APPENDIX F

WATERBODIES CROSSED BY THE MILLENNIUM PIPELINE

TABLE F1

Waterbodies Crossed by the Millennium Pipeline Project

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
	1740+15	0.0 to 32.9	Lake Erie	73,976	P	Coldwater (PA), A-Special (NY)	6/1 to 9/15	Jet sled, directional drill shoreline	No	Variance required for timing restriction.
Chautauqua	1867+45	35.4	Trib. Lake Erie	10		C	None	Dry *	Yes	
	1877+58	35.6	Trib. Lake Erie	15		C	None	Dry *	Yes	
	1884+68	35.7	Trib. Lake Erie	10		D	None	Open cut	No	
	1885+32	35.7	Trib. Lake Erie	10	I	D	None	Open cut	No	
	2016+25	38.1	Belson Creek (Gage Gulf)	16	P	A	6/1 to 11/30	Dry	Yes	A, B - Town of Ripley.
	2032+87	38.4	Trib. Belson Creek	<10	P	A	6/1 to 11/30	Dry	Yes	
	2058+48	38.9	Trib. Belson Creek	14		D	None	Open cut	No	
	2087+28	39.4	Belson Creek (Gage Gulf)	12	P	A	6/1 to 11/30	Dry	Yes	
	2173+42	41.0	Trib. Lake Erie	160	P	C	None	Open cut	Yes	A
	2239+93	42.3	Trib. Chautauqua Creek	11	P	C(T)	6/1 to 9/15	Dry	Yes	--
	2249+62	42.5	Trib. Chautauqua Creek	12	I	D	None	Open cut	No	
	2273+06	42.9	Trib. Chautauqua Creek	<10	P	C(T)	6/1 to 9/15	Dry	Yes	
	2274+77	43.0	Chautauqua Creek	10	P	B(T)	6/1 to 9/15	Dry	Yes	
	2306+87	43.5	Trib. Chautauqua Creek	20	P	A	6/1 to 11/30	Dry	Yes	
	2327+69	44.1	Trib. Mud Creek	27	P	C	None	Open cut	Yes	A
	2333+92	44.2	Trib. Mud Creek	21	I	C	None	Dry *	Yes	
	2334+81	44.3	Trib. Mud Creek	19	I	C	None	Dry *	Yes	
	2352+14	44.5	Trib. Mud Creek	15	I	C	None	Dry *	Yes	
	2363+22	44.7	Trib. Mud Creek	16	P	C	None	Open cut	Yes	A
	2369+16	44.8	Trib. Mud Creek	16	P	C	6/1 to 11/30	Open cut	Yes	A
	2385+19	45.1	Trib. Mud Creek	<10	P	C	6/1 to 11/30	Dry	Yes	
	2504+18	47.4	Trib. Little Inlet	20		C	6/1 to 11/30	Dry *	Yes	
	2603+96	49.3	Big Inlet	<10	P	C	6/1 to 11/30	Dry	Yes	
	2640+06	49.9	Trib. Big Inlet	<10	P	C	6/1 to 11/30	Dry	Yes	
	2656+82	50.3	Trib. Big Inlet	<10	I	D	None	Open cut	No	
	2661+80	50.4	Trib. Big Inlet	31	P	C	6/1 to 11/30	Open cut	Yes	A
	2736+07	51.8	Trib. Dewittville Creek	<10		C	6/1 to 11/30	Dry *	Yes	
	2756+41	52.1	Dewittville Creek	25	P	C	6/1 to 11/30	Open cut	Yes	A
	2788+54	52.8	Trib. Dewittville Creek	11	P	C	None	Dry	Yes	
	2821+65	53.4	Trib. Dewittville Creek	15	P	C	6/1 to 11/30	Open cut	Yes	A

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Chautauqua (cont'd)	2830+05	53.5	Trib. Dewittville Creek	<10		D	None	Open cut	No	--
	2872+30	54.3	Whitesides Creek	<10	P	C	6/1 to 11/30	Dry	Yes	--
	2941+15	55.6	Bemus Creek	38	P	C	6/1 to 11/30	Open cut	Yes	A
	3087+38	58.4	Trib. Cassadaga Creek	11	P	C	None	Dry	Yes	
	3126+64	59.2	Trib. Cassadaga Creek	5		D	None	Open cut	No	
	3132+54	59.3	Trib. Cassadaga Creek	3		D	None	Open cut	No	
	3165+53	59.9	Cassadaga Creek	42	P	C	None	Open cut	Yes	A
	3188+49	60.3	Trib. Cassadaga Creek	113	P	C	None	Open cut	Yes	A
	3198+90	60.5	Trib. Cassadaga Creek e/	272	P	C	None	Open cut	Yes	A
	3322+91	62.9	Trib. Hatch Creek	15		D	None	Open cut	No	
	3371+46	63.8	Trib. Hatch Creek	7	P	C	None	Dry	Yes	
	3383+20	64.0	Trib. Hatch Creek	7	P	C	None	Dry	Yes	
	3407+43	64.5	Hatch Creek	14	P	C	None	Dry	Yes	
	3464+25	65.6	Trib. Clear Creek	5	I	C	None	Dry *	Yes	--
	3507+82	66.4	Trib. Clear Creek	15	P	C(T)	6/1 to 9/15	Dry	Yes	--
	3512+05	66.5	Trib. Clear Creek	18	P	C(T)	6/1 to 9/15	Dry	Yes	--
	3525+84	66.7	Trib. Clear Creek	24	P	C(T)	6/1 to 9/15	Dry	Yes	--
	3644+28	69.0	Clear Creek	35	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	3654+59	69.2	Trib. Clear Creek	20	P	C	None	Open cut	Yes	A
	3695+95	69.9	Trib. Clear Creek	25	P	C	None	Open cut	Yes	A
	3722+33	70.4	Allen Brook	20	P	C(T)	6/1 to 9/15	Open cut	Yes	A
Cattaraugus	3851+15	72.9	State Drainage Ditch	96	P	C	None	Open cut	Yes	A
	3853+00	72.9	Trib. State Drainage Ditch e/	128	I	D	None	Open cut	No	--
	3857+02	73.0	Trib. State Drainage Ditch e/	100	I	D	None	Open cut	No	--
	3903+89	73.9	Trib. Conewango Creek	15	P	C	None	Dry	Yes	--
	3925+23	74.3	Trib. Conewango Creek	6	P	C	None	Dry	Yes	--
	4007+84	75.8	Seager Creek or Pope Brook	11	I	C	None	Dry *	Yes	--
	4063+77	76.9	Mill Creek	<10	I	C	None	Dry *	Yes	--
	4119+19	77.9	Trib. Elm Creek	<10	I	C(T)	6/1 to 9/15	Dry *	Yes	--
	4148+34	78.5	Elm Creek	20	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	4183+67	79.2	Trib. Peaslee Hollow	14	P	D	None	Open cut	Yes	--
	4185+92	79.2	Trib. Peaslee Hollow	15	P	C(T)	6/1 to 9/15	Dry	Yes	--
	4238+82	80.2	Peaslee Hollow	32	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	4259+23	80.6	Trib. Cold Spring Creek	21		D	None	Open cut	No	
	4306+09	81.5	Cold Spring Creek	9	P	C	None	Dry	Yes	
	4312+60	81.6	Trib. Cold Spring Creek	50	I	D	None	Open cut	No	
	4343+46	82.2	Trib. Cold Spring Creek	15	I	C	None	Dry *	Yes	
	4365+13	82.6	Trib. Cold Spring Creek	16	I	C	None	Dry *	Yes	

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Cattaraugus (cont'd)	4454+81	84.3	Trib. Little Valley Creek	15	P	C	None	Open cut	Yes	A
	4460+56	84.4	Trib. Little Valley Creek	26	P	C	None	Open cut	Yes	A
	4668+93	88.3	Little Valley Creek	43	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	4745+19	89.8	Whig Street Creek	10	P	C(T)	6/1 to 9/15	Dry	Yes	
	4746+44	89.8	Trib. Whig Street Creek	12	P	C(T)	6/1 to 9/15	Dry	Yes	
	4822+62	91.3	Trib. Great Valley Creek	40	P	D	None	Open cut	Yes	
	4825+00	91.3	Trib. Great Valley Creek	37	P	D	None	Open cut	Yes	
	4840+86	91.6	Trib. Great Valley Creek	26	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	4845+86	91.7	Trib. Great Valley Creek	9	P	C(T)	6/1 to 9/15	Dry	Yes	
	4863+90	92.0	Trib. Great Valley Creek	33		C(T)	6/1 to 9/15	Dry *	Yes	
	5006+73	94.7	Great Valley Creek	43	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	5052+42	95.5	Trib. Wrights Creek	21		C	None	Dry	Yes	
	5070+17	95.8	Wrights Creek	24	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	5135+96	97.1	Willoughby Creek	36	P	C	None	Open cut	Yes	A
	5268+89	97.2	Trib. Willoughby Creek	6	P	C	None	Dry	Yes	--
	5275+73	99.6	Trib. Wrights Creek	12	P	C	None	Dry	Yes	--
	5291+07	99.7	Trib. Wrights Creek	25	P	C	None	Open cut	Yes	A
	5296+79	99.9	Trib. Wrights Creek	14	P	C	None	Open cut	Yes	A
	5374+08	101.8	Trib. Pumpkin Hollow	13		C(T)	6/1 to 9/15	Dry *	Yes	
	5382+48	102.0	Trib. Pumpkin Hollow	10		D	None	Open cut	No	
	5384+83	102.0	Tributary of Pumpkin Hollow	10		D	None	Open cut	No	
	5389+50	102.1	Trib. Pumpkin Hollow	9		C(T)	6/1 to 9/15	Dry *	Yes	
	5411+81	102.5	Trib. Five Mile Creek	8	P	C(T)	6/1 to 9/15	Dry	Yes	
	5444+23	103.1	Trib. Five Mile Creek	<10		C	None	Dry *	Yes	
	5459+63	103.4	Trib. Five Mile Creek	13	P	C	None	Dry	Yes	
	5486+57	103.9	Trib. Five Mile Creek	11	P	C	None	Dry	Yes	
	5493+92	104.1	Trib. Five Mile Creek	11	P	C	None	Dry	Yes	
	5518+18	104.5	Five Mile Creek	32	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	5588+50	105.9	Trib. Five Mile Creek	45	P	C	None	Open cut	Yes	A
	5628+99	106.6	Trib. Five Mile Creek	24	P	C	None	Open cut	Yes	A
	5653+04	107.1	Trib. Five Mile Creek	<10	I	C	None	Dry *	Yes	
	5658+84	107.2	Trib. Five Mile Creek	<10	I	C	None	Dry *	Yes	
	5694+53	107.9	Trib. Five Mile Creek	15	I	C	None	Dry *	Yes	
	5720+96	108.4	Trib. Five Mile Creek	15	I	C	None	Dry *	Yes	
	5728+02	108.5	Trib. Five Mile Creek	13	I	C	None	Dry *	Yes	
	5788+04	109.6	Twomile Creek	15	P	C	None	Dry	Yes	
	5807+61	110.0	Trib. Blakesly Hollow Brook	<10	P	A	6/1 to 11/30	Dry	Yes	
	5824+75	110.3	Blakesly Hollow Brook	22	P	A	6/1 to 11/30	Open cut	Yes	A
	5844+65	110.7	Woodchuck Hollow	30	P	A	6/1 to 11/30	Open cut	Yes	A

