

CONSTRUCTION COST ESTIMATE

SNOHOMISH COUNTY PUBLIC WORKS

PROJECT: **GRANITE FALLS BRIDGE #102 REPLACEMENT**

RC # 1622

UPI#

10-0011-1

ITEM NO.	WSDOT ITEM NO.	ITEM	QUANTITY	UNIT	COST/UNIT	COST	
PREPARATION						SUBTOTAL	\$2,662,667.09
1	0001	MOBILIZATION	1	L.S.	\$1,252,083.09	\$1,252,083.09	
2	0025	CLEARING AND GRUBBING	2.8	ACRE	\$12,000.00	\$33,360.00	
3	0049	REMOVING DRAINAGE STRUCTURE	2	EACH	\$500.00	\$1,000.00	
4	0050	REMOVAL OF STRUCTURE AND OBSTRUCTIONS	1	L.S.	\$20,000.00	\$20,000.00	
5	0071	REMOVING EXISTING BRIDGE	1	L.S.	\$1,300,000.00	\$1,300,000.00	
6	0170	REMOVING GUARDRAIL	754	L.F.	\$6.00	\$4,524.00	
7	0187	REMOVING PAINT LINE	1,700	L.F.	\$1.00	\$1,700.00	
8	-----	SELECTIVE CLEARING - ROCK BOLTS	1	L.S.	\$50,000.00	\$50,000.00	
GRADING						SUBTOTAL	\$1,057,636.00
9	0300	ROADWAY EXCAVATION	10,000	C.Y.	\$35.00	\$350,000.00	
10	0431	GRAVEL BORROW INCL. HAUL	18,487	TON	\$28.00	\$517,636.00	
11	-----	ACCESS EXCAVATION	1,500	C.Y.	\$60.00	\$90,000.00	
12	-----	WORK ACCESS	1	L.S.	\$100,000.00	\$100,000.00	
STORM SEWER						SUBTOTAL	\$70,420.00
13	1180	SCHEDULE A CULV. PIPE 12 IN. DIAM.	20	L.F.	\$45.00	\$900.00	
14	3091	CATCH BASIN TYPE 1	13	EACH	\$1,100.00	\$14,300.00	
15	3105	CATCH BASIN TYPE 2 48 IN. DIAM.	3	EACH	\$2,000.00	\$6,000.00	
16	3151	TESTING STORM SEWER PIPE	1,070	L.F.	\$6.00	\$6,420.00	
17	3541	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	1,070	L.F.	\$40.00	\$42,800.00	
STRUCTURE						SUBTOTAL	\$7,056,778.92
18	4013	SHORING OR EXTRA EXCAVATION CL. A	1	L.S.	\$3,700.00	\$3,700.00	
19	4025	GRAVEL BACKFILL FOR WALL	120	C.Y.	\$40.00	\$4,800.00	
20	4148	EPOXY-COATED ST. REINF. BAR FOR BRIDGE	300	LB.	\$1.70	\$510.00	
21	4149	ST. REINF. BAR FOR BRIDGE	211,000	LB.	\$1.25	\$263,750.00	
22	4300	SUPERSTRUCTURE	1	L.S.	\$3,452,600.00	\$3,452,600.00	
23	4322	CONC. CLASS 4000 FOR BRIDGE	720	C.Y.	\$600.00	\$432,000.00	
24	4468	CLEANING AND PAINTING	1	L.S.	\$309,211.52	\$309,211.52	
25	5656	BRIDGE APPROACH SLAB	380	S.Y.	\$250.00	\$95,000.00	
26	7169	STRUCTURAL EARTH WALL	7,100	S.F.	\$40.00	\$284,000.00	
27	-----	SOLDIER PILE WALL	7,400	S.F.	\$150.00	\$1,110,000.00	
28	-----	STRUCTURE EXCAVATION CLASS A INCL. HAUL (ROCK)	1,240	C.Y.	\$150.00	\$186,000.00	
29	-----	STRUCTURE EXCAVATION CLASS A INCL. HAUL (SOIL)	90	C.Y.	\$35.00	\$3,150.00	
30	-----	TXDOT C412 BARRIER	140	L.F.	\$160.00	\$22,400.00	
31	-----	TEMPORARY HOLD-DOWN SYSTEM	1	L.S.	\$20,000.00	\$20,000.00	
32	-----	METALIZING	1	L.S.	\$869,657.40	\$869,657.40	
SURFACING						SUBTOTAL	\$121,000.00
33	5100	CRUSHED SURFACING BASE COURSE	5,500	TON	\$22.00	\$121,000.00	
HOT MIX ASPHALT						SUBTOTAL	\$306,000.00
34	5711	PLANING BITUMINOUS PAVEMENT	200	S.Y.	\$10.00	\$2,000.00	
35	5767	HMA CL. 1/2 IN. PG	3,800	TON	\$80.00	\$304,000.00	
EROSION CONTROL AND ROADSIDE RESTORATION						SUBTOTAL	\$429,420.00
36	6373	SILT FENCE	1,900	L.F.	\$5.00	\$9,500.00	
37	6403	ESC LEAD	450	DAY	\$200.00	\$90,000.00	
38	6409	TOPSOIL TYPE C	1.8	ACRE	\$37,000.00	\$65,490.00	
39	6414	SEEDING, FERTILIZING, AND MULCHING	1.8	ACRE	\$4,000.00	\$7,080.00	
40	6488	EROSION CONTROL AND WATER POLLUTION PREVENTION	1	L.S.	\$250,000.00	\$250,000.00	
41	6630	HIGH VISIBILITY FENCE	1,050	L.F.	\$7.00	\$7,350.00	
TRAFFIC						SUBTOTAL	\$635,042.00
42	6719	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	3	EACH	\$5,000.00	\$15,000.00	
43	6727	EXTRUDED CURB	489	L.F.	\$18.00	\$8,802.00	
44	6757	BEAM GUARDRAIL TYPE 31	943	L.F.	\$105.00	\$99,015.00	

