Appendix G

Tables of Resources Affected

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PennEast Pipeline Company, LLC
PennEast Pipeline Company

Appendix G – Tables of Resources Affected

List of Tables

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
Pennsylvania Mainline								
	0.0	0.0	Pennsylvania	Luzerne	Dallas Twp	Appalachian Plateaus	Bedrock	R
	0.0	0.4	Pennsylvania	Luzerne	Dallas Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	0.4	0.6	Pennsylvania	Luzerne	Dallas Twp	Appalachian Plateaus	Bedrock	R
	0.6	0.7	Pennsylvania	Luzerne	Dallas Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	0.7	1.2	Pennsylvania	Luzerne	Dallas Twp	Appalachian Plateaus	Bedrock	R
	1.2	1.3	Pennsylvania	Luzerne	Kingston Twp	Appalachian Plateaus	Bedrock	R
	1.3	1.6	Pennsylvania	Luzerne	Kingston Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	1.6	2.0	Pennsylvania	Luzerne	Kingston Twp	Appalachian Plateaus	Bedrock	R
	2.0	2.1	Pennsylvania	Luzerne	Kingston Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	2.1	2.5	Pennsylvania	Luzerne	Kingston Twp	Appalachian Plateaus	Bedrock	R
	2.5	2.6	Pennsylvania	Luzerne	Kingston Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	2.6	3.1	Pennsylvania	Luzerne	Kingston Twp	Appalachian Plateaus	Bedrock	R
	3.1	3.1	Pennsylvania	Luzerne	Kingston Twp	Valley and Ridge	Alluvium	Qa
	3.1	4.2	Pennsylvania	Luzerne	Kingston Twp	Valley and Ridge	Bedrock	R
	4.2	4.2	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Bedrock	R
	4.2	4.3	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Wisconsinan till	Qwt
	4.3	4.4	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Bedrock	R
	4.4	4.6	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Wisconsinan till	Qwt
	4.6	4.6	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Bedrock	R
	4.6	5.1	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Wisconsinan till	Qwt
	5.1	5.3	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Strip mine	Sm
	5.3	5.3	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Granite or granitic gneiss pit	gp
	5.3	5.4	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Wisconsinan ice-contact stratified drift	Qwic
	5.4	5.5	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Wisconsinan outwash	Qwo
	5.5	5.6	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Coal dump	cd

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	5.6	6.0	Pennsylvania	Luzerne	West Wyoming Boro	Valley and Ridge	Granite or granitic gneiss pit	gp
	6.0	6.0	Pennsylvania	Luzerne	Wyoming Boro	Valley and Ridge	Granite or granitic gneiss pit	gp
	6.0	6.3	Pennsylvania	Luzerne	Wyoming Boro	Valley and Ridge	Alluvium	Qa
	6.3	6.5	Pennsylvania	Luzerne	Wyoming Boro	Valley and Ridge	Wisconsinan outwash	Qwo
	6.5	6.9	Pennsylvania	Luzerne	Wyoming Boro	Valley and Ridge	Alluvium	Qa
	6.9	7.0	Pennsylvania	Luzerne	Wyoming Boro	Valley and Ridge	Slate or shale bedrock	sr
	7.0	7.1	Pennsylvania	Luzerne	Wyoming Boro	Valley and Ridge	Alluvium	Qa
	7.1	7.1	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Alluvium	Qa
	7.1	7.2	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Slate or shale bedrock	sr
	7.2	7.2	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Alluvium	Qa
	7.2	7.3	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Wisconsinan outwash	Qwo
	7.3	7.3	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Strip mine	Sm
	7.3	7.4	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Coal dump	cd
	7.4	7.4	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Strip mine	Sm
	7.4	7.4	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Coal dump	cd
	7.4	7.5	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Strip mine	Sm
	7.5	7.7	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Coal dump	cd
	7.7	7.7	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Strip mine	Sm
	7.7	7.8	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Wisconsinan ice-contact stratified drift	Qwic
	7.8	7.8	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Strip mine	Sm
	7.8	8.0	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Bedrock	R
	8.0	8.1	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Bedrock	R
	8.1	8.5	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Wisconsinan till	Qwt
	8.5	9.0	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Strip mine	Sm
	9.0	9.1	Pennsylvania	Luzerne	Jenkins Twp	Valley and Ridge	Strip mine	Sm
	9.1	9.1	Pennsylvania	Luzerne	Laflin Boro	Valley and Ridge	Strip mine	Sm

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	9.1	9.1	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Strip mine	Sm
	9.1	9.5	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Bedrock	R
	9.5	9.6	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Strip mine	Sm
	9.6	9.8	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Bedrock	R
	9.8	9.9	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Coal dump	cd
	9.9	10.0	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Rock pit	Rp
	10.0	10.0	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Bedrock	R
	10.0	10.1	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Coal dump	cd
	10.1	10.2	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Wisconsinan till	Qwt
	10.2	10.4	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Strip mine	Sm
	10.4	10.7	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Wisconsinan till	Qwt
	10.7	10.8	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Bedrock	R
	10.8	10.9	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Strip mine	Sm
	10.9	10.9	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Bedrock	R
	10.9	10.9	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Alluvium	Qa
	10.9	10.9	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Strip mine	Sm
	10.9	11.0	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Bedrock	R
	11.0	11.0	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Wisconsinan ice-contact stratified drift	Qwic
	11.0	11.2	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Strip mine	Sm
	11.2	11.4	Pennsylvania	Luzerne	Plains Twp	Valley and Ridge	Bedrock	R
	11.4	12.0	Pennsylvania	Luzerne	Plains Twp	Appalachian Plateaus	Bedrock	R
	12.0	12.3	Pennsylvania	Luzerne	Plains Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	12.3	12.3	Pennsylvania	Luzerne	Plains Twp	Appalachian Plateaus	Bedrock	R
	12.3	12.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	12.4	12.5	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	12.5	12.7	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	12.7	12.8	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	12.8	13.0	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan ice-contact stratified drift	Qwic
	13.0	13.0	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Fill	f
	13.0	13.0	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Granite or granitic gneiss pit	gp
	13.0	13.3	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	13.3	13.8	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	13.8	13.9	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	13.9	14.0	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	14.0	14.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	14.4	15.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	15.4	15.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	15.4	15.6	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	15.6	15.7	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	15.7	15.8	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan ice-contact stratified drift	Qwic
	15.8	15.9	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Alluvium	Qa
	15.9	16.0	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	16.0	16.1	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan ice-contact stratified drift	Qwic
	16.1	16.1	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	16.1	16.1	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Alluvium	Qa
	16.1	16.2	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	16.2	16.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	16.4	16.5	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	16.5	16.7	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	16.7	16.8	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	16.8	16.9	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	16.9	17.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	17.4	17.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	17.4	17.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wetland	Qw
	17.4	17.5	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	17.5	17.6	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	17.6	17.6	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	17.6	17.9	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	17.9	18.1	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	18.1	19.3	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	19.3	19.5	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Alluvium	Qa
	19.5	19.8	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	19.8	19.9	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	19.9	20.1	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	20.1	20.1	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	20.1	20.8	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	20.8	21.2	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	21.2	21.3	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	21.3	21.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	21.4	21.5	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	21.5	22.3	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	22.3	22.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	22.4	22.4	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Alluvium	Qa
	22.4	22.7	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Bedrock	R
	22.7	22.7	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	22.7	22.8	Pennsylvania	Luzerne	Bear Creek Twp	Appalachian Plateaus	Alluvium	Qa
	22.8	22.8	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Alluvium	Qa
	22.8	23.2	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Bedrock	R