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Cattaraugus (cont'd)	5870+21	111.2	Olean Creek	180	P	A	6/1 to 11/30	Open cut	No	A, B - City of Olean.
	5902+57	111.8	Godfrey Hollow Branch	25		A	6/1 to 11/30	Dry *	Yes	--
	5915+42	112.1	Trib. Godfrey Hollow Branch	<10		A	6/1 to 11/30	Dry *	Yes	
	5919+16	112.1	Trib. Godfrey Hollow Branch	<10		D	None	Open cut	No	
	5924+35	112.2	Trib. Godfrey Hollow Branch	18		A	6/1 to 11/30	Dry *	Yes	
	5930+65	112.3	Trib. Godfrey Hollow Branch	15		A	6/1 to 11/30	Dry *	Yes	--
	5961+67	112.9	Trib. Haskell Creek	<10		C	None	Dry *	Yes	C
	5987+46	113.4	Trib. Haskell Creek	14		C	None	Dry *	Yes	C
	6017+59	114.0	Trib. Haskell Creek	<10		C	None	Dry *	Yes	C
	6049+22	114.6	Trib. Haskell Creek	6	P	C	None	Dry	Yes	
	6070+34	115.0	Haskell Creek	60	P	C(T)	6/1 to 9/15	Open cut	Yes	A, C
	6082+55	115.2	Trib. Haskell Creek	17	P	C	None	Open cut	Yes	A, C
	6107+87	115.7	Trib. Haskell Creek	<10		D	None	Open cut	No	--
	6158+62	116.7	Trib. Wolf Run	29	P	C	None	Open cut	Yes	A, C
	6183+29	117.1	Wolf Run	65	P	C	None	Open cut	Yes	A, C
Allegany	6213+33	117.7	Trib. Wolf Run	<10		D	None	Open cut	No	C
	6216+57	117.8	Trib. Wolf Run	<10	P	C	None	Dry	Yes	C
	6267+04	118.7	Trib. Wolf Creek	15	P	C	None	Dry	Yes	C
	6282+46	119.0	Wolf Creek	15	P	C	None	Open cut	Yes	A, C
	6326+57	119.8	Trib. Dodge Creek	<10		C	None	Dry *	Yes	C
	6329+22	119.9	Trib. Dodge Creek	<10		C	None	Dry *	Yes	C
	6349+14	120.3	Trib. Dodge Creek	<10	P	C	None	Dry	Yes	C
	6356+60	120.4	Dodge Creek	40	P	C(T)	6/1 to 9/15	Open cut	Yes	A, C
	6388+56	121.0	Trib. Dodge Creek	10		D	None	Open cut	No	C
	6390+51	121.1	Trib. Dodge Creek	5		D	None	Open cut	No	C
	6479+74	121.9	Trib. Dodge Creek	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	6479+98	122.7	Trib. Dodge Creek	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	6634+63	125.7	Trib. Little Genesee Creek	<10		C	None	Dry *	Yes	C
	6689+85	126.7	Trib. Little Genesee Creek	<10		C	None	Dry *	Yes	C
	6697+84	126.9	Little Genesee Creek	<10		C(T)	6/1 to 9/15	Dry *	Yes	C
	6749+77	127.9	Trib. Van Campen Creek	12	P	C	None	Dry	Yes	C
	6811+50	129.0	South Branch Van Campen Creek	<10		C(T)	6/1 to 9/15	Dry *	Yes	C
	6966+40	132.0	Trib. Knight Creek	32	P	C	None	Open cut	Yes	A, C
	6971+02	132.1	Knight Creek	58	P	C	None	Open cut	Yes	A, C
	7024+59	133.1	Brimmer Brook	25	P	C	None	Open cut	Yes	
	7029+16	133.2	Trib. Brimmer Brook	25		D	None	Open cut	No	
	7062+54	133.8	Trib. Brimmer Brook	<10		D	None	Open cut	No	
	7073+48	134.0	Trib. Brimmer Brook	15	P	C	None	Dry	Yes	

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Allegany (cont'd)	7144+36	135.4	Crowner Brook	20	P	C	None	Open cut	Yes	A
	7167+44	135.8	Trib. Crowner Brook	<10	I	C	None	Dry *	Yes	--
	7246+90	137.3	Genesee River	130	P	A(T)	6/1 to 9/15	Open cut	No	A, B - Town of Wellsville.
	7254+52	137.4	Cold Brook	<10	I	C(T)	6/1 to 9/15	Dry *	Yes	
	7259+91	137.5	Trib. Cold Brook	<10	I	C(T)	6/1 to 9/15	Dry *	Yes	
	7444+05	141.0	Trib. Trapping Brook	<10		D	None	Open cut	No	
	7482+05	141.7	Trib. Trapping Brook	<10		C	None	Dry *	Yes	
	7614+37	144.2	Trib. Fulmer Valley Creek	12		C	None	Dry *	Yes	
	7678+84	145.4	Fulmer Valley Creek	<10		C	None	Dry *	Yes	
	7736+73	146.5	Best Hollow Creek	<10		C(TS)	6/1 to 9/30	Dry *	Yes	--
	7749+23	146.8	Trib. Best Hollow Creek	<10	I	C	None	Dry *	Yes	--
	7809+88	147.9	Trib. Dyke Creek	<10	P	C	None	Open cut	Yes	A
Steuben	7872+77	148.1	Trib. Dyke Creek	20	P	C	None	Open cut	Yes	A
	7917+53	148.5	Trib. Dyke Creek	<10	I	C	None	Dry *	Yes	--
	7935+61	148.8	Trib. Dyke Creek	20	P	D	None	Open cut	Yes	
	7979+01	151.0	Trib. Bennetts Creek	<10	P	C	6/1 to 11/30	Dry	Yes	
	8007+68	151.2	Tribuary of Bennetts Creek	<10	P	C	6/1 to 11/30	Dry	Yes	
	8028+25	151.8	Trib. Bennetts Creek	<10	P	C	6/1 to 11/30	Dry	Yes	
	8031+39	151.9	Trib. Bennetts Creek	<10	P	C	6/1 to 11/30	Dry	Yes	
	8073+00	152.9	Trib. Rock Creek	9	I	C	6/1 to 11/30	Dry *	Yes	
	8138+69	154.1	Rock Creek	12	P	C(TS)	6/1 to 9/15	Dry	Yes	--
	8189+43	155.1	Bennetts Creek	60	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	8192+94	155.2	Trib. Bennetts Creek	7	I	C	6/1 to 11/30	Dry *	Yes	--
	8237+48	156.0	Trib. Bennetts Creek	31	P	C	6/1 to 11/30	Open cut	Yes	A
	8259+71	156.4	Trib. Bennetts Creek	14	P	C	6/1 to 11/30	Open cut	Yes	A
	8366+35	158.5	Trib. Milwaukee Creek	9	P	C	6/1 to 11/30	Dry	Yes	--
	8409+98	159.3	Milwaukee Creek	15	P	C	6/1 to 11/30	Dry	Yes	--
	8686+07	164.5	Trib. Talbot Creek	17	P	C	6/1 to 11/30	Open cut	Yes	A
	8730+66	165.4	North Branch Tuscarora Creek	24	P	C	6/1 to 11/30	Open cut	Yes	A
	8737+57	165.5	Trib. North Branch Tuscarora Creek	12	P	C	6/1 to 11/30	Open cut	Yes	A
	8818+36	167.0	Trib. Tracy Creek	34	P	C	6/1 to 11/30	Open cut	Yes	A
	8880+82	168.2	Trib. Tracy Creek	14	P	C	6/1 to 11/30	Open cut	Yes	A
	8909+82	168.8	Trib. Tracy Creek	5	P	C	6/1 to 11/30	Dry	Yes	
	9054+08	171.5	Back Channel of Canisteo River	15	P	C	6/1 to 11/30	Open cut	Yes	A
	9055+15	171.5	Back Channel of Canisteo River	15	P	C	6/1 to 11/30	Open cut	Yes	A
	9056+59	171.5	Canisteo River	81	P	C	6/1 to 11/30	Open cut	Yes	A
	9168+13	173.6	Goodhue Creek	5	P	C	6/1 to 11/30	Dry	Yes	
	9268+57	175.5	Trib. Michigan Creek	8	I	C	6/1 to 11/30	Dry *	Yes	

ABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Steuben (cont'd)	9272+22	175.6	Trib. Michigan Creek	3	P	C	6/1 to 11/30	Dry	Yes	--
	9404+76	178.1	Curtis Creek	67	P	C	6/1 to 11/30	Open cut	Yes	A
	9554+87	181.0	Trib. Cohocton River	38	I	D	6/1 to 9/15	Open cut	No	--
	9577+89	181.4	Cohocton River	203	P	C	6/1 to 9/15	Open cut	No	A
	9587+69	181.6	Trib. Cohocton River	11	P	C	6/1 to 9/15	Dry dtch	Yes	--
	9616+57	182.1	Meads Creek	74	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	9625+10	182.3	Trib. Meads Creek	11	I	D	6/1 to 11/30	Open cut	No	--
	9650+78	182.8	Trib. Meads Creek	<10	I	C	6/1 to 11/30	Dry *	Yes	--
	9669+89	183.1	Trib. Cohocton River	<10	I	C	6/1 to 11/30	Dry *	Yes	--
	9714+24	184.0	Erwin Hollow Brook	59	P	C(TS)	6/1 to 9/15	Open cut	Yes	A
	9776+06	185.1	Hodgmans Creek	13	I	C	6/1 to 11/30	Dry *	Yes	--
	9820+35	186.0	Borden Creek	13	P	C(TS)	6/1 to 9/15	Dry	Yes	--
	9849+86	186.5	Trib. Cutler Creek	4	I	D	6/1 to 11/30	Open cut	No	
	9856+52	186.7	Trib. Cutler Creek	17	P	C(TS)	6/1 to 9/15	Open cut	Yes	A
	9857+55	186.7	Cutler Creek	43	P	C(TS)	6/1 to 9/15	Open cut	Yes	A
	9961+33	188.6	Post Creek	83	P	C	None	Open cut	Yes	A
	10102+6	191.3	Trib. Chemung River	15	I	C	None	Dry *	Yes	--
Chemung	10146+9	192.2	Trib. Cuthrie Run	11	P	C	None	Dry	Yes	--
	10157+6	192.4	Trib. Cuthrie Run	8		D	None	Dry *	No	--
	10191+1	193.0	Trib. Cuthrie Run	52	P	C	None	Open cut	Yes	A
	10191+7	193.0	Cuthrie Run	15	I	C	None	Dry *	Yes	--
	10220+6	193.6	Trib. Cuthrie Run	35	P	C	None	Open cut	Yes	A
	10257+8	194.3	Trib. Sing Sing Creek	9	I	D	None	Open cut	No	--
	10269+8	194.5	Trib. Sing Sing Creek	11	I	C	None	Dry *	Yes	--
	10292+5	194.9	Trib. Sing Sing Creek	5	I	D	None	Open cut	No	
	10295+8	195.0	Trib. Sing Sing Creek	5		D	None	Open cut	No	
	10310+1	195.3	Trib. Sing Sing Creek	16	I	C(T)	6/1 to 9/15	Dry *	Yes	
	10320+7	195.5	Trib. Sing Sing Creek	6	I	C	None	Dry *	Yes	--
	10324+6	195.5	Sing Sing Creek	34	P	C(TS)	6/1 to 9/15	Open cut	Yes	A
	10484+1	198.5	Catharine Creek	23	P	C(TS)	6/1 to 9/15	Open cut	Yes	A
	10564+6	200.1	Trib. Catharine Creek	12	I	C	None	Dry *	Yes	--
	10589+8	200.6	Catharine Creek	17	P	C	None	Open cut	Yes	A
	10610+1	200.9	Trib. Catharine Creek	11	I	C	None	Dry *	Yes	--
	10693+4	202.5	North Branch Newtown Creek	30	P	C	None	Open cut	Yes	A
	10716+0	202.9	Newtown Creek	36		C	None	Open cut	Yes	A
	10847+7	205.4	Trib. Newtown Creek	9		C	None	Dry *	Yes	--
	10929+6	207.0	Trib. Baldwin Creek	<10		C	None	Dry *	Yes	
	10963+8	207.6	Trib. Baldwin Creek	11		C	None	Dry *	Yes	

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Chemung (cont'd)	10995+9	208.2	Trib. Baldwin Creek	13	I	C	None	Dry *	Yes	--
	11012+5	208.6	Baldwin Creek	9	P	C	None	Dry	Yes	--
	11082+0	209.9	Trib. Newtown Creek	33	I	C	None	Dry *	Yes	
	11083+1	209.9	Trib. Newtown Creek	9	I	D	None	Open cut	No	
	11097+7	210.2	Trib. Newtown Creek	23	I	C	None	Dry *	Yes	
	11130+4	210.8	Trib. Newtown Creek	7	I	D	None	Open cut	No	
	11132+2	210.8	Trib. Newtown Creek	4	I	D	None	Open cut	No	
	11134+7	210.9	Trib. Newtown Creek	3	I	C	None	Dry *	Yes	
	11188+3	211.9	Tributary to WynkoopCreek	11	I	C	None	Dry *	Yes	
	11194+1	212.0	Wynkoop Creek	11	P	C	None	Dry	Yes	
	11241+9	212.9	Tributary to Wynkoop Creek	18	P	C	None	Open cut	Yes	A
	11318+1	214.3	Trib. Cayuta Creek	8	I	D	6/1 to 9/15	Open cut	No	
	11351+0	215.0	Cayuta Creek e/	116	P	B	6/1 to 9/15	Open cut	Yes	A
	11377+3	215.5	Trib. Cayuta Creek	4	I	D	6/1 to 9/15	Open cut	No	
	11377+9	215.5	Trib. Cayuta Creek	5	I	C	None	Dry *	Yes	
	11408+1	216.0	Trib. Dean Creek	5	I	D	6/1 to 9/15	Open cut	No	--
	11413+7	216.2	Trib. Dean Creek	7	I	D	6/1 to 9/15	Open cut	No	--
	11418+2	216.2	Trib. Dean Creek	3	I	D	6/1 to 9/15	Open cut	No	
	11423+1	216.3	Trib. Dean Creek	8	I	C	6/1 to 9/15	Dry *	Yes	
Tioga	11428+5	216.4	Trib. Dean Creek	5	I	D	6/1 to 9/15	Open cut	No	--
	11466+6	217.2	Trib. Dean Creek	4	I	D	6/1 to 9/15	Open cut	No	--
	11640+7	220.5	South Branch Catatonk Creek	22	P	C	6/1 to 9/15	Open cut	Yes	A
	11688+3	221.4	Trib. South Branch Catatonk Creek	4	I	D	6/1 to 11/30	Open cut	No	--
	11691+1	221.4	Trib. South Branch Catatonk Creek	7	P	C	6/1 to 9/15	Dry	Yes	--
	11752+2	222.6	Trib. Evelin Hill Creek	14	I	C	6/1 to 9/15	Dry *	Yes	
	11779+8	223.1	Evelin Hill Creek	45	P	C	6/1 to 9/15	Open cut	Yes	A
	11825+3	223.9	Trib. Pipe Creek	<10	P	C	6/1 to 9/15	Dry	Yes	
	11856+9	224.5	Pipe Creek	29	P	C	6/1 to 9/15	Open cut	Yes	A
	11953+9	226.4	Trib. Catatonk Creek	11	I	C	6/1 to 9/15	Dry *	Yes	
	11979+5	226.9	Trib. Catatonk Creek	<10	I	C	6/1 to 9/15	Dry *	Yes	
	11995+8	227.2	Trib. Catatonk Creek	11	I	C	6/1 to 9/15	Dry *	Yes	
	12047+1	228.1	Catatonk Creek	74	P	C	6/1 to 11/30	Open cut	Yes	A
	12091+0	229.0	Trib. Catatonk Creek	9		C	6/1 to 9/15	Dry *	Yes	
	12154+1	230.2	Trib. Owego Creek	29		C(T)	6/1 to 9/15	Dry *	Yes	--
	12163+1	230.3	Owego Creek	122	P	C(T)	6/1 to 9/15	Open cut	No	A
	12205+7	231.2	Trib. Owego Creek	22	P	C	6/1 to 9/15	Open cut	Yes	A
	12219+0	231.4	Trib. Owego Creek	16		D	6/1 to 9/15	Open cut	No	
	12253+3	232.1	Trib. Owego Creek	20		C	6/1 to 9/15	Dry *	Yes	

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Tioga (cont'd)	12253+6	232.1	Trib. Owego Creek	11		D	6/1 to 9/15	Open cut	No	
	12255+7	233.0	Trib. Owego Creek	10		D	6/1 to 9/15	Open cut	No	
	12341+9	233.7	Tributary to Little Nanticoke	6	P	C	6/1 to 9/15	Dry	Yes	
	12372+3	234.2	Little Nanticoke Creek	8		C	6/1 to 9/15	Dry *	Yes	
	12416+9	235.2	Pond	140	P	C	None	Open cut	No	A
	12438+4	235.5	Ford Creek	4	I	C	6/1 to 9/15	Dry *	Yes	
	12493+3	236.6	Foster Creek	10	P	C	6/1 to 9/15	Dry	Yes	
	12566+4	238.5	Tributary to Crocker Creek	10	I	C	6/1 to 9/15	Dry *	Yes	
Broome	12593+6	238.7	Tributary to Crocker Creek	3		C	6/1 to 9/15	Dry *	Yes	
	12627+0	238.9	Crocker Creek	30	P	C	6/1 to 9/15	Open cut	Yes	A
	12654+0	239.4	Tributary to Crocker Creek	10		C	6/1 to 9/15	Dry *	Yes	
	12717+7	240.7	Nanticoke Creek	60	P	C	6/1 to 9/15	Open cut	Yes	A
	12768+9	241.5	Tributary to Bradley Creek	15		C	6/1 to 9/15	Dry	Yes	
	12769+9	241.6	Tributary to Bradley Creek	10	I	C	6/1 to 9/15	Dry *	Yes	
	12783+9	241.8	Bradley Creek	20	P	C	6/1 to 9/15	Open cut	Yes	A
	12822+0	242.4	Tributary to Bradley Creek	6	I	C	6/1 to 9/15	Dry *	Yes	
	12869+5	242.5	Tributary to Patterson Creek	6	I	C	6/1 to 9/15	Dry *	Yes	
	12877+6	243.5	Patterson Creek	35	P	C	6/1 to 9/15	Open cut	Yes	A
	12893+5	244.2	Trib. Patterson Creek	15	I	C	6/1 to 9/15	Dry *	Yes	
	12933+9	244.9	Trib. Little Choconut Creek	26	P	C	6/1 to 9/15	Open cut	Yes	A
	12969+4	245.6	Trib. Little Choconut Creek	12		C	6/1 to 9/15	Dry *	Yes	
	13040+3	247.0	Little Choconut Creek	89	P	C	6/1 to 9/15	Open cut	Yes	A
	13055+8	247.3	Trib. Little Choconut Creek	23	P	C	6/1 to 9/15	Open cut	Yes	A
	13112+3	248.3	Trib. Chenango River	13	I	D	6/1 to 9/15	Open cut	No	
	13189+5	249.8	Chenango River	275	P	B	6/1 to 9/15	DD	No	
	13227+3	250.5	Phelps Creek	11	P	C	6/1 to 9/15	Open cut	Yes	A
	13382+1	253.4	Trib. Stratton Mill Creek	<10	I	C	6/1 to 9/15	Dry *	Yes	--
	13407+4	253.9	Stratton Mill Creek	7	P	C	6/1 to 9/15	Dry	Yes	
	13455+3	254.8	Trib. Stanley Hollow Creek	35	P	C	6/1 to 9/15	Open cut	Yes	A
	13507+1	255.8	Trib. Stanley Hollow Creek	25	P	C	6/1 to 9/15	Open cut	Yes	A
	13539+0	256.4	Stanley Hollow Creek	41	P	C	6/1 to 9/15	Open cut	Yes	A
	13572+7	257.0	Trib. Stanley Hollow Creek	17		C	6/1 to 9/15	Dry *	Yes	
	13607+4	257.7	Trib. Stanley Hollow Creek	20	P	C	6/1 to 11/30	Open cut	Yes	A
	13648+5	258.5	Trib. Occanum Creek	15	P	C	6/1 to 11/30	Open cut	Yes	A
	13673+3	259.0	Occanum Creek	12	P	C	6/1 to 9/15	Open cut	Yes	A
	13699+5	259.4	Trib. Occanum Creek	<10	P	C	6/1 to 9/15	Dry	Yes	
	13732+2	260.1	Trib. Occanum Creek	<10	P	C	6/1 to 9/15	Dry	Yes	
	13761+0	260.6	Trib. Still Creek	<10	P	C	6/1 to 9/15	Dry	Yes	

