

**TABLE 4-20
ALTERNATIVE 4 - PIPELINE CORRIDOR INFORMATION**

Offshore Pipeline Corridor (Oil and Gas) ¹							Onshore Pipeline Corridor ^{2,3}			
Water Depth (feet)	Corridor ⁴ Length (feet)	Estimated ^{4,5} Trenching Rate (feet/day)	Estimated ^{5,6} Trenching Time (days)	Estimated ⁷ Seafloor Area Disturbed (acres)	Estimated ^{4,5} Volume Excavated (cubic yards)	Estimated ⁸ Construction Costs (\$ Million)	Pipeline Type	Installation Method ⁹	Line Length ^{4,10} (feet)	Estimated ⁸ Construction Costs (\$ million)
0 - 10	20,600	1,000	20.6	3.8	82,400	7.8 - 11.7	Oil	New VSMs along new ROW	18,240	5.2 - 6.8
10 - 20	17,470	600	29.1	17.7	192,200	8.3 - 11.6		New VSMs along existing pipeline and/or road corridor	44,860	12.7 - 21.2
20 - 30	4,804	600	8.1	4.9	53,200	2.8 - 3.7	Gas	New VSMs along new ROW	1,900	0.5 - 0.7
30 - 40	4,800	200	24	4.9	52,800	5.5 - 7.3		New VSMs along existing pipeline and/or road corridor	28,900	8.2 - 13.7
Totals	47,700	N/A	N/A	31.3	380,600	24.4 - 34.3	Totals	N/A	93,900	26.6 - 42.4

- Notes:
- 1 = Offshore freshwater ice road cap (3 inches thick by 100 ft wide) requires 23,500 bbls/mile of pipeline length (47,700 ft requires 212,400 bbls freshwater).
 - 2 = Total onshore pipeline corridor length is 64,110 ft (93,900 ft - 29,790 ft).
 - 3 = Onshore freshwater ice road (2 inches thick by 75 ft wide) requires 11,800 bbls/mile of pipeline length (64,110 ft requires 143,400 bbls of freshwater).
 - 4 = Source: Hanley, 1997b:Attachment 2
 - 5 = Source: BPXA, 1997b:2.4-6
 - 6 = Pipeline trenching would be conducted with four crews working simultaneously.
 - Crews 1 and 2 would excavate the trench from landfall to the point where the pipeline turns north at the southern boundary of the Northstar Unit.
 - Crew 3 would start just outside the barrier island and continue to a point midway between the barrier island and Seal Island.
 - Crew 4 would begin at a point midway between the barrier islands and continue to Seal Island.
 - 7 = Source: Hanley, 1997b:Attachment 2; BPXA, 1997b:Figure 2.4-4
 - 8 = Source: BPXA, 1997a:1
 - 9 = Typical VSM spacing for onshore pipeline construction is 55 ft (64,110 ft ÷ 55 ft = 1,166 VSMs) (A. Leavitt - Pers. Comm., 1997:1)
 - 10 = 29,790 ft of onshore pipeline is shared in common onshore corridor.
- bbls = Barrels
ft = Feet
N/A = Not applicable
ROW = Right-of-way
VSMs = Vertical support members