

KPFF Consulting Engineers
 1601 5th Ave, Suite 1600
 Seattle, Wa. 98101
 (206)622-5822

project: South Lander St Grade Separation
Substructure Costs Using MultiColumn Piers
 location: City of Seattle
 client: City of Seattle

by: DGH
 date: 8/19/2007
 job # 106531

Substructure Costs Using MultiColumn Piers

Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
	Conc. Class 4000 for Bridge	CY	1,020	\$750	\$765,000
	St. Reinf. Bar for Bridge	LB	269,260	\$1.50	\$403,890
	Soil Excavation for Shaft Including Haul	CY	6,575	\$650	\$4,273,750
	Conc. Class 4000P for Shaft	CY	6,575	\$600	\$3,945,000
	St. Reinf. Bar for Shaft	LB	1,738,950	\$2.00	\$3,477,900
	CSL Access Tube/Testing	LF	26,880	\$45	\$1,209,600
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	700	\$350	\$245,000
	Structure Excavation Class A Incl. Haul	CY	1,555	\$80	\$124,400
	Shoring or Extra Excavation Class A	SF	16,800	\$30	\$504,000
	Shaft- 24 in Diameter - Temp	LF	5,600	\$200	\$1,120,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
				Sum of total cost above =	\$16,168,540
				Contingency (30%) =	\$4,850,562
				Total² =	\$21,019,102

notes:

- (1) Costs in 2007 dollars
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers
 1601 5th Ave, Suite 1600
 Seattle, Wa. 98101
 (206)622-5822

project: South Lander St Grade Separation
Substructure Costs Using Wall Piers
 location: City of Seattle
 client: City of Seattle

by: DGH
 date: 8/19/2007
 job # 106531

Substructure Costs Using Wall Piers

Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
	Conc. Class 4000 for Bridge	CY	2,575	\$750	\$1,931,250
	St. Reinf. Bar for Bridge	LB	681,150	\$1.50	\$1,021,725
	Soil Excavation for Shaft Including Haul	CY	6,575	\$650	\$4,273,750
	Conc. Class 4000P for Shaft	CY	6,575	\$600	\$3,945,000
	St. Reinf. Bar for Shaft	LB	1,738,950	\$2.00	\$3,477,900
	CSL Access Tube/Testing	LF	26,880	\$45	\$1,209,600
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	350	\$350	\$122,500
	Structure Excavation Class A Incl. Haul	CY	1,040	\$80	\$83,200
	Shoring or Extra Excavation Class A	SF	11,200	\$30	\$336,000
	Shaft- 24 in Diameter - Temp	LF	2,800	\$200	\$560,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
				Sum of total cost above =	\$17,060,925
				Contingency (30%) =	\$5,118,278
				Total² =	\$22,179,203

notes:

- (1) Costs in 2007 dollars
- (2) Cost does not include mobilization, sales tax, or engineering-

KPFF Consulting Engineers 1601 6th Ave, Suite 1600 Seattle, Wa. 98101 (206)922-5822		project: South Lander St Grade Separation Span Layout #1 - 42 Web location: City of Seattle client: City of Seattle			by: DGH date: 8/27/2007 job #: 106531	
Span Layout #1 - 42 Web						
Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost	
SUPERSTRUCTURE						
	Bridge Railing Type Pedestrian	LF	1,370	\$130	\$178,100	
	Traffic Barrier	LF	1,370	\$160	\$219,200	
	Fractured Fin Finish	SY	590	\$30	\$17,700	
	Conc. Class 4000D	CY	1,795	\$900	\$1,615,500	
	Epoxy-Coated Steel Reinforcing Bar	LB	512,380	\$2.00	\$1,024,760	
	Expansion Joint System	LF	260	\$100	\$26,000	
	Bridge Drains	EACH	8	\$1,000	\$8,000	
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500	
	Structural Low Alloy Steel	LB	2,072,125	\$3.00	\$6,216,375	
	Painting Existing Steel Bridge @ Years 15, 30, 45, and 60	LB	8,288,500	\$0.50	\$4,144,250	
	Elastomeric Bearing Pad	EACH	90	\$500	\$45,000	
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000	
	Electrical Conduit	LS	1	\$50,000	\$50,000	
					\$13,601,385	
SUBSTRUCTURE						
	Conc. Class 4000 for Bridge	CY	1,125	\$750	\$843,750	
	St. Reinf. Bar for Bridge	LB	297,715	\$1.50	\$446,573	
	Soil Excavation for Shaft Including Haul	CY	7,515	\$650	\$4,884,750	
	Conc. Class 4000P for Shaft	CY	7,515	\$600	\$4,509,000	
	St. Reinf. Bar for Shaft	LB	1,987,375	\$2.00	\$3,974,750	
	CSL Access Tube/Testing	LF	30,720	\$45	\$1,382,400	
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	800	\$350	\$280,000	
	Structure Excavation Class A Incl. Haul	CY	1,780	\$80	\$142,400	
	Shoring or Extra Excavation Class A	SF	19,200	\$30	\$576,000	
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000	
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000	
					\$18,419,623	
APPROACH STRUCTURE						
	Bridge Railing Type Pedestrian	LF	415	\$130	\$53,950	
	Traffic Barrier	LF	415	\$160	\$66,400	
	Fractured Fin Finish	SY	180	\$30	\$5,400	
	Conc. Class 4000 for Bridge	CY	2,520	\$750	\$1,890,000	
	St. Reinf. Bar for Bridge	LB	665,850	\$1.50	\$998,775	
	Structure Excavation Class A. Incl. Haul	CY	1,650	\$80	\$132,000	
	Shaft - 24 in Diameter	LF	10,820	\$200	\$2,164,000	
					\$5,310,525	
RETAINING WALLS						
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800	
	Traffic Barrier	LF	160	\$160	\$25,600	
	Fractured Fin Finish	SY	70	\$30.00	\$2,100	
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000	
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000	
					\$93,500	
					Sum of total cost above = \$37,425,033	
					Contingency (30%) = \$11,227,510	
					Total² = \$48,652,542	