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Broome (cont'd)	13794+6	261.2	Trib. Still Creek	<10	P	C	6/1 to 9/15	Dry	Yes	
	13801+0	261.4	Trib. Still Creek	4	I	D	6/1 to 11/30	Open cut	No	
	13859+4	262.5	Trib. Sage Creek	14	I	D	6/1 to 11/30	Open cut	No	
	13860+7	262.5	Trib. Sage Creek	6	I	D	6/1 to 11/30	Open cut	No	
	13899+2	263.2	Susquehanna River	369	P	B	6/1 to 11/30	Open cut	No	A
	13929+9	263.8	Trib. Susquehanna River	6	P	B	6/1 to 9/15	Dry	Yes	--
	13961+8	264.4	Pond	67	P	D	None	Open cut	Yes	--
	13986+1	264.9	Trib. Susquehanna River	6		D	6/1 to 11/30	Open cut	No	--
	14087+6	266.8	Trib. Tuscarora Creek	<10	P	C	6/1 to 9/15	Dry	Yes	--
	14115+6	267.3	Tuscarora Creek	13	P	C	6/1 to 9/15	Open cut	Yes	A
	14174+1	268.5	Trib. Marsh Creek	9		C(T)	6/1 to 9/15	Dry *	Yes	
	14182+4	268.6	Trib. Marsh Creek	13		D	6/1 to 9/15	Open cut	No	
	14219+0	269.3	Trib. Marsh Creek	18		C(T)	6/1 to 9/15	Dry *	Yes	A
	14257+0	270.0	Marsh Creek	<10	P	C(T)	6/1 to 9/15	Dry	Yes	
	14283+8	270.5	Trib. Marsh Creek	12	I	C(T)	6/1 to 9/15	Dry *	Yes	A
	14325+6	271.3	Trib. Oquaga Creek	18	P	C(T)	6/1 to 9/15	Open cut	Yes	A
	14375+6	272.3	Trib. Oquaga Creek	64	I	C	6/1 to 9/15	Dry *	Yes	--
	14384+4	272.4	Oquaga Creek	41	P	C	6/1 to 9/15	Open cut	Yes	A
	14423+9	273.2	Trib. Tarbell Brook	12	P	C(T)	6/1 to 9/15	Dry	Yes	--
	14425+3	273.2	Trib. Tarbell Brook	15	P	C(T)	6/1 to 9/15	Dry	Yes	--
	14462+6	273.9	Bone Creek	16	I	C	6/1 to 9/15	Dry *	Yes	--
	14533+6	275.0	Trib. Butler Brook	19	P	C	6/1 to 9/15	Open cut	Yes	A
Delaware	14563+8	276.0	Butler Brook	<10	P	C	None	Open cut	Yes	A
	14576+7	276.0	West Branch Delaware River	270	P	B(T)	6/1 to 9/15	Open cut	No	--
	14685+2	278.0	Trib. Roods Creek	12		D	None	Open cut	No	
	14751+5	279.0	Trib. Roods Creek	39		D	None	Open cut	No	
	14754+5	279.0	Trib. Roods Creek	20		D	None	Open cut	No	
	14792+1	280.0	Roods Creek	19	P	C(TS)	6/1 to 9/15	Dry	Yes	
	14830+6	281.0	Laurel Creek	13	P	C(TS)	6/1 to 9/15	Dry	Yes	
	14853+5	281.0	Trib. West Branch Delaware River	<10		C(TS)	6/1 to 9/15	Dry *	Yes	
	14857+3	281.0	Trib. West Branch Delaware River	<10		C(TS)	6/1 to 9/15	Dry *	Yes	
	14880+4	282.0	Travis Brook	<10		C(TS)	6/1 to 9/15	Dry *	Yes	
	14941+4	283.0	Trib. Sands Creek	<10		C(T)	6/1 to 9/15	Dry *	Yes	--
	15041+2	285.0	Sands Creek	50	P	C(TS)	6/1 to 9/15	Open cut	Yes	A
	15095+6	286.0	Bear Brook	<10		C(TS)	6/1 to 9/15	Dry *	Yes	C
	15127+7	287.0	Trib. Sands Creek	34		C(TS)	6/1 to 9/15	Dry *	Yes	C
	15176+3	287.0	East Branch Delaware River	512	P	C(T)	6/1 to 9/15	Open cut	No	A
	15205+9	288.0	Trib. East Branch Delaware River	<10		C(TS)	6/1 to 9/15	Dry *	Yes	C

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Delaware (cont'd)	15256+5	289.0	Trib. East Branch Delaware River	<10		C(TS)	6/1 to 9/15	Dry *	Yes	C
	15340+5	291.0	Gee Brook	<10		C(T)	6/1 to 9/15	Dry *	Yes	C
	15443+5	293.0	Abe Lord Creek	<10		C(TS)	6/1 to 9/15	Dry *	Yes	C
	15469+6	293.0	Trib. Abe Lord Creek	13		C	6/1 to 9/15	Dry *	Yes	C
	15517+8	294.0	Bouchoux Brook	<10		C(TS)	6/1 to 9/15	Dry *	Yes	C
	15604+4	296.0	Pea Brook	<10		C(TS)	6/1 to 9/15	Dry *	Yes	C
	15605+2	296.0	Pea Brook	15	P	C(TS)	6/1 to 9/15	Dry	Yes	C
	15631+5	296.0	Trib. Pea Brook	<10		C(T)	6/1 to 9/15	Dry *	Yes	C
	15688+1	297.0	Trib. Hoolihan Brook	<10	P	C	6/1 to 9/15	Dry	Yes	C
	15704+0	297.0	Hoolihan Brook	<10	P	C(TS)	6/1 to 9/15	Dry	Yes	C
Sullivan	15755+1	298.0	Trib. Basket Creek	46	P	C(T)	6/1 to 9/15	Open cut	Yes	A, C
	15800+9	299.0	Basket Creek	20	P	C(T)	6/1 to 9/15	Dry	Yes	C
	15827+0	300.0	Trib. Delaware River	10	I	A(T)	6/1 to 9/15	Dry *	Yes	C
	15873+7	301.0	Trib. Hankins Creek	<10	P	C	6/1 to 9/15	Dry	Yes	C
	15897+3	301.0	Hankins Creek	56	P	C(T)	6/1 to 9/15	Open cut	Yes	A, C
	15941+1	302.0	Trib. Delaware River	<10	P	C	6/1 to 11/30	Dry	Yes	A, C
	15948+5	302.0	Trib. Delaware River	<10	P	D	6/1 to 11/30	Dry	Yes	C
	15952+0	302.0	Trib. Delaware River	<10	I	D	6/1 to 11/30	Open cut	No	C
	15976+4	303.0	Trib. Delaware River	<10		C	6/1 to 11/30	Dry *	Yes	C
	15994+4	303.0	Trib. Delaware River	20		C	6/1 to 11/30	Dry *	Yes	C
	16128+6	305.0	Trib. Callicoon Creek	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	16173+2	306.0	Pond	73	P	D	6/1 to 11/30	Open cut	Yes	C
	16180+5	306.0	Trib. Callicoon Creek	<10	I	D	6/1 to 9/15	Open cut	No	C
	16182+2	306.0	Trib. Callicoon Creek	<10	I	C	6/1 to 11/30	Dry *	Yes	C
	16185+2	306.5	Trib. Callicoon Creek	<10	I	D	6/1 to 9/15	Open cut	No	C
	16201+4	307.0	Callicoon Creek	190	P	C(T)	6/1 to 9/15	Open cut	No	A, C
	16268+5	308.0	Trib. Delaware River	<10	I	C(T)	6/1 to 9/15	Dry *	Yes	C
	16284+4	308.0	Trib. Delaware River	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	16338+0	309.0	Trib. Delaware River	<10	P	D	6/1 to 11/30	Open cut	Yes	C
	16351+2	310.0	Trib. Delaware River	<10	P	D	6/1 to 11/30	Open cut	Yes	C
	16420+4	311.0	Trib. Mitchell Pond Brook	<10		D	6/1 to 11/30	Open cut	No	C
	16426+9	311.0	Trib. Mitchell Pond Brook	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	16459+9	312.0	Mitchell Pond Brook	15	P	C(T)	6/1 to 9/15	Dry	Yes	C
	16569+6	314.0	Trib. Tenmile River	18	P	B(T)	6/1 to 9/15	Dry	Yes	C
	16633+3	315.0	Trib. Tenmile River	22	P	B(T)	6/1 to 9/15	Dry	Yes	C
	16651+1	315.0	Trib. Tenmile River	11	P	B(T)	6/1 to 9/15	Dry	Yes	C
	16651+7	315.0	Tenmile River	21	P	B(T)	6/1 to 9/15	Dry	Yes	C
	16785+5	318.0	Smith Mill Brook	75	P	B	6/1 to 11/30	Open cut	Yes	A, C