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	22.8	23.2	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Bedrock	R
	23.2	23.7	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Bedrock	R
	23.7	24.7	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Woodfordian ground moraine	Qwgm
	24.7	24.8	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Bedrock	R
	24.8	26.1	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Woodfordian ground moraine	Qwgm
	26.1	27.4	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Woodfordian end moraine	Qwem
	27.4	27.6	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Bedrock	R
	27.6	28.1	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	28.1	29.1	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Bedrock	R
	29.1	29.3	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	29.3	29.4	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Peat	Qp
	29.4	29.6	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	29.6	29.7	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Bedrock	R
	29.7	30.1	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	30.1	30.2	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Bedrock	R
	30.2	30.9	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	30.9	32.7	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	32.7	32.8	Pennsylvania	Carbon	Kidder Twp	Appalachian Plateaus	Bedrock	R
	32.8	32.9	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Bedrock	R
	32.9	33.0	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Wisconsinan till	Qwt
	33.0	33.3	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Illinoian till	Qit
	33.3	33.4	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Illinoian lag	Qil
	33.4	33.6	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Red and gray sandstone and shale bedrock	rgr
	33.6	33.8	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Gray sandstone and shale bedrock	gr
	33.8	34.0	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Red and gray sandstone and shale bedrock	rgr

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	34.0	34.2	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	34.2	34.4	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Alluvium	Qa
	34.4	34.5	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	34.5	34.6	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Illinoian lag	Qil
	34.6	34.7	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	34.7	37.1	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Illinoian till	Qit
	37.1	37.6	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Illinoian lag	Qil
	37.6	38.0	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Shale or sandstone bedrock	br
	38.0	38.1	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Boulder alluvium	Qba
	38.1	38.7	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	38.7	38.9	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Shale or sandstone bedrock	br
	38.9	38.9	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Shale or sandstone bedrock	br
	38.9	38.9	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Gray sandstone and shale bedrock	gr
	38.9	39.3	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Gray sandstone and shale bedrock	gr
	39.3	39.3	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Boulder colluvium	Qbc
	39.3	39.7	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Gray sandstone and shale bedrock	gr
	39.7	40.0	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Boulder alluvium	Qba
	40.0	40.0	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Red and gray sandstone and shale bedrock	rgr
	40.0	40.2	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Stony colluvium derived from red sandstone and conglomerate	Qsrc
	40.2	40.4	Pennsylvania	Carbon	Penn Forest Twp	Appalachian Plateaus	Pre-Illinoian fill	Qpit
	40.4	40.8	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Pre-Illinoian fill	Qpit
	40.8	40.8	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Boulder alluvium	Qba
	40.8	40.9	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Stony colluvium derived from red sandstone and conglomerate	Qsrc
	40.9	40.9	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Boulder alluvium	Qba

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	40.9	40.9	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Stony colluvium derived from red sandstone and conglomerate	Qsrc
	40.9	41.1	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Boulder alluvium	Qba
	41.1	41.3	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Pre-Illinoian fill	Qpit
	41.3	41.3	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Boulder alluvium	Qba
	41.3	41.4	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Pre-Illinoian fill	Qpit
	41.4	41.5	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Pre-Illinoian lag	Qpil
	41.5	41.6	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Gray sandstone and shale bedrock	gr
	41.6	41.8	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Red shale and sandstone bedrock	rr
	41.8	41.8	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Pre-Illinoian lag	Qpil
	41.8	41.8	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Pre-Illinoian fill	Qpit
	41.8	41.9	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Pre-Illinoian lag	Qpil
	41.9	42.1	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Red shale and sandstone bedrock	rr
	42.1	42.4	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Gray sandstone and shale bedrock	gr
	42.4	42.8	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Pre-Illinoian lag	Qpil
	42.8	43.3	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Slate or shale bedrock	sr
	43.3	43.3	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Alluvium	Qa
	43.3	43.3	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Illinoian lag	Qil
	43.3	43.6	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Illinoian outwash	Qio
	43.6	43.7	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Illinoian lag	Qil
	43.7	43.8	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Open water	ow
	43.8	44.0	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Slate or shale bedrock	sr
	44.0	44.0	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Alluvium	Qa
	44.0	44.2	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Slate or shale bedrock	sr
	44.2	44.4	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Gray sandstone and shale bedrock	gr
	44.4	44.5	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Red shale and sandstone bedrock	rr
	44.4	44.5	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Red shale and sandstone bedrock	rr

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	44.5	44.5	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Red shale and sandstone bedrock	rr
	44.5	44.5	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Alluvium	Qa
	44.5	44.6	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Alluvium	Qa
	44.6	44.7	Pennsylvania	Carbon	Towamensing Twp	Appalachian Plateaus	Red shale and sandstone bedrock	rr
	44.7	44.8	Pennsylvania	Carbon	Towamensing Twp	Valley and Ridge	Red shale and sandstone bedrock	rr
	44.8	44.8	Pennsylvania	Carbon	Towamensing Twp	Valley and Ridge	Alluvium	Qa
	44.8	45.1	Pennsylvania	Carbon	Towamensing Twp	Valley and Ridge	Red shale and sandstone bedrock	rr
	45.1	45.3	Pennsylvania	Carbon	Towamensing Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	45.3	45.3	Pennsylvania	Carbon	Towamensing Twp	Valley and Ridge	Alluvium	Qa
	45.3	46.5	Pennsylvania	Carbon	Towamensing Twp	Valley and Ridge	Red and gray sandstone and shale bedrock	rgr
	46.5	46.7	Pennsylvania	Carbon	Towamensing Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	46.7	46.8	Pennsylvania	Carbon	Towamensing Twp	Valley and Ridge	Red shale and sandstone bedrock	rr
	46.8	47.3	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Red shale and sandstone bedrock	rr
	47.3	47.6	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	47.6	47.9	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Slate or shale bedrock	sr
	47.9	47.9	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Alluvium	Qa
	47.9	48.1	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Boulder colluvium	Qbc
	48.1	48.2	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	48.2	48.3	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Boulder colluvium	Qbc
	48.3	48.5	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	48.5	48.6	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Boulder colluvium	Qbc
	48.6	48.6	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Stony colluvium derived from gray sandstone	Qssc
	48.6	48.7	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	48.7	48.7	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Pre-Illinoian outwash	Qpio
	48.7	48.9	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Wisconsinan outwash	Qwo

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	48.9	49.0	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Alluvium	Qa
	49.0	49.5	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Wisconsinan outwash	Qwo
	49.5	49.7	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Stony colluvium derived from red sandstone and conglomerate	Qsrc
	49.7	49.8	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Boulder colluvium	Qbc
	49.8	49.8	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Stony colluvium derived from red sandstone and conglomerate	Qsrc
	49.8	50.0	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Red shale and sandstone bedrock	rr
	50.0	50.0	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	50.0	50.1	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Boulder colluvium	Qbc
	50.1	50.5	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	50.5	50.6	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Boulder colluvium	Qbc
	50.6	50.9	Pennsylvania	Carbon	Lower Towamensing Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	50.9	51.3	Pennsylvania	Northampton	Lehigh Twp	Valley and Ridge	Gray sandstone and shale bedrock	gr
	51.3	52.4	Pennsylvania	Northampton	Lehigh Twp	Valley and Ridge	Boulder colluvium	Qbc
	52.4	52.7	Pennsylvania	Northampton	Lehigh Twp	Valley and Ridge	Stony colluvium derived from gray sandstone	Qssc
	52.7	53.2	Pennsylvania	Northampton	Lehigh Twp	Valley and Ridge	Boulder colluvium	Qbc
	53.2	53.3	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Boulder colluvium	Qbc
	53.3	53.5	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Stony colluvium derived from gray sandstone	Qssc
	53.5	53.6	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	53.6	53.7	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	53.7	54.1	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	54.1	54.2	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	54.2	55.6	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Slate or shale bedrock	sr
	55.6	55.7	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Alluvium	Qa
	55.7	55.8	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian fill	Qpit

