

CONCEPT DESIGN - CAPITAL COST ESTIMATE

I-5 Trade Corridor - Concept 1

Corridor Section: Columbia River Crossing - 5 lane structure

Date: 28-Mar-02

Date of Cost Index: August 2001

		Unit	Quantity	Cost	Total	
I.	RIGHT OF WAY/REAL ESTATE					\$52,062,285
1	1.1 Commercial	SF	735353	\$25	\$18,383,825	
	1.2 Residential	SF	10943	\$15	\$164,145	
	1.3 Buildings	LS	1	\$7,000,000	\$7,000,000	
	1.3.1 Business Relocation	LS	1	\$20,000,000	\$20,000,000	
	1.4 Open Lands	SF	355616	\$5.00	\$1,778,080	
	1.5 Railroad R/W	SF	2200	\$1.50	\$3,300	
2	Subtotal				\$47,329,350	
3	Engineering & Admin	LS	10%	\$4,732,935	\$4,732,935	
II.	CIVIL CONSTRUCTION					
1	Utility Relocations					\$20,148,000
	1.1 Urban Corridor	M	13.3	\$1,500,000.00	\$19,920,000	
	1.2 Open Lands	M	1	\$200,000.00	\$228,000	
	1.3 Lane Addition	M	0	\$125,000.00	\$0	
2	General Embankment					\$4,282,964
	2.1 General Embankment	CY	305,926	\$14.00	\$4,282,964.00	
	2.2 General Excavation	CY	12,000	\$14.00	\$168,000.00	
3	Surfacing / Paving					\$17,518,668
	3.1 New Surfacing - ACP	SY	159,501	\$65.00	\$10,367,565.00	
	(includes wearing course, base course, agg base, excav to 30" section depth)					
	3.2 New Surfacing - PCC	SY	70,724	\$92.00	\$6,506,608.00	
	(includes concrete, agg base, excav to section depth)					
	3.3 Overlay Surfacing - ACP	SY	99,153	\$6.50	\$644,494.50	
	(includes surface prep, ACP waring course, and leveling course)					
	3.4 Sidewalk - PCC	SY				
	(includes concrete, excav, agg base)					
4	Roadside Development					\$15,338,000
	4.1 Drainage System	M	14.4	\$1,000,000.00	\$14,420,000.00	
	4.2 Restoration of Wetlands	AC	5.4	\$170,000.00	\$918,000.00	
5	Traffic Services & Safety					\$6,632,330
	5.1 Illumination	M	14.4	\$250,000.00	\$3,605,000.00	
	5.2 Signage	M	14.4	\$100,000.00	\$1,442,000.00	
	(includes signage, supports, sign bridges, and pavement markings)					
	5.3 Signalized Intersection	EA	5	\$300,000.00	\$1,500,000.00	
	5.4 Striping	LM	32.2	\$2,650.00	\$85,330.00	
6	Structures					\$450,416,657
	6.01 Highway overpass	SF	452,087	\$100.00	\$45,208,700.00	
	6.02 Overland Bridge	SF	775,696	\$150.00	\$116,354,400.00	
	6.03 Low/Mid level over water	SF	374,506	\$275.00	\$102,989,150.00	
	6.04 High level over water	SF		\$325.00	\$0.00	
	6.05 Movable lift span	SF	24,000	\$1,670.00	\$40,080,000.00	
	6.06 Double Deck over water	SF	263,701	\$438.00	\$115,501,038.00	
	6.07 Pedestrian Bridge	SF		\$140.00	\$0.00	
	6.08 Bridge Widening	SF	59,449	\$154.00	\$9,155,146.00	
	6.09 Bridge Demolition	SF	164,194	\$25.73	\$4,224,711.62	
	6.1 Cut and Cover Box	LF			\$0.00	
	6.11 Tunnel	LF			\$0.00	
	6.12 Tie-back Retaining Wall	SF		\$90.00	\$0.00	
	6.13 MSE Retaining Wall	SF		\$29.00	\$0.00	
	6.14 CIP wall <10' hgt	SF	103,435	\$35.00	\$3,620,225.00	
	6.15 CIP wall 10'-15' hgt	SF	77,599	\$40.00	\$3,103,960.00	
	6.16 CIP wall 15'-20' hgt	SF	26,295	\$47.00	\$1,235,865.00	
	6.17 CIP wall 20'-25' hgt	SF	108,755	\$55.00	\$5,981,525.00	
	6.18 Soundwalls	SF	30,982	\$23.00	\$712,586.00	
	6.19 Soundwall Relocation	SF		\$16.00	\$0.00	
	6.2 Soundwall Demolation	SF	14,934	\$10.00	\$149,340.00	
	6.21 Concrete Barrier	LF	38,182	\$55.00	\$2,100,010.00	
7	Park and Ride					\$0
	7.1 Surface Lot	Space		\$2,500.00	\$0.00	
	7.2 Garage - 0-3 levels	Space		\$9,000.00	\$0.00	
	7.3 Garage - 4+ levels	Space		\$11,000.00	\$0.00	
8	Civil Construction Subtotal (Lines 1 through 7)					\$514,336,619
9	Mobilization -			8% of Line 8	\$ 41,146,930	
10	Subtotal (Lines 8 & 9)				\$ 555,483,549	
11	Construction Contingency			32% of Line 10	\$ 177,754,736	
12	Construction Total (Lines 10 & 11)				\$ 733,238,284	
III.	DESIGN ENGINEERING & ADMINISTRATION (25% of Line 12)					\$ 183,309,571
IV.	TOTAL HIGHWAY CAPITAL COST (20 Lines I, 12 and III)					\$ 968,610,140
V.	LRT SYSTEM (EXPO TO 5TH ST., VACOUVER)					\$81,690,159
	1 Civil Construction			\$16,300,304.00		
	2 Transit Vehicles (4 LRVs)			\$12,057,834.00		
	3 Operations Facilities			\$2,007,656.00		
	4 Traction Electrification System			\$3,104,967.00		
	5 Signals			\$2,991,811.00		
	6 Communications			\$844,353.00		
	7 Fare Collection			\$496,002.00		
	8 Right of way			\$14,779,182.00		
	9 Engineering & Admin			\$10,931,325.00		
	10 Contingency			\$18,176,725.00		
VI.	TOTAL CAPITAL COST (2001 \$)	Lines IV AND V				\$ 1,050,300,299