Leary Slough Bridge #40031 remains on the County's watch list. It has incurred some damage due to what is believed to be an overloaded vehicle crossing the bridge. Staff is working with our on call Bridge Consultant, Shearer Design, to have a load rating completed on this bridge. The engineering plans are inadequate, but the bridge design is similar to other county bridges built at that time. Based on these factors and past performance we should be able to perform a reliable load rating on the bridge. Skagit County has increased the inspection frequency to a 12 month cycle to keep on top of any further deterioration that may arise. When the load rating is completed, it is anticipated the bridge inspection cycle will be increased to the standard two year cycle.

Pulver Road at Joe Leary Slough

Example of longitudinal cracking in girder on Pulver

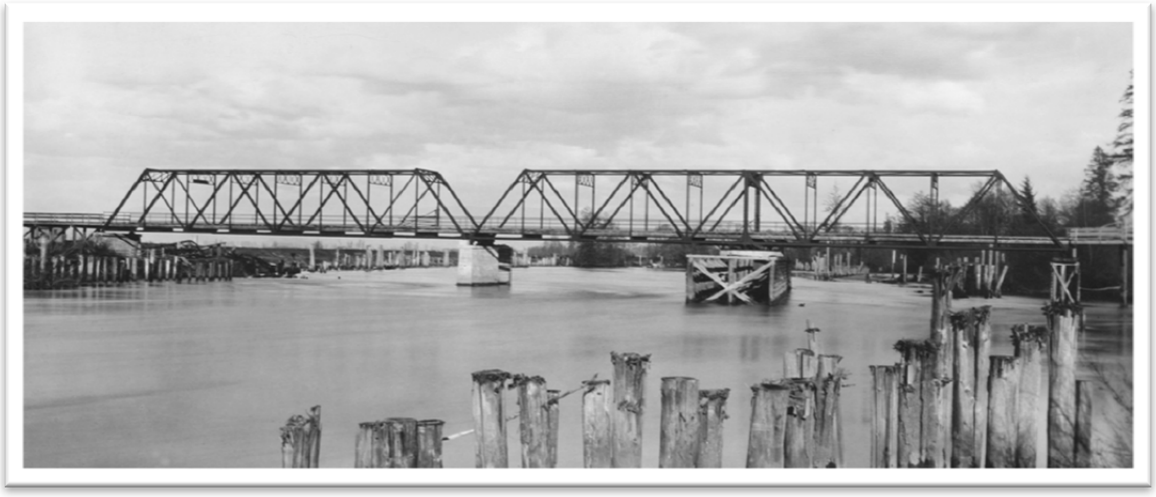
BRIDGE REPLACEMENT and REHABILITATION PLAN FOR DEFICIENT BRIDGES

The County's current focus is to replace or rehabilitate bridges that are classified as Structurally Deficient or Functional Obsolete per NBIS. Public Works staff is currently seeking funding for a number of bridges that are in need of replacement, rehabilitation and/or resurfacing including, but not limited to:

Replacement

- Burlington Northern Overpass #40111
  - Structurally deficient, timber structure is deteriorating
  - Functionally obsolete, does not meet the geometry standard of the road system.

- North Fork Bridge #40037
  - Structurally deficient, pier has twisted and settled.
  - Functionally obsolete, does not meet the geometry standard of the road system.



North Fork Bridge - 1912

Rehabilitation/Resurfacing

- Samish River Bridge on Old Hwy 99 #40114
  - Due to frozen rocker bearings, the bridge deck experiences compression stress which results in cracks and pops to concrete deck.
  - Grant funds are being sought after to replace the bearings, expansion joints, and resurface the deck/driving surface.

- Friday Creek Bridge on Old Hwy 99 #40115
  - The bridge deck is deteriorating due to age and wear resulting in spalling and exposed rebar.
  - Grant funds are being sought after to resurface the deck and level the approaches.

- Lower Finney Creek Bridge on South Skagit Highway #40089
  - The bridge deck is deteriorating due to age and wear resulting in spalling and exposed rebar.
  - Grant funds are being sought after to resurface the deck and level the approaches.

Under Review

- Pulver Road at Joe Leary Slough #40031
  - Girders showing signs of stress
  - Load Rating is being prepared to verify structural integrity

MAINTENANCE AND REPAIRS

Maintenance and Repairs: The majority of bridge repair and maintenance work is done by County crews. This inculdes cleaning, minor painting, deck repairs, and rehabilitation of bridges. The major projects completed in 2013 were the replacement of two rotting pier caps under the South Lake Campbell Road Outlet. Inspectors measured 3 inches of crushing occurring in the caps which translated to 3 inches of settlement in the roadway. Construction was done in one day and involved the removal of the bridge deck by lifting the five bathtub girders individually by excavator and placing them on the roadway. The caps were replaced and the girders were put back in place. Once the weather cooperated, the crew came back to grout between the girders and asphalt level the approaches.

Crushing of the pier cap

Removal of bridge girders

Completed S. Lake Campbell Road Outlet Rehab

It was discovered during the inspection of the BNSF Railroad Overpass this summer that some crushing has been occurring on the pier caps that support the main span of the BNSF Railroad Overpass. With the aid and direction of our contracted bridge engineer, David Shearer, a high strength epoxy application was injected into the pier caps to strengthen the timber, prevent further rotting, and stop any further crushing from occurring.

Old Highway 99 BNSF Railroad Overpass

Skagit County was awarded BRAC funding in the amount of $10-million to help fund the replacement of the BNSF Railroad Overpass. Skagit County has contracted with Berger Abam to design the new overpass and is working with BNSF on design parameters.

In addition to the above mentioned repairs, Skagit County's Bridge Crew preforms various minor repairs and maintenance throughout the year.

These repairs and maintenance include, but are not limited to:

- Patching the deck due to spalling or material loss
- Replacing the loss of armor/rock around the abutments
- Repairing Bridge Rail and guardrail
- Leveling approaches
- Spot painting
- Removal of vegetation encroaching or blocking access to the bridge for inspection purposes
- Replacing damaged or worn signing

2013 BRIDGE MAINTENANCE LIST

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
NOOKACHAMPS BIG LAKE	40001	.25 S JCT SR9	2	Bank protection: armor missing upstream end on the right bank.
			1	Sidewalk: Level and patch settled area, tripping hazard.
			1	Signs: delineator is bent at north end. Salmon stream sign needs replacing.
			1	Deck: The deck has spalls showing through the sealer. Old patches are wearing off.
			2	Approach rails: upgrade approach rails to meet current standards.
			2	Deck: Refill patches that have fallen out.
			2	Sidewalk: Repair sidewalk approach where rebar is exposed (north end).
SWAN ROAD BRIDGE	40002	NOOKACHAMPS	1	Raise approach rail to minimum height.
			2	Depression in deck over upstream pile. Monitor for settlement
			2	Repair west approach - settlement > 1"
FRANCIS NOOKACHAMPS	40003	NOOKACHAMP FRANCIS	2	Repair: level approach roads and patch potholes.
			2	Clean Mud off of girders and caps at the east end of bridge
			2	Remove vegetation from ends of bridge
SLOUGH FRANCIS ROAD	40004	2.0 W JCT SR9	2	Shoulder/pavement edge drops off between edge of road and guardrail. - needs to be brought up to grade.
			3	Paint rail posts
			2	Replace damaged guardrail at NE corner. Approx. 100' and 3 posts.
GREEN RD @ THOMAS	40011	.01 S KELLEHER RD	2	Approach Road: level approaches settled >2" on both ends
			1	Guardrail: Post 1, downstream end missing bolt and nut. Currently hanging on one bolt.
BRICKYARD CREEK	40012	MP 5.38 COOK RD	2	Deck needs to be swept and drains cleaned
			2	Approach road: west upstream shoulder needs to be graded to drain standing water.
			2	Recommend saw cutting @ bridge seat and joint filling.
			3	Sweep sidewalk.
F&S GRADE SAMISH RIVER	40013	F&S GRADE SAMISH R	M	Alder tree at right bank under bridge.
			2	Left upstream approach rail end treatment need replaced
			2	Left upstream approach rail end treatment need replaced
SAMISH R GRIPP & PRAIRIE	40014	GRIPP ROAD SAMISH R	2	Repair: Thrie beams need to be painted, there is rust & the galvanized material is wearing off.