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	55.8	55.8	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	55.8	56.4	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Slate or shale bedrock	sr
	56.4	56.5	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	56.5	57.7	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Slate or shale bedrock	sr
	57.7	57.9	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	57.9	58.2	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Slate or shale bedrock	sr
	58.2	58.2	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	58.2	58.7	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Slate or shale bedrock	sr
	58.7	58.8	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	58.8	59.0	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Slate or shale bedrock	sr
	59.0	59.0	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	59.0	60.0	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Slate or shale bedrock	sr
	60.0	60.0	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Alluvium	Qa
	60.0	60.1	Pennsylvania	Northampton	Moore Twp	Valley and Ridge	Slate or shale bedrock	sr
	60.1	60.3	Pennsylvania	Northampton	East Allen Twp	Valley and Ridge	Slate or shale bedrock	sr
	60.3	60.4	Pennsylvania	Northampton	East Allen Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	60.4	60.4	Pennsylvania	Northampton	East Allen Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	60.4	60.4	Pennsylvania	Northampton	East Allen Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	60.4	60.9	Pennsylvania	Northampton	East Allen Twp	Valley and Ridge	Slate or shale bedrock	sr
	60.9	61.2	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Slate or shale bedrock	sr
	61.2	61.2	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	61.2	61.2	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Alluvium	Qa
	61.2	61.2	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	61.2	61.8	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	61.8	61.9	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Limestone bedrock	lr
	61.9	62.0	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Urban Land	u

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	62.0	62.0	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	62.0	62.1	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Urban Land	u
	62.1	62.2	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	62.2	62.4	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	62.4	62.4	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	62.4	62.5	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Urban Land	u
	62.5	62.5	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Fill	f
	62.5	63.3	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	63.3	63.3	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Alluvium	Qa
	63.3	63.5	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	63.5	63.7	Pennsylvania	Northampton	Upper Nazareth Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	63.7	64.4	Pennsylvania	Northampton	Lower Nazareth Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	64.4	64.7	Pennsylvania	Northampton	Lower Nazareth Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	64.7	65.1	Pennsylvania	Northampton	Lower Nazareth Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	65.1	65.2	Pennsylvania	Northampton	Lower Nazareth Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	65.2	65.6	Pennsylvania	Northampton	Lower Nazareth Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	65.6	65.7	Pennsylvania	Northampton	Lower Nazareth Twp	Valley and Ridge	Pre-Illinoian fill	Qpit
	65.7	65.7	Pennsylvania	Northampton	Lower Nazareth Twp	Valley and Ridge	Pre-Illinoian lag	Qpl
	65.7	65.8	Pennsylvania	Northampton	Lower Nazareth Twp	New England	Pre-Illinoian lag	Qpl
	65.8	65.9	Pennsylvania	Northampton	Lower Nazareth Twp	New England	Pre-Illinoian fill	Qpit
	65.9	66.5	Pennsylvania	Northampton	Lower Nazareth Twp	New England	Pre-Illinoian lag	Qpl
	66.5	66.7	Pennsylvania	Northampton	Lower Nazareth Twp	New England	Pre-Illinoian fill	Qpit
	66.7	66.8	Pennsylvania	Northampton	Lower Nazareth Twp	New England	Pre-Illinoian lag	Qpl
	66.8	67.3	Pennsylvania	Northampton	Bethlehem Twp	New England	Pre-Illinoian lag	Qpl
	67.3	67.6	Pennsylvania	Northampton	Bethlehem Twp	New England	Pre-Illinoian fill	Qpit
	67.6	67.9	Pennsylvania	Northampton	Bethlehem Twp	New England	Pre-Illinoian lag	Qpl

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	67.9	67.9	Pennsylvania	Northampton	Bethlehem Twp	New England	Pre-Illinoian fill	Qpit
	67.9	68.4	Pennsylvania	Northampton	Bethlehem Twp	New England	Pre-Illinoian lag	Qpl
	68.4	68.4	Pennsylvania	Northampton	Bethlehem Twp	New England	Pre-Illinoian fill	Qpit
	68.4	70.1	Pennsylvania	Northampton	Bethlehem Twp	New England	Pre-Illinoian lag	Qpl
	70.1	70.2	Pennsylvania	Northampton	Bethlehem Twp	New England	Limestone bedrock	lr
	70.2	70.6	Pennsylvania	Northampton	Bethlehem Twp	New England	Pre-Illinoian lag	Qpl
	70.6	70.6	Pennsylvania	Northampton	Bethlehem Twp	New England	Limestone bedrock	lr
	70.6	70.7	Pennsylvania	Northampton	Bethlehem Twp	New England	Urban Land	u
	70.7	70.7	Pennsylvania	Northampton	Easton City	New England	Urban Land	u
	70.7	70.8	Pennsylvania	Northampton	Easton City	New England	Coaly alluvium	ca
	70.8	70.8	Pennsylvania	Northampton	Lower Saucon Twp	New England	Coaly alluvium	ca
	70.8	71.1	Pennsylvania	Northampton	Lower Saucon Twp	New England	Limestone bedrock	lr
	71.1	71.1	Pennsylvania	Northampton	Lower Saucon Twp	New England	Limestone and sandstone colluvium	Qlsc
	71.1	71.3	Pennsylvania	Northampton	Lower Saucon Twp	New England	Colluvium derived from granitic gneiss and sandstone	Qgsc
	71.3	71.4	Pennsylvania	Northampton	Lower Saucon Twp	New England	Pre-Illinoian lag	Qpl
	71.4	71.4	Pennsylvania	Northampton	Lower Saucon Twp	New England	Colluvium derived from granitic gneiss and sandstone	Qgsc
	71.4	71.5	Pennsylvania	Northampton	Lower Saucon Twp	New England	Sandstone bedrock	ss
	71.5	71.8	Pennsylvania	Northampton	Lower Saucon Twp	New England	Granitic gneiss bedrock	g
	71.8	71.8	Pennsylvania	Northampton	Lower Saucon Twp	New England	Hornblende gneiss bedrock	hg
	71.8	72.0	Pennsylvania	Northampton	Lower Saucon Twp	New England	Colluvium derived from hornblende gneiss	Qhgc
	72.0	72.1	Pennsylvania	Northampton	Lower Saucon Twp	New England	Hornblende gneiss bedrock	hg
	72.1	72.1	Pennsylvania	Northampton	Lower Saucon Twp	New England	Colluvium derived from hornblende gneiss	Qhgc
	72.1	72.7	Pennsylvania	Northampton	Williams Twp	New England	Colluvium derived from hornblende gneiss	Qhgc