ITEM NO.	WSDOT ITEM NO.	ITEM	QUANTITY	UNIT		COST/UNIT	COST
45	6760	BEAM GUARDRAIL TRANSITION SECTION TYPE	1	EACH		\$5,500.00	\$5,500.00
46	6766	BEAM GUARDRAIL ANCHOR TYPE 10	4	EACH		\$900.00	\$3,600.00
47	6781	TEMPORARY BARRIER	1,500	L.F.		\$25.00	\$37,500.00
48	6806	PAINT LINE	5,100	L.F.		\$2.00	\$10,200.00
49	6884	RAISED PAVEMENT MARKER TYPE 2	0.85	HUND		\$500.00	\$425.00
50	6890	PERMANENT SIGNING	1	L.S.		\$10,000.00	\$10,000.00
51	6904	ILLUMINATION SYSTEM	1	L.S.		\$35,000.00	\$35,000.00
52	6971	PROJECT TEMPORARY TRAFFIC CONTROL	1	L.S.		\$200,000.00	\$200,000.00
53	6974	TRAFFIC CONTROL SUPERVISOR	1	L.S.		\$120,000.00	\$120,000.00
54	-----	SEW WALL TRAFFIC BARRIER	300	L.F.		\$300.00	\$90,000.00
		OTHER ITEMS				SUBTOTAL	\$1,433,950.00
55	7000	SCHEDULE UPDATE	12	EACH		\$1,000.00	\$12,000.00
56	7003	TYPE B PROGRESS SCHEDULE	1	L.S.		\$10,000.00	\$10,000.00
57	7006	STRUCTURE EXCAVATION CLASS B INCL. HAUL	2,000	C.Y.		\$50.00	\$100,000.00
58	7008	SHORING OR EXTRA EXCAVATION CLASS B	400	S.F.		\$35.00	\$14,000.00
59	7037	STRUCTURE SURVEYING	1	L.S.		\$40,000.00	\$40,000.00
60	7038	ROADWAY SURVEYING	1	L.S.		\$40,000.00	\$40,000.00
61	7041	BOLLARD TYPE	4	EACH		\$500.00	\$2,000.00
62	7055	CEMENT CONC. SIDEWALK	90	S.Y.		\$100.00	\$9,000.00
63	7070	ROCK BOLT	3,810	L.F.		\$165.00	\$628,650.00
64	7480	ROADSIDE CLEANUP	1	EST.		\$35,000.00	\$35,000.00
65	7500	FIELD OFFICE BUILDING	1	L.S.		\$48,000.00	\$48,000.00
66	7567	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	2,800	C.Y.		\$40.00	\$112,000.00
67	7728	MINOR CHANGE	1	CALC		\$80,000.00	\$80,000.00
68	7736	SPCC PLAN	1	L.S.		\$10,000.00	\$10,000.00
69	-----	ROCK FACE WEEP HOLES	1,514	L.F.		\$100.00	\$151,350.00
70	-----	VERTICAL FOUNDATION ROCK BOLTS	630	L.F.		\$165.00	\$103,950.00
71	-----	ROCK BOLT DEBRIS CONTAINMENT FENCE	150	L.F.		\$200.00	\$30,000.00
72	-----	BRIDGE END SIDEWALK RAMP	4	EACH		\$2,000.00	\$8,000.00

CONSTRUCTION BID ESTIMATE TOTAL COST - SCHEDULE A		\$13,773,000.00
CONSTRUCTION BID ESTIMATE TOTAL COST - SCHEDULE B		\$ 236,000.00
SUBTOTAL (2017 Dollars)		\$ 13,773,000.00
LEVEL OF DESIGN ACCURACY FOR QUANTITIES	15%	\$ 2,066,000.00
SUBTOTAL (2017 Dollars)		\$ 15,839,000.00
INFLATION 3% PER YEAR FOR 5 YEARS	3%	\$ 2,523,000.00
SUBTOTAL (2020 Dollars)		\$ 18,362,000.00
CONSTRUCTION CONTINGENCY	10%	\$ 1,836,000.00
TOTAL CONSTRUCTION COST		\$ 20,198,000.00

The 2017 estimate is from the project design report prepared by BergerABAM. Snohomish County added an inflation multiplier of 3% per year