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
SAMISH R GRIPP & PRAIRIE	40014	GRIPP ROAD	2	Repair: patch spall in the wingwall.
			1	MONITOR: Bridge is by-passable, right upstream channel protection is starting to slump into river and needs to be monitored after high water events.
SAMISH R PRAIRIE ROAD	40015	SAMISH R PRAIRIE	3	Clear vegetation around abutments. (watch out for bees!)
			2	Add additional rip rap to north bank, downstream 15'.
			2	Tighten cable on NW ET guardrail.
			3	Patch bridge deck
SAMISH RIVER PRAIRIE RD	40016	SAMISH R PRAIRIE	2	Sweep Deck
			2	NW section of guardrail damaged and post leaning.
PRAIRIE RD FRIDAY CK	40017	FRIDAY CK PRAIRIE	2	Spalls on upstream curb.
			3	Brush cut around abutments
			3	Minor settling in westerly approach. Dig out and/or patch.
			M	Clear debris upstream
FRIDAY CREEK IST BRIDGE	40018	.45 MI N OLD HWY 99 N	1	Patch exposed rebar in girders #1 #2 #3 & #4 and Soffits.
			3	Pressure wash conc. rails & girders
			1	1" > approaches - Dig out and pre-level scheduled
FRIDAY CREEK 2ND BR	40019	0.59 Miles N. of Old 99	2	Crack Seal north approach
			2	Replace spacer blocks #4 and #12 of SE corner
			2	Replace spacer blocks #8 and #12 of NE corner
			3	Approach roadways have settled 3+ inches. Road markings indicate future dig out and/or A/C leveling.
			M	Abut #1 - erosion undermining the corner of abutment. Probably the cause of settling approaches.
FRIDAY CREEK 3RD BRIDGE	40020	0.3 N. of JCT w/ Old 99	2	Drain: repair drain on bridge, has broken off.
			3	Upgrade guardrail to current standards
			2	Brush and paint guardrail posts
			2	Pressure wash moss off girders
FRIDAY CREEK 4TH BRIDGE	40021	.4 N JCT BURL ALG	2	Exposed rebar: wire brush and patch exposed rusty rebar on beams 1, 2, and 4
			M	bank erosion 30' upstream
			2	Abutments: replace fill material under the left abutment.
			3	Diaphragms rusty - need steel brushing and paint
FRIDAY CREEK 6TH BRIDGE	40023	.6 N JCT BURL ALG	3	Bridge curbing, girders and soffits need pressure washed.
			1	Dig out and A/C level North approach.

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
FRIDAY CREEK 6TH BRIDGE	40023	.6 N JCT BURL-AI	3	Pressure wash curbs and girders
			M	Repair: undermined riprap at D/S South abutment
			2	NE guardrail, Post 4 is rotted and needs replaced.
			2	Weed whack around abutments and approach guardrail
FARM-TO-MARKET	40026	7.7 N JCT SR 20	M	Monitor settlement on the road approaches.
			3	Patch spall on outside of rail at connection (8th post from North)
SAMISH RIVER SLOUGH	40027	0.4 W JCT SR 537	2	Repair - paint posts
			2	Sweep Deck
			3	Missing a guardrail post on SE transition and the NW transition.
SAMISH RIVER NEAR EDISON	40028	0.5 W JCT SR 537	M	Monitor undermining of gabion wall at Pier 1.
			B	End treatment @ NE section is damaged. Needs repair or replacement
BAY VIEW EDISON	40029	5. N JCT SR 536		Guardrail - block out missing in southwest leg.
				brush and patch exposed rebar in deck
THOMAS ROAD (Samish R)	40030	0.3 N ALLEN WEST	2	Rails need to be upgraded.
			M	Repair material loss at right abutment
PULVER ROAD @ JOE LEARY	40031	.6 S JCT SR 11	1	Paint bridge rails and posts. See photo.
			M	Monitor the south abutment soil migration, there is a gap between the abutment cap and the ground. Piles are showing.
			1	Seal deck with a membrane, to prevent further spalling and corrosion of the rebar. See photo.
			M	Numerous vertical cracks in all girders. Continue to monitor for spreading.
FARM-TO-MARKET	40032	7.5 N JCT SR 20	2	Northbound approach needs asphalt patch.
SAMISH R	40034	5.9 N JCT SR 20	2	Rails: Upgrade approach rails to meet current stds.
			1	Sand has accumulated, sweep deck.
			2	Waterway: Remove woody debris at bent 4 & 5.
			2	Remove moss from deck and rails.
			2	Remove vegetation from ends of bridge
BAY VIEW-EDISON (Indian)	40035	0.4 MI N OF SR20	3	brush and patch exposed rebar and spalls in girders
FARM TO MARKET RD	40036	5.0 N JCT SR 20	1	Vegetation needs to be cut around the ends of the bridge.
			3	Brush and patch spall in soffit

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
NORTH FORK BRIDGE	40037	5.5 W JCT INTER 5	M	Monitor the movement of the piers at the east end of the structure including the tipping of Pier 8 to the east. DAG 2010 - no change.
			1	Add steel plate extensions to the bearing base plates at Pier 8. 40% of the bearing area has been lost due to the pier rotation.
			1	Investigate the need to repair scour damage at Piers 3, 4 and 5 and complete repairs if required. DAG 2012 - unable to verify repair until new copy of dive report received, see REPAIR 12929.
			0	Repair broken conduit in Spans 3 and 4 near Pier 4.
			1	Incorporate the results of the latest dive inspection (scheduled in 2012), including 2005 scour repairs, into the 9 and 361 notes as appropriate, and update WSBIS form to show underwater inspection date and inspector information. Currently, the last inspection shows as 2002, while it should be no later than 2007. DAG 2012 - Dive inspection has not been performed.
			1	Patch potholes in Span 8 using Urefast or Set 45. DAG 2012 - changed to Priority '1'.
			1	The sliding plate joint at Pier 7 has been retrofitted with an extension that is butt-welded to the original slide plate. Five of these skip welds are cracked near the centerline. Re-weld the plate.
			2	Repair damaged Span 2 north thrie-beam
			2	Trees in Span 5 hinder UBIT inspection of the bridge. Remove trees before inspection in March of 2014.
			1	Remove debris pile (logs) at the upstream nose of Pier 3.
SULLIVAN SLOUGH LACONNER	40038	3.83 S JCT SR 20	1	Remove vegetation from the bridge ends.
			2	Paint the bridge rail posts, are peeling and rusty.
			2	End terminal on approach rail needs repair - north end.
RAINBOW BRIDGE	40039	SWIN SL @ LACONNER	1	Arch joints are missing poured rubber, causing floor system to excessively rust below. Clean all the open panel joints over the floor beams and fill them with poured rubber.

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
RAINBOW BRIDGE	40039	SWIN SL @ LACONNER	1	Reposition the bronze bearing plates at Floor beam 17 Bearing C and Pier 5 steel stringer Bearing A 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.
			2	Replace the missing bird screens at the following locations: U5W, U8W, U9W, U13W, U6E, U8E, U11E, and U12E (U8W, U13W, U6E, U8E, and U11E added 4/13/2010, DAG/CRT).
			M	Monitor cracking of welds for connection of the lateral cross-bracing to the bottom flanges of the stringers in Panels 5, 8, and 15. If cracks propagate into base metal, take corrective action to stop further propagation. DAG 2012: No change.
			2	Remove paint and dirt which is covering arch at the Pier 4 and 5 footings. Clean to bare steel and paint.
E PETER JOHNSON RD	40041	1.0 Miles E. of Cedardale	2	Clean out deposited sediment on top of pier cap.
			3	Westbound guardrail - minor impact damage on one section.
			2	Dig out asphalt patches on approach and rebuild
DRAINAGE DITCH MILLTOWN	40042	.02 E JCT SR 530	2	Repair end treatment, west downstream end
			2	Previous patches in deck are wearing and need replacing
			2	sweep deck
CARPENTER CK CONWAY HILL	40043	0.5 E JCT INTER 5	3	Clear vegetation from deck curb and joints.
DRAINAGE DITCH	40044	2.8 EAST JCT. SR 5	2	Repair: pressure wash barrier rail - has lots of lichen / moss. See photo.
			1	Remove vegetation from ends of bridge.
			1	Deck needs vegetation removal and sweep.
FISHERS SLOUGH	40045	1.5 EAST JCT. SR 5	2	Seal transverse cracks in deck.
			1	Remove vegetation along concrete railing.
BEAR CREEK CAVANAUGH	40046	8.0 E JCT SR 9	2	Existing patches need additional material added
PILCHUCK CREEK CAVANAUGH	40047	8.7 E JCT SR 9	2	Material loss from behind abutment causing approach road to settle.
CULVERT AT LAKE CREEK	40048	MP 0.96 LK CAVANAVGH RD	2	Remove vegetation to create a path for inspection.
			2	Clear log jam at downstream end. Debris beginning to build up into culvert.
NOOKACHAMPS BEAVER LK RD	40051	3.0 SE JCT SR 9	3	Patch exposed rebar on deck.
			M	Losing material behind Abut #2

