



Project: Skagway Ore Peninsula

Location: Skagway, AK

Client: Municipality of Skagway

Date: 7/6/2022

30% Design ROM Estimate of Construction Costs - DRAFT						
		Base Project	Add. Alt. MSP	Add. Alt. North Berth Extension		Total All Projects
#	Item	Cost (2022\$)	Cost (2022\$)	Highest Expected Cost (2022\$)	Highest Possible Cost (2022\$)	Cost (2022\$)
1.00	Mobilization and Demobilization	\$ 2,800,000	\$ 638,000	\$ 366,000	\$ 594,000	\$ 3,804,000
2.00	Temporary Erosion and Settlement Control	\$ 551,000	\$ 179,000	\$ 102,000	\$ 166,000	\$ 832,000
3.00	Demolition & Disposal	\$ 3,890,000				\$ 3,890,000
4.00	Cruise Dock Float Guide Piles and Access Trestle	\$ 3,920,000				\$ 3,920,000
5.00	Cruise Terminal Floating Dock	\$ 11,878,800				\$ 11,878,800
6.00	RORO Ramp and Access Trestle	\$ 7,400,000				\$ 7,400,000
7.00	New Fuel Line Routing	\$ 1,250,000				\$ 1,250,000
8.00	New Dolphins & Strengthened Dolphins	\$ 8,130,000				\$ 8,130,000
9.00	Fuel Header and Pipe Bridges	\$ 1,960,000				\$ 1,960,000
10.00	Corrosion Protection	\$ 980,000				\$ 980,000
11.00	Marine Service Platform, Utilities and Elec.		\$ 8,940,000			\$ 8,940,000
12.00	North Berth Extension (Highest Expected)			\$ 5,120,000	\$ 8,320,000	\$ 5,120,000
13.00	Upland Grading, Utilities and Electrical	\$ 1,670,000				\$ 1,670,000
Construction Subtotal		\$ 44,430,000	\$ 9,760,000	\$ 5,590,000	\$ 9,080,000	\$ 59,770,000
2.5% Soft Costs - Const. Admin. & Eng. Support & MMM		\$ 1,110,000	\$ 244,000	\$ 140,000	\$ 227,000	\$ 1,490,000
3% Per year Escalation to Construction Mid-Point		\$ 2,670,000	\$ 586,000	\$ 335,000	\$ 545,000	\$ 3,590,000
30% Design Contingency		\$ 13,330,000	\$ 2,930,000	\$ 1,680,000	\$ 2,720,000	\$ 17,930,000
Total ROM Construction Cost Estimate		\$ 61,500,000	\$ 13,500,000	\$ 7,700,000	\$ 12,600,000	\$ 82,800,000
Design Costs						
Project Engineering Design		\$ 3,500,000	\$ 400,000	\$ 174,000	\$ 174,000	\$ 4,100,000
Dredge Sampling Budget				\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Total ROM Construction & Design		\$ 65,000,000	\$ 13,900,000	\$ 8,874,000	\$ 13,774,000	\$ 87,800,000

Notes

1. All costs are rounded to the nearest \$1,000, \$10,000 or \$100,000.
2. Upland Civil in design - \$1M Assumption Applied
3. If MSP is built in Phase one, Two dolphins could be removed reducing cost \$1.5M-\$2.0M
4. Each item contains utilities for that structure
5. NEPA costs could be about \$100K for RORO ramp if PIDP grant added to Project Design Costs
6. The design of the Marine Service Platform (MSP) is funded via the Canadian Yukon government
7. This estimate does not include future maintenance costs
8. Float costs are based on bids provided by float fabricators
9. A cost range is provided for north berth extension based on the expected, and highest probable volume of potentially contaminated dredge material.



