

VOLUME IIA

APPENDIX 10D

Major Route Variation Tables – June 2015

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TABLE 10D
Summary of Route Variations Incorporated into the Proposed Route

Pipeline Segment	Milepost		Total Length (miles)		Approx. Maximum Separation (feet)	Variation ID	Reason for Variation	Additional Information Provided In:
	Begin	End	Feb. 2015	May 2015				
CGT Lateral	-	-		-	-	-	None	-
Sherwood Lateral	2.52	2.86	0.34	0.36	396	SH1	Realign pipeline to avoid archeological site.	Appendix 10F, Figure 10F-1
	31.08	31.47	0.39	0.43	123	SH2	Realign pipeline to avoid newly constructed cabin and shed.	Appendix 10F, Figure 10F-2
	40.95	41.39	0.44	0.40	343	SH3	Realign pipeline to avoid archeological site.	Appendix 10F, Figure 10F-3
	45.60	46.01	0.41	0.43	275	SH4	Realign pipeline to avoid archeological site.	Appendix 10F, Figure 10F-4
	48.13	48.38	0.25	0.20	269	SH5	Realign pipeline to avoid archeological site.	Appendix 10F, Figure 10F-5
Seneca Lateral	3.50	3.88	0.38	0.38	282	SE1	Reroute pipeline to Hall Meter Station site, and eliminate creek crossing.	Appendix 10F, Figure 10F-6
Berne Lateral (Berne Meter Station)	0.00	0.38	0.38	0.89	2,295	BE1	Reroute pipeline to relocated Berne Meter Station.	Appendix 10D, Table 10D-1, Appendix 10E, Figure 10E-1
Clarrington Lateral (Cadiz Tie-In)	31.84	32.60	0.76	1.09	2,179	CL1	Move Cadiz Tie-In to southwest corner of Dominion's property. Extend the Clarrington Lateral to new Cadiz Tie-In.	Appendix 10D, Table 10D-2, Appendix 10E, Figure 10E-2
Cadiz Lateral	1.00	2.77	1.77	1.33	727	CA1	Reroute pipeline away from residences, avoid one creek crossing, and minimize impacts on wetland areas.	Appendix 10D, Table 10D-3, Appendix 10E, Figure 10E-3
Cadiz Lateral, Cadiz Tie-In	2.85	2.90	0.05	0.59	2,179	CA2	Move Cadiz Tie-In to southwest corner of Dominion's property. Extend the Cadiz Lateral to new Cadiz Tie-In.	Appendix 10D, Table 10D-4, Appendix 10E, Figure 10E-4

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Summary of Route Variations Incorporated into the Proposed Route

Pipeline Segment	Milepost		Total Length (miles)		Approx. Maximum Separation (feet)	Variation ID	Reason for Variation	Additional Information Provided In:
	Begin	End	Feb. 2015	May 2015				
Majorsville Lateral	8.34	8.73	0.39	0.36	403	MJ1	Avoid two perennial stream crossings and address constructability issues.	Appendix 10F, Figure 10F-7
	11.61	12.48	0.87	0.86	106	MJ2	Ohio River HDD - Adjust centerline and workspace to minimize impacts on residences.	Appendix 10F, Figure 10F-8
Burgettstown Lateral	0.00	0.56	0.56	0.37	1,263	BG1	Adjust property boundary for Burgettstown Compressor Station. Reroute pipeline to reconfigured station.	Appendix 10D, Table 10D-5, Appendix 10E, Figure 10E-5
	2.67	3.92	1.35	1.13	943	BG2	Realign pipeline to follow Columbia right-of-way to accommodate request from Washington County.	Appendix 10D, Table 10D-6, Appendix 10E, Figure 10E-6
	4.86	6.72	1.86	2.05	2,688	BG3	Reroute pipeline to avoid future cemetery expansion.	Appendix 10D, Table 10D-7, Appendix 10E, Figure 10E-7
	14.52	16.55	2.03	2.77	1,632	BG4	Reroute the pipeline and Ohio River HDD to eliminate the crossing of the Mountaineer Woodview Golf Course (and the associated HDD) and a clay strip mine used as a landfill on the east side of the river.	Appendix 10D, Table 10D-8, Appendix 10E, Figure 10E-8
	50.45	51.3	0.85	1.03	1,263	BG5	Reroute pipeline to a new tie-in at Mainline Compressor Station 1. Also avoids paralleling a stream and reduces wetland impacts,	Appendix 10D, Table 10D-9, Appendix 10E, Figure 10E-9
Supply Connector Lines A and B, Cadiz Tie-In	0	1.12	1.12	0.87	2,179	SC1	Move Cadiz Tie-In to southwest corner of Dominion's property. Relocate Supply Connector A and B to new Cadiz Tie-In.	Appendix 10D, Table 10D-10, Appendix 10E, Figure 10E-10