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)622-5822		project: South Lander SI Grade Separation Span Layout #1 - 48 Web location: City of Seattle client: City of Seattle		by: DGH date: 8/27/2007 job # 106531	
Span Layout #1 - 48 Web					
Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
SUPERSTRUCTURE					
	Bridge Railing Type Pedestrian	LF	1,370	\$130	\$178,100
	Traffic Barrier	LF	1,370	\$160	\$219,200
	Fractured Fin Finish	SY	590	\$30	\$17,700
	Conc. Class 4000D	CY	1,795	\$900	\$1,615,500
	Epoxy-Coated Steel Reinforcing Bar	LB	512,380	\$2.00	\$1,024,760
	Expansion Joint System	LF	260	\$100	\$26,000
	Bridge Drains	EACH	8	\$1,000	\$8,000
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500
	Structural Low Alloy Steel	LB	1,781,000	\$3.00	\$5,343,000
	Painting Existing Steel Bridge @ Years 15, 30, 45, and 60	LB	7,124,000	\$0.50	\$3,562,000
	Elastomeric Bearing Pad	EACH	81	\$500	\$40,500
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000
	Electrical Conduit	LS	1	\$50,000	\$50,000
					\$12,141,260
SUBSTRUCTURE					
	Conc. Class 4000 for Bridge	CY	1,125	\$750	\$843,750
	St. Reinf. Bar for Bridge	LB	297,715	\$1.50	\$446,573
	Soil Excavation for Shaft Including Haul	CY	7,515	\$650	\$4,884,750
	Conc. Class 4000P for Shaft	CY	7,515	\$600	\$4,509,000
	St. Reinf. Bar for Shaft	LB	1,987,375	\$2.00	\$3,974,750
	CSL Access Tube/Testing	LF	30,720	\$45	\$1,382,400
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	800	\$350	\$280,000
	Structure Excavation Class A Incl. Haul	CY	1,780	\$80	\$142,400
	Shoring or Extra Excavation Class A	SF	19,200	\$30	\$576,000
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
					\$18,419,623
APPROACH STRUCTURE					
	Bridge Railing Type Pedestrian	LF	415	\$130	\$53,950
	Traffic Barrier	LF	415	\$160	\$66,400
	Fractured Fin Finish	SY	180	\$30	\$5,400
	Conc. Class 4000 for Bridge	CY	2,520	\$750	\$1,890,000
	St. Reinf. Bar for Bridge	LB	665,850	\$1.50	\$998,775
	Structure Excavation Class A, Incl. Haul	CY	1,650	\$80	\$132,000
	Shaft - 24 in Diameter	LF	10,820	\$200	\$2,164,000
					\$5,310,525
RETAINING WALLS					
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800
	Traffic Barrier	LF	160	\$160	\$25,600
	Fractured Fin Finish	SY	70	\$30.00	\$2,100
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000
					\$93,500
					Sum of total cost above = \$35,964,908
					Contingency (30%) = \$10,789,472
					Total² = \$46,754,380

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)622-5822		project: South Lander St Grade Separation Span Layout #1 - WF42G location: City of Seattle client: City of Seattle			by: DGH date: 8/27/2007 job # 106531	
Span Layout #1 - WF42G						
Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost	
SUPERSTRUCTURE						
	Bridge Railing Type Pedestrian	LF	1,370	\$130	\$178,100	
	Traffic Barrier	LF	1,370	\$160	\$219,200	
	Fractured Fin Finish	SY	590	\$30	\$17,700	
	Conc. Class 4000D	CY	2,540	\$900	\$2,286,000	
	Epoxy-Coated Steel Reinforcing Bar	LB	512,380	\$2.00	\$1,024,760	
	Expansion Joint System	LF	260	\$100	\$26,000	
	Bridge Drains	EACH	8	\$1,000	\$8,000	
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500	
	Prestressed Conc. Girder Series WF42G	LF	11,645	\$210	\$2,445,450	
	Elastomeric Bearing Pad	EACH	68	\$500	\$34,000	
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000	
	Electrical Conduit	LS	1	\$50,000	\$50,000	
					\$6,345,710	
SUBSTRUCTURE						
	Conc. Class 4000 for Bridge	CY	1,125	\$750	\$843,750	
	St. Reinf. Bar for Bridge	LB	297,715	\$1.50	\$446,573	
	Soil Excavation for Shaft Including Haul	CY	7,515	\$650	\$4,884,750	
	Conc. Class 4000P for Shaft	CY	7,515	\$600	\$4,509,000	
	St. Reinf. Bar for Shaft	LB	1,987,375	\$2.00	\$3,974,750	
	CSL Access Tube/Testing	LF	30,720	\$45	\$1,382,400	
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	800	\$350	\$280,000	
	Structure Excavation Class A Incl. Haul	CY	1,780	\$80	\$142,400	
	Shoring or Extra Excavation Class A	SF	19,200	\$30	\$576,000	
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000	
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000	
					\$18,419,623	
APPROACH STRUCTURE						
	Bridge Railing Type Pedestrian	LF	415	\$130	\$53,950	
	Traffic Barrier	LF	415	\$160	\$66,400	
	Fractured Fin Finish	SY	180	\$30	\$5,400	
	Conc. Class 4000 for Bridge	CY	2,520	\$750	\$1,890,000	
	St. Reinf. Bar for Bridge	LB	665,850	\$1.50	\$998,775	
	Structure Excavation Class A. Incl. Haul	CY	1,650	\$80	\$132,000	
	Shaft - 24 in Diameter	LF	10,820	\$200	\$2,164,000	
					\$5,310,525	
RETAINING WALLS						
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800	
	Traffic Barrier	LF	160	\$160	\$25,600	
	Fractured Fin Finish	SY	70	\$30.00	\$2,100	
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000	
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000	
					\$93,500	
					Sum of total cost above = \$30,169,358	
					Contingency (30%) = \$9,050,807	
					Total ² = \$39,220,165	

