[redacted]

Bridge and Structures Office

Not Included In Bridge Quantities List

SR	Job Number	Project Title	
Designed By	Checked By	Date	Supervisor
Type of Structure			

The following is a list of items for which the Bridge and Structures Office is relying on the Region to furnish plans, specifications and estimates.

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Revised 2/97

Not Included In Bridge Quantities List
Figure 12-A-1

Washington State Department of Transportation
Bridge and Structures

Bridge Quantities

✓ **Indicate Unit of Measure:**
☐ English ☐ Metric

St. Item No.	Item Use	Item Description	Quantity	Unit of Measure
0001(E) 0001(M)	Std. Item	Mobilization	_____	L.S.
0061 0061	GSP Item	Removing Portion of Existing Bridge Type _____ Area _____ SF/SM	_____	L.S.

Drilled Holes: *Less than 12"/305 mm long:* *Greater than 12"/305 mm long:*

Number	Diameter	Number	Diameter	Length
_____	_____ Inch/mm	_____	_____ Inch/mm	_____ LF/M
_____	_____ Inch/mm	_____	_____ Inch/mm	_____ LF/M
_____	_____ Inch/mm	_____	_____ Inch/mm	_____ LF/M

Core Drilled Holes: *Less than 12"/305 mm long:* *Greater than 12"/305 mm long:*

Number	Diameter	Number	Diameter	Length
_____	_____ Inch/mm	_____	_____ Inch/mm	_____ LF/M
_____	_____ Inch/mm	_____	_____ Inch/mm	_____ LF/M
_____	_____ Inch/mm	_____	_____ Inch/mm	_____ LF/M

0071 0071	GSP Item	Removing Existing Bridge Type _____ Area _____ SF/SM	_____	L.S.
	Sp. Prov.	Removing Temporary Structure Type _____ Area _____ SF/SM	_____	L.S.
4006/8331	Std. Item	Structure Excavation Class A Incl. Haul	_____	CY/M3

Unsuitable:

Pier	Soil
_____	_____ CY/M3
_____	_____ CY/M3
_____	_____ CY/M3
_____	_____ CY/M3

Cofferdam:

Pier	Soil	Rock
_____	_____ CY/M3	_____ CY/M3
_____	_____ CY/M3	_____ CY/M3
_____	_____ CY/M3	_____ CY/M3
_____	_____ CY/M3	_____ CY/M3

4010/8835	GSP Item	Special Excavation	_____	CY/M3

Pier	Soil
_____	_____ CY/M3
_____	_____ CY/M3
_____	_____ CY/M3
_____	_____ CY/M3

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Bridge Quantities (Page 1 of 6)
Figure 12-A-2

St. Item No.	Item Use	Item Description	Quantity	Unit of Measure
4013/4013	Std. Item	Shoring or Extra Excavation Class A	_____	L.S.

Dry:

Pier	<6 ft./2 m	6 ft./2 m to 10 ft./3 m	10 ft./3 m to * 20 ft./6 m	>20 ft./6 m *
		AVERAGE OVERALL HEIGHT		
_____	_____ SF/SM	_____ SF/SM	_____ SF/SM	_____ SF/SM
_____	_____ SF/SM	_____ SF/SM	_____ SF/SM	_____ SF/SM
_____	_____ SF/SM	_____ SF/SM	_____ SF/SM	_____ SF/SM
_____	_____ SF/SM	_____ SF/SM	_____ SF/SM	_____ SF/SM

Cofferdam:

Pier	<6 ft./2 m	6 ft./2 m to 10 ft./3 m	10 ft./3 m to * 20 ft./6 m	>20 ft./6 m *
		AVERAGE OVERALL HEIGHT		
_____	_____ SF/SM	_____ SF/SM	_____ SF/SM	_____ SF/SM
_____	_____ SF/SM	_____ SF/SM	_____ SF/SM	_____ SF/SM
_____	_____ SF/SM	_____ SF/SM	_____ SF/SM	_____ SF/SM
_____	_____ SF/SM	_____ SF/SM	_____ SF/SM	_____ SF/SM