TABLE 10D
Summary of Route Variations Incorporated into the Proposed Route

Pipeline Segment	Milepost		Total Length (miles)		Approx. Maximum Separation (feet)	Variation ID	Reason for Variation	Additional Information Provided In:
	Begin	End	Feb. 2015	May 2015				
Supply Connector Lines A and B	13.93	14.52	0.59	0.7	935	SC2	Reroute pipeline to avoid proximity to houses, address landowner concern, and reduce wetland impacts.	Appendix 10D, Table 10D-11, Appendix 10E, Figure 10E-11
Mainlines A and B	18.78	19.12	0.34	0.34	368	ML1	Modify pipeline route through Compressor Station 1 to minimize interference with station facilities.	Appendix 10F , Figure 10F-9
	31.82	32.6	0.78	0.85	782	ML2	Reroute pipeline to avoid acid mine reclamation project.	Appendix 10D, Table 10D-12, Appendix 10E, Figure 10E-12
	35.26	35.37	0.11	0.08	88	ML3	Realign pipeline to increase distance from residence.	Appendix 10F, Figure 10F-10
	45.18	45.38	0.20	0.21	103	ML4	Realign pipeline to avoid proximity to oil well.	Appendix 10F, Figure 10F-11
	46.14	46.69	0.55	0.54	126	ML5	Realign pipeline to avoid natural spring.	Appendix 10F, Figure 10F-12
	48.79	49.04	0.25	0.26	121	ML6	Realign pipeline to improve foreign pipeline crossing.	Appendix 10F, Figure 10F-13
	54.21	55.42	1.21	1.21	780	ML7	Reroute pipeline to reduce forest clearing.	Appendix 10D, Table 10D-13, Appendix 10E, Figure 10E-13
	65.61	66.67	1.06	0.69	489	ML8	Realign pipeline to shorten overall length and reduce forest clearing.	Appendix 10F, Figure 10F-14
	69.24	69.41	0.17	0.2	154	ML9	Realign pipeline to avoid buildings and sewer pump station facilities.	Appendix 10F, Figure 10F-15
	76.96	78.02	1.06	1.13	709	ML10	Reroute pipeline to adjusted Compressor Station 2 site.	Appendix 10D, Table 10D-14, Appendix 10E, Figure 10E-14
	78.02	80.07	2.05	2.1	1,618	ML11	Reroute pipeline to reduce forest clearing.	Appendix 10D, Table 10D-15, Appendix 10E, Figure 10E-15

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Summary of Route Variations Incorporated into the Proposed Route

Pipeline Segment	Milepost		Total Length (miles)		Approx. Maximum Separation (feet)	Variation ID	Reason for Variation	Additional Information Provided In:
	Begin	End	Feb. 2015	May 2015				
Mainlines A and B	82.1	83.5	1.40	1.42	1,456	ML12	Reroute pipeline to avoid impact to residences per landowners request, and eliminate the HDD of a 70-foot deep creek crossing.	Appendix 10D, Table 10D-16, Appendix 10E, Figure 10E-16
	94.24	96.0	1.76	1.87	2,100	ML13	Reroute pipeline to improve Highway 42, Railroad HDD, and avoid Ohio agricultural conservancy property.	Appendix 10D, Table 10D-17, Appendix 10E, Figure 10E-17
	135.04	135.3	0.26	0.27	70	ML14	Realign pipeline for Honey Creek and CR 12 HDD.	Appendix 10F, Figure 10F-16
	196.78	197.25	0.47	0.47	214	ML15	Realign pipeline to move farther from Highway 15 bridge per county engineer's request. Eliminates HDD at Wade Creek because creek is narrower at new crossing location.	Appendix 10F, Figure 10F-17
Market Segment	7.64	8.75	1.11	1.28	615	MS1	Reroute pipeline to eliminate forest clearing.	Appendix 10D, Table 10D-18, Appendix 10E, Figure 10E-18
	19.22	20.83	1.61	1.72	1,192	MS2	Reroute pipeline to avoid conservancy lands.	Appendix 10D, Table 10D-19, Appendix 10E, Figure 10E-19
	25.60	26.21	0.61	0.61	174	MS3	Realign pipeline increase distance from dairy operation and manure pond at landowner request.	Appendix 10F, Figure 10F-18
	29.12	29.46	0.34	0.34	239	MS4	Realign pipeline to avoid septic system at landowner request. Also reduces forested wetland impacts.	Appendix 10F, Figure 10F-19
	31.18	31.91	0.73	0.76	340	MS5	Realign pipeline to minimize impact on drain tiles at landowner request.	Appendix 10F, Figure 10F-20
	38.83	38.90	0.07	0.08	37	MS6	Realign pipeline to improve constructability.	Appendix 10F, Figure 10F-21

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Summary of Route Variations Incorporated into the Proposed Route