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
TAYLOR ROAD WALKER CREEK	40052	4.3 E JCT SR 9	S	Repair rip rap under bridge
			1	Repair scour hole upstream of bridge.
			M	Monitor bridge after high water event.
NOOKACHAMPS KNAPP RD	40054	0.1 E JCT SR 9	1	Sweep the bridge deck.
			3	Deck Repair: remove overspray BST on bridge deck.
			2	Cut and remove brush around the abutments for access under the bridge.
			2	Remove vegetation from SE corner of bridge deck. Grass us limiting drainage.
			1	Brush and patch spalls on deck.
BURMASTER ROAD	40060	1.2 E JCT MINKLER	2	Repair: Level upstream approach @ west end of bridge.
			1	Clean bridge deck, drains and rails. Dirt and moss are on the decks, curbs, sides of the bridge and rails. Pressures wash the bridge.
			2	Repair: numerous spalls at D/S curb.
			2	Remove vegetation from around ends of bridge.
			2	Sweep bridge deck.
			3	Repair spalls in concrete railing, approx. 2'.
			3	Utility line casing (PVC pipe) is broken.
WISEMAN CRK MINKLER ROAD	40061	.5 W JCT SR 20	3	Patch the damaged areas on the curb.
			2	Clean and patch spall in Beam #5.
			1	Need to remove vegetation from around bridge
			2	Remove Fence from downstream headwalls
			1	Repair scour at Abutment #1, upstream end.
			1	Remove debris from bridge, upstream end.
BLACK SLOUGH BRIDGE	40062	Utopia Rd 0.5 E of Hoehn	1	Level the right approach in the east bound lane.
			1	Remove vegetation at end of bridge
CHILDS CREEK LYMAN HWY	40063	0.8 E JCT SR 20	1	Monitor: channel filling, this channel fills up with gravel debris. 2012 - aggradations nearly to bottom of girder. Need to dredge.
			3	Missing nut on guardrail post: 2nd post from the west end, downstream side.
			3	Guardrail post rotten: 3rd post from southwest end.
			M	Scour hole on backside of guardrail at southwest end
			3	Repair thrie beam, southwest end

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
MUDDY CRK-HAMILTON CEM	40066	.5 W JCT SR 20	2	Small pot hole forming at the right bridge/approach road. Monitor and patch.
ALDER CREEK BRIDGE	40067	0.75 E JCT SR 20	2	Potholing on deck and at deck joints
			M	Upstream channel migration to the west. Stream approaching bridge at angle now with higher velocities at Abutment #2
GRANDY CRK.CAPEHORN ROAD	40068	2.25 W JCT SR 20	M	Monitor the bank protection, check after high water.
			2	Patch the 6 spalls in deck with exposed rebar.
SWIFT CREEK CONRAD RD	40069	0.2 E JCT SR 20	M	Monitor the channel protection.
			1	Repair the riprap channel protection on the left bank under the bridge.
			2	Remove the BST overspray patches from the bridge deck.
			M	Appears to be bridge movement causing abutments to rotate. This would explain the crushing occurring on the elastomeric bearings.
SKAGIT RIVER MARBLEMOUNT	40070	.03 E JCT SR 20	0	Replace split spacer block at NE corner.
			1	Remove debris from upstream face of Pier 4. This is a recurrent problem. Consider the installation of a shark or debris deflector.
CASCADE RIVER BRIDGE	40071	.04 S JCT CASC.RD	1	Repair - Left approach, large 24" x 4" spall at seat, see photo.
			1	Repair - Right approach has cracked and settled, see photo.
			2	Patch exposed rebar in deck near right end of bridge.
			1	Repair Spall on south roadway approach 3'x6"x2"
			2	Repair thrie beam transition at nw corner. Damaged from fallen tree.
			2	Sweep deck and shoulders
MONOGRAM CK CASCADE RD	40072	7.37 E JCT SR 20	2	Repair: deck has spall on R downstream edge.
			2	Concrete repair: patch left and right wingwalls; and left abutment.
			1	Debris removal: remove debris under the bridge.
			M	Waterway: monitor bridge at high water, stream overtops the bridge and bypasses on the left end.
MARBLE CREEK BRIDGE	40074	8.3 E JCT SR 20	2	Wingwall: Joint seal is missing, gap between bridge and walls. Fill gap btw retaining walls and the abutments.
			2	Repair: fourth rail post from right D corner is bent from impact; base plate is still in place.
			2	NE End treatment isn't up to standard
			2	SE Wrap around end treatment is damaged
			3	Patch potholes on West approach

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
SIBLEY CREEK BRIDGE	40075	10 MI E MARBLEMOUNT	1	Repair: 8 delineators missing (4 on each side of bridge)
HARD CREEK BRIDGE	40076	MP 12.7	3	Sweep deck
MINERAL PARK BRIDGE	40077	16.02 E JCT SR 20	1	Repair abutment #1 armor.
			2	Patch potholes. Caused from scour of material behind abutment #1.
			3	Sweep gravel and debris off deck.
PARKER CREEK BRIDGE	40080	7.5 MI E OF SR-9	2	Vegetation: remove sapling trees at left upstream wingwall, see photos.
DAY CREEK	40081	9. E JCT SR 9	2	Replace missing nuts on guardrail left upstream approach rail.
			2	Repair the rusty rebar in the beams. Clean and patch.
			2	Repair failing deck patches.
			1	Dig out and repair both road approaches - appeared to be in the works during inspection.
			3	Remove debris from mid channel
LORETTA CREEK	40082	10. E JCT SR 9	2	Concrete deck: Sweep deck and clean drains.
			2	Remove BST overspray from the deck.
			3	Paint rail posts
CUMBERLAND CK	40083	11.5 E JCT SR 9	2	Paint rail posts
			1	Repair: right bank under bridge is scoured out 1 1/2 to 2 ft. under the abutment cap. Replace missing fill material under abutment with quarry spalls.
O'TOOLE CREEK BR.	40084	15. E JCT SR 9	M	Monitor right bank repair upstream of bridge. Large root wad cabled to riprap was installed in 9/2003.
			1	Repair left upstream abutment, channel protection. Monitor
			2	Replace bridge sign/ missing.
			3	Level both approaches to bridge. 2012 - approaches marked for patching prior to chip sealing
			1	Replace cabled root wad
			1	Huge group of Alders are being undercut just upstream of bridge. Monitor.
			2	Scour causing sloughing behind Abut #2. May be causing material loss and dips at the approaches.
			2	Rails need painting
MILL CREEK	40086	17. E JCT SR9	1	Remove woody debris from under bridge.
			2	Patch exposed rebar in the girders.
			2	Patch spalls in deck asphalt overlay.
			3	Sweep deck
			2	Fill scour hole at upstream end of Abut#1