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Sullivan (cont'd)	16903+6	320.0	Beaver Brook	60	P	B	6/1 to 11/30	Open cut	Yes	A, C
	16979+0	322.0	Trib. Halfway Brook	12	P	C(T)	6/1 to 9/15	Dry	Yes	C
	17021+5	322.0	Halfway Brook	80	P	B(T)	6/1 to 9/15	Open cut	Yes	A, C
	17085+5	324.0	Trib. Halfway Brook	<10	I	C(T)	6/1 to 9/15	Dry *	Yes	C
	17096+5	324.0	Trib. Halfway Brook	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	17171+9	325.0	Trib. Lebanon Lake	<10	P	C	6/1 to 11/30	Dry	Yes	C
	17215+3	326.0	Trib. Lebanon Lake	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	17278+6	327.0	Trib. Mongaup Falls Reservoir	<10	P	B(T)	6/1 to 9/15	Dry	Yes	C
	17293+3	328.0	Trib. Mongaup Falls Reservoir	<10	P	B(T)	6/1 to 9/15	Dry	Yes	C
	17370+4	329.0	Long Falls Brook	<10	P	B	6/1 to 11/30	Dry	Yes	C
	17429+3	330.0	Mongaup River (Rio Reservoir)	675	P	B(T)	Fall to 12/1	Open cut	No	A, C, D
Orange	17448+3	330.0	Tributary to Rio Reservoir	20	P	B(T)	Fall to 12/1	Dry	Yes	D
	17467+1	331.0	Tributary to Rio Reservoir	<10	I	B(T)	Fall to 12/1	Dry *	Yes	D
	17582+3	333.0	Bush Kill	<10	P	C	6/1 to 11/30	Dry	Yes	C
	17665+8	335.0	Steeny Kill	15	P	B	6/1 to 11/30	Open cut	Yes	A, C
	17699+9	335.0	Trib. Shingle Kill	25	P	B	6/1 to 11/30	Open cut	Yes	A, C
	17754+7	336.0	Trib. Shingle Kill	23	P	B	6/1 to 11/30	Open cut	Yes	A, C
	17775+1	337.0	Trib. Shingle Kill	<10	P	B	6/1 to 11/30	Dry	Yes	C
	17826+3	338.0	Trib. Gold Creek	<10	P	AA	6/1 to 11/30	Dry	Yes	C
	17896+1	339.0	Trib. Gold Creek	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	17921+0	339.0	Trib. Gold Creek	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	17933+5	340.0	Gold Creek	25	P	C(T)	6/1 to 9/15	Dry	Yes	C
	17936+2	340.0	Gold Creek	27	P	C(T)	6/1 to 9/15	Dry	Yes	C
	17941+6	340.0	Trib. Gold Creek	20	P	C(T)	6/1 to 9/15	Dry	Yes	C
	17971+0	340.0	Trib. Neversink River	23	P	C(T)	6/1 to 9/15	Dry	Yes	C
	17994+6	341.0	Neversink River	72	P	A(T)	6/1 to 9/15	Dry e/	No	C
	17996+6	341.0	Neversink River	57	P	A(T)	6/1 to 9/15	Dry e/	No	C
	18037+5	342.0	Shin Hollow Brook	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	18081+0	342.0	Shin Hollow Brook	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	18113+9	343.0	Trib. Shawangunk Kill	<10		B	6/1 to 11/30	Dry *	Yes	C
	18117+7	343.0	Shawangunk Kill	<10	P	A	6/1 to 11/30	Dry	Yes	C
	18160+5	344.0	Trib. Rutgers Creek	<10	P	D	6/1 to 11/30	Open cut	Yes	C
	18182+1	344.0	Rutgers Creek e/	143	P	C	6/1 to 11/30	Open cut	No	C, E
	18191+7	345.0	Trib. Rutgers Creek	13	P	D	6/1 to 11/30	Open cut	Yes	C
	18207+1	345.0	Trib. Rutgers Creek	<10	P	D	6/1 to 11/30	Open cut	Yes	C
	18208+1	345.0	Trib. Rutgers Creek	<10	I	D	6/1 to 11/30	Open cut	No	C
	18335+2	347.0	Rutgers Creek	41	P	C(T)	6/1 to 9/15	Open cut	Yes	A, C
	18356+9	348.0	Trib. Rutgers Creek	17	P	D	6/1 to 11/30	Open cut	Yes	C

TABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Orange (cont'd)	18364+6	348.0	Trib. Rutgers Creek	<10	I	D	6/1 to 11/30	Open cut	No	C
	18370+6	348.0	Trib. Rutgers Creek	<10	I	D	6/1 to 11/30	Open cut	No	C
	18372+3	348.0	Trib. Rutgers Creek	<10	I	D	6/1 to 11/30	Open cut	No	C
	18389+1	348.0	Trib. Wallkill River	<10	I	D	6/1 to 11/30	Open cut	No	C
	18461+5	350.0	Trib. Wallkill River	<10	P	D	6/1 to 11/30	Open cut	Yes	C
	18525+0	350.7	Wallkill River	82	P	C	6/1 to 11/30	Open cut	Yes	A, C
	18535+0	351.4	Trib. Wallkill River	<10	P	C	6/1 to 11/30	Dry	Yes	C
	18646+0	352.4	Pochuck Creek	113	P	C	6/1 to 11/30	Horizontal Bore	No	C
	18658+0	353.0	Intermittent Ditch to Eurich Ditch	18	P	D	6/1 to 11/30	Open cut	Yes	C
	18689+5	354.0	Trib. Eurich Ditch	<10	I	D	6/1 to 11/30	Open cut	No	C
	18704+6	354.0	Trib. Eurich Ditch	<10	I	D	6/1 to 11/30	Open cut	No	C
	18718+6	354.0	Trib. Eurich Ditch	<10	I	D	6/1 to 11/30	Open cut	No	C
	18774+6	356.0	Quaker Creek	15	I	D	6/1 to 11/30	Open cut	No	C
	18818+5	356.0	Trib. Wheeler Creek	<10	P	D	6/1 to 11/30	Open cut	Yes	C
	18871+1	357.0	Wheeler Creek	345	P	D	6/1 to 11/30	Open cut	No	C
	18909+9	358.0	Stony Creek	<10	I	D	6/1 to 11/30	Open cut	No	C
	18982+7	359.0	Trib. Wawayanda Creek	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	19021+3	360.0	Trib. Wawayanda Creek	<10	P	B	6/1 to 11/30	Dry	Yes	C
	19027+4	360.0	Trib. Wawayanda Creek	<10	P	B	6/1 to 11/30	Dry	Yes	C
	19044+6	361.0	Trib. Wawayanda Creek	28	P	B	6/1 to 11/30	Open cut	Yes	A, C
	19045+8	361.0	Trib. Wawayanda Creek	<10	P	B	6/1 to 11/30	Dry	Yes	C
	19057+1	361.0	Wawayanda Creek	60	P	B(T)	6/1 to 9/15	Open cut	Yes	A, C
	19073+4	361.0	Trib. Long House Creek	23	P	B(T)	6/1 to 9/15	Open cut	Yes	A, C
	19082+1	361.0	Trib. Long House Creek	15	I	D	6/1 to 11/30	Open cut	No	C
	19083+4	361.0	Trib. Long House Creek	15	I	D	6/1 to 11/30	Open cut	No	C
	19088+4	361.0	Trib. Long House Creek	15	I	D	6/1 to 11/30	Open cut	No	C
	19108+0	362.0	Trib. Long House Creek	18	I	D	6/1 to 11/30	Open cut	No	C
	19109+8	362.0	Long House Creek	18	P	B(T)	6/1 to 11/30	Dry	Yes	C
	19123+7	362.0	Trib. Long House Creek	<10	I	D	6/1 to 11/30	Open cut	No	C
	19141+5	362.0	Trib. Long House Creek	11	P	B(T)	6/1 to 9/15	Dry	Yes	C
	19251+1	365.0	Trib. Greenwood Lake	<10	I	D	6/1 to 11/30	Open cut	No	C
	19280+7	365.0	Trib. Greenwood Lake	<10	P	C	6/1 to 11/30	Dry	Yes	C
	19371+3	367.0	Trib. Indian Kill Reservoir	<10	P	D	6/1 to 11/30	Open cut	Yes	B - Town of Tuxedo, C
	19527+1	370.0	Ramapo River	70	P	A(T)	6/1 to 9/15	DD	Yes	--
	19530+8	370.0	Trib. Ramapo River	28	P	B	6/1 to 11/30	Open cut	Yes	A, C
	19549+6	370.0	Parker Cabin Hollow Brook	11	P	B	6/1 to 11/30	Dry	Yes	C
	19616+9	371.0	Black Ash Creek	<10	P	C	6/1 to 11/30	Dry	Yes	C
	19649+9	372.0	Trib. Ramapo River	<10	P	C	6/1 to 11/30	Dry	Yes	C

ABLE F-1 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Orange	19659+6	372.0	Trib. Ramapo River	<10	P	C	6/1 to 11/30	Dry	Yes	C
(cont'd)	19662+6	372.0	Trib. Ramapo River	<10	P	C	6/1 to 11/30	Dry	Yes	C
Rockland	19714+1	373.0	Spring Brook	<10	P	B	6/1 to 11/30	Dry	Yes	C
	19733+6	374.0	Stony Brook	<10	P	C(T)	6/1 to 9/15	Dry	Yes	C
	19756+3	374.0	Trib. Stony Brook	10	P	B	6/1 to 11/30	Dry	Yes	C
	19817+7	375.0	Torne Brook	<10	P	B	6/1 to 11/30	Dry	Yes	C
	19841+3	376.0	Trib. Torne Brook	<10	P	B	6/1 to 11/30	Dry	Yes	C
	19882+0	376.0	Trib. Mahwah River	<10	P	B	6/1 to 11/30	Dry	Yes	C
	20307+8	384.0	West Branch of Hackensack River	12	P	C(T)	6/1 to 9/15	Dry	Yes	--
	20384+7	386.0	Trib. Minisceongo Creek	<10		SC -D	6/1 to 11/30	Open cut	No	
	20393+8	386.0	Trib. Minisceongo Creek	<10		D	6/1 to 11/30	Open cut	No	
	20397+4	386.0	Trib. Minisceongo Creek	<10		D	6/1 to 11/30	Open cut	No	
	20410+5	386.0	Minisceongo Creek	<10	P	SC -D	6/1 to 11/30	Open cut	Yes	
	20450+7	387.0	Trib. Minisceongo Creek	<10	I	D	6/1 to 11/30	Open cut	No	
	20483+8	387.3	Trib. Minisceongon River	55	P	D	6/1 to 11/30	Open cut	Yes	
	20499+1	387.5	Pond	485	P	D	None	Open cut	No	
	20559+6	387.9	Hudson River	1,850	P	SB	11/1 to 1/31	Open cut	No	
Westchester	20639+5	390.5	Trib. Hudson River	<10	P	SB	6/1 to 11/30	Dry	Yes	
	20646+3	390.7	Trib. Hudson River	<10	P	SB	None	Dry	Yes	
	20649+5	390.7	Trib. Hudson River	<10	P	SB	None	Dry	Yes	
	20702+3	390.8	Trib. Hudson River	15	P	SB	None	Dry	Yes	
	20764+1	392.9	Furnace Brook Lake	620	P	B	6/1 to 11/30	Open cut	No	
	20893+5	395.3	Croton River	65	P	B	6/1 to 11/30	Open cut	Yes	
	20928+7	395.5	Trib. Croton River	2	P	D	None	Dry	Yes	
	20985+9	397.1	Teatown Lake	358	P	B	6/1 to 11/30	Open cut	No	
	21002+2	397.2	Trib. Vernay Lake	10	P	B	None	Dry	Yes	
	21083+0	398.9	Pocantico River	5	P	D	None	Dry	Yes	
	21129+2	399.9	Trib. Pocantico River	5	P	D	None	Dry	Yes	
	21219+8	401.5	Trib. Kinderogen Lake	5	P	B	None	Dry	Yes	
	21298+1	402.1	Trib. Pocantico River	8	P	D	None	Dry	Yes	
	21300+6	403.1	Trib. Pocantico River	8	P	D	None	Dry	Yes	
	21712+9	408.0	Sawmill River	35	P	B(T)	None	Open cut	Yes	A
	21745+5	410.9	Trib. Rum Brook	4	P	D	None	Dry	Yes	
	21769+6	413.9	Sprain Brook	8	P	C	None	Dry	Yes	
	21950+4	417.5	Trib. Grassy Sprain Brook	4	P	C	None	Dry	Yes	
	22068+5	417.7	Grassy Sprain Brook	12	P	C	None	Dry	Yes	