Pipeline Segment	Milepost		Total Length (miles)		Approx. Maximum Separation (feet)	Variation ID	Reason for Variation	Additional Information Provided In:
	Begin	End	Feb. 2015	May 2015				
Market Segment	44.58	44.92	0.34	0.37	233	MS7	Realign pipeline at request from two landowners.	Appendix 10F, Figure 10F-22
	46.34	47.79	1.45	1.45	1,422	MS8	Reroute pipeline to avoid archaeological site.	Appendix 10D, Table 10D-20, Appendix 10E, Figure 10E-20
	49.22	49.75	0.53	0.55	286	MS9	Realign pipeline to reduce forest clearing.	Appendix 10F, Figure 10F-23
	50.06	51.57	1.58	1.47	212	MS10	Realign pipeline to avoid archaeological site.	Appendix 10F, Figure 10F-24
	52.71	54.32	1.61	1.64	2,848	MS11	Reroute pipeline to reduce wetland impacts and forest clearing.	Appendix 10D, Table 10D-21, Appendix 10E, Figure 10E-21
	55.41	56.39	0.98	0.97	716	MS12	Reroute pipeline to reduce forest clearing.	Appendix 10D, Table 10D-22, Appendix 10E, Figure 10E-22
	61.85	64.44	2.59	2.37	2,768	MS13	Reroute pipeline to reduce Raisin River crossing from three crossings to one crossing. Also avoids archaeological site.	Appendix 10D, Table 10D-23, Appendix 10E, Figure 10E-23
	64.60	65.43	0.83	0.84	314	MS14	Realign pipeline to avoid paralleling a creek and multiple crossings of that creek.	Appendix 10F, Figure 10F-25
	68.00	69.29	1.29	1.31	720	MS15	Reroute pipeline to parallel Panhandle Eastern right-of-way.	Appendix 10D, Table 10D-24, Appendix 10E, Figure 10E-24
	69.29	70.45	1.16	0.89	664	MS16	Reroute pipeline off of Panhandle Eastern right-of-way at landowner request to avoid close proximity to front of house. Also avoids forest clearing.	Appendix 10D, Table 10D-25, Appendix 10E, Figure 10E-25

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Pipeline Segment	Milepost		Total Length (miles)		Approx. Maximum Separation (feet)	Variation ID	Reason for Variation	Additional Information Provided In:
	Begin	End	Feb. 2015	May 2015				
Market Segment	70.45	72.18	1.73	1.74	773	MS17	Reroute pipeline to Panhandle Eastern right-of-way. Also avoids archaeological site.	Appendix 10D, Table 10D-26, Appendix 10E, Figure 10E-26
	72.18	78.17	5.99	5.70	5,208	MS18	Reroute pipeline to parallel ITC easement.	Appendix 10D, Table 10D-27, Appendix 10E, Figure 10E-27
	79.47	81.75	2.28	1.92	1,146	MS19	Reroute pipeline to follow other side of property lines and shorten route.	Appendix 10D, Table 10D-28, Appendix 10E, Figure 10E-28
	82.00	83.00	1.00	0.90	202	MS20	Realign reroute to avoid paralleling creek and reduce wetland impacts by 1.27 acres.	Appendix 10F, Figure 10F-26
	83.88	86.82	2.94	2.96	2,311	MS21	Reroute pipeline to avoid Village of Pinckney wastewater treatment plant.	Appendix 10D, Table 10D-29, Appendix 10E, Figure 10E-29
	88.23	88.54	0.31	1.31	747	MS22	Reroute pipeline to other side of ITC easement to avoid part of golf course.	Appendix 10D, Table 10D-30, Appendix 10E, Figure 10E-30
	91.11	92.00	0.89	0.87	185	MS23	Realign pipeline to other side of ITC to address landowner request.	Appendix 10F, Figure 10F-27
	95.25	96.0	0.74	0.73	50	MS24	Realign pipeline for crossing of Vines Road and avoid powerline tower.	Appendix 10F, Figure 10F-28
	96.41	96.62	0.21	0.19	99	MS25	Realign pipeline to stay on edge of two properties.	Appendix 10F, Figure 10F-29

TABLE 10D-1
Comparison of the Berne Lateral (Feb. 2015) and Proposed Route (Variation BE1)

Environmental Factor	Unit	Berne Lateral - MPs 0.0 – 0.38		Variance ¹
		Berne Lateral Feb. 2015	Proposed Route (Variation BE1)	
Total length:	miles	0.38	0.89	0.51
Length adjacent to existing rights-of-way	miles	0.40	0.10	-0.30
Total construction right-of-way	acres	4.27	9.72	5.45
Emergent wetlands	acres	0	0	0.00
Scrub-shrub wetlands	acres	0	0.05	0.05
Forested wetlands	acres	0	0	0.00
Forest	acres	2.82	8.01	5.19
Agricultural land	acres	1.23	1.51	0.28
Open land	acres	0.22	0.20	-0.02
Permanent right-of-way	acres	2.34	5.39	3.05
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	1	2	1
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	2	4	2
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-2
Comparison of the Clarington Lateral (Feb. 2015) and Proposed Route (Variation CL1)