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
PRESSENTIN CREEK	40088	18.5 E JCT SR9	2	Seal deck with a membrane.
			1	Paint rails and posts.
			3	Cut back vegetation at abut #1
LOWER FINNEY CREEK BR.	40089	19. E JCT SR 9	1	Remove woody debris from piers walls.
			M	Monitor channel migration: stream is unstable, and has switched rapidly from the R bank to the L bank. Consider installing river training devices. REPAIR.
			2	Pier Protection: repair slipped riprap armor on Piers 2 and 3.
DALLES BRIDGE	40090	1.5 S JCT SR 20	2	Replace poured joints over floor beams with a Dow Corning pourable joint or equivalent. George Schultz has been provided phone numbers of suppliers.
			1	Clean debris from lower truss panel points over piers. (Repair Priority changed to '1', 3/29/2010, GAS/TJN)
ILLABOT CREEK BRIDGE	40094	4.0 E JCT SR 530	1	Level right/east approach, road has settled. Patch spalls at bridge ends.
			3	Pothole on west end of bridge WB lane
JORDAN CREEK BRIDGE	40095	0.71 SW JCT CASC.	2	Repair riprap armor at the right abutment.
GOVERNMENT BR	40099	7.5 N SNO CO BDRY	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.(Repair re-written to focus on cracked welds and sleeper channels, 3/15/2010, GAS/TJN)
			2	Repair or replace the blocking and support for the north side metal bridge railing, in Span 2 between Panel Points L1 and L2.
BEAR CK-BAKER LK ROAD	40101	9.5 NE JCT SR 20	2	Dig out the approach road, repair and pave. Has settled on both ends, may have to place geotextile to slow down the migration of the fill below the abutments. Place gabions on the stream side of the right abutment.
			3	Large tree fallen upstream across channel...monitor for channel movement and backup
BEAR CK-LK SAMISH	40106	2.0 MI NW JCT I-5	1	Patch spall on beam #5 right end.
			3	Paint bridge rail posts
FRIDAY CREEK-ALGER	40109	0.25 E JCT I-5	2	Repair: Posts need painting
				Remove vegetation from around ends of bridge

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
FRIDAY CREEK-ALGER	40109	0.25 E JCT I-5		Replace damaged transition rail on SW section.
				Crack seal approaches, bst pulled apart at joint.
BURL NORTHERN OVERPASS	40111	0.2 North of Jct w/ Cook	2	Deck: patch spalls in the deck.
			1	Replace rotted or broken sway braces and tighten nuts/bolts. ·Bent #07 Loose middle bolt & nut on pile 2 and pile 3. ·Bent #08 Missing nut on lowest way brace. ·Bent #11 on pile 4 missing nut on sway brace. ·Bent #30 RED tagged the upper sway brace between pile 5 and the cap, 1/2" shell. ·Bent #30 RED tagged the lower sway brace on pile 3, rotten from pile to end. ·Bent #40 RED tagged the upper sway brace between pile 5 and the cap, rotted thru. ·Bent #62 RED tagged the lower sway brace on pile 1 west end brace is broken
			1	Deck Sofits: Wire brush/paint exposed rebar and patch spalls throughout bridge sofits.
			1	Pack Rust has formed/forming on steel stringers at the ends of all of the stringers causing section loss. In addition, pack rust has formed along the upper top leg of the channel on the western most stringer. Rust should be removed and painted as soon as possible. NOTE: BNSF Railroad will need to be contacted prior to any maintenance occurring in proximity of the railroad line!!!
			3	Monitor shims on temporary shoring - slight movement when struck: Bent #61 - NW pile Bent #67 east pile.
			2	Bridge Rail has been impacted at various areas of the bridge. Straighten and repair where needed
THOMAS CREEK BRIDGE	40113	1.4 N JCT COOK RD.	1	Replace rotten wood bridge rail post at southwest corner of the bridge.
			1	Remove and replace rotted abutment walls on both abutments.
SAMISH RIVER BRIDGE	40114	2.6 N JCT COOK RD.	3	Repair missing concrete baluster at NW corner of bridge. Recommend attaching additional rebar to top and bottom connection. Drill 5/8" diameter hole 6" deep for #4 rebar. Secure with epoxy resin. Lap splice #4 bars full height. (Rail designed with one #4 bar per post).

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
SAMISH RIVER BRIDGE			2	The south sliding joint is missing the top plate near the east curb line. There is approximately 5' of loose top plate adjacent to the missing section. Remove the loose section of top plate.
			M	Repair cope cracks at the following locations (lengths observed 4/14/10): Stringer 2A at FB 2: 1/2" crack. Stringer 7A at FB 6: 1/4" crack. Recommended repair procedure: Locate crack termination by dye penetrant testing. Grind out crack to 3/4" minimum diameter (grind min 1/8" beyond identified tip); remove all sharp corners in vicinity of repair; polish exposed surfaces; paint.
			1	Wash sand and debris from bottom chord. Bottom chord is not visible beneath sand piles at panel points.
			1	Reset or replace rocker bearings at Pier 3. Joint is closed and spalling the header.
			0	Feather patch south approach.
FRIDAY CREEK BRIDGE	40115	4.3 N JCT COOK RD.	2	Unplug drains
			2	Scrub and patch exposed rebar in deck.
SILVER CR. BRIDGE	40117	0.3 MI E OF OLD 99	2	Remove small trees underneath and from around bridge.
			3	Repair 3 guardrail sections damaged from impact
GRANDY CREEK WEST FORK	40120	2. NE JCT SR 20	2	Repair: paint is peeling on approach rails.
TEX PIPELINE BRIDGE	40126	1.6 N JCT SR 20	2	Curb cracked and spalling at north/west corner.
MUDDY CREEK BRIDGE	40129	0.3 M W HAMILTON	1	Repair the leveling patches on girder #4.
			3	Clear vegetation growing in sandbar along bridge.
RED CABIN CREEKBRIDGE	40130	1.0 W HAMILTON	2	Repair: left bridge seat approach road has a D spall in pavement 1' x 9".
			3	Brush cut vegetation around Northwest abutment
JONES CREEK BRIDGE	40132	2.3 W HAMILTON	2	Approaches: Both approaches have pot holes and need repair.
			3	Pressure wash concrete bridge rails
GRANDY CREEK EAST	40140	4. NE JCT SR 20	1	Clean and patch spalls/popouts and rusty rebar.
			1	Replace upstream top rail - section loss and corrosion.
			3	The right (south) abutment appears to be settling. Monitor
BAYVIEW STATE PARK	40141	3.5 N JCT SR 20	3	Repair: Patch cracks in ends of beams.

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
			M	Rails: upgrade to meet current standards.
			2	Paint bridge rails and posts.
CAMPBELL LAKE OUTLET	40142	.39 miles W of SR 20	2	Clean and patch the exposed rebar in the soffit.
			M	S.S. screen upstream of bridge
			1	Pier caps 1 and 2 both need replacing. 3" of crushing on existing.
CHILDS CRK BRIDGE	40151	.1 S JCT SR 20	3	Rotten block out posts #'s 1 & 5 on west side, 6 & 7 on east side.
			3	Brush cut needed in NE corner.
ANACORTES FERRY DOCK	40152	ANACORTES	M	MONITOR: Broken bars in the steel grid deck near the apron. Grid deck had 36 bent or broken members near apron, (Photo #29). Repair Updated 10/8/2008 for additional damaged grid bars.
			1	REPAIR: Grease the counterweight wire ropes on regular scheduled maintenance per the manufacturer's recommendations. 2012 findings: Lift cables and counterweight cables are dry.
			2	Replace missing 3 wall sections between 3 pile frames in the left breakwater wall offshore end. Shore up the offshore left outer 9 pile timber dolphin.
ANACORTES FERRY DOCK	40152	ANACORTES	1	Girder 1G has cracks and delamination in the bottom chord on most of the shore side half. Girders 1 H and 1 I (eastern most girders) also have some narrow cracking. Two options: Continue with the bulb T replacement of the three easternmost girders. Or, on Girder 1 G -Arrest the corrosion in the pre-stressing strands in the bottom flanges of the "bulb Tee" concrete girders. Remove delaminated concrete, clean rust off strands, paint with an epoxy base paint, patch concrete, carbon fiber wrap bottom flange. For Girders 1 H and 11, epoxy inject the bottom flange narrow cracks.
			1	Right side live load hanger pin bracket has a corrosion hole in the shore 10/3/2012 side channel, 1" x 3". Replace channel and paint. The Left Outer Dolphin is no longer performing as designed. It was in contact with the breakwater wall and allowing damage to the breakwater wall. It should be repaired or replaced.

