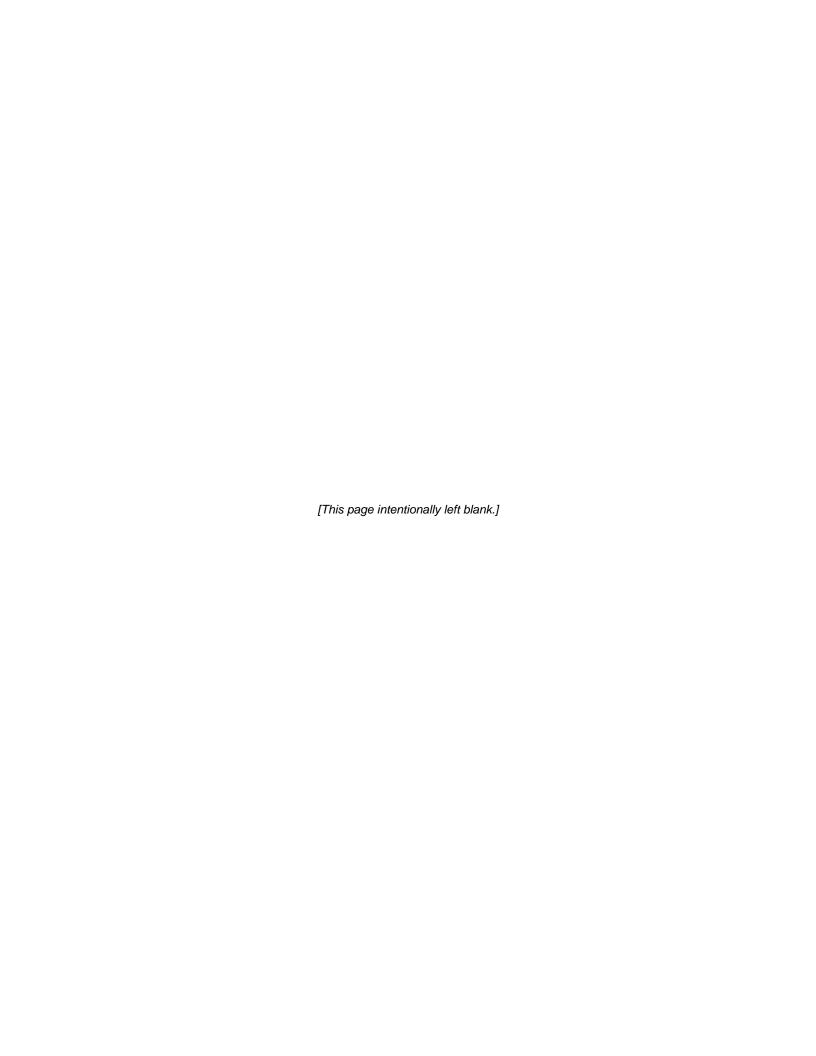
APPENDIX E

PIPELINE CONSTRUCTION METHODS BY MILEPOST



Pipeline Construction Methods by Milepost

The anticipated primary construction methods that will be used along the KMLP Project are listed by milepost in the following tables (minor construction methods, such as road, railroad, and pipeline crossings are not listed). The construction method numbers used in the table correspond to the construction method descriptions as follows:

- Typical Submerged Marsh (Push-Pull);
- Typical HDD Waterbody Crossing;
- Typical Inland Open Water <8' Depth;
- Saturated Wetland Crossing without Topsoil Segregation;
- Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation;
- Upland without Topsoil Segregation;
- Typical Cross Section with 24" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation;
- Unsaturated Wetland Crossing with Topsoil Segregation;
- 42" Typical Cross Section with Full Width Topsoil Segregation;
- Typical Cross Section with 42" Pipe Adjacent to Foreign Pipe with Ditch Plus Spoil Side Topsoil Segregation;
- 42" & 36" Typical Cross Section without Topsoil Segregation;
- 36" Typical Cross Section without Topsoil Segregation; and
- Inland Open Water ≥8' Depth.

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TABLE E-1 Pipeline Construction Method by Milepost			
Milepost		Primary Construction Method	
Begin	End	Description	Figure Number
0.00	0.92	42" & 36" Typical Cross Section without Topsoil Segregation (LNG Terminal)	2.3.1.1-6
0.92	1.51	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
1.51	3.93	Typical Submerged Marsh (Push-Pull)	2.3.1.2-5
3.93	4.83	Typical HDD Waterbody Crossing	2.3.1.3-1
4.83	9.93	Typical Inland Open Water <8' Depth	2.3.1.3-4
9.93	11.94	Typical Inland Open Water ≥8' Depth	2.3.1.3-5
11.94	12.21	Typical Inland Open Water <8' Depth	2.3.1.3-4
12.21	13.50	Typical Inland Open Water ≥8' Depth	2.3.1.3-5
13.50	13.82	Typical Inland Open Water <8' Depth	2.3.1.3-4
13.82	14.23	Typical Inland Open Water ≥8' Depth	2.3.1.3-5
14.23	17.96	Typical Inland Open Water <8' Depth	2.3.1.3-4
17.96	18.62	Typical HDD Waterbody Crossing	2.3.1.3-1
18.62	19.41	Typical HDD Waterbody Crossing	2.3.1.3-1
19.41	20.01	Typical HDD Waterbody Crossing	2.3.1.3-1
20.01	20.57	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
20.57	21.17	Saturated Wetland Crossing without Topsoil Segregation	2.3.1.2-3 and 2.3.1.2-4
21.17	22.11	Typical HDD Waterbody Crossing	2.3.1.3-1
22.11	22.71	Typical HDD Waterbody Crossing	2.3.1.3-1
22.71	23.45	Typical HDD Waterbody Crossing	2.3.1.3-1
23.45	23.95	Typical HDD Waterbody Crossing	2.3.1.3-1