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	72.7	72.9	Pennsylvania	Northampton	Williams Twp	New England	Colluvium derived from granitic gneiss	Qggc
	72.9	73.3	Pennsylvania	Northampton	Williams Twp	New England	Colluvium derived from hornblende gneiss	Qhgc
	73.3	73.6	Pennsylvania	Northampton	Williams Twp	New England	Colluvium derived from granitic gneiss	Qggc
	73.6	73.8	Pennsylvania	Northampton	Williams Twp	New England	Granitic gneiss bedrock	g
	73.8	73.9	Pennsylvania	Northampton	Williams Twp	New England	Colluvium derived from granitic gneiss	Qggc
	73.9	74.2	Pennsylvania	Northampton	Williams Twp	New England	Colluvium derived from granitic gneiss and sandstone	Qgsc
	74.2	74.4	Pennsylvania	Northampton	Williams Twp	New England	Pre-Illinoian lag	Qpl
	74.4	74.4	Pennsylvania	Northampton	Williams Twp	New England	Alluvium	Qa
	74.4	74.7	Pennsylvania	Northampton	Williams Twp	New England	Pre-Illinoian fill	Qpit
	74.7	74.9	Pennsylvania	Northampton	Williams Twp	New England	Colluvium derived from granitic gneiss and sandstone	Qgsc
	74.9	75.1	Pennsylvania	Northampton	Williams Twp	New England	Colluvium derived from hornblende gneiss	Qhgc
	75.1	75.2	Pennsylvania	Northampton	Williams Twp	New England	Hornblende gneiss bedrock	hg
	75.2	75.4	Pennsylvania	Northampton	Williams Twp	New England	Granitic gneiss bedrock	g
	75.4	75.5	Pennsylvania	Northampton	Williams Twp	New England	Colluvium derived from granitic gneiss	Qggc
	75.5	75.6	Pennsylvania	Northampton	Williams Twp	New England	Granitic gneiss bedrock	g
	75.6	75.7	Pennsylvania	Bucks	Durham Twp	New England	Granitic gneiss bedrock	g
	75.7	75.7	Pennsylvania	Bucks	Durham Twp	New England	Colluvium derived from granitic gneiss	Qggc
	75.7	76.0	Pennsylvania	Bucks	Durham Twp	New England	Colluvium derived from granitic gneiss and sandstone	Qgsc
	76.0	76.1	Pennsylvania	Bucks	Durham Twp	New England	Pre-Illinoian lag	Qpl
	76.1	76.2	Pennsylvania	Bucks	Durham Twp	New England	Limestone and/or iron ore dump	ld
	76.2	76.2	Pennsylvania	Bucks	Durham Twp	New England	Pre-Illinoian lag	Qpl
	76.2	76.4	Pennsylvania	Bucks	Durham Twp	New England	Pre-Illinoian fill	Qpit
	76.4	76.5	Pennsylvania	Bucks	Riegelsville Boro	New England	Pre-Illinoian fill	Qpit

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	76.5	76.5	Pennsylvania	Bucks	Riegelsville Boro	New England	Limestone and/or iron ore pit	lp
	76.5	76.6	Pennsylvania	Bucks	Riegelsville Boro	New England	Pre-Illinoian lag	Qpl
	76.6	76.8	Pennsylvania	Bucks	Durham Twp	New England	Pre-Illinoian lag	Qpl
	76.8	77.1	Pennsylvania	Bucks	Durham Twp	New England	Pre-Illinoian outwash	Qpio
	77.1	77.2	Pennsylvania	Bucks	Durham Twp	New England	Wisconsinan outwash	Qwo
	77.2	77.2	Pennsylvania	Bucks	Durham Twp	New England	Sand and gravel pit	sgp
	77.2	77.4	Pennsylvania	Bucks	Durham Twp	New England	Alluvium	Qa
Hellertown 24-inch Lateral								
	0.0	0.0	Pennsylvania	Northampton	Lower Saucon Twp	New England	Pre-Illinoian lag	Qpl
	0.0	0.2	Pennsylvania	Northampton	Lower Saucon Twp	New England	Colluvium derived from granitic gneiss and sandstone	Qgsc
	0.2	0.3	Pennsylvania	Northampton	Lower Saucon Twp	New England	Colluvium derived from granitic gneiss	Qggc
	0.3	0.7	Pennsylvania	Northampton	Lower Saucon Twp	New England	Granitic gneiss bedrock	g
	0.7	1.2	Pennsylvania	Northampton	Lower Saucon Twp	New England	Hornblende gneiss bedrock	hg
	1.2	1.3	Pennsylvania	Northampton	Lower Saucon Twp	New England	Granitic gneiss bedrock	g
	1.3	1.3	Pennsylvania	Northampton	Lower Saucon Twp	New England	Colluvium derived from granitic gneiss	Qggc
	1.3	1.4	Pennsylvania	Northampton	Lower Saucon Twp	New England	Colluvium derived from hornblende gneiss	Qhgc
	1.4	1.4	Pennsylvania	Northampton	Lower Saucon Twp	New England	Colluvium derived from granitic gneiss and sandstone	Qgsc
	1.4	1.5	Pennsylvania	Northampton	Lower Saucon Twp	New England	Sandstone bedrock	ss
	1.5	2.0	Pennsylvania	Northampton	Lower Saucon Twp	New England	Hornblende gneiss bedrock	hg
	2.0	2.1	Pennsylvania	Northampton	Lower Saucon Twp	New England	Granitic gneiss bedrock	g
New Jersey Mainline								
	77.4	77.4	New Jersey	Hunterdon	Holland Twp	New England	Alluvium	Qa
	77.4	77.4	New Jersey	Hunterdon	Holland Twp	New England	Alluvium	Qal
	77.4	77.5	New Jersey	Hunterdon	Holland Twp	New England	Weathered Gneiss	Qwg

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	77.5	77.7	New Jersey	Hunterdon	Holland Twp	New England	Late Wisconsinan Glaciofluvial Deposits	Qwf
	77.7	77.7	New Jersey	Hunterdon	Holland Twp	New England	Gneiss Colluvium	Qcg
	77.7	78.1	New Jersey	Hunterdon	Holland Twp	New England	Weathered Gneiss	Qwg
	78.1	78.2	New Jersey	Hunterdon	Holland Twp	New England	Weathered Carbonate Rock	Qwcb
	78.2	79.3	New Jersey	Hunterdon	Holland Twp	New England	Weathered Conglomerate	Qwc
	79.3	79.6	New Jersey	Hunterdon	Holland Twp	New England	Weathered Shale, Mudstone, and Sandstone	Qws
	79.6	79.8	New Jersey	Hunterdon	Holland Twp	New England	Eolian Deposits	Qe
	79.8	79.8	New Jersey	Hunterdon	Holland Twp	New England	Late Wisconsinan Glaciofluvial Deposits	Qwf
	79.8	79.8	New Jersey	Hunterdon	Holland Twp	New England	Alluvium	Qal
	79.8	80.0	New Jersey	Hunterdon	Holland Twp	New England	Late Wisconsinan Glaciofluvial Deposits	Qwf
	80.0	80.0	New Jersey	Hunterdon	Holland Twp	New England	Alluvium	Qal
	80.0	80.2	New Jersey	Hunterdon	Holland Twp	New England	Late Wisconsinan Glaciofluvial Deposits	Qwf
	80.2	80.2	New Jersey	Hunterdon	Holland Twp	New England	Alluvium	Qal
	80.2	80.3	New Jersey	Hunterdon	Holland Twp	New England	Late Wisconsinan Glaciofluvial Deposits	Qwf
	80.3	80.4	New Jersey	Hunterdon	Holland Twp	New England	Alluvium	Qal
	80.4	80.5	New Jersey	Hunterdon	Holland Twp	New England	Postglacial Stream Terrace Deposits	Qst
	80.5	80.6	New Jersey	Hunterdon	Holland Twp	New England	Alluvium	Qal
	80.6	81.8	New Jersey	Hunterdon	Holland Twp	New England	Weathered Conglomerate	Qwc
	81.8	81.8	New Jersey	Hunterdon	Holland Twp	New England	Weathered Shale, Mudstone, and Sandstone	Qws
	81.8	81.8	New Jersey	Hunterdon	Holland Twp	New England	Alluvium and Colluvium	Qcal
	81.8	82.4	New Jersey	Hunterdon	Holland Twp	New England	Weathered Shale, Mudstone, and Sandstone	Qws
	82.4	82.6	New Jersey	Hunterdon	Holland Twp	New England	Alluvium	Qal