*INDICATE AVERAGE HEIGHT

4030	GSP Item	Rock Bolt	_____	Each
--	Sp. Prov.	Soil Excavation For Shaft Including Haul	_____	CY/M3
--	Sp. Prov.	Rock Excavation For Shaft Including Haul	_____	CY/M3
--	Sp. Prov.	Furnishing and Placing Temp. Casing For _____ Diam. Shaft	_____	LF/M
--	Sp. Prov.	Furnishing Permanent Casing For _____ Diam. Shaft	_____	LF/M
--	Sp. Prov.	Placing Permanent Casing For _____ Diam. Shaft	_____	Each
--	Sp. Prov.	Casing Shoring	_____	LF/M
--	Sp. Prov.	Shoring or Extra Excavation Cl. A	_____	L.S.
--	Sp. Prov.	CSL Access Tube	_____	LF/M
4151/8426	Std. Item	St. Reinf. Bar For Shaft	_____	LB/KG
--	Sp. Prov.	Conc. Class 4000P For Shaft	_____	CY/M3
--	Sp. Prov.	Removing Obstructions	_____	Est.
--	GSP Item	Excavation For Piling	_____	LF/M
4055/8355	Std. Item	Preboring For Pile	_____	LF/M
4060/4060	Std. Item	Furnishing and Driving Concrete Test Pile	_____	Each
4070/8363	Std. Item	Furnishing Concrete Piling - _____ Diameter	_____	LF/M
4080/4080	Std. Item	Driving Concrete Pile - _____ Diameter	_____	Each
4085/4085	Std. Item	Furnishing and Driving Steel Test Pile	_____	Each
4090/8373	Std. Item	Furnishing Steel Piling	_____	LF/M
4095/4095	Std. Item	Driving Steel Pile	_____	Each
4100/4100	Std. Item	Furnishing and Driving Timber Test Pile	_____	Each
4105/8381	Std. Item	Furnishing Timber Piling - Untreated	_____	LF/M
4106/8383	Std. Item	Furnishing Timber Piling - Creosote Treated	_____	LF/M
4108/4108	Std. Item	Driving Timber Pile - Untreated	_____	Each
4110/4110	Std. Item	Driving Timber Pile - Creosote Treated	_____	Each
4116/4116	Std. Item	Pile Splice - Timber	_____	Each
--	Sp. Prov.	Pile Tip	_____	Each

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Bridge Quantities (Continued Page 2 of 6)
Figure 12-A-2

