ESTIMATED COSTS OF MATERIAL, LABOR AND EQUIPMENT

FOR CANADIAN PORTION OF HAINES-FAIRBANKS POL PIPELINE

1. The costs shown herein are estimated on the basis of Seattle prices for equipment and material and Alaska prices for labor. The estimate for the main pipeline is based on two construction spreads for mainline plus one spread for Kluane Lake crossing and one spread for river crossings and cleanup, with 200 day completion time. The estimates for pump stations are based on individual crews and equipment for each station with five months' completion time for each.

2. The total Seattle cost of material for that portion of the main pipeline in Canada is estimated at $3,937,000. Adding freight to Alaska brings this figure to $4,921,000.

3. The total Seattle cost of material for the pumping stations in Canada is estimated at $1,162,070. Adding freight to Alaska brings this figure to $1,453,000.

4. Labor Costs

a. Main Pipeline in Canada

Classification	Man Hours	Alaska Cost
Welders	66,000	$ 250,000
Truck Drivers	193,000	620,000
Heavy Equipment Operators	100,000	380,000
Laborers, Pipeline	150,000	357,000
Repair Mechanics	37,000	125,000
Unclassified Camp Laborers	100,000	210,000
Supervisors, Field	57,000	225,000
TOTAL		$2,167,000

b. Pump Stations in Canada

Classification	Man Hours	Alaska Cost
Laborers	53,120	$ 146,080
Cement Finishers	4,180	13,167
Hoisting Engineers	16,160	52,843

Pump Stations in Canada (Continued)

Classification	Man Hours	Alaska Cost
Truck Drivers	6,080	$ 19,274
Carpenters	34,040	106,886
Structural Steel Workers	28,560	97,104
Electricians	24,950	87,325
Painters	6,620	24,163
Pipefitters and Welders	38,350	134,225
Millwrights	6,750	22,545
Sheet Metal Workers	4,580	16,030
Supervision	21,780	87,120
Glaziers	4,140	11,800
TOTAL		$813,562

5. List of Construction Equipment and Cost

a. Main Pipeline

Equipment	Unit Cost	Total Seattle Cost
14 D-8 Bulldozers @	$21,400	$ 299,600
11 D-8 Side-boom Tractors @	23,000	253,000
22 Pipe Hauling Trucks @	27,000	594,000
5 Low Boys with Tractors @	25,000	125,000
8 Small Tractors @	10,000	80,000
2 Motor Cranes @	25,000	50,000
28 Various Size Trucks, Ave.	5,000	140,000
12 Welding Machines @	1,500	18,000
3 Back-hoe Shovel Combinations	22,000	66,000
3 Self-propelled Barges @	50,000	150,000

Main Pipeline (Continued)

Equipment	Unit Cost	Total Seattle Cost
5 Pickup Trucks @	$ 3,500	$ 17,500
12 Jeeps @	2,500	30,000
5 Passenger Cars @	2,600	13,000
Miscellaneous Tools and Equipment		25,000
TOTAL		$1,861,100

b. Pumping Stations

Equipment	Unit Cost	Total Seattle Cost
3 25-Ton Truck Cranes @	$ 31,000	$ 93,000
3 D-8 Cats @	21,400	64,200
3 Scraper Pans @	14,920	44,760
3 Motor Patrol Graders @	15,360	46,080
3 Air Compressors @	13,000	39,000
11 Welding Machines @	1,430	15,730
1 Generator @	2,900	2,900
2 Generators @	1,700	3,400
3 Concrete Mixers @	3,670	11,010
3 Sheeps-foot Rollers @	6,000	18,000
3 Water Tanks @	500	1,500
3 Fordson Tractors @	4,360	13,080
6 Dump Trucks @	4,200	25,200
3 Flat-bed Trucks @	4,340	13,020
6 Pickup Trucks @	3,400	20,400
3 Paint-spray Outfits @	500	1,500
Small Tools		50,000
TOTAL		$462,780

6. Attention is invited to the fact that the sum of the figures shown for equipment, material and labor are not intended to represent the installed cost of the pipeline and pumping stations in Canada. They do not include such items as transportation costs of men to and from Canada, overhead, contractor's profit, and subsistence for the men employed. The total equipment expense will be less than the purchase cost of the equipment as it is assumed that the equipment will not be worn out on the work in Canada. It should also be considered that while figures given are for new equipment, much of the construction equipment may be of lesser value due to previous use.