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Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	82.6	82.9	New Jersey	Hunterdon	Holland Twp	New England	Weathered Shale, Mudstone, and Sandstone	Qws
	82.9	82.9	New Jersey	Hunterdon	Holland Twp	New England	Alluvium	Qal
	82.9	83.1	New Jersey	Hunterdon	Holland Twp	New England	Weathered Shale, Mudstone, and Sandstone	Qws
	83.1	83.3	New Jersey	Hunterdon	Holland Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	83.3	83.4	New Jersey	Hunterdon	Holland Twp	Piedmont	Alluvium	Qal
	83.4	84.0	New Jersey	Hunterdon	Holland Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	84.0	84.0	New Jersey	Hunterdon	Holland Twp	Piedmont	Alluvium	Qal
	84.0	85.5	New Jersey	Hunterdon	Holland Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	85.5	85.5	New Jersey	Hunterdon	Holland Twp	Piedmont	Alluvium	Qal
	85.5	85.6	New Jersey	Hunterdon	Holland Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	85.6	85.7	New Jersey	Hunterdon	Alexandria Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	85.7	85.8	New Jersey	Hunterdon	Alexandria Twp	Piedmont	Alluvium	Qal
	85.8	86.4	New Jersey	Hunterdon	Alexandria Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	86.4	86.5	New Jersey	Hunterdon	Alexandria Twp	Piedmont	Alluvium	Qal
	86.5	86.5	New Jersey	Hunterdon	Alexandria Twp	Piedmont	Alluvial Fan Deposits	Qaf
	86.5	87.6	New Jersey	Hunterdon	Alexandria Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	87.6	87.6	New Jersey	Hunterdon	Alexandria Twp	Piedmont	Alluvium	Qal
	87.6	88.5	New Jersey	Hunterdon	Alexandria Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	88.5	88.5	New Jersey	Hunterdon	Alexandria Twp	Piedmont	Alluvium	Qal
	88.5	88.5	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Alluvium	Qal

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	88.5	89.2	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	89.2	89.2	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Alluvium and Colluvium	Qcal
	89.2	90.4	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	90.4	90.4	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Alluvium	Qal
	90.4	90.8	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	90.8	90.9	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Alluvium	Qal
	90.9	92.4	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	92.4	92.6	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Alluvium	Qal
	92.6	93.1	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	93.1	93.2	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Alluvium	Qal
	93.2	93.4	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	93.4	93.5	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Alluvium	Qal
	93.5	93.9	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	93.9	93.9	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Alluvium and Colluvium	Qcal
	93.9	94.1	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	94.1	94.2	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Alluvium	Qal
	94.2	95.1	New Jersey	Hunterdon	Kingwood Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	95.1	95.7	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	95.7	95.8	New Jersey	Hunterdon	Delaware Twp	Piedmont	Shale, Mudstone, and Sandstone Colluvium	Qcs
	95.8	95.8	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium	Qal

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	95.8	97.0	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	97.0	97.0	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium and Colluvium	Qcal
	97.0	97.4	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	97.4	97.5	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium	Qal
	97.5	97.7	New Jersey	Hunterdon	Delaware Twp	Piedmont	Shale, Mudstone, and Sandstone Colluvium	Qcs
	97.7	98.0	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	98.0	98.1	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium	Qal
	98.1	99.2	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	99.2	99.2	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium	Qal
	99.2	100.0	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Diabase	Qwd
	100.0	100.3	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	100.3	100.3	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium and Colluvium	Qcal
	100.3	100.5	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	100.5	100.6	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium and Colluvium	Qcal
	100.6	100.7	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	100.7	100.8	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium and Colluvium	Qcal
	100.8	100.8	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium	Qal
	100.8	101.0	New Jersey	Hunterdon	Delaware Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	101.0	101.1	New Jersey	Hunterdon	Delaware Twp	Piedmont	Alluvium	Qal
	101.1	101.1	New Jersey	Hunterdon	Delaware Twp	Piedmont	Shale, Mudstone, and Sandstone Colluvium	Qcs

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	101.1	101.2	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Shale, Mudstone, and Sandstone Colluvium	Qcs
	101.2	102.7	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	102.7	102.7	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Alluvium	Qal
	102.7	102.8	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Shale, Mudstone, and Sandstone Colluvium	Qcs
	102.8	103.3	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	103.3	103.6	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Weathered Diabase	Qwd
	103.6	103.6	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Alluvium	Qal
	103.6	103.7	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Diabase Colluvium	Qcd
	103.7	103.7	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Alluvium	Qal
	103.7	104.0	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Diabase Colluvium	Qcd
	104.0	104.4	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Weathered Diabase	Qwd
	104.4	104.5	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	104.5	104.7	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Shale, Mudstone, and Sandstone Colluvium	Qcs
	104.7	105.2	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	105.2	105.4	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	105.4	105.4	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium and Colluvium	Qcal
	105.4	105.6	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	105.6	105.6	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	105.6	106.1	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	106.1	106.1	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	106.1	106.2	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	106.2	106.3	New Jersey	Mercer	Hopewell Twp	Piedmont	Postglacial Stream Terrace Deposits	Qst
	106.3	106.5	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	106.5	106.5	New Jersey	Mercer	Hopewell Twp	Piedmont	Shale, Mudstone, and Sandstone Colluvium	Qcs
	106.5	106.7	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	106.7	106.7	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	106.7	107.1	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	107.1	107.2	New Jersey	Mercer	Hopewell Twp	Piedmont	Diabase Colluvium	Qcd
	107.2	107.6	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Diabase	Qwd
	107.6	107.6	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium and Colluvium	Qcal
	107.6	108.2	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Diabase	Qwd
	108.2	108.3	New Jersey	Mercer	Hopewell Twp	Piedmont	Diabase Colluvium	Qcd
	108.3	108.5	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Diabase	Qwd
	108.5	108.5	New Jersey	Mercer	Hopewell Twp	Piedmont	Diabase Colluvium	Qcd
	108.5	108.5	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium and Colluvium	Qcal
	108.5	108.6	New Jersey	Mercer	Hopewell Twp	Piedmont	Diabase Colluvium	Qcd
	108.6	108.8	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Diabase	Qwd
	108.8	109.1	New Jersey	Mercer	Hopewell Twp	Piedmont	Diabase Colluvium	Qcd
	109.1	109.1	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	109.1	109.1	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	109.1	109.4	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	109.4	109.5	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium and Colluvium	Qcal