St. Item No.	Item Use	Item Description	Quantity	Unit of Measure
4120/8393	Std. Item	Furnishing Prestressed Hollow Concrete Piling _____	_____	LF/M
4130/4130	Std. Item	Placing Prestressed Hollow Concrete Pile _____	_____	Each
4140/4140	Std. Item	Driving Prestressed Hollow Concrete Pile _____	_____	Each
4145/4145	Sp. Prov.	Pile Loading Test No. of Tests _____ Each Pile Size _____ Ton/Tonne	_____	LF/M
4147/8410	Std. Item	Epoxy-Coated St. Reinf. Bar For _____	_____	LB/KG
4147/8410	Std. Item	Epoxy-Coated St. Reinf. Bar For Traffic Barrier	_____	LB/KG
4148/8412	Std. Item	Epoxy-Coated St. Reinf. Bar For Bridge	_____	LB/KG
4149/8420	Std. Item	St. Reinf. Bar For Bridge	_____	LB/KG
4151/8426	Std. Item	St. Reinf. Bar For Traffic Barrier	_____	LB/KG
4151/8426	Std. Item	St. Reinf. Bar For _____	_____	LB/KG
4165/8428	Std. Item	Wire Mesh _____	_____	SY/SM
4166/8430	Std. Item	Lean Concrete _____	_____	CY/M3
--	GSP Item	Conc. Class _____	_____	CY/M3
4322/8452	Std. Item	Conc. Class 4000/28 for Bridge	_____	CY/M3
4202/8442	Std. Item	Conc. Class 4000/28 for Traffic Barrier	_____	CY/M3
4202/8442	Std. Item	Conc. Class 4000/28 for _____	_____	CY/M3
4320/8441	Std. Item	Conc. Class 3000/20 for Bridge	_____	CY/M3
4200/8440	Std. Item	Conc. Class 3000/20 for _____	_____	CY/M3
4325/8477	Std. Item	Conc. Class 5000/35 for Bridge	_____	CY/M3
4205/8475	Std. Item	Conc. Class 5000/35 for _____	_____	CY/M3
4324/8468	Std. Item	Conc. Class 4000W/28W for Bridge	_____	CY/M3
4204/8466	Std. Item	Conc. Class 4000W/28W for _____	_____	CY/M3
4183/4183	GSP Item	Conc. Class EA	_____	CY/M3
4185/4185	GSP Item	Conc. Class HE	_____	CY/M3
--	Std. Item	Conc. Class _____ LS	_____	CY/M3
4184/4184	GSP Item	Cylinder Concrete	_____	CY/M3
4188/4188	GSP Item	Fractured Fin Finish	_____	SY/SM
4230/4230	Std. Item	Structural Carbon Steel	_____	LB/KG
4235/4235	Std. Item	Structural Low Alloy Steel	_____	LB/KG
4240/4240	Std. Item	Structural High Strength Steel	_____	LB/KG
4246/4536	Std. Item	Cast Steel	_____	LB/KG
4251/8540	Std. Item	Forged Steel	_____	LB/KG
4256/8546	Std. Item	Cast Iron	_____	LB/KG
4261/8549	Std. Item	Malleable Iron	_____	LB/KG
4267/8552	Std. Item	Ductile Iron	_____	LB/KG
4271/8555	Std. Item	Cast Bronze	_____	LB/KG

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Bridge Quantities (Continued Page 3 of 6)
Figure 12-A-2

St. Item No.	Item Use	Item Description	Quantity	Unit of Measure
4280/8560	Std. Item	Timber and Lumber - Untreated	_____	MBM/M3
4282/8582	Std. Item	Timber and Lumber - Creosote Treated	_____	MBM/M3
4284/8584	Std. Item	Timber and Lumber - Salts Treated	_____	MBM/M3
4300/4300	Std. Item	Superstructure Bridge Plan Area _____ SF/SM	_____	LS
4311/4311	Std. Item	Roadway Deck Bridge Plan Area _____ SF/SM	_____	LF/M
4390/8595	GSP Item	Electrical Conduit Diameter _____ Inch Length _____ LF/M	_____	LF/M
4400/8600	GSP Item	Steel Handrail	_____	LF/M
4405	GSP Item	Bridge Rail - Low Fence Type	_____	LF/M
4406	GSP Item	Bridge Rail - High Fence Type	_____	LF/M
4410/8605	GSP Item	Bridge Railing Type _____	_____	LF/M
4420	GSP Item	Bridge Grate Inlet	_____	Each
4453/4453	GSP Item	Pigmented Sealer	_____	SY/SM
7169/9572	Sp. Prov.	Structural Earth Wall	_____	SF/SM
--	Sp. Prov.	_____	_____	_____
--	Sp. Prov.	_____	_____	_____

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Bridge Quantities (Continued Page 4 of 6)
Figure 12-A-2