30% ROM Estimate of Construction Costs Detail - DRAFT					
	Item	Quantity	Unit	Unit Cost	Cost (2022\$)
1.00	Mobilization and Demobilization	1	LS	\$ 3,804,000	\$ 3,800,000
2.00	Temporary Erosion and Settlement Control	1	LS	\$ 832,000	\$ 832,000
3.00	Demolition & Disposal	1	LS	\$ 3,894,000	\$ 3,890,000
3.01	Timber Trestle Demolition	23428	SF	\$35	\$820,000
3.02	Dolphin Demolition	10	EA	\$21,900	\$219,000
3.03	Concrete Dock Demolition	1	LS	\$257,000	\$257,000
3.04	Ore Loader Demolition	1	LS	\$1,385,000	\$1,390,000
3.05	Barge Haul for Demo	2	EA	\$100,000	\$200,000
3.06	Ore Loader Support Structure Demolition	710	CY	\$380	\$270,000
3.07	Electrical Demolition	1	LS	\$738,000	\$738,000
4.00	Cruise Dock Float Guide Piles and Access Trestle	1	LS	\$ 3,920,000	\$ 3,920,000
4.01	Access Ramp	1	LS	\$2,225,000	\$2,230,000
4.02	Access Trestle	1	LS	\$315,000	\$315,000
4.03	Access Ramp Support Frame	1	LS	\$62,000	\$62,000
4.04	Steel Float Guide Piles	1	LS	\$724,000	\$724,000
4.05	Cruise Dock Float Utilities Total	1	LS	\$448,900	\$448,900
4.06	Electrical	1	LS	\$139,215	\$139,000
5.00	Cruise Terminal Floating Dock	1	LS	\$ 11,878,800	\$ 11,878,800
6.00	RORO Ramp and Access Trestle	1	LS	\$ 7,400,000	\$ 7,400,000
6.01	RORO Ramp	1	LS	\$2,990,000	\$2,990,000
6.02	RORO Ramp Control and Hydraulics	1	LS	\$77,500	\$78,000
6.03	RORO Trestle	1	LS	\$4,140,000	\$4,140,000
6.04	RORO Ramp Utilities Total	1	LS	\$149,600	\$150,000
6.05	Electrical	1	LS	\$46,250	\$46,000
7.00	New Fuel Line Routing	1	LS	\$ 1,250,000	\$ 1,250,000
7.01	6" API Steel Pipe	2562	LF	\$ 450	\$1,150,000
7.02	Joints, Fittings & Cathodic Protection	1	LS	\$ 103,605	\$104,000
8.00	New Dolphins & Strengthened Dolphins	1	LS	\$ 8,132,000	\$ 8,130,000
8.01	South Dolphin A Reinforcement	1	LS	\$854,600	\$855,000
8.02	South Dolphin B Reinforcement	1	LS	\$794,600	\$795,000
8.03	Typical Dolphins	3	EA	\$1,120,000	\$3,360,000
8.04	Dolphin J Barge Dolphin	1	EA	\$723,000	\$723,000
8.05	Catwalks and Supports	1	LS	\$1,790,000	\$1,790,000
8.06	Existing Dolphins Fender System Replacement	5	EA	\$92,000	\$460,000
8.07	Electrical	1	LS	\$148,750	\$149,000
9.00	Fuel Header and Pipe Bridges	1	LS	\$ 1,960,000	\$ 1,960,000
9.01	Fuel Header	1	LS	\$1,026,600	\$1,030,000
9.02	Pipe Bridges	1	LS	\$891,000	\$891,000
9.03	Electrical	1	LS	\$40,652	\$41,000
10.00	Corrosion Protection	1	LS	\$ 980,000	\$ 980,000



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11.00	Marine Service Platform, Utilities and Elec.	1	LS	\$ 8,940,000	\$ 8,940,000
11.01	Marine Service Platform	1	LS	\$8,620,000	\$8,620,000
11.02	Utilities	1	LS	\$201,000	\$201,000
11.03	Electrical	1	LS	\$122,688	\$123,000
12.00	North Berth Extension (Highest Expected)	1	LS	\$ 5,117,000	\$ 5,120,000
12.01	Total Dredge	1	LS	\$4,080,000	\$4,080,000
12.02	Slope Protection	1	LS	\$830,000	\$830,000
12.03	Concrete Dock Demolition	1	LS	\$206,600	\$207,000
13.00	Upland Grading, Utilities and Electrical	1	LS	\$ 1,670,000	\$ 1,670,000
13.01	Upland Civil	1	LS	\$1,000,000	\$1,000,000
13.02	Upland Electrical	1	LS	\$667,156	\$670,000
Construction Subtotal					\$ 59,770,000
2.5% Soft Costs - Const. Admin. & Eng. Support & MMM					\$ 1,490,000
3% Per year Escalation to Construction Mid-Point					\$ 3,590,000
30% Design Contingency					\$ 17,930,000
Total ROM Construction Cost Estimate					\$ 82,800,000
Design Costs					
Project Engineering Design					\$ 4,100,000
Dredge Sampling Budget					\$ 1,000,000
Project Design & Dredge Sampling Budget					\$ 87,800,000

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