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	109.5	109.5	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	109.5	109.5	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium and Colluvium	Qcal
	109.5	109.9	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	109.9	109.9	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	109.9	110.9	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	110.9	111.0	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	111.0	111.2	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	111.2	111.2	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	111.2	111.6	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	111.6	111.6	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	111.6	112.4	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	112.4	112.9	New Jersey	Mercer	Hopewell Twp	Piedmont	Eolian Deposits	Qe
	112.9	113.6	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	113.6	113.6	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	113.6	114.4	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	114.4	114.4	New Jersey	Mercer	Hopewell Twp	Piedmont	Alluvium	Qal
	114.4	115.0	New Jersey	Mercer	Hopewell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
Gilbert 24-inch Lateral								
	0.0	0	New Jersey	Hunterdon	Holland Twp	New England	Weathered Shale, Mudstone, and Sandstone	Qws
Lambertville 24-inch Lateral								

Table G-1

Surficial Geological Conditions Associated with the Project

Facility	Begin MP	End MP	State	County	Municipality	Physiographic Province a/	Surficial Geology	Geology Code
	0.0	0.8	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws
	0.8	0.9	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Alluvium and Colluvium	Qcal
	0.9	1.4	New Jersey	Hunterdon	West Amwell Twp	Piedmont	Weathered Shale, Mudstone, and Sandstone	Qws

Notes:
a/ Physiographic Province derived from USGS shapefile - http://water.usgs.gov/GIS/dsdl/physio_shp.zip

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
Pennsylvania Mainline							
	0.0	1.3	Luzerne	Dallas Township	Appalachian Plateaus	In Dallas Township, the Project is underlain by the Devonian-aged Catskill Formation, a grayish-red sandstone, siltstone, shale, and mudstone; locally conglomeratic. The topography is flat to undulating hills.	Dck
	1.3	4.2	Luzerne	Kingston Township	Appalachian Plateaus and Ridge & Valley	In Kingston Township, the Project is underlain by the Devonian-aged Catskill Formation, a grayish-red sandstone, siltstone, shale, and mudstone; locally conglomeratic. The Mississippian-aged Pocono Formation, a light-gray to buff or light-olive-gray, medium-grained, cross-bedded sandstone, and minor siltstone. The topography is undulating hills with some steep valleys.	Dck
	4.2	6.0	Luzerne	West Wyoming Borough	Ridge & Valley	In West Wyoming Borough, the Project is underlain by the Devonian-aged Catskill Formation, a grayish-red sandstone, siltstone, shale, and mudstone; locally conglomeratic; the Mississippian-aged Pocono Formation, a light-gray to buff or light-olive-gray, medium-grained, cross-bedded sandstone and minor siltstone; Mauch Chunk Formation, a grayish-red shale, siltstone, sandstone, and some conglomerate; the Pennsylvanian-aged Llewellyn Formation, a gray, fine- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences; and Pottsville Formation, a gray sandstone and conglomerate; also contains thin beds of shale, claystone, limestone, and coal. The topography is a steep valley to flat.	Dck Mp Mmc Pl Pp
	6.0	7.1	Luzerne	Wyoming Borough	Ridge & Valley	In Wyoming Borough, the Project area is underlain by the Pennsylvanian-age Llewellyn Formation, a gray, fine- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences. The topography is relatively flat.	Pl
	7.1	9.1	Luzerne	Jenkins Township	Ridge & Valley	In Jenkins Township, the Project area is underlain by the Pennsylvanian-age Llewellyn Formation, a gray, fine- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences. The topography is relatively flat to undulating.	Pl
	8.1	12.6	Luzerne	Plains Township	Ridge & Valley	In Plains Township, the Project area is underlain by the Pennsylvanian-age Llewellyn Formation, a gray, fine- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences; Pottsville Formation, a gray sandstone and conglomerate; also contains thin beds of shale, claystone, limestone, and coal; and the Mississippian-aged Mauch Chunk Formation, a grayish-red shale, siltstone, sandstone, and some conglomerate. The topography is relatively flat to undulating.	Pl Pp Mmc
	9.1	9.1	Luzerne	Laflin Borough	Ridge & Valley	In Laflin Borough, the Project area is underlain by the Pennsylvanian age Llewellyn Formation, a gray, find- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences. The topography is relatively flat to undulating.	Pl

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	12.6	23.0	Luzerne	Bear Creek Township	Ridge & Valley and Appalachian Plateaus	In Bear Creek Township, the Project area is underlain by the Mississippian-aged Mauch Chunk Formation, a grayish-red shale, siltstone, sandstone, and some conglomerate; Pocono Formation, a light-gray to buff or light-olive-gray, medium-grained, cross-bedded sandstone and minor siltstone; Spechty Kopf Formation, a light- to olive-gray, fine- to medium- grained, cross-bedded sandstone with minor pebbly mudstone, and laminite arranged in crude fining-upward cycles in some places; and the Devonian-aged Duncannon member of the Catskill Formation, a grayish-red sandstone, siltstone, and mudstone in fining-upward cycles; conglomerate occurs at base of some cycles. The topography is undulating hills. Elevation ranges from 1200' to 2010' above sea level.	Mmc Mp MDsk Dcd
	23.0	33.1	Carbon	Kidder Township	Appalachian Plateaus	In Kidder Township, the Project area is underlain by the Mississippian-aged Spechty Kopf Formation, a light- to olive-gray, fine- to medium- grained, cross-bedded sandstone with minor pebbly mudstone, and laminite arranged in crude fining-upward cycles in some places; and the Devonian-aged Duncannon member of the Catskill Formation, a grayish-red sandstone, siltstone, and mudstone in fining-upward cycles; conglomerate occurs at base of some cycles. The topography is gently undulating.	MDsk Dcd
	33.1	40.6	Carbon	Penn Forest Township	Appalachian Plateaus and Ridge & Valley	In Penn Forest Township, the Project area is underlain by the Devonian-aged Duncannon member of the Catskill Formation, a grayish-red sandstone, siltstone, and mudstone in fining-upward cycles, with conglomerate occurring at the base of some cycles; the Mississippian-aged Spechty Kopf Formation, a light- to olive-gray, fine- to medium- grained, cross-bedded sandstone with minor pebbly mudstone, and laminite, arranged in crude fining-upward cycles in some places; and by the following members of the Devonian-aged Catskill Formation: Poplar Gap member, gray and light-olive-gray sandstone, conglomerate, and siltstone containing intermittent red beds; Packerton member, a greenish-gray to gray sandstone and some siltstone; some laterally persistent conglomerate beds in lower part; Long Run member, a gray and grayish-red sandstone and grayish-red siltstone and mudstone in fining-upward cycles. The topography is gently undulating to undulating.	Dcd MDsk Dcpg Dcp Dclr

