TABLE 1

Delaware River Reach B Submarine Utility Crossings

Utility	*Owner/Operator*	*Utility Description*	*Permit Information*	*Location Description*
E	Columbia Gas Transmission	One 20-inch submarine gas pipeline	Application Submitted: NA Permit Issued: 06/27/87 Permit #: CENAP-OP-R-87-0239-12	Claymont, DE across Marcus Hook Range to Logan Township, NJ
F2	Colonial Pipeline Company	One 30-inch submarine oil pipeline	Application Submitted: 04/21/87 Permit Issued: 08/03/87 Permit #: CENAP-OP-R-87-0123-12	200' downstream from existing 30" submarine oil pipeline (below)
F	Colonial Pipeline Company	One 30-inch submarine oil pipeline	Application Submitted: 05/28/63 Permit Issued: 10/11/63 Permit #: NAPOP-N	Just south of DE state line across Marcus Hook Range and Anchorage between Claymont, DE and Logan Township, NJ
G	Linde Group	One 8-inch nitrogen submarine pipeline	(See Item H Permit Information)	Lower end of Marcus Hook Anchorage, between New Castle County, DE and Logan Township, NJ
H	Sunoco Logistics	Three 6-inch and three 4-inch submarine chemical pipelines	Application: 11/04/60, rev. 07/20/61 Permit Issued: 05/22/61, rev. 08/02/61 Permit #: NAPOP-N	Lower end of Marcus Hook Anchorage, between New Castle County, DE and Logan Township, NJ
I	Williams Gas Pipeline Transco	One 16-inch submarine gas pipeline	(See Item H Permit Information)	Lower end of Marcus Hook Anchorage, between New Castle County, DE and Logan Township, NJ
J	Williams Gas Pipeline Transco	One 12-inch submarine gas pipeline	Application: 04/25/51, rev. 06/22/51 Permit Issued: 06/28/51 Permit #: NAPKP	<200' downstream from existing natural gas pipeline (below)
J2	Williams Gas Pipeline Transco	One 12-inch submarine gas pipeline	Application: 12/01/49, rev. 06/05/50 & 10/03/50 Permit Issued: 08/04/50, rev. 10/09/50 Permit #: NAPKP	Marcus Hook, PA to a point 1.5-mi downstream from mouth of Raccoon Creek, Logan Township, NJ
K	Williams Gas Pipeline Transco	Two 20-inch and one 6-inch submarine gas pipelines	No permit information found.	Marcus Hook Range between Chester, PA and Logan Township, NJ
N	Comcast Cable	Submerged fiber optics cable	Application: 09/10/97 Permit Issued:10/31/97 Permit #: CENAP-OP-R-199701939-15	Chester, PA to Bridgeport, NJ

TABLE 2

REACH B SUBMARINE UTILITY CROSSINGS OF THE DELAWARE RIVER
As-Built Survey/Project Vertical Datum Information

Current Owner/Operator	Utility Description	Date of As-Built Survey[2]	Minimum Below As-Built Datum In Channel (feet)	As-Built Datum Description	Minimum Below Project Datum In Channel NOAA MLLW (feet)
Columbia Gas (E)	20-inch gas pipeline	01/20/88	62.5	"C.O.E. Datum" (COE MLW Datum - Marcus Hook Range)	62.7
Colonial Pipeline (F2)	30-inch oil pipeline	09/26/88[3]	58.9	"Delaware River Datum" (DRD is 0.54 feet below MLW)	59.6
Colonial Pipeline (F)[1]	30-inch oil pipeline	08/31/65	57.5	"Delaware River Datum" (DRD is 0.54 feet below MLW)	58.2
Linde/Sunoco/Transco (G/H/I)	3-4 inch & 3-6 inch chemical, 1-8 inch nitrogen, 1-16 inch gas pipelines	12/22/61	58	"USCE Delaware River Datum" (High Water and Low Water are 6.0 feet and 0.7 feet above DRD, respectively)	58.7
Transco (J)	1-12 inch gas pipeline	09/10/64	63.8	"MLW" (MLW is 0.7 feet above U.S. Engineers Datum")	63.8
Transco (J2)	1-12 inch gas pipeline	NA	NA	NA	NA
Transco (K)	1-6 inch & 2-20 inch gas pipelines	09/23/64	52	"U.S. Corps of Engineers Delaware River Datum" (that datum being 2.90 feet lower than the USC&GS datum)	52.7
Comcast Cable (N)	Fiber optics cable	03/09/99	74	"Local MLW" (Local MLW is 5.3 feet below Local MHW)	74.1

Notes

[1]This as-built shows a pipeline installed in the mid 1960s, now listed as "inactive".

[2]Date as-built survey drawing issued.

[3]Date as-built top of pipe survey completed.