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)622-5822	project: South Lander St Grade Separation Span Layout #2 - 42 Web	by: DGH date: 8/27/2007 job #: 106531
	location: City of Seattle client: City of Seattle	

Span Layout #2 - 42 Web

Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
SUPERSTRUCTURE					
	Bridge Railing Type Pedestrian	LF	1,250	\$130	\$162,500
	Traffic Barrier	LF	1,250	\$160	\$200,000
	Fractured Fin Finish	SY	530	\$30	\$15,900
	Conc. Class 4000D	CY	1,640	\$900	\$1,476,000
	Epoxy-Coated Steel Reinforcing Bar	LB	467,500	\$2.00	\$935,000
	Expansion Joint System	LF	260	\$100	\$26,000
	Bridge Drains	EACH	8	\$1,000	\$8,000
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500
	Structural Low Alloy Steel	LB	1,890,625	\$3.00	\$5,671,875
	Painting Existing Steel Bridge @ Years 15, 30, 45, and 60	LB	7,562,500	\$0.50	\$3,781,250
	Elastomeric Bearing Pad	EACH	90	\$500	\$45,000
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000
	Electrical Conduit	LS	1	\$50,000	\$50,000
					\$12,428,025
SUBSTRUCTURE					
	Conc. Class 4000 for Bridge	CY	1,125	\$750	\$843,750
	St. Reinf. Bar for Bridge	LB	297,715	\$1.50	\$446,573
	Soil Excavation for Shaft Including Haul	CY	7,515	\$650	\$4,884,750
	Conc. Class 4000P for Shaft	CY	7,515	\$600	\$4,509,000
	St. Reinf. Bar for Shaft	LB	1,987,375	\$2.00	\$3,974,750
	CSL Access Tube/Testing	LF	30,720	\$45	\$1,382,400
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	800	\$350	\$280,000
	Structure Excavation Class A Incl. Haul	CY	1,780	\$80	\$142,400
	Shoring or Extra Excavation Class A	SF	19,200	\$30	\$576,000
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
					\$18,419,623
APPROACH STRUCTURE					
	Bridge Railing Type Pedestrian	LF	550	\$130	\$71,500
	Traffic Barrier	LF	550	\$160	\$88,000
	Fractured Fin Finish	SY	240	\$30	\$7,200
	Conc. Class 4000 for Bridge	CY	3,365	\$750	\$2,523,750
	St. Reinf. Bar for Bridge	LB	890,190	\$1.50	\$1,335,285
	Structure Excavation Class A. Incl. Haul	CY	2,195	\$80	\$175,600
	Shaft - 24 in Diameter	LF	14,465	\$200	\$2,893,000
					\$7,094,335
RETAINING WALLS					
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800
	Traffic Barrier	LF	160	\$160	\$25,600
	Fractured Fin Finish	SY	70	\$30.00	\$2,100
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000
					\$93,500
					Sum of total cost above = \$38,035,483
					Contingency (30%) = \$11,410,645
					Total² = \$49,446,127

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)622-5822	project: South Lander St Grade Separation Span Layout #2 - 48 Web	by: DGH date: 8/27/2007 job # 106531
	location: City of Seattle client: City of Seattle	