Environmental Factor	Unit	Clarington Lateral - MPs 31.84 – 32.60		Variance ¹
		Clarington Lateral Feb. 2015	Proposed Route (Variation CL1)	
Total length:	miles	0.76	1.09	0.33
Length adjacent to existing rights-of-way	miles	0.40	0.80	0.40
Total construction right-of-way	acres	13.92	0	-13.92
Emergent wetlands	acres	0.24	0.32	0.08
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	3.41	4.50	1.09
Agricultural land	acres	9.11	12.62	3.51
Open land	acres	1.40	1.40	0.00
Permanent right-of-way	acres	5.06	6.68	1.62
Intermittent streams crossed	number	1	1	0
Perennial streams crossed	number	1	1	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	1	1
Tracts crossed	number	4	4	0
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-3
Comparison of the Cadiz Lateral (Feb. 2015) and Proposed Route (Variation CA1)

Environmental Factor	Unit	Cadiz Lateral - MPs 1.0 – 2.77		Variance ¹
		Cadiz Lateral Feb. 2015	Proposed Route (Variation CA1)	
Total length:	miles	1.77	1.33	-0.44
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	25.46	23.05	-2.41
Emergent wetlands	acres	0	0.12	0.12
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	1.31	15.45	14.14
Agricultural land	acres	14.25	4.50	-9.75
Open land	acres	9.89	3.09	-6.80
Permanent right-of-way	acres	8.30	8.03	-0.27
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	3	3	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	4	3	-1
Railroads crossed	number	0	0	0
Tracts crossed	number	11	8	-3
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-4
Comparison of the Cadiz Lateral (Feb. 2015) and Proposed Route (Variation CA2)

Environmental Factor	Unit	Cadiz Lateral - MPs 2.85 – 2.9		Variance ¹
		Cadiz Lateral Feb. 2015	Proposed Route (Variation CA2)	
Total length:	miles	0.05	0.59	0.54
Length adjacent to existing rights-of-way	miles	0	0	0.00
Total construction right-of-way	acres	0	9.98	9.98
Emergent wetlands	acres	0	0	0.00
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	0	0.83	0.83
Agricultural land	acres	0	8.44	8.44
Open land	acres	0	0.71	0.71
Permanent right-of-way	acres	0.29	3.58	3.29
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	0	0	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	0	0	0
Railroads crossed	number	0	0	0
Tracts crossed	number	1	2	1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

Note: Proposed Route is a 0.6 mile-long extension from the former Cadiz Tie-In site to the currently proposed site.

TABLE 10D-5
Comparison of the Burgettstown Lateral (Feb. 2015) and Proposed Route (Variation BG1)

Environmental Factor	Unit	Burgettstown Lateral - MPs 0.0 - 0.56		Variance ¹
		Burgettstown Lateral Feb. 2015	Proposed Route (Variation BG1)	
Total length:	miles	0.56	0.37	-0.19
Length adjacent to existing rights-of-way	miles	0.20	0.10	-0.10
Total construction right-of-way	acres	7.07	4.94	-2.13
Emergent wetlands	acres	0	0.42	0.42
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	6.10	4.33	-1.77
Agricultural land	acres	0	0	-6.10
Open land	acres	0.97	0.61	-0.36
Permanent right-of-way	acres	3.41	2.26	-1.15
Intermittent streams crossed	number	1	0	-1
Perennial streams crossed	number	1	1	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	2	2	0
Railroads crossed	number	0	0	0
Tracts crossed	number	5	4	-1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-6
Comparison of the Burgettstown Lateral (Feb. 2015) and Proposed Route (Variation BG2)

Environmental Factor	Unit	Burgettstown Lateral - MPs 2.67 – 3.92		Variance ¹
		Burgettstown Lateral Feb. 2015	Proposed Route (Variation BG2)	
Total length:	miles	1.35	1.13	-0.22
Length adjacent to existing rights-of-way	miles	0.20	0.90	0.70
Total construction right-of-way	acres	19.11	15.46	-3.65
Emergent wetlands	acres	0	0	0.00
Scrub-shrub wetlands	acres	0	0.10	0.10
Forested wetlands	acres	0	0	0.00
Forest	acres	11.59	15.00	3.41
Agricultural land	acres	7.52	0.46	-7.06
Open land	acres	0	0	0.00
Permanent right-of-way	acres	7.38	6.07	-1.31
Intermittent streams crossed	number	3	3	0
Perennial streams crossed	number	0	1	1
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	0	0	0
Railroads crossed	number	0	0	0
Tracts crossed	number	5	3	-2
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-7
Comparison of the Burgettstown Lateral (Feb. 2015) and Proposed Route (Variation BG3)

Environmental Factor	Unit	Burgettstown Lateral - MPs 4.86 – 6.72		Variance ¹
		Burgettstown Lateral Feb. 2015	Proposed Route (Variation BG3)	
Total length:	miles	1.86	2.05	0.19
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	30.75	33.11	2.36
Emergent wetlands	acres	0.20	0	-0.20
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	21.14	22.36	1.22
Agricultural land	acres	8.58	5.93	-2.65
Open land	acres	1.03	4.83	3.80
Permanent right-of-way	acres	11.31	12.43	1.12
Intermittent streams crossed	number	1	3	2
Perennial streams crossed	number	2	5	3
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	3	3	0
Railroads crossed	number	0	0	0
Tracts crossed	number	6	9	3
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-8
Comparison of the Burgettstown Lateral (Feb. 2015) and Proposed Route (Variation BG4)