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	40.6	47.1	Carbon	Towamensing Township	Ridge and Valley	In Towamensing Township, the Project area is underlain by the following members of the Devonian-aged Catskill Formation: Long Run member, a gray and grayish-red sandstone and grayish-red siltstone and mudstone in fining-upward cycles; Beaverdam Run Member, an alternating olive-gray siltstone and sandstone; with marine fossils; Walcksville member, a greenish-gray sandstone and red siltstone and mudstone in fining-upward cycles; and the Towamensing member, consisting of sandstone, siltstone, and shale. Other Devonian-aged Formations underlying the Project area are the Trimmers Rock Formation, olive-gray siltstone and shale, characterized by graded bedding with marine fossils and some very fine grained sandstone; Mahantango Formation, a gray, brown, and olive shale and siltstone, with marine fossils; and the Marcellus Formation, a black shale with sparse marine fauna and siderite concretions. The topography is gently undulating.	Dclr Dcbr Dcw Dct Dtr Dmh Dm
	47.1	51.1	Carbon	Lower Towamensing Township	Ridge & Valley	In Lower Towamensing Township, the Project area is underlain by the following members of the Devonian-aged Catskill Formation: Walcksville member, a greenish-gray sandstone and red siltstone and mudstone in fining-upward cycles; and the Towamensing member, consisting of sandstone, siltstone, and shale. Other Devonian-aged Formations underlying the Project area are the Trimmers Rock Formation, an olive-gray siltstone and shale, characterized by graded bedding, marine fossils, and some very fine grained sandstone; Mahantango Formation, a gray, brown, and olive shale and siltstone, with marine fossils; the Marcellus Formation, a black shale with sparse marine fauna and siderite concretions; the Buttermilk Falls Limestone, a gray fossiliferous limestone and black chert; and the Ridgeley Formation, a white siliceous sandstone. Silurian-aged Formations underlying the Project area are the Decker Formation, a gray calcareous sandstone having lenses of calcareous conglomerate, siltstone, and shale, and lenses of limestone and dolomite; the Bloomsburg Formation, a grayish-red siltstone, shale, and sandstone arranged in fining-upward cycles; and the Shawangunk Formation, a light to dark-gray, fine to very coarse grained sandstone and conglomerate, containing a few shale interbeds. The topography is gently undulating to undulating.	Dcw Dct Dtr Dmh Dm Dbe Drc Sdp Sb Ss
	51.1	53.5	Northampton	Lehigh Township	Ridge & Valley	In Lehigh Township, the Project area is underlain by the Silurian-aged Shawangunk Formation, a light to dark-gray, fine to very coarse grained sandstone and conglomerate, containing a few shale interbeds, and the Ordovician-aged Martinsburg Formation, a gray to dark gray, and infrequently tan and purple shale and slate with graywacke and shale, which consists of abundant impure sandstone (graywacke) interbeds. The topography is gently undulating.	Ss Om

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	53.5	60.3	Northampton	Moore Township	Ridge & Valley	In Moore Township, the Project area is underlain by the Ordovician-aged Martinsburg Formation, a gray to dark gray, and infrequently tan and purple shale and slate with graywacke and shale, which consists of abundant impure sandstone (graywacke) interbeds. The topography is gently undulating.	Om Omgs
	60.3	61.2	Northampton	East Allen Township	Ridge & Valley	In East Allen Township, the Project area is underlain by the Ordovician-aged Martinsburg Formation, a gray to dark gray, and infrequently tan and purple shale and slate. The topography is gently undulating.	Om
	61.2	63.9	Northampton	Upper Nazareth Township	Ridge & Valley	In Upper Nazareth Township, the Project area is underlain by Ordovician-aged Jacksonburg Formation, a dark-gray shaly limestone (cement rock) having slaty cleavage; basal medium- to thick-bedded limestone (cement limestone); the Martinsburg Formation, a gray to dark gray, and infrequently tan and purple shale and slate; and the Epler Formation, a very finely crystalline, light-gray limestone interbedded with gray dolomite; coarsely crystalline limestone lenses present. The topography is flat to gently undulating.	Ojk Om Oe
	63.9	67.1	Northampton	Lower Nazareth Township	Ridge & Valley	In Lower Nazareth Township, the Project area is underlain by Ordovician-aged Epler Formation, a very finely crystalline, light-gray limestone interbedded with gray dolomite; coarsely crystalline limestone lenses present; the Rickenbach Formation, a gray, very finely to coarsely crystalline, laminated dolomite; dark-gray chert in irregular beds, stringers, and nodules; bands of quartz sand grains in lower half; and the Cambrian-aged Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base. The topography is flat to gently undulating.	Oe Ori Cal
	67.1	70.9	Northampton	Bethlehem Township	Ridge & Valley	In Bethlehem Township, the Project area is underlain by Cambrian-aged Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base and the Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly. The topography is flat to gently undulating.	Cal Clv
	70.9	71.1	Northampton	City of Easton	Ridge & Valley	In the City of Easton, the Project area is underlain by Cambrian-aged Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly. The topography is gently undulating.	Clv

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	71.1	72.4	Northampton	Lower Saucon Township	Ridge & Valley and New England	In the Ridge and Valley Physiographic portion of Lower Saucon Township, the Project area is underlain by the Cambrian-aged Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly; and Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; color ranges from nearly white to dark gray; massive bedded; quartz-pebble conglomerate occurs at base. In the New England Physiographic portion of Lower Saucon Township, the dark, medium-grained Precambrian hornblende gneiss; and light, medium-grained felsic to mafic gneiss underlie the Project area. The topography is upslope. The elevation ranges from 200' to 600' above sea level.	Clv Cha hg gn
	72.4	75.9	Northampton	Williams Township	Ridge & Valley and New England	In the Ridge and Valley Physiographic portion of Williams Township, the Project area is underlain by the Cambrian-aged Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly; Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base; and Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; color ranges from nearly white to dark gray; massive bedded; quartz-pebble conglomerate occurs at base. In the New England Physiographic portion of Williams Township, the dark, medium-grained Precambrian hornblende gneiss; and light, medium-grained felsic to mafic gneiss underlie the Project area. The topography is upslope.	Clv Cal Cha hg gn

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	75.9	77.7	Bucks	Durham Township	Ridge & Valley and New England	In the Ridge and Valley Physiographic portion of Durham Township, the Project area is underlain by the Cambrian-aged Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; color ranges from nearly white to dark gray; massive bedded; quartz-pebble conglomerate occurs at base; Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly; and Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base. In the New England Physiographic portion of Durham Township, the Project area is underlain by the Trenton Gravel, a gray or pale-reddish-brown, very gravelly sand interstratified with crossbedded sand and clay-silt beds; includes areas of Holocene alluvium and swamp deposits and dark, medium-grained Precambrian hornblende gneiss; and light, medium-grained felsic to mafic gneiss also underlie the Project area.The topography is relatively flat.	Cha Clv Cal Qt hg gn
	76.7	76.9	Bucks	Riegelsville Borough	Ridge and Valley	In Riegelsville Borough, the Project area is underlain by the Cambrian-aged Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base. The topography is flat	Cal
Hellertown Lateral							
	0.0	2.1	Northampton	Lower Saucon Township	New England and Ridge and Valley	In the New England Physiographic portion of the Hellertown Lateral Project area, the bedrock is composed of the dark, medium-grained Precambrian hornblende gneiss; and the light, medium-grained felsic to mafic gneiss. This rock comprises most of the higher elevations due to its resistance to weathering. In the Ridge and Valley Physiographic portion of the Hellertown Lateral Project area, the bedrock is composed of the Cambrian-aged Leithsville Formation, a gray, fine- to medium-grained, thin- to medium-bedded dolomite; and Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; quartz-pebble conglomerate occurring at base. Elevation ranges from approximately 350' to 700' above sea level.	Hg gn Clv Cha