Span Layout #2 - 48 Web

Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
SUPERSTRUCTURE					
	Bridge Railing Type Pedestrian	LF	1,250	\$130	\$162,500
	Traffic Barrier	LF	1,250	\$160	\$200,000
	Fractured Fin Finish	SY	530	\$30	\$15,900
	Conc. Class 4000D	CY	1,580	\$900	\$1,422,000
	Epoxy-Coated Steel Reinforcing Bar	LB	467,500	\$2.00	\$935,000
	Expansion Joint System	LF	260	\$100	\$26,000
	Bridge Drains	EACH	8	\$1,000	\$8,000
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500
	Structural Low Alloy Steel	LB	1,625,000	\$3.00	\$4,875,000
	Painting Existing Steel Bridge @ Years 15, 30, 45, and 60	LB	6,500,000	\$0.50	\$3,250,000
	Elastomeric Bearing Pad	EACH	81	\$500	\$40,500
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000
	Electrical Conduit	LS	1	\$50,000	\$50,000
					\$11,041,400
SUBSTRUCTURE					
	Conc. Class 4000 for Bridge	CY	1,125	\$750	\$843,750
	St. Reinf. Bar for Bridge	LB	297,715	\$1.50	\$446,573
	Soil Excavation for Shaft Including Haul	CY	7,515	\$650	\$4,884,750
	Conc. Class 4000P for Shaft	CY	7,515	\$600	\$4,509,000
	St. Reinf. Bar for Shaft	LB	1,987,375	\$2.00	\$3,974,750
	CSL Access Tube/Testing	LF	30,720	\$45	\$1,382,400
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	800	\$350	\$280,000
	Structure Excavation Class A Incl. Haul	CY	1,780	\$80	\$142,400
	Shoring or Extra Excavation Class A	SF	19,200	\$30	\$576,000
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
					\$18,419,623
APPROACH STRUCTURE					
	Bridge Railing Type Pedestrian	LF	550	\$130	\$71,500
	Traffic Barrier	LF	550	\$160	\$88,000
	Fractured Fin Finish	SY	240	\$30	\$7,200
	Conc. Class 4000 for Bridge	CY	3,365	\$750	\$2,523,750
	St. Reinf. Bar for Bridge	LB	890,190	\$1.50	\$1,335,285
	Structure Excavation Class A. Incl. Haul	CY	2,195	\$80	\$175,600
	Shaft - 24 in Diameter	LF	14,465	\$200	\$2,893,000
					\$7,094,335
RETAINING WALLS					
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800
	Traffic Barrier	LF	160	\$160	\$25,600
	Fractured Fin Finish	SY	70	\$30.00	\$2,100
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000
					\$93,500
					Sum of total cost above = \$36,648,858
					Contingency (30%) = \$10,994,657
					Total² = \$47,643,515

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)822-5822	project: South Lander St Grade Separation Span Layout #2 - WF42G	by: DGH date: 8/27/2007 job # 106531
	location: City of Seattle client: City of Seattle	

Span Layout #2 - WF42G

Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
SUPERSTRUCTURE					
	Bridge Railing Type Pedestrian	LF	1,250	\$130	\$162,500
	Traffic Barrier	LF	1,250	\$160	\$200,000
	Fractured Fin Finish	SY	530	\$30	\$15,900
	Conc. Class 4000D	CY	2,310	\$900	\$2,079,000
	Epoxy-Coated Steel Reinforcing Bar	LB	467,500	\$2.00	\$935,000
	Expansion Joint System	LF	260	\$100	\$26,000
	Bridge Drains	EACH	8	\$1,000	\$8,000
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500
	Prestressed Conc. Girder Series WF42G	LF	10,625	\$210	\$2,231,250
	Elastomeric Bearing Pad	EACH	68	\$500	\$34,000
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000
	Electrical Conduitt	LS	1	\$50,000	\$50,000
					\$5,798,150
SUBSTRUCTURE					
	Conc. Class 4000 for Bridge	CY	1,125	\$750	\$843,750
	St. Reinf. Bar for Bridge	LB	297,715	\$1.50	\$446,573
	Soil Excavation for Shaft Including Haul	CY	7,515	\$650	\$4,884,750
	Conc. Class 4000P for Shaft	CY	7,515	\$600	\$4,509,000
	St. Reinf. Bar for Shaft	LB	1,987,375	\$2.00	\$3,974,750
	CSL Access Tube/Testing	LF	30,720	\$45	\$1,382,400
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	800	\$350	\$280,000
	Structure Excavation Class A Incl. Haul	CY	1,780	\$80	\$142,400
	Shoring or Extra Excavation Class A	SF	19,200	\$30	\$576,000
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
					\$18,419,623
APPROACH STRUCTURE					
	Bridge Railing Type Pedestrian	LF	550	\$130	\$71,500
	Traffic Barrier	LF	550	\$160	\$88,000
	Fractured Fin Finish	SY	240	\$30	\$7,200
	Conc. Class 4000 for Bridge	CY	3,365	\$750	\$2,523,750
	St. Reinf. Bar for Bridge	LB	890,190	\$1.50	\$1,335,285
	Structure Excavation Class A. Incl. Haul	CY	2,195	\$80	\$175,600
	Shaft - 24 in Diameter	LF	14,465	\$200	\$2,893,000
					\$7,094,335
RETAINING WALLS					
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800
	Traffic Barrier	LF	160	\$160	\$25,600
	Fractured Fin Finish	SY	70	\$30.00	\$2,100
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000
					\$93,500
					Sum of total cost above = \$31,405,608
					Contingency (30%) = \$9,421,682
					Total² = \$40,827,290