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
ANACORTES FERRY DOCK	40152	ANACORTES	3	Lift motor gear box leaks oil. Repair leaks.
			2	There is no hand rail on the apron and the lift span. These become difficult to navigate for some of the less mobile pedestrians when either lift span or apron are placed at low tide.
			2	Transfer span framing has scattered rust blooms in the floor beams, stringer clip angles, and bottom diagonals. Clean to bright steel, prime, and spot paint.
GUEMES ISLAND FERRY DOCK	40153	GUEMES ISLAND	2	Replace upper clevis pin on right hoist platform. This pin has insufficient grip length causing threads in bearing.
			2	Replace existing nuts and washers on Pier 2 Fixed Bearings, clean Anchor Bolt Threads and torque to specifications.
			2	Grease counterweight cables and hoist cables.
			N	Update WSBIS Fields 74-53 & 74-63 (ADT)
			2	Unplug drain holes in pit area of counterweights.
			M	Monitor deformed gusset holes for apron lift beam hydraulic ram clevis pin.
			1	Replace the lower clevis bolt attachment to the hoisting block on the right girder. This bolt is yielding.
			2	Perform a Scour Evaluation NBI field 680 code "T" is no longer acceptable.
GUEMES ISLAND FERRY DOCK	40153	GUEMES ISLAND	1	Apron piano hinge type at end of transfer span has 1/2" of slop due to fretting. Per contract plans, double extra pipe inner diameter is 1.771", rod is 1.625", and this should have only a 1/8" gap. These need to be greased on a regular basis to reduce section loss.
			1	Apron lips have worn through since photo #33 was taken in 2006. They are rusted through, knife edged and bent. Replace Apron lips.
			1	Left live load hanger is bent inboard. Straighten left live load hanger.
			1	Grease the upper and lower live load hanger pins.
			2	There is no hand rail on the apron and the lift span. These become difficult to navigate for some of the less mobile pedestrians when either lift span or apron are placed at low tide

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
GUEMES ISLAND FERRY DOCK			3	Lift motor gear box leaks oil. Repair leaks.
			1	Clean and spot paint all steel areas which have corrosion.
CARPENTER CRK. BRIDGE	40156	0.75 S JCT SR534	2	Replace block outs with 6" blocks on rails
BENSON RIDGE LN	40157	1.2 E I-5	2	Nuts are loose again on bolts that hold deck in place. These were recently tightened in 2010 so perhaps need to look at replacing nuts with locking nuts.
COAL CREEK BRIDGE	40159	00.1 MI E SIMS ROAD	2	Replace all rail posts that are damaged
			2	Repair spalls upstream side of bridge
			B	Brush cut around abutments
RED CREEK BRIDGE	40163	2 miles North of S.R. 20	M	Water flowing from abutment #2, below G5
LOCAL AGENCY BRIDGES				
RIVERSIDE BRIDGE	000000001	0.7 N JCT SR 538	0	A utility bracket on the north side of Pier 5, supporting the 24" waterline, has slipped.
			0	Install access cover to luminaire in Span 4.
			1	Shear key at Pier 5 was not built as designed. Provide full support to Girder H at Pier 5.
			1	Remove timber debris accumulating around piers in water.
			2	Remove transient living area from Pier 2.
HOAG STEWARD OVERPASS	000000002	Riverside Dr Jct. Hoag St	1	Clean out debris from Joints between bridge and slabs and replace joint fillers
			2	Pressure wash moss off sidewalks.
ELEANOR LANE A	000000003	0.1 E Jct Old Highway 99	1	Pedestrian Rail on south side of bridge is damage and has come lose at the base due to broken welds in two places.
EAGLEMONT DRIVE	000000006	0.1 S Jct Beaver Pond N	M	Monitor the shift of stream toward the South footing (Photo SI-5).
			2	Repair the settlement at South East corner at Roadway sidewalk (Photo SI-6)
			M	Monitor the crushing and bulging of the gabions. (Photo SI-20)
			2	Repair uplifting of the sidewalk panels and spalls in curbing. (Photo SI-25)
J OFF BEAVER POND DR. S.	000000007	Off Beaver Pond Dr. S.	2	Clean material from culvert
			2	Trim vegetation back from inlet and outlet to allow for conveyance and inspection.
BEAVER POND DR. SOUTH	000000008	0.5 N Jct. Eaglemont Dr	3	Tighten Utility Hangers on black sewer pipe and others.
BEAVER POND DR NORTH A	000000009	0.4 N Jct. Eaglemont Dr	2	Crack seal at deck/approach slab joints.

BRIDGE NAME	BRIDGE NUMBER	REF-LOCATION	PRIORITY CODE	REPAIR DESCRIPTION
BEAVER POND DR NORTH A			2	Crack seal at approach slabs.
NORTH BURLINGTON BLVD	BURLINN-2	1.02 MI SO OF COOK RD	2	Repair: Approach rail damage, rail posts tighten loose bolts that secure posts to box culvert on underside.
			2	Repair: Guardrail terminal on the southeast corner of bridge appears to have been hit.
GOLDENROD BRIDGE	BURLINN-3	.3 N. of W. MCCORQUEDALE	1	Repair Guardrail Terminal South east corner of rail, appears to have been hit.
			2	Sweep deck and clean compression seals of debris
BAKER RIVER	CONCRETE1	0.1 N MAIN ST	M	Monitor scour at Pier 2 which is undermined at the NE corner. Minor change in 2013
			0	Install timber rail board at the SE approach.
			2	Remove ivy from pier wall at Pier 2.

GLOSSARY OF BRIDGE TERMINOLOGY

Abutment—a substructure supporting the end of a single span, or the extreme end of a multi-span super-structure 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 sewing 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.

Fracture critical member—a member in tension or with a tension element whose failure would probably cause a portion of or the entire bridge to collapse.

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.

Pinpile—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 resisting 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 less than 20 feet, have a single span and are typically supported by timber piles or shallow concrete footings.

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.

Sufficiency rating—the sufficiency rating is a numeric value from 100 (a bridge in new condition) to 0 (a bridge incapable of carrying traffic). The sufficiency rating is the summation of four calculated values: Structural Adequacy and Safety, Serviceability and Functional Obsolescence, Essentiality for Public Use, and Special Reductions.

Substructure—the abutment, piers, grillage, or other structure built to support the span or spans of a bridge 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.