Breakdown of Items for Superstructure or Roadway Deck

St. Item No.	Item Use	Item Description	Quantity	Unit of Measure
--	Std. Item	Epoxy-Coated Steel Reinforcing Bar	_____	LB/KG
--	Std. Item	Epoxy-Coated Steel Reinforcing Bar (Traffic Barrier)	_____	LB/KG
--	Std. Item	Steel Reinforcing Bar	_____	LB/KG
--	Std. Item	Steel Reinforcing Bar (Traffic Barrier)	_____	LB/KG
--	GSP Item	Conc. Class _____	_____	CY/M3
--	Std. Item	Conc. Class 4000D/28D	_____	CY/M3
--	Std. Item	Conc. Class 4000/28	_____	CY/M3
--	Std. Item	Conc. Class 4000/28 (Traffic Barrier)	_____	CY/M3
--	Std. Item	Conc. Class 5000/35	_____	CY/M3
--	Std. Item	Conc. Class _____ LS	_____	CY/M3
--	GSP Item	Fractured Fin Finish	_____	SY/SM
--	Std. Item	Structural Carbon Steel	_____	LB/KG
--	Std. Item	Structural Low Alloy Steel	_____	LB/KG
--	Std. Item	Structural High Strength Steel	_____	LB/KG
--	Std. Item	Cast Steel	_____	LB/KG
--	Std. Item	Forged Steel	_____	LB/KG
--	Std. Item	Cast Iron	_____	LB/KG
--	Std. Item	Malleable Iron	_____	LB/KG
--	Std. Item	Ductile Iron	_____	LB/KG
--	Std. Item	Cast Bronze	_____	LB/KG
--	Std. Item	Timber and Lumber - Untreated	_____	MBM/M3
--	Std. Item	Timber and Lumber - Creosote Treated	_____	MBM/M3
--	Std. Item	Timber and Lumber - Salts Treated	_____	MBM/M3
--	Sp. Prov.	Glulam Deck Panels	_____	MBM/M3
--	Std. Item	Electrical Conduit	_____	LF/M
		Diameter _____ Inch Length _____ LF/M		
--	GSP Item	Steel Handrail	_____	LF/M
--	GSP Item	Bridge Rail - Low Fence Type	_____	LF/M
--	GSP Item	Bridge Rail - High Fence Type	_____	LF/M
--	Std. Item	Bridge Railing Type _____	_____	LF/M
--	GSP Item	Traffic Barrier	_____	LF/M
4430/4430	GSP Item	Special Bridge Drain	_____	Each
4433/4433	Sp. Prov.	Modify Bridge Drain	_____	Each
4434/4434	Sp. Prov.	Plugging Existing Bridge Drain	_____	Each
4420/4420	GSP Item	Bridge Grate Inlet	_____	Each

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Bridge Quantities (Continued Page 5 of 6)
Figure 12-A-2

St. Item No.	Item Use	Item Description	Quantity	Unit of Measure
--	GSP Item	Expansion Joint System Type _____ Length _____ LF/M Type _____ Length _____ LF/M Type _____ Length _____ LF/M	_____	LF/M
4444/8634	Sp. Prov.	Expansion Joint Modification Type _____ Length _____ LF/M	_____	LF/M
4232/8515	Sp. Prov.	Modified Concrete Overlay	_____	CF/M3
4233/8516	Sp. Prov.	Finishing and Curing Modified Concrete Overlay		SY/SM
4456/8644	Sp. Prov.	Scarifying Concrete Surface	_____	SY/SM
	Sp. Prov.	Polymer Concrete Overlay	_____	SY/SM
	Sp. Prov.	Further Deck Preparation Volume _____ CF/CM Avg. Depth _____ Inch/mm	_____	L.S.
4445/4445	GSP Item	Bridge Deck Repair Volume _____ CF/CM Avg. Depth _____ Inch/mm	_____	L.S.
--	GSP Item	Pigment Sealer	_____	SY/SM
4455/8643	GSP Item	Membrane Waterproofing (Deck Seal)	_____	SY/SM
--	Sp. Prov.	Pot Bearing	_____	Each
--	Sp. Prov.	Disc Bearing	_____	Each
--	Sp. Prov.	Spherical Bearing	_____	Each
--	Sp. Prov.	Cylindrical Bearing	_____	Each
--	Std. Item	Elastomeric Bearing Pad	_____	Each
--	GSP Item	Fabric Pad Bearing	_____	Each
--	Std. Item	Prestressed Conc. Girder Series W42G/W42MG	_____	LF/M
--	Std. Item	Prestressed Conc. Girder Series W50G/W50MG	_____	LF/M
--	Std. Item	Prestressed Conc. Girder Series W58G/W58MG	_____	LF/M
--	Std. Item	Prestressed Conc. Girder Series W74G/W74MG	_____	LF/M
--	Std. Item	Prestressed Conc. Girder Series W83G/W83MG	_____	LF/M
--	Std. Item	Prestressed Conc. Girder Series W95G/W95MG	_____	LF/M
--	Std. Item	Prestressing	_____	LB/KG
--	Sp. Prov.	Precast Prestressed Slab Volume _____ CF/CM Length _____ LF/M	_____	SF/SM
--	Sp. Prov.	Precast Prestressed Tri Beam Volume _____ CF/CM Length _____ LF/M	_____	SF/SM
--	Sp. Prov.	Precast Prestressed Double Tee Beam Volume _____ CF/CM Length _____ LF/M	_____	SF/SM
--	Sp. Prov.	Precast Segment Volume _____ CY/CM	_____	LF/M
--	Sp. Prov.	_____	_____	_____
--	Sp. Prov.	_____	_____	_____