TABLE F-1 .(cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Timing Restrictions	Construction Crossing Method c/	Equipment Crossing Required	Comments d/
Westchester	22105 + 2	418.2	Grassy Sprain Brook	15	P	C	None	Dry	Yes	--
(cont'd)	22258 + 2	421.0	Bronx River	40	P	C	None	Open cut	Yes	A

a/ P = Perennial; I = Intermittent.
b/ See table F-2 for state water water use classifications and fishery types.
c/ Construction crossing methods:
Dry = Dry ditch using either dam and pump or flume.
Dry * = Dry ditch, if flowing; open cut if no flow.
Open cut = Open cut across stream.
DD = Directional drill, if feasible.
d/ Comments:
A = Install in-stream sediment filters
B = Public water supply. Millennium would notify appropriate water authority in writing 1 week before construction.
C = Existing pipeline would be removed.
D = Construction and maintenance would be restricted to the fall and would be completed by December 1. Millennium would coordinate with NYSDEC regarding exact timing.
E = Spread would be moved around stream and wetland.
e/ Crossing width includes associated wetlands. Actual waterbody width would be less than 100 feet wide.

TABLE F-2

State Water Quality Classifications and Fishery Designations

Classification	Definition
AA	Fresh Surface Water. Best usages: water supply for drinking and culinary or food processing; primary and secondary contact recreation; and fishing. Waters shall be suitable for fish propagation and survival. These waters, if subjected to approved disinfection to meet New York State DOH drinking water standards, are or will be considered safe and satisfactory for drinking water purposes.
A	Fresh Surface Water. Best usages: water supply for drinking and culinary or food processing; primary and secondary contact recreation; and fishing. Water shall be suitable for fish propagation and survival. These waters, if subjected to approved disinfection (equal to coagulation, sedimentation, filtration and disinfection) to meet New York State DOH drinking water standards, are or will be considered safe and satisfactory for drinking water purposes.
B	Fresh Surface Water. Best usages: primary and secondary contact recreation and fishing These waters shall be suitable for fish propagation and survival.
C	Fresh Surface Water. Best usages: fishing. These waters shall be suitable for fish propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.
D	Fresh Surface Water. Best usages: fishing. Due to natural conditions, these waters will not support fish propagation. These waters shall be suitable for fish survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.
SB	Saline Surface Water. Best usages: primary and secondary contact recreation and fishing. These water shall be suitable for fish propagation and survival.
SC	Saline Surface Water. Best usages: fishing. These waters shall be suitable for fish propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.
T	Stream designated as trout water.
TS	Stream suitable for trout spawning

TABLE F3

Pipeline Crossing Construction Techniques a/

Category/Method	Description	ENVIRONMENTAL FACTORS		CONSTRUCTION/ENGINEERING FACTORS		Appropriate Use	Estimated Costs b/
		Advantages	Disadvantages	Advantages	Disadvantages		
OPEN CUT (Wet Crossing)							
1. Hoe	Trench through waterbody with hoe from banks or from instream.	• rapid construction/ installation • maintains streamflow • maintains fish passage • relatively short duration of sediment release (≤ 24 hours)	• potentially high sedimentation during excavation and backfilling • instream stockpiling of spoil on wide waterbodies	• no need for specialized equipment • rapid construction; installation • low cost • compatible with granular substrates and some rock	• limited to less than 65 feet unless hoe works in stream • limited by water depth unless hoe works off barge • may require several hoes working together to facilitate excavation	• limited to shallow (about 5 feet) waterbodies with unconsolidat ed substrate • most common method of waterbody trenching • sedimentatio n is not a concern • waterbody with low percentage of fines	Minor : $5-$10,000 Intermediate: $25,000 Major: > $50,000
2. Dragline (yo-yo)	Trench through waterbody with yo-yo bucket from either bank.	• equipment not in waterbody • spoil on banks • maintains streamflow • maintains fish passage	• potentially high sedimentation • slow construction/ installation • long duration of sedimentation • safety concern with cables strung across waterbody • may require grading of banks leading to sediment release • large area required for equipment	• permits many passes over trench • cleans sloughed material from trench • good for unconsolidated substrate	• moderately expensive • inaccurate control on trench width and alignment • slow • specialized equipment • trench susceptible to sloughing • need for large work space for equipment setup • cable restricts navigational use of waterbody • incompatible with boulders or dense bottom material	• wide and deep waterbodies with soft substrate and limited navigational concerns • common on larger rivers • sedimentatio n is not a concern • waterbodies with minimal bank height	Minor: NA Intermediate: NA Major: $ > 75,000

TABLE F3 (cont'd)

Category/Method	Description	ENVIRONMENTAL FACTORS		CONSTRUCTION/ENGINEERING FACTORS		Appropriate Use	Estimated Costs b/
		Advantages	Disadvantages	Advantages	Disadvantages		
OPEN CUT CROSSING (cont'd)							
3. Dredging	Dredge trench through waterbody with suction and pump slurry to banks or tanks on barges.	• minimal sediment release during trenching • maintains streamflow • maintains fish passage • no instream spoil storage • relies on natural sediment transport for backfill	• settling ponds required for slurry • disposal of settled water • possible damage to fish	• allows deep water trenching • a technique for getting spoil to shore • no instream spoil storage	• expensive • specialized equipment • settling pond must be constructed • difficult in bouldery substrate or bedrock • trench depth may be inadequate	• lakes • deep wide rivers with fine unconsolidated sediment • where siltation is a concern	Minor: NA Intermediate: NA Major: $>75,000

TABLE F3 (cont'd)

Category/Method	Description	ENVIRONMENTAL FACTORS		CONSTRUCTION/ENGINEERING FACTORS		Appropriate Use	Estimated Costs b/
		Advantages	Disadvantages	Advantages	Disadvantages		
DRY CROSSING							
1. Flume	Block flow upstream of crossing and divert through pipe(s) laid in streambed. Dam downstream side of crossing area to prevent backflow. Flume should be properly designed to accommodate flow.	• limited sediment release • maintains streamflow • capable of maintaining fish passage	• sediment release during dam con-struction/removal, and as water flushes over area of construction • susceptible to washout/sloughing • slow construction/ installation • some bank and streambed disturbance required • may dry up short reach of streambed • potential icing problem in winter may cause flooding • fish salvage required from dried up reach • potential barrier to fish if ice builds up or if poorly installed • disposal of sediment in water may be problematic especially if dam seals are poor	• relatively dry or no flow working conditions • ample time for pipeline construction • may be adapted for non-ideal conditions • compatibility with consolidated substrates	• difficult to trench and lay pipe, especially large diameter pipe under flume • overbends may also cause problems when laying pipe under flume • difficult to install properly • slow construction/ installation • common use is for flows less than 3 feet per second • flow limited by flume size • an increased number of or size of flumes increases the con- struction difficulty • specialized equipment • moderate expense • difficult to seal dams well • crossing may not stay dry in coarse, permeable substrate • flume size calcula- tions must be made • too short a flume may not be enough for unstable trench • flume pipe can be crushed or blocked during construction • requires relatively long straight channel to install flume • blasting may be difficult	• small waterbody with defined banks, and defined channel, with solid fine-textured substrate • sedimentatio n and fish passage are of concern • works best in non-permeable substrate	Minor: $35,000 Intermediate: $50,000 Major: $>75,000

TABLE F3 (cont'd)

Category/Method	Description	ENVIRONMENTAL FACTORS		CONSTRUCTION/ENGINEERING FACTORS		Appropriate Use	Estimated Costs b/
		Advantages	Disadvantages	Advantages	Disadvantages		
DRY CROSSING (cont'd)							
2. Dam and pump	Dam flow upstream and downstream of crossing and pump water around via hose(s).	• limited sediment release • maintains streamflow	• sediment release during dam construction/removal, and as water flushes over area of construction • susceptible to washout/sloughing • slow construction/ installation resulting in extended period instream • may dry up short reach of streambed • fish salvage required from dried up reach • barrier to fish movement • potential icing problem in winter may cause flooding • some bank and streambed disturbance may be required • disposal of sediment laden water may be a problem, especially if seals are poor	• relatively dry working conditions • ample time for construction • may be adapted for non-ideal conditions • hose can be routed around area of construction • multiple pumps can be used • compatible with consolidated substrates • can be used in waterbodies with meandering channel	• size of waterbody limited to pump capacity • specialized equipment and materials required • slow construction/ installation • moderately expensive • hose(s) may impede construction traffic • seepage may occur in coarse, permeable substrate • susceptible to mechanical failure • requires standby pump(s)	• small waterbody with low flow, defined banks and channel, and no requirement for fish passage • sediment release is of concern • works best in non-permeable substrate • common usage for low flows	Minor: $35,000 Intermediate: $50,000 Major: $>75,000

TABLE F3 (cont'd)

Category/Method	Description	ENVIRONMENTAL FACTORS		CONSTRUCTION/ENGINEERING FACTORS		Appropriate Use	Estimated Costs b/
		Advantages	Disadvantages	Advantages	Disadvantages		
DRY CROSSING (cont'd)							
3. High volume pump bypass	Install high volume pump(s) in pool upstream of crossing and pump watercourse dry, discharging downstream of crossing. Construct work area sump downstream of ditch to permit "washing" of work area. Pump silt laden from sump onto well vegetated area.	• limited sediment release • maintains streamflow • normal streamflow can be restored instantly • no sediment release as a result of dam construction	• minor sediment release as water flushes over area after construction • dries up short reach of streambed • barrier to fish movement • potential icing problem in winter may cause flooding • fish salvage required from dried up areas • sump areas required	• no dams are required • flow can be regulated if necessary • hose(s) can be routed around area of construction • multiple pumps can be used • compatibility with consolidated substrates	• sump(s) need to be excavated • specialized equipment and materials required • moderately expensive • hoses impede construction traffic • requires standby pump(s) • susceptible to mechanical failure	• small to moderate watercourses with low to moderate flow and no requirement for fish passage	Minor: $25,000 Intermediate: $40,000 Major: NA