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1000 Seattle, Wa. 98101 (206)622-5822		project: South Lander St Grade Separation Span Layout #2 - WF50G location: City of Seattle client: City of Seattle			by: DGH date: 8/27/2007 job # 106531	
Span Layout #2 - WF50G						
Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost	
SUPERSTRUCTURE						
	Bridge Railing Type Pedestrian	LF	1,250	\$130	\$162,500	
	Traffic Barrier	LF	1,250	\$160	\$200,000	
	Fractured Fin Finish	SY	530	\$30	\$15,900	
	Conc. Class 4000D	CY	2,030	\$900	\$1,827,000	
	Epoxy-Coated Steel Reinforcing Bar	LB	467,500	\$2.00	\$935,000	
	Expansion Joint System	LF	260	\$100	\$26,000	
	Bridge Drains	EACH	8	\$1,000	\$8,000	
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500	
	Prestressed Conc. Girder Series WF50G	LF	6,875	\$230	\$1,581,250	
	Elastomeric Bearing Pad	EACH	44	\$500	\$22,000	
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000	
	Electrical Conduit	LS	1	\$50,000	\$50,000	
					\$4,884,150	
SUBSTRUCTURE						
	Conc. Class 4000 for Bridge	CY	1,125	\$750	\$843,750	
	St. Reinf. Bar for Bridge	LB	297,715	\$1.50	\$446,573	
	Soil Excavation for Shaft Including Haul	CY	7,515	\$650	\$4,884,750	
	Conc. Class 4000P for Shaft	CY	7,515	\$600	\$4,509,000	
	St. Reinf. Bar for Shaft	LB	1,987,375	\$2.00	\$3,974,750	
	CSL Access Tube/Testing	LF	30,720	\$45	\$1,382,400	
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	800	\$350	\$280,000	
	Structure Excavation Class A Incl. Haul	CY	1,780	\$80	\$142,400	
	Shoring or Extra Excavation Class A	SF	19,200	\$30	\$576,000	
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000	
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000	
					\$18,419,623	
APPROACH STRUCTURE						
	Bridge Railing Type Pedestrian	LF	550	\$130	\$71,500	
	Traffic Barrier	LF	550	\$160	\$88,000	
	Fractured Fin Finish	SY	240	\$30	\$7,200	
	Conc. Class 4000 for Bridge	CY	3,365	\$750	\$2,523,750	
	St. Reinf. Bar for Bridge	LB	890,190	\$1.50	\$1,335,285	
	Structure Excavation Class A. Incl. Haul	CY	2,195	\$80	\$175,600	
	Shaft - 24 in Diameter	LF	14,465	\$200	\$2,893,000	
					\$7,094,335	
RETAINING WALLS						
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800	
	Traffic Barrier	LF	160	\$160	\$25,600	
	Fractured Fin Finish	SY	70	\$30.00	\$2,100	
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000	
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000	
					\$93,500	
					Sum of total cost above = \$30,491,608	
					Contingency (30%) = \$9,147,482	
					Total² = \$39,639,090	

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)622-5822		project: South Lander St Grade Separation Span Layout #3 - 36 Web location: City of Seattle client: City of Seattle		by: DGH date: 8/27/2007 job # 106531	
Span Layout #3 - 36 Web					
Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
SUPERSTRUCTURE					
	Bridge Railing Type Pedestrian	LF	1,150	\$130	\$149,500
	Traffic Barrier	LF	1,150	\$160	\$184,000
	Fractured Fin Finish	SY	490	\$30	\$14,700
	Conc. Class 4000D	CY	1,510	\$900	\$1,359,000
	Epoxy-Coated Steel Reinforcing Bar	LB	430,100	\$2.00	\$860,200
	Expansion Joint System	LF	260	\$100	\$26,000
	Bridge Drains	EACH	8	\$1,000	\$8,000
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500
	Structural Low Alloy Steel	LB	2,449,500	\$3.00	\$7,348,500
	Painting Existing Steel Bridge @ Years 15, 30, 45, and 60	LB	9,798,000	\$0.50	\$4,899,000
	Elastomeric Bearing Pad	EACH	77	\$500	\$38,500
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000
	Electrical Conduit	LS	1	\$50,000	\$50,000
					\$14,993,900
SUBSTRUCTURE					
	Conc. Class 4000 for Bridge	CY	910	\$750	\$682,500
	St. Reinf. Bar for Bridge	LB	240,795	\$1.50	\$361,193
	Soil Excavation for Shaft Including Haul	CY	5,635	\$650	\$3,662,750
	Conc. Class 4000P for Shaft	CY	5,635	\$600	\$3,381,000
	St. Reinf. Bar for Shaft	LB	1,490,530	\$2.00	\$2,981,060
	CSL Access Tube/Testing	LF	23,040	\$45	\$1,036,800
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	600	\$350	\$210,000
	Structure Excavation Class A Incl. Haul	CY	1,330	\$80	\$106,400
	Shoring or Extra Excavation Class A	SF	14,400	\$30	\$432,000
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
					\$14,233,703
APPROACH STRUCTURE					
	Bridge Railing Type Pedestrian	LF	680	\$130	\$88,400
	Traffic Barrier	LF	680	\$160	\$108,800
	Fractured Fin Finish	SY	295	\$30	\$8,850
	Conc. Class 4000 for Bridge	CY	4,130	\$750	\$3,097,500
	St. Reinf. Bar for Bridge	LB	1,092,850	\$1.50	\$1,639,275
	Structure Excavation Class A. Incl. Haul	CY	2,695	\$80	\$215,600
	Shaft - 24 in Diameter	LF	17,760	\$200	\$3,552,000
					\$8,710,425
RETAINING WALLS					
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800
	Traffic Barrier	LF	160	\$160	\$25,600
	Fractured Fin Finish	SY	70	\$30.00	\$2,100
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000
					\$93,500
					Sum of total cost above = \$38,031,528
					Contingency (30%) = \$11,409,458
					Total² = \$49,440,986