Environmental Factor	Unit	Burgettstown Lateral - MPs 14.52 – 16.55		Variance ¹
		Burgettstown Lateral Feb. 2015	Proposed Route (Variation BG4)	
Total length:	miles	2.03	2.77	0.74
Length adjacent to existing rights-of-way	miles	0.00	0.30	0.30
Total construction right-of-way	acres	20.46	23.83	3.37
Emergent wetlands	acres	0.33	0	-0.33
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	13.56	17.69	4.13
Agricultural land	acres	0.50	1.04	0.54
Open land	acres	6.40	5.11	-1.29
Permanent right-of-way	acres	12.33	13.78	1.45
Intermittent streams crossed	number	1	1	0
Perennial streams crossed	number	3	3	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	4	6	2
Railroads crossed	number	2	2	0
Tracts crossed	number	23	28	5
Residences within 50 feet of the centerline	number	2	0	-2
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-9
Comparison of the Burgettstown Lateral (Feb. 2015) and Proposed Route (Variation BG5)

Environmental Factor	Unit	Burgettstown Lateral - MPs 50.45 – 51.3		Variance ¹
		Burgettstown Lateral Feb. 2015	Proposed Route (Variation BG5)	
Total length:	miles	0.85	1.03	0.18
Length adjacent to existing rights-of-way	miles	0.00	0.10	0.10
Total construction right-of-way	acres	13.55	16.27	2.72
Emergent wetlands	acres	0	0	0.00
Scrub-shrub wetlands	acres	3.41	0.66	-2.75
Forested wetlands	acres	0	0	0.00
Forest	acres	9.48	11.91	2.43
Agricultural land	acres	1.16	3.66	2.50
Open land	acres	2.91	0.69	-2.22
Permanent right-of-way	acres	5.28	7.69	2.41
Intermittent streams crossed	number	1	2	1
Perennial streams crossed	number	1	1	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	2	1
Railroads crossed	number	0	0	0
Tracts crossed	number	2	5	3
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-10
Comparison of the Supply Connector Lines A and B (Feb. 2015) and Proposed Route (Variation SC1)

Environmental Factor	Unit	Supply Connector - MPs 0.0 – 1.12		Variance ¹
		Supply Connector Feb. 2015	Proposed Route (Variation SC1)	
Total length:	miles	1.12	0.87	-0.25
Length adjacent to existing rights-of-way	miles	0.00	0.50	0.50
Total construction right-of-way	acres	18.23	13.66	-4.57
Emergent wetlands	acres	0.08	0	-0.08
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0.23	0.23
Forest	acres	13.38	13.66	0.28
Agricultural land	acres	3.31	0	-3.31
Open land	acres	1.55	0	-1.55
Permanent right-of-way	acres	6.87	5.30	-1.57
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	1	1	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	0	-1
Railroads crossed	number	0	0	0
Tracts crossed	number	6	5	-1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-11
Comparison of the Supply Connector Lines A and B (Feb. 2015) and Proposed Route (Variation SC2)

Environmental Factor	Unit	Supply Connector - MPs 13.93 – 14.52		Variance ¹
		Supply Connector Feb. 2015	Proposed Route (Variation SC2)	
Total length:	miles	0.59	0.70	0.11
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	9.75	11.61	1.86
Emergent wetlands	acres	0.50	0.25	-0.25
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	7.92	7.81	-0.11
Agricultural land	acres	1.64	3.20	1.56
Open land	acres	0.19	0.60	0.41
Permanent right-of-way	acres	3.49	4.28	0.79
Intermittent streams crossed	number	1	3	2
Perennial streams crossed	number	0	1	1
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	5	4	-1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-12
Comparison of the Mainlines A and B (Feb. 2015) and Proposed Route (Variation ML2)

Environmental Factor	Unit	Mainlines A and B - MPs 31.82 – 32.6		Variance ¹
		Mainlines A and B Feb. 2015	Proposed Route (Variation ML2)	
Total length:	miles	0.78	0.85	0.07
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	13.88	14.39	0.51
Emergent wetlands	acres	0	0.08	0.08
Scrub-shrub wetlands	acres	0	0.02	0.02
Forested wetlands	acres	0	0	0.00
Forest	acres	6.37	7.08	0.71
Agricultural land	acres	6.09	4.61	-1.48
Open land	acres	1.42	2.69	1.27
Permanent right-of-way	acres	4.90	5.27	0.37
Intermittent streams crossed	number	0	1	1
Perennial streams crossed	number	1	1	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	7	8	1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-13
Comparison of the Mainlines A and B (Feb. 2015) and Proposed Route (Variation ML7)