TABLE F3 (cont'd)

Category/Method	Description	ENVIRONMENTAL FACTORS		CONSTRUCTION/ENGINEERING FACTORS		Appropriate Use	Estimated Costs b/
		Advantages	Disadvantages	Advantages	Disadvantages		
DRY CROSSING (cont'd)							
4. Coffer dam	Install dam about 2/3 into waterbody surrounding work area. Pump area dry or work in "still" waters. Remove dam and repeat on other side of waterbody. Materials, such as regular or oversized sandbags, sheet piling, rockfill or poly-water structures can also be used.	• maintains streamflow • maintains fish passage	• limited to moderate sediment release based on amount of instream work • may dry up long reach of waterbody • increased water velocity and potential scouring • possible increased erosion on opposite bank • potential washout of dam • slow construction/ installation • extensive instream activity with heavy equipment may be required to install dams • requires large right-of-way and terrain disturbance	• relatively dry working area • ample time for construction • compatible with consolidated substrates	• source of dam (sandbags, rock fill, poly, etc.) materials needed • pumping may be required • specialized materials required • slow construction/ installation • potential washout of dam • safety concerns	• moderate to large waterbodies too large for flume or pump techniques • sediment release and fish passage are of concern • braided stream channels • waterbodies with low banks • an extended instream period is required	Minor: NA Intermediate: $75,000 Major: $90,000

TABLE F3 (cont'd)

Category/Method	Description	ENVIRONMENTAL FACTORS		CONSTRUCTION/ENGINEERING FACTORS		Appropriate Use	Estimated Costs b/
		Advantages	Disadvantages	Advantages	Disadvantages		
DRY CROSSING (cont'd)							
5. Channel diversion	Divert streamflow into abandoned channel or construct a new channel. Use rockfill, sheet piling or poly water structures to divert flow. Channel may be lined or have a flexible stream diversion conduit installed.	• maintains streamflow • maintains fish passage	• unless lined, very high sediment release when new channel is flushed through • dries up long reach of waterbody • fish salvage required from dried up reach • slow construction/ installation • potential washout of diversion dam • damage to streambank and adjacent land • possible loss of topsoil and organic matter along new channel • may alter streamflow velocity	• relatively dry working area • ample time for construction • compatible with consolidated substrates	• expensive • source of dam (sandbags, rock fill, poly, etc.) material needed • may require channel liner or conduit • may require extensive preparation and channel grading/ restoration • specialized materials required • slow construction/ installation	• waterbodies too large to flume or pump • best used when new channel is clear of fine substrate and will cause little sediment release • braided stream channels • sediment release and fish passage are of concern	Minor: $50,000 Intermediate: $65,000 Major: $100,000

TABLE F3 (cont'd)

Category/Method	Description	ENVIRONMENTAL FACTORS		CONSTRUCTION/ENGINEERING FACTORS		Appropriate Use	Estimated Costs b/
		Advantages	Disadvantages	Advantages	Disadvantages		
DRY CROSSING (cont''d)							
6. Boring	Bore under waterbody from bellhole on one side to bellhole on other with or without casing. Wet boring with pilot hole and reaming bit can also be performed.	• no sediment release • no disturbance of streambed or banks • maintains normal streamflow • maintains fish passage • maintains vegetative buffer on either side of waterbody	• pump(s) may be required to drain seepage within the bellholes onto surrounding land • possibility of sump water causing sediment release in waterbody • requires additional work space for bellholes, spoil piles and sump(s) • potential for borehole cave-in	• can be fast and economical under the right conditions • minimizes cleanup of streambed and banks • road boring equipment may be available	• can be slow or not feasible under adverse conditions • difficult with fill or coarse material • potential for borehole cave-in • excessive borehole depth on deeply incised waterbodies or waterbodies with moderate or greater approach slopes • with excessive seepage in course fluvial material it may be impossible to keep hole dry • seepage into bellhole may cause sloughing • possible need for specialized equipment and pump(s) • limited to about 328 feet	• fine textured impermeable soils • low water table • streambed cannot be disturbed • used most often on irrigation ditches • fish and riparian habitat cannot be disturbed • waterbody is only slightly incised and approach slopes are absent or slight	Minor: $15-30,000 Intermediate: $40,000 Major: NA

a/ Excerpt from Watercourse Crossing Guidelines, Second Edition (June 1998) by the Canadian Pipeline Water Crossing Committee. Table 4.1 (page 4-2 through 4-8) and Table 7.1 (page 7-2).

b/ There are many variations of width, depth, channel shape, flow volume and characteristics which affect the costs of each crossing. Most crossings have to be evaluated on a case by case basis. Costs presented are the bare minimum and are based on the following assumptions: 1) no bedrock is encountered during construction (i.e. drilling and blasting costs are extra), 2) pipe is small diameter pipe (4- to 12-inch-diameter) installed by non-union contractor, 3) no costs are included for pipe or welding, 4) no buoyancy controls are included, and 5) all isolation techniques assume trench excavation by backhoe.

TABLE F4

Feasibility of Directional Drill for Waterbodies Proposed for Open Cut

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Construction Crossing Method	Directional Drill Infeasible Due To: Geology	Directional Drill Infeasible Due To: Topography/ Location Constraints	Comments c/
Chautauqua	2173+42	41.0	Trib. Lake Erie	160	P	C	Open cut	no	no	A
	2327+69	44.1	Trib. Mud Creek	27	P	C	Open cut	no	no	A
	2363+22	44.7	Trib. Mud Creek	16	P	C	Open cut	no	no	A
	2369+16	44.8	Trib. Mud Creek	16	P	C	Open cut	no	no	A
	2661+80	50.4	Trib. Big Inlet	31	P	C	Open cut	no	no	A
	2756+41	52.1	Dewittville Creek	25	P	C	Open cut	no	yes	A
	2821+65	53.4	Trib. Dewittville Creek	15	P	C	Open cut	no	no	A
	2941+15	55.6	Bemus Creek	38	P	C	Open cut	no	no	A
	3165+53	59.9	Cassadaga Creek	42	P	C	Open cut	no	yes	A
	3188+49	60.3	Trib. Cassadaga Creek	113	P	C	Open cut	no	yes	A
	3198+90	60.5	Trib. Cassadaga Creek	272	P	C	Open cut	no	yes	A
	3644+28	69.0	Clear Creek	35	P	C(T)	Open cut	no	no	A
	3654+59	69.2	Trib. Clear Creek	20	P	C	Open cut	no	no	A
	3695+95	69.9	Trib. Clear Creek	25	P	C	Open cut	no	no	A
	3722+33	70.4	Allen Brook	20	P	C(T)	Open cut	no	no	A
Cattaraugus	3851+15	72.9	State Drainage Ditch	96	P	C	Open cut	no	yes	A
	4148+34	78.5	Elm Creek	20	P	C(T)	Open cut	no	no	A
	4183+67	79.2	Trib. Peaslee Hollow	14	P	D	Open cut	no	no	--
	4238+82	80.2	Peaslee Hollow	32	P	C(T)	Open cut	no	no	A
	4454+81	84.3	Trib. Little Valley Creek	15	P	C	Open cut	no	no	A
	4460+56	84.4	Trib. Little Valley Creek	26	P	C	Open cut	no	no	A
	4668+93	88.3	Little Valley Creek	43	P	C(T)	Open cut	no	no	A
	4822+62	91.3	Trib. Great Valley Creek	40	P	D	Open cut	yes	yes	
	4825+00	91.3	Trib. Great Valley Creek	37	P	D	Open cut	yes	yes	--
	4840+86	91.6	Trib. Great Valley Creek	26	P	C(T)	Open cut	yes	yes	A
	5006+73	94.7	Great Valley Creek	43	P	C(T)	Open cut	no	no	A
	5070+17	95.8	Wrights Creek	24	P	C(T)	Open cut	no	no	A
	5135+96	97.1	Willoughby Creek	36	P	C	Open cut	yes	no	A
	5291+07	99.7	Trib. Wrights Creek	25	P	C	Open cut	yes	yes	A
	5296+79	99.9	Trib. Wrights Creek	14	P	C	Open cut	yes	yes	A
	5518+18	104.5	Five Mile Creek	32	P	C(T)	Open cut	no	yes	A
	5588+50	105.9	Trib. Five Mile Creek	45	P	C	Open cut	yes	yes	A
	5628+99	106.6	Trib. Five Mile Creek	24	P	C	Open cut	yes	yes	A
	5824+75	110.3	Blakesly Hollow Brook	22	P	A	Open cut	yes	yes	A