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Bridge Quantities (Continued Page 6 of 6)
Figure 12-A-2

Before using these structure unit costs for any official WSDOT project cost estimate, contact the Bridge and Structures Office at (360) 705-7201 to discuss the specific project criteria and constructability related risks, so an appropriate structures construction cost can be provided.

(Note: Unit struture costs include mobilization but do not include sales tax, engineering, or contingency)

		LOW	AVERAGE	HIGH ΔΔ
PRESTRESSED CONCRETE GIRDERS SPAN 50-175 FT.				
Water Crossing w/piling	SF	$100.00	$125.00	$150.00
Water Crossing w/spread footings	SF	85.00	100.00	120.00
Dry Crossing w/piling	SF	90.00	110.00	135.00
Dry Crossing w/spread footings	SF	70.00	80.00	100.00
REINFORCED CONCRETE AND POST-TENSIONED CONCRETE BOX GIRDER-SPAN 50-200 FT.				
Water Crossing w/piling	SF	100.00	120.00	150.00
Water Crossing w/spread footings	SF	90.00	110.00	135.00
Dry Crossing w/piling	SF	95.00	115.00	140.00
Dry Crossing w/spread footings	SF	80.00	105.00	130.00
REINFORCED CONCRETE FLAT SLAB SPAN 20-60 FT.	SF	60.00	80.00	100.00
PRESTRESSED CONCRETE SLABS SPAN 13-69 FT.	SF	70.00	85.00	110.00
PRESTRESSED CONCRETE DECKED BULB-TEE GIRDER SPAN 40-115 FT.	SF	95.00	105.00	130.00
STEEL GIRDER — SPAN 60-400 FT.	SF	110.00	135.00	200.00
STEEL TRUSS — SPAN 300-700 FT.			160.00*	
STEEL ARCH — SPAN 30-400 FT.			175.00*	
CONCRETE BRIDGE REMOVAL		10.00	25.00	40.00
WIDENING EXISTING CONCRETE BRIDGES (Including Removal)		140.00	160.00	250.00
RAILROAD UNDERCROSSING — SINGLE TRACK	LF	$8,000.00* (Steel Underdeck Girder) $9,000.00* (Steel Thru-Girder)		
RAILROAD UNDERCROSSING — DOUBLE TRACK	LF	$12,000.00*		
PEDESTRIAN BRIDGE — REINFORCED CONCRETE	SF	150.00	250.00	500.00
REINFORCED CONCRETE RIGID FRAME (TUNNEL)	SF		90.00*	
REPLACING EXISTING CURBS & BARRIER WITH NEW JERSEY BARRIER (INCLUDING REMOVAL)	LF	110.00	165.00	225.00
REINFORCED CONCRETE RETAINING WALL (EXPOSED AREA)	SF	40.00	60.00	75.00
SOLDIER PILE TIEBACK WALL (EXPOSED AREA)	SF	110.00	130.00	165.00