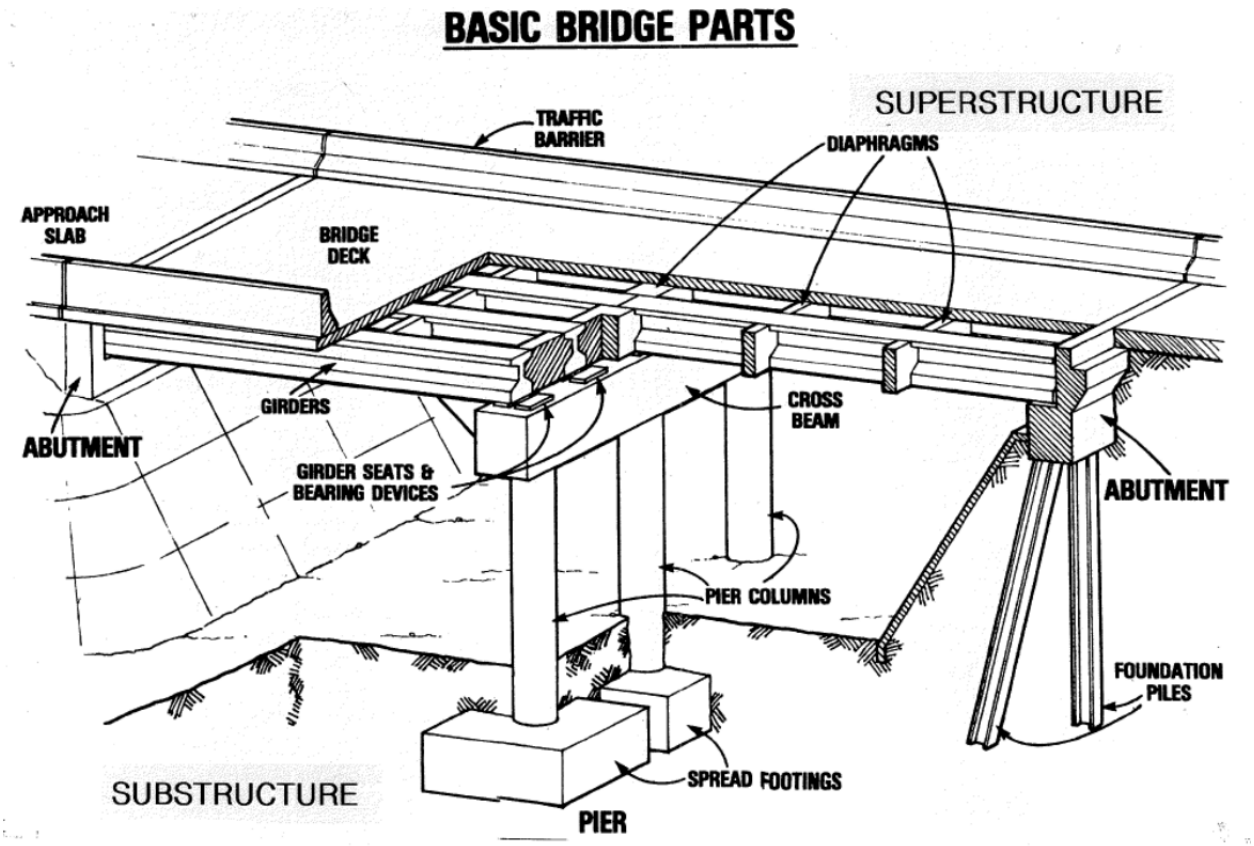
Tension—type of stress involving an action which pulls apart.

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.

Wheelrail—a timber curb fastened directly to the deck, most commonly found on all-timber bridges.

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

ELEMENTS OF A BRIDGE



2013 BRIDGE INVENTORY

109 Total Skagit County Bridges Owned

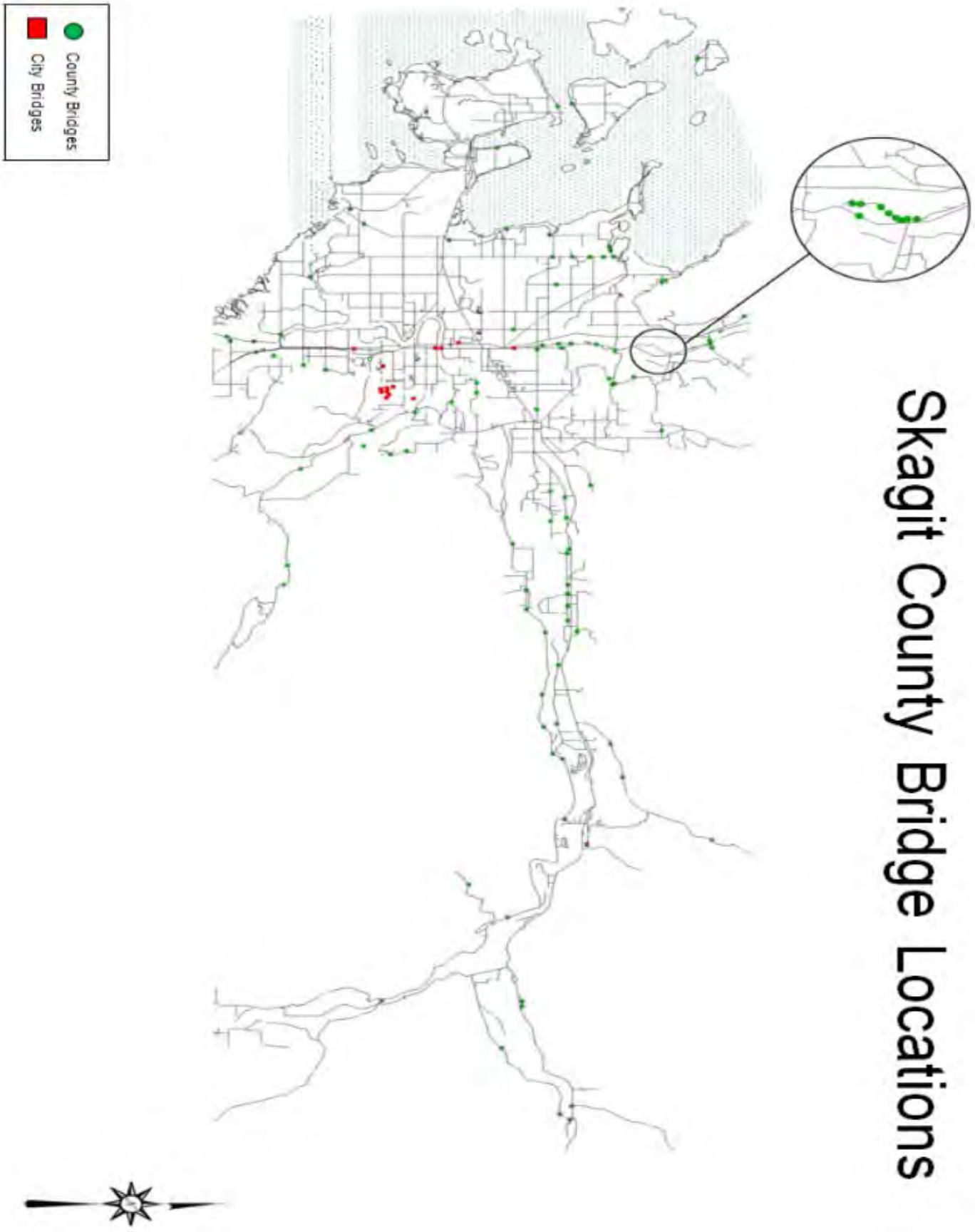
BRIDGE NUMBER	BRIDGE NAME	STRUCTURE ID#	ROADWAY	BRIDGE LENGTH	BRIDGE WIDTH	MAIN MATERIAL	AVERAGE DAILY VOLUME	YEAR BUILT	SUFFICIENCY RATING
40111	BURL NORTHERN OVERPASS	08252700	OLD HWY 99 NORTH	1182	29	Steel	5700	1936	**3.00 (SD)**
40037	NORTH FORK BRIDGE	08119200	BEST ROAD	726	28	Steel	3915	1959	**38.81 (SD)**
40152	ANACORTES FERRY DOCK	08151100	GUEMES ISLAND ROAD	205	21.6	Steel	649	1925	**40.62 (FO)**
40153	GUEMES ISLAND FERRY DOCK	08152100	GUEMES ISLAND ROAD	165	21.6	Steel	600	1981	**47.12 (FO)**
40093	UPPER FINNEY CREEK BR.	08050200	FINNEY TIMBER ACC.	217	18.3	Concrete	23	1952	**48.55 (F0)**
40070	SKAGIT RIVER MARBLEMOUNT	08228800	CASCADE RIVER RD	662	22	Steel	585	1930	**55.65 (FO)**
40142	CAMPBELL LAKE OUTLET	08153100	S. CAMPBELL LK RD	19	22	Concrete	58	1962	56.32
40039	RAINBOW BRIDGE	08484500	IRR PIONEER PARKWA	797	30	Steel	4967	1957	**56.42 (FO)**
40060	BURMASTER ROAD	08204900	BURMASTER ROAD	26	26	Concrete	265	1958	57.36
40063	CHILDS CREEK LYMAN HWY	08241500	LYMAN-HAMILTON HWY	32	28	Concrete	519	1948	57.89
40031	PULVER ROAD @ JOE LEARY	08336400	PULVER ROAD	39	26	Concrete	836	1955	58.86
40131	MANNSER CREEK BRIDGE	08209200	LYMAN HAMILTON HWY	52	30	Concrete	323	1954	**59.81 (FO)**
40021	FRIDAY CREEK 4TH BRIDGE	08408200	FRIDAY CREEK ROAD	61	22	Concrete	214	1961	59.88
40020	FRIDAY CREEK 3RD BRIDGE	08408400	FRIDAY CREEK ROAD	61	22	Concrete	178	1961	59.89
40115	FRIDAY CREEK BRIDGE	08425500	OLD HWY 99 NORTH	122	30	Concrete	2593	1956	**60.88 (SD)**
40018	FRIDAY CREEK IST BRIDGE	08409700	FRIDAY CREEK ROAD	61	22	Concrete	178	1962	60.9
40156	CARPENTER CRK. BRIDGE	08398500	CEDARDALE RD	83	38	Timber	622	1934	61.6
40055	SAMISH RIVER PRAIRIE RD	08342200	PRAIRIE RD	75	27.3	Concrete	844	1956	61.88
40113	THOMAS CREEK BRIDGE	08239200	BURL ALGER ROAD	52	32	Timber	5746	1934	**62.85 (SD)**
40114	SAMISH RIVER BRIDGE	08050100	OLD HWY 99 NORTH	385	25.8	Steel	3894	1934	**63.18 (SD)**
40001	NOOKACHAMPS BIG LAKE	08331000	LAKE VIEW BLVD	77	31	Concrete	645	1954	63.89
40151	CHILDS CRK BRIDGE	08229200	NICHOLSON RD	29	17	Concrete	33	1979	64.23
40090	DALLES BRIDGE	08203000	CONC SAUK VALLEY R	506	32	Steel	2365	1952	**65.73 (FO)**
40084	O'TOOLE CREEK BR.	08291000	SO SKAGIT HWY	66	26	Concrete	521	1959	66.11
40011	GREEN RD @ THOMAS	08220400	GREEN ROAD	51	26	Concrete	100	1958	66.23