Environmental Factor	Unit	Mainlines A and B - MPs 54.21 – 55.42		Variance ¹
		Mainlines A and B Feb. 2015	Proposed Route (Variation ML7)	
Total length:	miles	1.21	1.21	0.00
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	21.25	21.41	0.16
Emergent wetlands	acres	0.07	0.06	-0.01
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0.29	0	-0.29
Forest	acres	7.94	3.28	-4.66
Agricultural land	acres	12.25	16.65	4.40
Open land	acres	1.06	1.48	0.42
Permanent right-of-way	acres	7.34	7.40	0.06
Intermittent streams crossed	number	3	1	-2
Perennial streams crossed	number	0	0	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	4	7	3
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-14
Comparison of the Mainlines A and B (Feb. 2015) and Proposed Route (Variation ML10)

Environmental Factor	Unit	Mainlines A and B - MPs 76.96 – 78.02		Variance ¹
		Mainlines A and B Feb. 2015	Proposed Route (Variation ML10)	
Total length:	miles	1.06	1.13	0.07
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	14.59	12.76	-1.83
Emergent wetlands	acres	0	3.55	3.55
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	3.01	4.75	1.74
Agricultural land	acres	11.06	7.50	-3.56
Open land	acres	0.53	0.51	-0.02
Permanent right-of-way	acres	6.60	6.85	0.25
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	2	2	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	3	5	2
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-15
Comparison of the Mainlines A and B (Feb. 2015) and Proposed Route (Variation ML11)

Environmental Factor	Unit	Mainlines A and B - MPs 78.02 to 80.07		Variance ¹
		Mainlines A and B Feb. 2015	Proposed Route (Variation ML11)	
Total length:	miles	2.05	2.10	0.05
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	37.01	38.43	1.42
Emergent wetlands	acres	0.08	0.32	0.24
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	1.10	0.67	-0.43
Agricultural land	acres	34.71	36.67	1.96
Open land	acres	1.20	1.08	-0.12
Permanent right-of-way	acres	12.49	12.78	0.29
Intermittent streams crossed	number	1	0	-1
Perennial streams crossed	number	4	3	-1
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	3	3	0
Railroads crossed	number	0	0	0
Tracts crossed	number	10	12	2
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-16
Comparison of the Mainlines A and B (Feb. 2015) and Proposed Route (Variation ML12)

Environmental Factor	Unit	Mainlines A and B - MPs 82.1 – 83.5		Variance ¹
		Mainlines A and B Feb. 2015	Proposed Route (Variation ML12)	
Total length:	miles	1.40	1.42	0.02
Length adjacent to existing rights-of-way	miles	1.30	1.30	0.00
Total construction right-of-way	acres	18.47	27.82	9.35
Emergent wetlands	acres	0.07	0.24	0.17
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	3.67	8.00	4.33
Agricultural land	acres	14.39	18.82	4.43
Open land	acres	0.41	1.00	0.59
Permanent right-of-way	acres	8.55	9.49	0.94
Intermittent streams crossed	number	3	1	-2
Perennial streams crossed	number	2	1	-1
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	2	2	0
Railroads crossed	number	0	0	0
Tracts crossed	number	9	8	-1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-17
Comparison of the Mainlines A and B (Feb. 2015) and Proposed Route (Variation ML13)

Environmental Factor	Unit	Mainlines A and B - MPs 94.24 – 96.0		Variance ¹
		Mainlines A and B Feb. 2015	Proposed Route (Variation ML13)	
Total length:	miles	1.76	1.87	0.11
Length adjacent to existing rights-of-way	miles	0.00	0.30	0.30
Total construction right-of-way	acres	30.03	29.05	-0.98
Emergent wetlands	acres	0.49	0	-0.49
Scrub-shrub wetlands	acres	0	0.63	0.63
Forested wetlands	acres	0.43	1.91	1.48
Forest	acres	2.41	3.78	1.37
Agricultural land	acres	26.03	21.77	-4.26
Open land	acres	1.59	3.51	1.92
Permanent right-of-way	acres	10.77	11.40	0.63
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	2	2	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	3	3	0
Railroads crossed	number	1	1	0
Tracts crossed	number	12	12	0
Residences within 50 feet of the centerline	number	1	0	-1
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-18
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS1)

Environmental Factor	Unit	Market Segment - MPs 7.64 – 8.75		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS1)	
Total length:	miles	1.11	1.28	0.17
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	18.42	24.04	5.62
Emergent wetlands	acres	0	0	0.00
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	1.26	0	-1.26
Forest	acres	2.88	0	-2.88
Agricultural land	acres	14.79	23.18	8.39
Open land	acres	0.75	0.86	0.11
Permanent right-of-way	acres	6.64	7.83	1.19
Intermittent streams crossed	number	1	1	0
Perennial streams crossed	number	0	0	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	4	4	0
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-19
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS2)

Environmental Factor	Unit	Market Segment - MPs 19.22 – 20.83		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS2)	
Total length:	miles	1.61	1.72	0.11
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	29.32	32.19	2.87
Emergent wetlands	acres	0.04	0.04	0.00
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0	0	0.00
Forest	acres	0	0	0.00
Agricultural land	acres	28.51	30.79	2.28
Open land	acres	0.82	1.39	0.57
Permanent right-of-way	acres	9.75	10.71	0.96
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	1	1	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	8	9	1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-20
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS8)