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)922-5822	project: South Lander St Grade Separation Span Layout #3 - 48 Web	by: DGH date: 8/27/2007 job # 106531
	location: City of Seattle client: City of Seattle	

Span Layout #3 - 48 Web

Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
SUPERSTRUCTURE					
	Bridge Railing Type Pedestrian	LF	1,150	\$130	\$149,500
	Traffic Barrier	LF	1,150	\$160	\$184,000
	Fractured Fin Finish	SY	490	\$30	\$14,700
	Conc. Class 4000D	CY	1,460	\$900	\$1,314,000
	Epoxy-Coated Steel Reinforcing Bar	LB	430,100	\$2.00	\$860,200
	Expansion Joint System	LF	260	\$100	\$26,000
	Bridge Drains	EACH	8	\$1,000	\$8,000
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500
	Structural Low Alloy Steel	LB	1,495,000	\$3.00	\$4,485,000
	Painting Existing Steel Bridge @ Years 15, 30, 45, and 60	LB	5,980,000	\$0.50	\$2,990,000
	Elastomeric Bearing Pad	EACH	63	\$500	\$31,500
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000
	Electrical Conduit	LS	1	\$50,000	\$50,000
					\$10,169,400
SUBSTRUCTURE					
	Conc. Class 4000 for Bridge	CY	910	\$750	\$682,500
	St. Reinf. Bar for Bridge	LB	240,795	\$1.50	\$361,193
	Soil Excavation for Shaft Including Haul	CY	5,635	\$650	\$3,662,750
	Conc. Class 4000P for Shaft	CY	5,635	\$600	\$3,381,000
	St. Reinf. Bar for Shaft	LB	1,490,530	\$2.00	\$2,981,060
	CSL Access Tube/Testing	LF	23,040	\$45	\$1,036,800
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	600	\$350	\$210,000
	Structure Excavation Class A Incl. Haul	CY	1,330	\$80	\$106,400
	Shoring or Extra Excavation Class A	SF	14,400	\$30	\$432,000
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
					\$14,233,703
APPROACH STRUCTURE					
	Bridge Railing Type Pedestrian	LF	680	\$130	\$88,400
	Traffic Barrier	LF	680	\$160	\$108,800
	Fractured Fin Finish	SY	295	\$30	\$8,850
	Conc. Class 4000 for Bridge	CY	4,130	\$750	\$3,097,500
	St. Reinf. Bar for Bridge	LB	1,092,850	\$1.50	\$1,639,275
	Structure Excavation Class A. Incl. Haul	CY	2,695	\$80	\$215,600
	Shaft - 24 in Diameter	LF	17,760	\$200	\$3,552,000
					\$8,710,425
RETAINING WALLS					
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800
	Traffic Barrier	LF	160	\$160	\$25,600
	Fractured Fin Finish	SY	70	\$30.00	\$2,100
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000
					\$93,500
					Sum of total cost above = \$33,207,028
					Contingency (30%) = \$9,962,108
					Total² = \$43,169,136

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)622-5822		project: South Lander St Grade Separation Span Layout #3 - WF42G location: City of Seattle client: City of Seattle			by: DGH date: 8/27/2007 job # 106531	
Span Layout #3 - WF42G						
Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost	
SUPERSTRUCTURE						
	Bridge Railing Type Pedestrian	LF	1,150	\$130	\$149,500	
	Traffic Barrier	LF	1,150	\$160	\$184,000	
	Fractured Fin Finish	SY	490	\$30	\$14,700	
	Conc. Class 4000D	CY	2,130	\$900	\$1,917,000	
	Epoxy-Coated Steel Reinforcing Bar	LB	430,100	\$2.00	\$860,200	
	Expansion Joint System	LF	260	\$100	\$26,000	
	Bridge Drains	EACH	8	\$1,000	\$8,000	
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500	
	Prestressed Conc. Girder Series WF42G	LF	9,775	\$210	\$2,052,750	
	Elastomeric Bearing Pad	EACH	68	\$500	\$34,000	
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000	
	Electrical Conduit	LS	1	\$50,000	\$50,000	
					\$5,352,650	
SUBSTRUCTURE						
	Conc. Class 4000 for Bridge	CY	910	\$750	\$682,500	
	St. Reinf. Bar for Bridge	LB	240,795	\$1.50	\$361,193	
	Soil Excavation for Shaft Including Haul	CY	5,635	\$650	\$3,662,750	
	Conc. Class 4000P for Shaft	CY	5,635	\$600	\$3,381,000	
	St. Reinf. Bar for Shaft	LB	1,490,530	\$2.00	\$2,981,060	
	CSL Access Tube/Testing	LF	23,040	\$45	\$1,036,800	
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	600	\$350	\$210,000	
	Structure Excavation Class A Incl. Haul	CY	1,330	\$80	\$106,400	
	Shoring or Extra Excavation Class A	SF	14,400	\$30	\$432,000	
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000	
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000	
					\$14,233,703	
APPROACH STRUCTURE						
	Bridge Railing Type Pedestrian	LF	680	\$130	\$88,400	
	Traffic Barrier	LF	680	\$160	\$108,800	
	Fractured Fin Finish	SY	295	\$30	\$8,850	
	Conc. Class 4000 for Bridge	CY	4,130	\$750	\$3,097,500	
	St. Reinf. Bar for Bridge	LB	1,092,850	\$1.50	\$1,639,275	
	Structure Excavation Class A. Incl. Haul	CY	2,695	\$80	\$215,600	
	Shaft - 24 in Diameter	LF	17,760	\$200	\$3,552,000	
					\$8,710,425	
RETAINING WALLS						
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800	
	Traffic Barrier	LF	160	\$160	\$25,600	
	Fractured Fin Finish	SY	70	\$30.00	\$2,100	
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000	
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000	
					\$93,500	
					Sum of total cost above = \$28,390,278	
					Contingency (30%) = \$8,517,083	
					Total² = \$36,907,361	