Bridge and Structures
Figure 12-A-3

		LOW	AVERAGE	HIGH ΔΔ
SE WALL PRECAST CONCRETE PANELS	SF	17	30	40
SE WALL WELDED WIRE	SF	15	23	28
SE WALL CIP CONCRETE FACE	SF	33	40	50
SOIL NAIL WALL	SF	50	60	80
CONCRETE FACING PERMANENT GEOSYNTHETIC WALL	SF	13	22	35
CONCRETE CRIB WALL CONCRETE HEADERS	SF	22	35	45

*Based on limited cost data. Check with the Bridge PS&E Engineer.

Bridge areas are computed as follows:

Typical Bridges: Width x Length

Width: Total width of deck, including portion under the barrier.

Length: Distance between back of pavement seats, or for a bridge having wingwalls, 3'-0" behind the top of the embankment slope; typically end of wingwall to end of wingwall, reference Standard Plans H9.

Special Cases:

Widenings — Actual area of new construction.

Tunnel — Outside dimension from top of footing to top of footing over the tunnel roof, i.e., including walls and top width.

ΔΔ For small jobs (less than $100,000), use the high end of the cost range as a starting point.

Bridge and Structures (Continued)
Figure 12-A-3

BID ITEMS	UNIT	COST/UNIT ΔΔ		
Structure Excavation Class A Incl. Haul				
Earth	CY	$ 12.00	—	30.00
Rock	CY	100.00	—	220.00
Inside Cofferdam — Earth	CY	22.00	—	33.00
— Rock	CY	110.00	—	190.00
Shoring Extra Excavation Class A				
Dry — Depth under 6′	SF	3.00	—	8.00
Dry — 6′ - 10′	SF	7.00	—	11.00
Dry — 10′ - 20′	SF	11.00	—	22.00
Cofferdam	SF	30.00	—	40.00
Preboring For Standard Piles	LF	35.00	—	60.00
Furnishing & Driving Test Piles				
Concrete	Each	5,000.00	—	10,000.00
Steel	Each	4,000.00	—	8,000.00
Timber	Each	2,000.00	—	3,000.00
Furnishing Piling				
Conc. _____ Diam.	LF	35.00	—	45.00
Steel — TYP HP 12x53	LF	30.00	—	35.00
Timber — Creosote Treated	LF	10.00	—	12.00
Timber — Untreated	LF	8.00	—	10.00
**Pile Tip				
CIP Concrete (Steel Casing — Short Tip)	Each	200.00	—	250.00
CIP Concrete (Steel Casing — 10 Stinger)	Each	4,500.00	—	5,500.00
Steel (H-Pile)	Each	120.00	—	220.00
Timber (Arrow Tip)	Each	25.00	—	45.00
Driving Piles (40′ - 70′ Lengths)				
Concrete _____ Diam.	Each	500.00	—	1,000.00
Steel	Each	350.00	—	800.00
Timber	Each	225.00	—	450.00
Shafts				
Soil Excavtion Class A For Shaft Including Haul	CY	200.00		450.00
Rock Excavation For Shaft Incl. Haul	CY	500.00		700.00
Furnishing & Placing Temp. Casing For Shaft	LF	125.00		350.00
Casing Shoring	LF	125.00		350.00
Furnishing Permanent Casing For Shaft	LF	150.00		600.00
Placing Permanent Casing For Shaft	Each	1,500.00		2,000.00
Shoring or Extra Excavation CL.A — Shaft	Est.	10,000.00		25,000.00
Conc. Class 4000P For Shaft	CY	175.00		250.00
St. Reinf. Bar For Shaft	Lbs.	.60		.80
CSL Access Tubes	LF	5.00		10.00
Remvoing Obstrucitons	Est.	10% of all of above shaft ____		
St. Reinf. Bar For Bridge	Lbs.	.60	—	.80
Epoxy-Coated St. Reinf. Bar For Bridge	Lbs.	.75	—	1.00
Conc. Class 4000W	CY	150.00	—	225.00
Conc. Class 4000P	CY	150.00	—	225.00
Conc. Class 4000 (Footings)	CY	325.00	—	450.00
Conc. Class 4000 (Abut. & Ret. Walls)	CY	380.00	—	500.00
Conc. Class 5000	CY	400.00	—	500.00
Lean Concrete	CY	130.00	—	150.00
Concrete Class 4000 P (CIP Piling)	CY	130.00	—	200.00