TABLE F4 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Construction Crossing Method	Directional Drill Infeasible Due To: Geology	Directional Drill Infeasible Due To: Topography/ Location Constraints	Comments c/
Cattaraugus (cont'd)	5844+65	110.7	Woodchuck Hollow	30	P	A	Open cut	yes	yes	A
	5870+21	111.2	Olean Creek	180	P	A	Open cut	no	yes	A, B
	6070+34	115.0	Haskell Creek	60	P	C(T)	Open cut	no	yes	A
	6082+55	115.2	Trib. Haskell Creek	17	P	C	Open cut	no	no	A
	6158+62	116.7	Trib. Wolf Run	29	P	C	Open cut	no	no	A
	6183+29	117.1	Wolf Run	65	P	C	Open cut	no	no	A
Allegany	6282+46	119.0	Wolf Creek	15	P	C	Open cut	no	no	A
	6356+60	120.4	Dodge Creek	40	P	C(T)	Open cut	no	no	A
	6966+40	132.0	Trib. Knight Creek	32	P	C	Open cut	no	no	A
	6971+02	132.1	Knight Creek	58	P	C	Open cut	no	no	A
	7024+59	133.1	Brimmer Brook	25	P	C	Open cut	no	no	A
	7144+36	135.4	Crowner Brook	20	P	C	Open cut	no	yes	A
	7246+90	137.3	Genesee River	130	P	A(T)	Open cut	no	no	A, B
	7809+88	147.9	Trib. Dyke Creek	<10	P	C	Open cut	no	no	A
Steuben	7872+77	148.1	Trib. Dyke Creek	20	P	C	Open cut	no	no	A
	7935+61	148.8	Trib. Dyke Creek	20	P	D	Open cut	no	yes	
	8189+43	155.1	Bennetts Creek	60	P	C(T)	Open cut	no	no	A
	8237+48	156.0	Trib. Bennetts Creek	31	P	C	Open cut	no	no	A
	8259+71	156.4	Trib. Bennetts Creek	14	P	C	Open cut	yes	no	A
	8686+07	164.5	Trib. Talbot Creek	17	P	C	Open cut	no	no	A
	8730+66	165.4	North Branch Tuscarora Creek	24	P	C	Open cut	no	no	A
	8737+57	165.5	Trib. North Branch Tuscarora Cre	12	P	C	Open cut	no	no	A
	8818+36	167.0	Trib. Tracy Creek	34	P	C	Open cut	no	no	A
	8880+82	168.2	Trib. Tracy Creek	14	P	C	Open cut	no	no	A
	9054+08	171.5	Back Channel of Canisteo River	15	P	C	Open cut	no	no	A
	9055+15	171.5	Back Channel of Canisteo River	15	P	C	Open cut	no	no	A
	9056+59	171.5	Canisteo River	81	P	C	Open cut	no	no	A
	9404+76	178.1	Curtis Creek	67	P	C	Open cut	no	yes	A
	9577+89	181.4	Cohocton River	203	P	C	Open cut	no	no	A
	9616+57	182.1	Meads Creek	74	P	C(T)	Open cut	no	no	A
	9714+24	184.0	Erwin Hollow Brook	59	P	C(TS)	Open cut	no	yes	A
	9856+52	186.7	Trib. Cutler Creek	17	P	C(TS)	Open cut	no	no	A
	9857+55	186.7	Cutler Creek	43	P	C(TS)	Open cut	no	no	A
	9961+33	188.6	Post Creek	83	P	C	Open cut	no	yes	A

TABLE F4 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Construction Crossing Method	Directional Drill Infeasible Due To: Geology	Directional Drill Infeasible Due To: Topography/ Location Constraints	Comments c/
Chemung	10191+19	193.0	Trib. Cuthrie Run	52	P	C	Open cut	no	yes	A
	10220+68	193.6	Trib. Cuthrie Run	35	P	C	Open cut	no	yes	A
	10324+69	195.5	Sing Sing Creek	34	P	C(TS)	Open cut	no	yes	A
	10484+14	198.5	Catharine Creek	23	P	C(TS)	Open cut	no	yes	A
	10589+84	200.6	Catharine Creek	17	P	C	Open cut	no	no	A
	10693+41	202.5	North Branch Newtown Creek	30	P	C	Open cut	no	no	A
	10716+05	202.9	Newtown Creek	36	P	C	Open cut	no	no	A
	11241+92	212.9	Tributary to Wynkoop Creek	18	P	C	Open cut	no	yes	A
	11351+08	215.0	Cayuta Creek	116	P	B	Open cut	no	yes	A
Tioga	11640+70	220.5	South Branch Catatonk Creek	22		C	Open cut	no	no	A
	11779+87	223.1	Evelin Hill Creek	45		C	Open cut	no	no	A
	11856+95	224.5	Pipe Creek	29		C	Open cut	no	no	A
	12047+15	228.1	Catatonk Creek	74		C	Open cut	no	yes	A
	12163+10	230.3	Owego Creek	122		C(T)	Open cut	no	no	A
	12205+78	231.2	Trib. Owego Creek	22		C	Open cut	yes	yes	A
	12416+96	235.1	Pond	140		C	Open cut	no	no	A
Broome	12627+06	238.9	Crocker Creek	30	P	C	Open cut	no	no	A
	12717+70	240.7	Nanticoke Creek	60	P	C	Open cut	no	yes	A
	12783+90	241.8	Bradley Creek	20	P	C	Open cut	no	no	A
	12877+65	243.5	Patterson Creek	35	P	C	Open cut	no	no	A
	12933+99	244.9	Trib. Little Choconut Creek	26	P	C	Open cut	no	yes	A
	13040+32	247.0	Little Choconut Creek	89	P	C	Open cut	no	yes	A
	13055+88	247.3	Trib. Little Choconut Creek	23	P	C	Open cut	no	yes	A
	13227+31	250.5	Phelps Creek	11	P	C	Open cut	no	yes	A
	13455+30	254.8	Trib. Stanley Hollow Creek	35	P	C	Open cut	no	yes	A
	13507+14	255.8	Trib. Stanley Hollow Creek	25	P	C	Open cut	no	no	A
	13539+05	256.4	Stanley Hollow Creek	41	P	C	Open cut	no	no	A
	13607+48	257.7	Trib. Stanley Hollow Creek	20	P	C	Open cut	no	yes	A
	13648+54	258.5	Trib. Occanum Creek	15	P	C	Open cut	no	no	A
	13673+30	259.0	Occanum Creek	12	P	C	Open cut	no	no	A
	13899+25	263.2	Susquehanna River	369	P	B	Open cut	no	no	A
	13961+86	264.4	Pond	67	P	D	Open cut	no	yes	
	14115+65	267.3	Tuscarora Creek	13	P	C	Open cut	no	no	A
	14325+62	271.3	Trib. Oquaga Creek	18	P	C(T)	Open cut	no	no	A
	14384+42	272.4	Oquaga Creek	41	P	C	Open cut	yes	yes	A
	14533+63	275.0	Trib. Butler Brook	19	P	C	Open cut	no	yes	A

TABLE F4 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Construction Crossing Method	Directional Drill Infeasible Due To: Geology	Directional Drill Infeasible Due To: Topography/ Location Constraints	Comments c/
Delaware	14563+86	276.0	Butler Brook	<10	P	C	Open cut	no	yes	A
	15041+27	285.0	Sands Creek	50	P	C(TS)	Open cut	no	no	A
	15176+34	287.0	East Branch Delaware River	512	P	C(T)	Open cut	yes	yes	A
Sullivan	15755+13	298.0	Trib. Basket Creek	46	P	C(T)	Open cut	no	yes	A
	15897+33	301.0	Hankins Creek	56	P	C(T)	Open cut	yes	yes	A
	16173+25	306.0	Pond	73	P	D	Open cut	no	yes	--
	16187+11	307.0	Pond	103	P	D	Open cut	no	yes	
	16201+43	307.0	Callicoon Creek	190	P	C(T)	Open cut	no	yes	A
	16338+01	309.0	Trib. Delaware River	<10	P	D	Open cut	no	no	--
	16351+24	310.0	Trib. Delaware River	<10	P	D	Open cut	no	no	--
	16785+53	318.0	Smith Mill Brook	75	P	B	Open cut	no	no	A
	16903+63	320.0	Beaver Brook	60	P	B	Open cut	no	no	A
	17021+51	322.0	Halfway Brook	80	P	B(T)	Open cut	no	no	A
	17429+30	330.0	Mongaup River (Rio Reservoir)	675	P	B(T)	Open cut	no	yes	A, C
Orange	17665+84	335.0	Steeny Kill	15	P	B	Open cut	no	no	A
	17699+96	335.0	Trib. Shingle Kill	25	P	B	Open cut	no	no	A
	17754+74	336.0	Trib. Shingle Kill	23	P	B	Open cut	no	no	A
	18160+54	344.0	Trib. Rutgers Creek	<10	P	D	Open cut	no	yes	--
	18182+18	344.0	Rutgers Creek	143	P	C	Open cut	no	no	D
	18191+75	345.0	Trib. Rutgers Creek	13	P	D	Open cut	no	no	--
	18207+19	345.0	Trib. Rutgers Creek	<10	P	D	Open cut	no	no	--
	18335+27	347.0	Rutgers Creek	41	P	C(T)	Open cut	no	no	A
	18356+99	348.0	Trib. Rutgers Creek	17	P	D	Open cut	no	no	--
	18461+57	350.0	Trib. Wallkill River	<10	P	D	Open cut	no	no	--
	18525+07	350.7	Wallkill River	82	P	C	Open cut	no	no	A
	18658+06	353.0	Intermittent Ditch to Eurich Ditch	18	P	D	Open cut	no	no	--
	18818+57	356.0	Trib. Wheeler Creek	<10	P	D	Open cut	no	yes	--
	18871+13	357.0	Wheeler Creek	345	P	D	Open cut	no	no	--
	18996+01	360.0	Pond	155	P	C(T)	Open cut	no	no	--
	19044+66	361.0	Trib. Wawayanda Creek	28	P	B	Open cut	no	yes	A
	19057+11	361.0	Wawayanda Creek	60	P	B(T)	Open cut	no	yes	A
	19073+46	361.0	Trib. Long House Creek	23	P	B(T)	Open cut	no	no	A
	19371+37	367.0	Trib. Indian Kill Reservoir	<10	P	D	Open cut	no	no	B
	19530+85	370.0	Trib. Ramapo River	28	P	B	Open cut	no	no	A

TABLE F4 (cont'd)

County	Centerline Station	Approximate Milepost	Waterbody Name	Crossing Width (ft)	Waterbody Type a/	State Water Use Classification/ Fishery Type b/	Construction Crossing Method	Directional Drill Infeasible Due To: Geology	Directional Drill Infeasible Due To: Topography/ Location Constraints	Comments c/
Rockland	20410+58	386.0	Minisceongo Creek	<10	P	SC -D	Open cut	no	yes	--
	20483+80	387.3	Trib. Minisceongon River	55	P	D	Open cut	no	yes	
	20499+18	387.5	Pond	485	P	D	Open cut	no	yes	
	20559+61	387.9	Hudson River	11,850	P	SB	Open cut	no	yes	
Westchester	20764+10	392.9	Furnace Brook Lake	620	P	B	Open cut	yes	no	--
	20893+55	395.3	Croton River	65	P	B	Open cut	yes	yes	--
	20985+99	397.1	Teatown Lake	358	P	B	Open cut	yes	yes	--
	21712+92	408.0	Sawmill River	35	P	B(T)	Open cut	no	no	A
	22258+20	421.0	Bronx River	40	P	C	Open cut	no	yes	A

a/ P = Perennial; I = Intermittent.
b/ See table F-2 for state water water use classifications and fishery types.
c/ Comments:
A = Install in-stream sediment filters
B = Public water supply. Millennium would notify appropriate water authority in writing 1 week before construction.
C = Construction and maintenance would be restricted to the fall and would be completed by December 1. Millennium would coordinate with NYSDEC regarding exact timing.
D = Spread would be moved around stream and wetland.