BRIDGE NUMBER	BRIDGE NAME	STRUCTURE ID#	ROADWAY	BRIDGE LENGTH	BRIDGE WIDTH	MAIN MATERIAL	AVERAGE DAILY VOLUME	YEAR BUILT	SUFFICIENCY RATING
40008	SOUTH FORK BRIDGE	08236400	FIR ISLAND ROAD	908	34.7	Steel	4385	1972	67.96
40042	DRAINAGE DITCH MILLTOWN	08415700	MILLTOWN RD	50	26.2	Concrete	352	1957	67.98
40004	SLOUGH FRANCIS ROAD	08004200	FRANCIS ROAD	50	26	Concrete	3616	1958	**68.68 (FO)**
40072	MONOGRAM CK CASCADE RD	08068500	CASCADE RIVER ROAD	22	28	Concrete	135	1945	69.37
40099	GOVERNMENT BR	08414100	CONC SAUK VALLEY R	304	16	Steel	135	1930	**69.37 (FO)**
40130	RED CABIN CREEKBRIDGE	08191100	LYMAN HAMILTON HWY	22	30	Concrete	260	1954	69.48
40023	FRIDAY CREEK 6TH BRIDGE	08270100	FRIDAY CREEK ROAD	61	26	Concrete	166	1963	69.91
40132	JONES CREEK BRIDGE	08224100	LYMAN HAMILTON HWY	52	30	Concrete	260	1955	70.48
40101	BEAR CK-BAKER LK ROAD	08116400	BAKER LAKE ROAD	85	28	Concrete	486	1966	70.76
40024	FRIDAY CREEK 7TH BRIDGE	08269300	FRIDAY CREEK ROAD	61	26	Concrete	214	1964	70.9
40082	LORETTA CREEK	08304400	SO SKAGIT HWY	85	26	Concrete	951	1961	71.48
40047	PILCHUCK CREEK CAVANAUGH	08226900	LK CAVANAUGH ROAD	56	30	Concrete	428	1970	71.96
40109	FRIDAY CREEK-ALGER	08058200	ALGER-LK SAMISH RD	53	28	Concrete	4925	1965	**73.86 (FO)**
40077	MINERAL PARK BRIDGE	08053900	CASCADE RIVER RD	71	20	Concrete	92	1986	75.35
40043	CARPENTER CK CONWAY HILL	08265500	CONWAY HILL ROAD	58	16	Concrete	117	1980	**75.77 (FO)**
40076	HARD CREEK BRIDGE	08631300	CASCADE RIVER RD	46	24.2	Concrete	92	1997	76.17
40003	FRANCIS NOOKACHAMPS	08019100	FRANCIS ROAD	130	30	Concrete	3613	1979	76.51
40116	SILVER CREEK BRIDGE	08069100	OLD HWY 99 NORTH	38	30	Concrete	1862	1934	76.79
40038	SULLIVAN SLOUGH LACONNER	08417000	LACONNER WHITNEY R	68	28	Concrete	5204	1962	**76.92 (FO)**
40081	DAY CREEK	08385100	SO SKAGIT HWY.	160	26	Concrete	951	1961	78.22
40036	FARM TO MARKET RD	0003825A	FARM TO MARKET RD.	72	30	Concrete	1900	1950	78.37
40083	CUMBERLAND CK	08316700	SO SKAGIT HWY	50	26	Concrete	788	1961	78.98
40028	SAMISH RIVER NEAR EDISON	08037600	BAYVIEW EDISON RD	223	30.2	Concrete	970	1965	79.28
40140	GRANDY CREEK EAST	08424500	BAKER LAKE ROAD	41	30	Concrete	486	1968	80.56
40026	FARM-TO-MARKET	0003939B	FARM TO MARKET RD.	32	30	Concrete	1900	1951	80.66
40141	BAYVIEW STATE PARK	08410000	BAYVIEW EDISON RD	62	31	Concrete	655	1969	**80.74 (FO)**
40088	PRESSENTIN CREEK	08165500	SO SKAGIT HWY	85	29	Concrete	521	1966	80.98
40106	BEAR CK-LK SAMISH	07971600	ALGER-LK SAMISH RD	50	26	Concrete	328	1959	81.42
40034	SAMISH R	0007070A	FARM TO MARKET RD.	158	31.8	Concrete	963	1963	81.47

BRIDGE NUMBER	BRIDGE NAME	STRUCTURE ID#	ROADWAY	BRIDGE LENGTH	BRIDGE WIDTH	MAIN MATERIAL	AVERAGE DAILY VOLUME	YEAR BUILT	SUFFICIENCY RATING
40052	TAYLOR ROAD WALKER CREEK	08402000	TAYLOR ROAD	42	18	Concrete	83	1985	**81.6 (FO)**
40002	SWAN ROAD BRIDGE	08111100	SWAN ROAD	126	30	Concrete	879	1976	83.67
40046	BEAR CREEK CAVANAUGH	08226300	LK CAVANAUGH ROAD	51	30	Concrete	517	1967	84.23
40017	PRAIRIE RD FRIDAY CK	08024500	PRAIRIE ROAD	78	30	Concrete	2047	1975	85.16
40032	FARM-TO-MARKET	0003825C	FARM TO MARKET RD.	21	30	Concrete	1028	1950	85.66
40033	FARM-TO-MARKET	08631000	FARM TO MARKET RD	60	30.3	Concrete	1028	1950	85.66
40074	MARBLE CREEK BRIDGE	08083900	CASCADE RIVER RD	120	28.3	Concrete	252	1983	86.21
40065	SUTTER CREEK BRIDGE	08832900	CONRAD ROAD	73	16	Concrete	50	2011	86.24
40027	SAMISH RIVER SLOUGH	08037700	BAYVIEW EDISON RD	38	28.6	Concrete	888	1965	86.25
40029	BAY VIEW EDISON	08240900	BAYVIEW EDISON RD	101	32	Concrete	475	1955	86.62
40126	TEX PIPELINE BRIDGE	08436600	MARCH POINT ROAD	44	30	Concrete	1313	1960	86.68
40157	BENSON RIDGE LN	08015200	BENSON RIDGE LANE	52	31.1	Timber	50	1983	86.97
40086	MILL CREEK	08305200	SO SKAGIT HWY	41	30	Concrete	447	1969	**87.01 (FO)**
40066	MUDDY CRK-HAMILTON CEM	08128300	HAM-CEMETARY ROAD	50	28	Concrete	164	1965	87.72
40161	FLINN ROAD BRIDGE	08801300	FLINN ROAD	48	20.1	Concrete	15	2006	87.85
40016	SAMISH RIVER PRAIRIE RD	08451400	PRAIRIE ROAD	104	30	Concrete	1414	1975	88.38
40120	GRANDY CREEK WEST FORK	07985400	BAKER LAKE RD	61	30	Concrete	486	1968	88.54
40015	SAMISH R PRAIRIE ROAD	08018200	PRAIRIE ROAD	83	30	Concrete	1414	1974	88.54
40075	SIBLEY CREEK BRIDGE	08631200	CASCADE RIVER RD	23	30	Concrete	92	1997	88.83
40089	LOWER FINNEY CREEK BR.	08165700	SO SKAGIT HWY	120	28	Steel	521	1954	89.26
40035	BAY VIEW-EDISON (INDIAN)	08603000	BAYVIEW EDISON RD	71	36.8	Concrete	1069	1992	89.42
40061	WISEMAN CRK MINKLER ROAD	08177700	MINKLER ROAD	40	30	Concrete	945	1967	89.72
40062	BLACK SLOUGH BRIDGE	08169600	UTOPIA ROAD	141	30	Concrete	106	1984	**89.96 (FO)**
40117	SILVER CR. BRIDGE	08603100	ALGER CAIN LAKE RD	102	36.8	Concrete	4710	1992	90.31
40067	ALDER CREEK BRIDGE	08234500	CAPE HORN ROAD	41	30	Concrete	146	1972	90.64
40073	LOOKOUT CRK BRIDGE	08067900	CASCADE RIVER ROAD	191	30	Steel	120	1981	90.88
40041	E PETER JOHNSON RD	08079100	E PETER JOHNSON RD	54	26.3	Concrete	41	1981	92.62
40163	RED CREEK BRIDGE	08801200	HELMICK ROAD	150	39	Concrete	609	2007	93.38
40012	BRICKYARD CREEK	08655400	COOK ROAD	54	56.9	Concrete	12462	2000	93.57