** Pile ultimate capacity will affect these prices. Check with Bridge PS&E Engineer if unsure.

Substructure

Figure 12-A-4

BID ITEMS	UNIT	COST/UNIT ΔΔ		
Elastomeric Bearing Pads				
Girder Seat	Each	$ 100.00	—	$ 150.00
Girder Stop	Each	60.00	—	80.00
Spherical and Disc, Bearings (In place with plates)	Kip	10.00	—	12.00
Fabric Pad Bearing (In place, including all plates, TFE, etc.)	Each	1,500.00	—	2,500.00
Prestressed Concrete Girder				
W42G (Series 6)	LF	120.00		
W50G (Series 8)	LF	130.00		
W58G (Series 10)	LF	140.00		
W74G (Series 14)	LF	160.00		
W83G	LF	230.00		
W95G	LF	250.00		
Structural Carbon Steel (Steel girder, etc. when large amount of steel is involved)	Lbs.	1.0	—	1.50
Structural Low Alloy Steel (Steel girder, etc. when large amount of steel is involved)	Lbs.	1.25	—	1.75
Structural Steel (Sign supports, etc. when small amounts of steel are involved)	Lbs.	4.00	—	6.00
Timber & Lumber	MBM	1,750.00	—	2,500.00
Creosote Treated	MBM	2,000.00	—	2,800.00
Salts Treated	MBM	1,200.00	—	1,700.00
Untreated	MBM	1,500.00	—	2,000.00
Lagging (in place) Untreated	MBM	2,000.00	—	2,800.00
Expansion Joint Modification	LF	350.00	—	450.00
Expansion Joint System				
Compression Seal	LF	40.00	—	60.00
Modular (Approx. $100 per inch of movement)	LF	850.00	—	3,000.00
Strip Seal	LF	140.00	—	275.00
Bridge Drains	Each	300.00	—	500.00
Bridge Grate Inlets	Each	1,200.00	—	1,500.00
Conc. Class 5000	CY	550.00	—	700.00
Con. Class 5000 (Segmental Constr.)	CY	700.00	—	800.00
Con. Class 4000D (Deck Only)	CY	550.00	—	650.00
Conc. Class 4000	CY	500.00	—	600.00
Concrete Class EA (Exposed Aggregate)	CY	350.00	—	500.00
Concrete Class 4000 LS (Low Shrinkage)	CY	300.00	—	400.00
Concrete Class 5000 LS	CY	400.00	—	500.00
St. Reinf. Bar	Lbs.	.60	—	.80
Epoxy-Coated Steel Reinforcing Bar	Lbs.	.75	—	1.00
Post-tensioning Prestressing Steel (Includes Anchorages)	Lbs.	2.50	—	4.00
Traffic Barrier	LF	65.00	—	85.00
Bridge Railing Type BP & BP-S	LF	40	—	65.00
Bridge Railing Type Thrie Beam	LF	45	—	70.00
Modified Conc. Overlay	C.F.	30.00	—	70.00
Furnishing and Curing Modified Conc. Overlay	SY	45.00	—	75.00
Scarifying Conc. Overlay	SY	10.00	—	15.00
Polymer Concrete	SY	50.00	—	110.00
Polyeste Concrete	C.F.	100.00	—	200.00