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)922-5022		project: South Lander St Grade Separation <i>Span Layout #3 - Box</i> location: City of Seattle client: City of Seattle		by: DGH date: 8/27/2007 job # 106531	
Span Layout #3 - Box					
Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
SUPERSTRUCTURE					
	Bridge Railing Type Pedestrian	LF	1,150	\$130	\$149,500
	Traffic Barrier	LF	1,150	\$160	\$184,000
	Fractured Fin Finish	SY	490	\$30	\$14,700
	Conc. Class 4000D	CY	3,975	\$900	\$3,577,500
	Epoxy-Coated Steel Reinforcing Bar	LB	825,000	\$2.00	\$1,650,000
	Expansion Joint System	LF	260	\$100	\$26,000
	Bridge Drains	EACH	8	\$1,000	\$8,000
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500
	Elastomeric Bearing Pad	EACH	48	\$500	\$24,000
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000
	Electrical Conduit	LS	1	\$50,000	\$50,000
					\$5,740,200
SUBSTRUCTURE					
	Conc. Class 4000 for Bridge	CY	910	\$750	\$682,500
	St. Reinf. Bar for Bridge	LB	240,795	\$1.50	\$361,193
	Soil Excavation for Shaft Including Haul	CY	5,635	\$650	\$3,662,750
	Conc. Class 4000P for Shaft	CY	5,635	\$600	\$3,381,000
	St. Reinf. Bar for Shaft	LB	1,490,530	\$2.00	\$2,981,060
	CSL Access Tube/Testing	LF	23,040	\$45	\$1,036,800
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	600	\$350	\$210,000
	Structure Excavation Class A Incl. Haul	CY	1,330	\$80	\$106,400
	Shoring or Extra Excavation Class A	SF	14,400	\$30	\$432,000
	Shaft - 24 in Diameter - Temp	LF	6,400	\$200	\$1,280,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
					\$14,233,703
APPROACH STRUCTURE					
	Bridge Railing Type Pedestrian	LF	680	\$130	\$88,400
	Traffic Barrier	LF	680	\$160	\$108,800
	Fractured Fin Finish	SY	295	\$30	\$8,850
	Conc. Class 4000 for Bridge	CY	4,130	\$750	\$3,097,500
	St. Reinf. Bar for Bridge	LB	1,092,850	\$1.50	\$1,639,275
	Structure Excavation Class A. Incl. Haul	CY	2,695	\$80	\$215,600
	Shaft - 24 in Diameter	LF	17,760	\$200	\$3,552,000
					\$8,710,425
RETAINING WALLS					
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800
	Traffic Barrier	LF	160	\$160	\$25,600
	Fractured Fin Finish	SY	70	\$30.00	\$2,100
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000
					\$93,500
				Sum of total cost above =	\$28,777,828
				Contingency (30%) =	\$8,633,348
				Total² =	\$37,411,176

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)622-6822	project: South Lander St Grade Separation 116ft Span - 42 Web	by: DGH date: 8/27/2007 job # 106531
	location: City of Seattle client: City of Seattle	

116ft Span - 42 Web

Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
SUPERSTRUCTURE					
	Bridge Railing Type Pedestrian	LF	1,360	\$130	\$176,800
	Traffic Barrier	LF	1,360	\$160	\$217,600
	Fractured Fin Finish	SY	570	\$30	\$17,100
	Conc. Class 4000D	CY	1,600	\$900	\$1,440,000
	Epoxy-Coated Steel Reinforcing Bar	LB	423,360	\$2.00	\$846,720
	Expansion Joint System	LF	260	\$100	\$26,000
	Bridge Drains	EACH	8	\$1,000	\$8,000
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500
	Structural Low Alloy Steel	LB	2,005,575	\$3.00	\$6,016,725
	Painting Existing Steel Bridge @ Years 15, 30, 45, and 60	LB	8,022,300	\$0.50	\$4,011,150
	Elastomeric Bearing Pad	EACH	90	\$500	\$45,000
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000
	Electrical Conduit	LS	1	\$50,000	\$50,000
					\$12,911,595
SUBSTRUCTURE					
	Conc. Class 4000 for Bridge	CY	1,020	\$750	\$765,000
	St. Reinf. Bar for Bridge	LB	269,260	\$1.50	\$403,890
	Soil Excavation for Shaft Including Haul	CY	6,575	\$650	\$4,273,750
	Conc. Class 4000P for Shaft	CY	6,575	\$600	\$3,945,000
	St. Reinf. Bar for Shaft	LB	1,738,950	\$2.00	\$3,477,900
	CSL Access Tube/Testing	LF	26,880	\$45	\$1,209,600
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	700	\$350	\$245,000
	Structure Excavation Class A Incl. Haul	CY	1,555	\$80	\$124,400
	Shoring or Extra Excavation Class A	SF	16,800	\$30	\$504,000
	Shaft - 24 in Diameter - Temp	LF	5,600	\$200	\$1,120,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
					\$16,168,540
APPROACH STRUCTURE					
	Bridge Railing Type Pedestrian	LF	450	\$130	\$58,500
	Traffic Barrier	LF	450	\$160	\$72,000
	Fractured Fin Finish	SY	195	\$30	\$5,850
	Conc. Class 4000 for Bridge	CY	2,735	\$750	\$2,051,250
	St. Reinf. Bar for Bridge	LB	723,730	\$1.50	\$1,085,595
	Structure Excavation Class A. Incl. Haul	CY	1,785	\$80	\$142,800
	Shaft - 24 in Diameter	LF	11,760	\$200	\$2,352,000
					\$5,767,995
RETAINING WALLS					
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800
	Traffic Barrier	LF	160	\$160	\$25,600
	Fractured Fin Finish	SY	70	\$30.00	\$2,100
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000
					\$93,500
					Sum of total cost above = \$34,941,630
					Contingency (30%) = \$10,482,489
					Total² = \$45,424,119