BRIDGE NUMBER	BRIDGE NAME	STRUCTURE ID#	ROADWAY	BRIDGE LENGTH	BRIDGE WIDTH	MAIN MATERIAL	AVERAGE DAILY VOLUME	YEAR BUILT	SUFFICIENCY RATING
40005	OTTER POND CREEK CULVERT	08837400	NOOKACHAMPS HILLS	30	0	Steel	150	2008	93.6
40009	SLOUGH BRIDGE	08655300	COOK ROAD	38	43.1	Concrete	12817	2000	94.14
40112	NEFFS CROSSING	08801100	OLD HWY 99	108	44	Concrete	4377	2006	94.35
40045	FISHERS SLOUGH	0013135A	PIONEER HWY	114	38.7	Concrete	7157	1987	94.56
40094	ILLABOT CREEK BRIDGE	08467200	ROCKPORT CASCADE	93	31	Concrete	203	1970	94.65
40129	MUDDY CREEK BRIDGE	08631100	LYMAN-HAMILTON HWY	65	33.3	Concrete	201	1955	94.88
40080	PARKER CREEK BRIDGE	08630900	SO SKAGIT HWY	26	0	Concrete	1223	1996	95.09
40044	DRAINAGE DITCH	0013135B	PIONEER HWY	81	38.5	Concrete	7345	1987	95.18
40068	GRANDY CRK.CAPEHORN ROAD	08192000	CAPE HORN ROAD	51	30	Concrete	296	1967	95.36
40013	F&S GRADE SAMISH RIVER	08009600	F&S GRADE ROAD	102	30	Concrete	532	1974	95.4
40019	FRIDAY CREEK 2ND BR	08409300	FRIDAY CREEK ROAD	74	30	Concrete	178	1979	95.47
40030	THOMAS ROAD (SAMISH R)	08189000	THOMAS ROAD	91	30	Concrete	220	1973	96.16
40054	NOOKACHAMPS KNAPP RD	08306800	KNAPP ROAD	73	30	Concrete	357	1977	96.87
40092	MILLER CREEK	08655200	CONCRETE-SAUK VLY	25	0	Concrete	878	1999	97.43
40025	FRIDAY CREEK 8TH BR	08269100	FRIDAY CREEK ROAD	59	30	Concrete	178	1977	97.47
40014	SAMISH R GRIPP & PRAIRIE	07995800	GRIPP ROAD	84	30	Concrete	547	1976	97.48
40051	NOOKACHAMPS BEAVER LK RD	08256400	BEAVER LK RD 0511	73	31	Concrete	157	1977	97.63
40159	COAL CREEK BRIDGE	08191000	MINKLER ROAD 9350	29	38	Concrete	995	1984	97.76
40071	CASCADE RIVER BRIDGE	08213600	ROCKPORT CASCADE	180	30	Concrete	200	1967	97.91
40022	FRIDAY CREEK 5TH BR.	08395300	FRIDAY CREEK ROAD	69	30	Concrete	214	1977	98.11
40095	JORDAN CREEK BRIDGE	08234400	ROCKPORT CASCADE	56	30	Concrete	203	1969	98.23
40069	SWIFT CREEK CONRAD RD	08403900	CONRAD ROAD	38	26	Concrete	91	1981	98.96
40048	CULVERT AT LAKE CREEK	08641500	LAKE CAVANAVGH RD	21	34	Steel	428	1998	99.18
40164	S LAVENTURE RD	08856200	S LAVENTURE RD	80	64.7	Concrete	3500	2013	99.51
40162	MCELORY SLOUGH CULVERTS	08801400	BLANCHARD RD.	28	40	Concrete	40	2007	99.99
40160	SINCLAIR ISLAND DOCK	08181100	JACKSON RD 19900	174	5	Concrete	0	1929	0.00

CITY BRIDGES									
BRIDGE NUMBER	**BRIDGE NAME**	**STRUCTURE ID#**	**ROADWAY**	**BRIDGE LENGTH**	**BRIDGE WIDTH**	**MAIN MATERIAL**	**AVERAGE DAILY VOLUME**	**YEAR BUILT**	**SUFFICIENCY RATING**
BURLINGTON									
BURLINN-2	NORTH BURLINGTON BLVD	08641700	N BURLINGTON BLVD	26	40	Concrete	4119	1970	97.02
BURLINN-3	GOLDENROD BRIDGE	08814800	SOUTH GOLDENROD	116	48.8	Concrete	4338	2005	98.78
CONCRETE									
CONCRETE1	BAKER RIVER	08513500	OLD SR 20	269	26.7	Concrete	120	1916	20.67
MOUNT VERNON									
000000010	OLYMPIC LANE	08760000	OLYMPIC LANE	67	24	Concrete	300	2004	80.96
00000007	J OFF BEAVER POND DR. S.	08759500	J STREET	32	32	Aluminum/ Other	300	2006	81.05
00000003	ELEANOR LANE A	08759400	ELEANOR LANE	32	40	Concrete	300	2006	83.7
00000002	HOAG STEWARD OVERPASS	08759300	RIVERSIDE DR	60	74	Concrete	35303	2003	**86.21 (FO)**
00000001	RIVERSIDE BRIDGE	08725700	RIVERSIDE DRIVE	850	71.6	Concrete	35303	2004	89.63
00000006	EAGLEMONT DRIVE	08759000	ENGLEMONT DR	20	0	Steel	300	1995	92.97
00000004	SKAGIT HIGHLANDS PARKWAY	08758900	SKAGIT HIGHLANDS P	37	0	Concrete	300	2003	96.96
00000008	BEAVER POND DR SOUTH	08759100	BEAVER POND DR S	29	36	Concrete	300	2004	97.22
00000009	BEAVER POND DR NORTH B	08759200	BEAVER POND DR N	54	44	Concrete	300	2002	97.22
00000005	LANDMARK DRIVE	08759600	LANDMARK DR	51	44	Concrete	300	1994	97.22
00000011	BEAVER POND DR NORTH A	08759700	BEAVER POND DR N	42	44	Concrete	300	2001	97.97
MV-12	LAVENTURE RD CULVERT	08848200	LAVENTURE ROAD	30	62.5	Concrete	4973	2010	99.53



Skagit County Bridge Locations