Superstructre
Figure 12-A-5

BID ITEMS	UNIT	COST/UNIT ΔΔ		
Electrical Conduit, metal 2	LF	$ 8.00	—	$ 15.00
Sign Support (Brackets, Mono, or Truss Sign Bridges)	Lbs.	2.50	—	5.00
Concrete Surface Finishes				
Fractured Fin Finish	SY	18.00	—	30.00
Exposed Aggregate Finish*	SY	18.00	—	25.00
Pigmented Sealer	SY	6.00	—	9.00
*Requires the use of concrete Class EA				
Painting Existing Steel Bridges (Lead Base)	Ton. (Steel)	550.00	—	750.00
Painting New Steel Bridges	Lbs. (Steel)	.09	—	.11
Mobilization				
Masonry Drilling Δ				
Holes up to 1 foot deep				
1" diameter	25.00			
1 ½"	27.00			
2"	30.00			
2 ½"	32.00			
3"	35.00			
3 ½"	45.00			
4"	50.00			
5"	55.00			
6"	65.00			
7"	85.00			

Δ For holes greater than 1-foot deep up to 20 feet deep, use 1.5 x above prices.
If drilling through steel reinforcing, add $16.00 per lineal inch of steel drilled.

Removal of Rails and Curbs	LF	$ 80.00	—	$ 130.00
Removal of Rails, Curbs, and Slab	SF	25.00	—	50.00
Further Deck Preparation	CF	100.00	—	150.00
Bridge Deck Repair	CF	110.00	—	160.00
Removing ACP from bridge deck	SY	7.00	—	12.00

Miscellaneous
Figure 12-A-6

Operation	UNIT**	Minimum Output	Maximum Output	Average Output
Substructure				
Structure Exc. & Shoring	C.Y./Day	20	150	80
*Seals	C.Y./Day	10	20	15
*Footings	C.Y./Day	6	14	10
*Abutment Walls	C.Y./Day	4	19	7
*Wingwalls	C.Y./Day	1	2	1.5
*Retaining Walls with Footings	C.Y./Day	4	17	11
*Columns	C.Y./Day	3	8	4
Falsework for X-beams	C.Y./Day	13	4	10
*X-beams	C.Y./Day	16	20	18
Driving Test Piles	Each/Day	1	2	1
Furnishing Piles				
Precast Concrete	Days	40	20	30
Cast-in-Place Concrete	Days	15	2	5
Steel	Days	30	2	10
Timber	Days	20	2	5
Driving Piles				
Concrete	L.F./Day	100	200	150
Steel	L.F./Day	100	200	150
Timber	L.F./Day	100	200	150
Superstructure				
Prestressed Girders				
Girder Fabrication	Days	70	35	45
Set Girders	L.F./Day	200	1,450	550
*Slab & Diaphragms	C.Y./Day	6	18	11
Box Girders				
Span Falsework	S.F./Day	150	900	700
*Bottom Slab	C.Y./Day	3	11	8
*Webs, Diaphragms, and X-beams	C.Y./Day	5	25	18
*Top Slab	C.Y./Day	7	12	9
Stress and Grout Strands	LBS/Day	4,500	8,000	6,000
Strip Falsework	S.F./Day	1,500	3,000	2,200
T-Beam				
Span Falsework	S.F./Day	500	1,000	700
*Girders, Diaphragms, and Slab	C.Y./Day	6	15	10
Strip Falsework	S.F./Day	1,000	2,000	1,500
Flat Slab				
Span Falsework	S.F./Day	100	600	250
*Slab and X-beams	C.Y./Day	6	15	10
Strip Falsework	S.F./Day	300	1,000	500
Steel Girder				
Girder Fabrication	Days	200	110	150
Girder Erection	L.F./Day	50	200	100
*Slab	C.Y./Day	6	15	10
Painting	S.F./Day	1,000	3,000	2,000
Miscellaneous				
*Traffic Barrier	L.F./Day	20	80	40
*Traffic Railing & Sidewalk	L.F./Day	15	60	35
*Concrete Overlay	S.Y./Day	200	300	250
Expansion Joint Replacement	Days/Lane Closure	4	6	8

* Concrete
** All times are based on 8-hour work days

Construction Time Rates
Figure 12-A-7