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering

KPFF Consulting Engineers 1601 5th Ave, Suite 1600 Seattle, Wa. 98101 (206)822-5822	project: South Lander St Grade Separation 116ft Span - WF50G	by: DGH date: 8/27/2007 job # 106531
	location: City of Seattle client: City of Seattle	

116ft Span - WF50G

Std. Item Number	Item	Unit	Quantity	Unit Cost ¹	Total Cost
SUPERSTRUCTURE					
	Bridge Railing Type Pedestrian	LF	1,360	\$130	\$176,800
	Traffic Barrier	LF	1,360	\$160	\$217,600
	Fractured Fin Finish	SY	570	\$30	\$17,100
	Conc. Class 4000D	CY	2,170	\$900	\$1,953,000
	Epoxy-Coated Steel Reinforcing Bar	LB	427,300	\$2.00	\$854,600
	Expansion Joint System	LF	260	\$100	\$26,000
	Bridge Drains	EACH	8	\$1,000	\$8,000
	Drain Pipe 12 in Diam	LF	350	\$90	\$31,500
	Prestressed Conc. Girder Series WF50G	LF	7,350	\$230	\$1,690,500
	Conc. Class 4000 for Bridge	CY	430	\$750	\$322,500
	St. Reinf. Bar for Bridge	LB	112,700	\$1.50	\$169,050
	Elastomeric Bearing Pad	EACH	44	\$500	\$22,000
	Bridge Railing Type Chain Link	LF	250	\$100	\$25,000
	Electrical Conduit	LS	1	\$50,000	\$50,000
					\$5,563,650
SUBSTRUCTURE					
	Conc. Class 4000 for Bridge	CY	1,020	\$750	\$765,000
	St. Reinf. Bar for Bridge	LB	269,260	\$1.50	\$403,890
	Soil Excavation for Shaft Including Haul	CY	6,575	\$650	\$4,273,750
	Conc. Class 4000P for Shaft	CY	6,575	\$600	\$3,945,000
	St. Reinf. Bar for Shaft	LB	1,738,950	\$2.00	\$3,477,900
	CSL Access Tube/Testing	LF	26,880	\$45	\$1,209,600
	Furnishing and Placing Temp. Casing for 8 ft Diam. Shaft	LF	700	\$350	\$245,000
	Structure Excavation Class A Incl. Haul	CY	1,555	\$80	\$124,400
	Shoring or Extra Excavation Class A	SF	16,800	\$30	\$504,000
	Shaft - 24 in Diameter - Temp	LF	5,600	\$200	\$1,120,000
	Removing Shaft Obstructions	LS	1	\$100,000	\$100,000
					\$16,168,540
APPROACH STRUCTURE					
	Bridge Railing Type Pedestrian	LF	450	\$130	\$58,500
	Traffic Barrier	LF	450	\$160	\$72,000
	Fractured Fin Finish	SY	195	\$30	\$5,850
	Conc. Class 4000 for Bridge	CY	2,735	\$750	\$2,051,250
	St. Reinf. Bar for Bridge	LB	723,730	\$1.50	\$1,085,595
	Structure Excavation Class A. Incl. Haul	CY	1,785	\$80	\$142,800
	Shaft - 24 in Diameter	LF	11,760	\$200	\$2,352,000
					\$5,767,995
RETAINING WALLS					
	Bridge Railing Type Pedestrian	LF	160	\$130	\$20,800
	Traffic Barrier	LF	160	\$160	\$25,600
	Fractured Fin Finish	SY	70	\$30.00	\$2,100
	Conc. Class 4000 for Bridge	CY	40	\$750	\$30,000
	St. Reinf. Bar for Bridge	LB	10,000	\$1.50	\$15,000
					\$93,500
					Sum of total cost above = \$27,593,685
					Contingency (30%) = \$8,278,106
					Total² = \$35,871,791

notes:

- (1) Costs in 2007 dollars (Most costs are derived from WSDOT BDM, last updated March 2007)
- (2) Cost does not include mobilization, sales tax, or engineering