Environmental Factor	Unit	Market Segment - MPs 46.34 – 47.79		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS8)	
Total length:	miles	1.45	1.45	0.00
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	25.93	27.05	1.12
Emergent wetlands	acres	0	0	0.00
Scrub-shrub wetlands	acres	0	0.74	0.74
Forested wetlands	acres	0.10	0	-0.10
Forest	acres	4.58	0.11	-4.47
Agricultural land	acres	21.03	26.60	5.57
Open land	acres	0.32	0.34	0.02
Permanent right-of-way	acres	8.89	9.00	0.11
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	0	0	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	6	6	0
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-21
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS11)

Environmental Factor	Unit	Market Segment - MPs 52.71 – 54.32		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS11)	
Total length:	miles	1.61	1.64	0.03
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	28.68	30.22	1.54
Emergent wetlands	acres	0.13	0.08	-0.05
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0.29	0	-0.29
Forest	acres	5.12	1.08	-4.04
Agricultural land	acres	22.47	27.62	5.15
Open land	acres	1.09	1.52	0.43
Permanent right-of-way	acres	10.05	10.20	0.15
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	1	1	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	2	2	0
Railroads crossed	number	0	0	0
Tracts crossed	number	8	6	-2
Residences within 50 feet of the centerline	number	0	1	1
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-22
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS12)

Environmental Factor	Unit	Market Segment - MPs 55.41 – 56.39		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS12)	
Total length:	miles	0.98	0.97	-0.01
Length adjacent to existing rights-of-way	miles	0.00	0.00	0.00
Total construction right-of-way	acres	16.60	18.00	1.40
Emergent wetlands	acres	0.13	0.26	0.13
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0.27	0	-0.27
Forest	acres	6.35	1.13	-5.22
Agricultural land	acres	9.00	13.86	4.86
Open land	acres	1.24	3.01	1.77
Permanent right-of-way	acres	5.92	6.00	0.08
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	0	0	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	0	0	0
Railroads crossed	number	0	0	0
Tracts crossed	number	2	3	1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-23
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS13)

Environmental Factor	Unit	Market Segment - MPs 61.85 – 64.44		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS13)	
Total length:	miles	2.59	2.37	-0.22
Length adjacent to existing rights-of-way	miles	1.00	0.20	-0.80
Total construction right-of-way	acres	40.48	39.11	-1.37
Emergent wetlands	acres	0.18	0.28	0.10
Scrub-shrub wetlands	acres	0.57	0	-0.57
Forested wetlands	acres	0.30	0	-0.30
Forest	acres	11.85	5.10	-6.75
Agricultural land	acres	27.44	32.44	5.00
Open land	acres	1.19	1.56	0.37
Permanent right-of-way	acres	15.99	14.57	-1.42
Intermittent streams crossed	number	1	0	-1
Perennial streams crossed	number	4	2	-2
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	3	2	-1
Railroads crossed	number	0	0	0
Tracts crossed	number	17	18	1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-24
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS15)

Environmental Factor	Unit	Market Segment - MPs 68.0 – 69.29		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS15)	
Total length:	miles	1.29	1.31	0.02
Length adjacent to existing rights-of-way	miles	0.00	1.30	1.30
Total construction right-of-way	acres	23.22	23.12	-0.10
Emergent wetlands	acres	0.51	0.84	0.33
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0.17	0.08	-0.09
Forest	acres	0	0	0.00
Agricultural land	acres	22.53	22.45	-0.08
Open land	acres	0.68	0.67	-0.01
Permanent right-of-way	acres	7.86	7.96	0.10
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	0	0	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	4	6	2
Residences within 50 feet of the centerline	number	1	1	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-25
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS16)

Environmental Factor	Unit	Market Segment - MPs 69.29 – 70.45		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS16)	
Total length:	miles	1.16	0.89	-0.27
Length adjacent to existing rights-of-way	miles	1.16	0.3	-0.86
Total construction right-of-way	acres	20.21	21.05	0.84
Emergent wetlands	acres	0.98	0.53	-0.45
Scrub-shrub wetlands	acres	0	0	0.00
Forested wetlands	acres	0.61	0.48	-0.13
Forest	acres	6.32	1.80	-4.52
Agricultural land	acres	13.19	18.55	5.36
Open land	acres	0.71	0.70	-0.01
Permanent right-of-way	acres	7.06	7.50	0.44
Intermittent streams crossed	number	1	1	0
Perennial streams crossed	number	0	0	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	1	1	0
Railroads crossed	number	0	0	0
Tracts crossed	number	5	5	0
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-26
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS17)