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TABLE E-1 Pipeline Construction Method by Milepost			
Milepost		Primary Construction Method	Figure Number
Begin	End	Description	rigure Number
23.95	25.26	Saturated Wetland Crossing without Topsoil Segregation	2.3.1.2-3 and 2.3.1.2-4
25.26	26.03	Typical HDD Waterbody Crossing	2.3.1.3-1
26.03	26.80	Typical HDD Waterbody Crossing	2.3.1.3-1
26.80	30.36	Saturated Wetland Crossing without Topsoil Segregation	2.3.1.2-3 and 2.3.1.2-4
30.36	31.46	Typical HDD Waterbody Crossing	2.3.1.3-1
31.46	32.42	Typical HDD Waterbody Crossing	2.3.1.3-1
32.42	35.15	Typical Submerged Marsh (Push-Pull)	2.3.1.2-5
35.15	35.64	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
35.64	37.40	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
37.40	38.59	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
38.59	37.24	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
37.24	39.10	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
39.10	40.29	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
40.29	42.50	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
42.50	42.72	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
42.72	43.36	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2

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	TABLE E-1 Pipeline Construction Method by Milepost			
Milepost		Primary Construction Method	Figure Number	
Begin	End	Description	ga	
43.36	43.44	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
43.44	43.69	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
43.69	44.48	Typical HDD Waterbody Crossing	2.3.1.3-1	
44.48	44.82	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
44.82	45.00	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
45.00	45.55	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
45.55	46.23	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
46.23	46.70	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
46.70	47.00	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
47.00	47.76	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
47.76	48.04	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
48.04	48.70	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
48.70	49.15	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
49.15	49.57	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
49.57	50.45	Typical HDD Waterbody Crossing	2.3.1.3-1	
50.45	51.30	Typical HDD Waterbody Crossing	2.3.1.3-1	
51.30	51.78	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	

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	TABLE E-1 Pipeline Construction Method by Milepost			
Mile	post	Primary Construction Method	Figure Number	
Begin	End	Description		
51.78	52.37	Typical HDD Waterbody Crossing	2.3.1.3-1	
52.37	53.05	Typical HDD Waterbody Crossing	2.3.1.3-1	
53.05	53.52	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
53.52	53.60	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
53.60	53.90	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
53.90	54.02	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
54.02	54.91	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
54.91	55.03	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
55.03	56.06	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
56.06	57.64	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3	
57.64	57.94	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2	
57.94	59.73	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3	
59.73	61.00	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	
61.00	62.70	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3	
62.70	66.27	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2	

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	TABLE E-1 Pipeline Construction Method by Milepost		
Milepost		Primary Construction Method	Eigura Numbar
Begin	End	Description	Figure Number
66.27	66.95	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
66.95	67.37	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
65.37	72.91	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
72.91	73.85	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
73.85	76.20	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
76.20	76.98	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
76.98	77.65	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
77.65	78.40	Typical HDD Waterbody Crossing	2.3.1.3-1
78.40	88.61	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
88.61	89.08	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
89.08	89.20	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
89.20	89.40	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
89.40	89.58	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
89.58	99.02	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2

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TABLE E-1 Pipeline Construction Method by Milepost			
Milepost		Primary Construction Method	
Begin	End	Description	Figure Number
99.02	99.76	Typical HDD Waterbody Crossing	2.3.1.3-1
99.76	101.52	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
101.52	105.73	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
105.73	106.97	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
106.97	109.14	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
109.14	109.36	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
109.36	101.14	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
101.14	112.01	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
112.01	112.42	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
112.42	118.30	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
118.30	118.68	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
118.68	118.86	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
118.86	121.95	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
121.95	122.06	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2

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TABLE E-1 Pipeline Construction Method by Milepost			
Milepost		Primary Construction Method	N
Begin	End	Description	Figure Number
122.06	129.57	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
129.57	129.69	42" Typical Cross Section without Topsoil Segregation	2.3.1.1-2
129.69	129.80	Typical Inland Open Water ≥8' Depth	2.3.1.3-5
129.80	132.16	Typical Cross Section with 42" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-3
0.00	0.92	42" & 36" Typical Cross Section without Topsoil Segregation (LNG Terminal)	2.3.1.1-6
0.92	1.22	36" Typical Cross Section without Topsoil Segregation (LNG Terminal)	2.3.1.1-7
0.00	0.77	Typical Cross Section with 24" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-8
0.77	1.57	Unsaturated Wetland Crossing with Topsoil Segregation	2.3.1.2-1 and 2.3.1.2-2
1.57	2.30	Typical Cross Section with 24" Pipe Adjacent to Foreign Pipeline without Topsoil Segregation	2.3.1.1-8

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