Environmental Factor	Unit	Market Segment - MPs 70.45 – 72.18		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS17)	
Total length:	miles	1.73	1.74	0.01
Length adjacent to existing rights-of-way	miles	0.10	1.30	1.20
Total construction right-of-way	acres	28.65	24.86	-3.79
Emergent wetlands	acres	3.85	6.28	2.43
Scrub-shrub wetlands	acres	1.58	1.41	-0.17
Forested wetlands	acres	1.63	0	-1.63
Forest	acres	10.10	6.21	-3.89
Agricultural land	acres	17.71	17.80	0.09
Open land	acres	0.85	0.84	-0.01
Permanent right-of-way	acres	10.58	10.44	-0.14
Intermittent streams crossed	number	1	1	0
Perennial streams crossed	number	4	5	1
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	2	2	0
Railroads crossed	number	0	0	0
Tracts crossed	number	10	14	4
Residences within 50 feet of the centerline	number	0	3	3
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-27
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS18)

Environmental Factor	Unit	Market Segment - MPs 72.18 – 78.17		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS18)	
Total length:	miles	5.99	5.70	-0.29
Length adjacent to existing rights-of-way	miles	0.20	5.60	5.40
Total construction right-of-way	acres	103.63	93.74	-9.89
Emergent wetlands	acres	5.55	6.20	0.65
Scrub-shrub wetlands	acres	0	4.85	4.85
Forested wetlands	acres	0.85	1.86	1.01
Forest	acres	21.42	21.89	0.47
Agricultural land	acres	77.93	66.22	-11.71
Open land	acres	4.28	5.62	1.34
Permanent right-of-way	acres	36.51	34.90	-1.61
Intermittent streams crossed	number	3	2	-1
Perennial streams crossed	number	2	2	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	8	7	-1
Railroads crossed	number	1	1	0
Tracts crossed	number	29	29	0
Residences within 50 feet of the centerline	number	0	3	3
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-28
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS19)

Environmental Factor	Unit	Market Segment - MPs 79.47 – 81.75		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS19)	
Total length:	miles	2.28	1.92	-0.36
Length adjacent to existing rights-of-way	miles	1.00	0.00	-1.00
Total construction right-of-way	acres	33.45	33.43	-0.02
Emergent wetlands	acres	1.65	1.97	0.32
Scrub-shrub wetlands	acres	0	0.27	0.27
Forested wetlands	acres	2.96	0	-2.96
Forest	acres	4.80	4.89	0.09
Agricultural land	acres	27.95	27.78	-0.17
Open land	acres	0.70	0.75	0.05
Permanent right-of-way	acres	12.55	11.55	-1.00
Intermittent streams crossed	number	1	0	-1
Perennial streams crossed	number	1	1	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	2	2	0
Railroads crossed	number	0	0	0
Tracts crossed	number	8	9	1
Residences within 50 feet of the centerline	number	0	0	0
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00
¹ Variance calculated by subtracting February 2015 route from Proposed Route.				

TABLE 10D-29
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS21)

Environmental Factor	Unit	Market Segment - MPs 83.88 – 86.82		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS21)	
Total length:	miles	2.94	2.96	0.02
Length adjacent to existing rights-of-way	miles	2.10	0.40	-1.70
Total construction right-of-way	acres	36.20	42.95	6.75
Emergent wetlands	acres	3.25	0.48	-2.77
Scrub-shrub wetlands	acres	0.36	1.62	1.26
Forested wetlands	acres	1.56	1.29	-0.27
Forest	acres	15.44	27.54	12.10
Agricultural land	acres	15.27	12.45	-2.82
Open land	acres	5.48	2.95	-2.53
Permanent right-of-way	acres	17.85	17.99	0.14
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	1	1	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	3	3	0
Railroads crossed	number	0	0	0
Tracts crossed	number	27	26	-1
Residences within 50 feet of the centerline	number	0	2	2
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.

TABLE 10D-30
Comparison of the Market Segment (Feb. 2015) and Proposed Route (Variation MS22)

Environmental Factor	Unit	Market Segment - MPs 88.23 – 89.54		Variance ¹
		Market Segment Feb. 2015	Proposed Route (Variation MS22)	
Total length:	miles	1.31	1.31	0.00
Length adjacent to existing rights-of-way	miles	0	0	0.00
Total construction right-of-way	acres	21.64	21.48	-0.16
Emergent wetlands	acres	0	0.37	0.37
Scrub-shrub wetlands	acres	0.49	0	-0.49
Forested wetlands	acres	0	0.10	0.10
Forest	acres	1.28	2.01	0.73
Agricultural land	acres	13.04	14.49	1.45
Open land	acres	7.32	4.98	-2.34
Permanent right-of-way	acres	7.80	8.02	0.22
Intermittent streams crossed	number	0	0	0
Perennial streams crossed	number	0	0	0
NRHP Listed Properties within 500 feet	number	0	0	0
Roads crossed	number	0	0	0
Railroads crossed	number	0	0	0
Tracts crossed	number	0	0	0
Residences within 50 feet of the centerline	number	1	0	-1
NSAs (e.g., schools, hospitals) within 500 feet	number	0	0	0
Public lands crossed	miles	0.00	0.00	0.00

¹ Variance calculated by subtracting February 2015 route from Proposed Route.