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
New Jersey Mainline							
	77.7	85.4	Hunterdon	Holland Township	Highlands and Piedmont	In Holland Township, the Project area is underlain by the Cambrian-aged Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; quartz-pebble conglomerate occurring at base. Middle Proterozoic-aged Quartz-Oligoclase Gneiss Losee Metamorphic Suite, a white-weathering, light-greenish-gray, medium- to coarse-grained, moderately layered to indistinctly foliated gneiss and the Hornblende Granite - Byram Intrusive Suite, a pinkish-gray- to medium-buff-weathering, pinkish-white or light-pinkish-gray, medium- to coarse-grained, gneissoid to indistinctly foliated granite and sparse granite gneiss composed principally of microcline microperthite, quartz, oligoclase, and hornblende. The Project area is also underlain by the Cambrian-aged Leithsville Formation gray, a fine- to medium-grained, thin- to medium-bedded dolomite; the Jurassic–Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; the Passaic Formation quartzite-clast conglomerate facies, a brownish-red pebble conglomerate, medium- to coarse-grained, feldspathic sandstone and micaceous siltstone; the Passaic Formation conglomerate and sandstone facies, a brownish-red pebble conglomerate, medium- to coarse-grained, feldspathic sandstone and micaceous siltstone; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is gently rolling hills.	Ch Ylo Ybh Cl JTrp JTrpcq JTrpsc Trpg
	85.4	87.7	Hunterdon	Alexandria Township	Piedmont	In Alexandria Township, the Project area is underlain by the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is gently undulating.	JTrp Trpg

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	87.7	94.4	Hunterdon	Kingwood Township	Piedmont	In Kingwood Township, the Project area is underlain by the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation; the Triassic-aged Lockatong Formation, cyclic lacustrine sequences of silty, dolomitic or argillite; laminated mudstone; and the Lockatong Formation red bed, cyclic lacustrine sequences of silty, dolomitic or analcime-bearing argillite; laminated mudstone; silty to calcareous, argillaceous very fine grained sandstone and pyritic siltstone; and minor silty limestone, mostly light- to dark-gray, greenish gray, and black. The topography is gently undulating to flat.	JTrp Trpg Trl Trlr
	94.4	100.4	Hunterdon	Delaware Township	Piedmont	In Delaware Township, the Project area is underlain by the Jurassic-aged Diabase, which are sheet-like intrusions of medium- to fine-grained diabase and diabase dikes whose main components are labradorite and pyroxene; the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; the Triassic-aged Lockatong Formation, which consists of cyclic lacustrine sequences of silty, dolomitic or argillite; laminated mudstone; and the Triassic-aged Stockton Formation major rock type medium- to coarse-grained, light-gray, light-grayish-brown, or yellowish- to pinkish-gray arkosic sandstone and medium- to fine-grained, violet-gray to reddish-brown arkosic sandstone with minor argillaceous siltstone. The topography is flat to gently undulating.	Jd JTrp Trl Trs
	100.4	104.4	Hunterdon	West Amwell Township	Piedmont	In this portion of West Amwell Township, the Project area is underlain by theJurassic Diabase, consisting predominantly of sheet-like intrusions of medium- to fine-grained diabase and diabase dikes, main components are labradorite and pyroxene; the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; the Triassic-aged Lockatong Formation - predominantly cyclic lacustrine sequences of silty, dolomitic or argillite; laminated mudstone; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is gently undulating to flat.	Jd JTrp Trl Trpg

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	104.4	114.0	Mercer	Hopewell Township	Piedmont	In Hopewell Township, the Project area is underlain by the Jurassic-aged Diabase, which are sheet-like intrusions of medium- to fine-grained diabase and diabase dikes, whose main components are labradorite and pyroxene; the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is gently undulating to flat.	Jd JTrp Trpg
Gilbert 12-inch Lateral							
	0.0	0.1	Hunterdon	Holland Township	Piedmont	In Holland Township, the Project area is underlain by the Jurassic-Triassic-aged Passaic Formation conglomerate and sandstone facies, a brownish-red pebble conglomerate, medium- to coarse-grained, feldspathic sandstone and micaceous siltstone. The topography is gently rolling hills.	JTrpsc
Lambertville 36-inch Lateral							
	0.0	1.4	Hunterdon	West Amwell Township	Piedmont	In West Amwell Township, the Project area is underlain by the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is flat to gently undulating.	JTrp Trpg

Notes:
a/ Overlapping MPs are due to crossing in and out of municipality borders.

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
Pennsylvania Mainline							
	0.0	1.3	Luzerne	Dallas Township	Appalachian Plateaus	In Dallas Township, the Project is underlain by the Devonian-aged Catskill Formation, a grayish-red sandstone, siltstone, shale, and mudstone; locally conglomeratic. The topography is flat to undulating hills.	Dck
	1.3	4.2	Luzerne	Kingston Township	Appalachian Plateaus and Ridge & Valley	In Kingston Township, the Project is underlain by the Devonian-aged Catskill Formation, a grayish-red sandstone, siltstone, shale, and mudstone; locally conglomeratic. The Mississippian-aged Pocono Formation, a light-gray to buff or light-olive-gray, medium-grained, cross-bedded sandstone, and minor siltstone. The topography is undulating hills with some steep valleys.	Dck
	4.2	6.0	Luzerne	West Wyoming Borough	Ridge & Valley	In West Wyoming Borough, the Project is underlain by the Devonian-aged Catskill Formation, a grayish-red sandstone, siltstone, shale, and mudstone; locally conglomeratic; the Mississippian-aged Pocono Formation, a light-gray to buff or light-olive-gray, medium-grained, cross-bedded sandstone and minor siltstone; Mauch Chunk Formation, a grayish-red shale, siltstone, sandstone, and some conglomerate; the Pennsylvanian-aged Llewellyn Formation, a gray, fine- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences; and Pottsville Formation, a gray sandstone and conglomerate; also contains thin beds of shale, claystone, limestone, and coal. The topography is a steep valley to flat.	Dck Mp Mmc Pl Pp
	6.0	7.1	Luzerne	Wyoming Borough	Ridge & Valley	In Wyoming Borough, the Project area is underlain by the Pennsylvanian-age Llewellyn Formation, a gray, fine- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences. The topography is relatively flat.	Pl
	7.1	9.1	Luzerne	Jenkins Township	Ridge & Valley	In Jenkins Township, the Project area is underlain by the Pennsylvanian-age Llewellyn Formation, a gray, fine- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences. The topography is relatively flat to undulating.	Pl
	8.1	12.6	Luzerne	Plains Township	Ridge & Valley	In Plains Township, the Project area is underlain by the Pennsylvanian-age Llewellyn Formation, a gray, fine- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences; Pottsville Formation, a gray sandstone and conglomerate; also contains thin beds of shale, claystone, limestone, and coal; and the Mississippian-aged Mauch Chunk Formation, a grayish-red shale, siltstone, sandstone, and some conglomerate. The topography is relatively flat to undulating.	Pl Pp Mmc
	9.1	9.1	Luzerne	Laflin Borough	Ridge & Valley	In Laflin Borough, the Project area is underlain by the Pennsylvanian age Llewellyn Formation, a gray, find- to coarse-grained sandstone, siltstone, shale, conglomerate, and numerous anthracite coals in repetitive sequences. The topography is relatively flat to undulating.	Pl

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	12.6	23.0	Luzerne	Bear Creek Township	Ridge & Valley and Appalachian Plateaus	In Bear Creek Township, the Project area is underlain by the Mississippian-aged Mauch Chunk Formation, a grayish-red shale, siltstone, sandstone, and some conglomerate; Pocono Formation, a light-gray to buff or light-olive-gray, medium-grained, cross-bedded sandstone and minor siltstone; Spechty Kopf Formation, a light- to olive-gray, fine- to medium- grained, cross-bedded sandstone with minor pebbly mudstone, and laminite arranged in crude fining-upward cycles in some places; and the Devonian-aged Duncannon member of the Catskill Formation, a grayish-red sandstone, siltstone, and mudstone in fining-upward cycles; conglomerate occurs at base of some cycles. The topography is undulating hills. Elevation ranges from 1200' to 2010' above sea level.	Mmc Mp MDsk Dcd
	23.0	33.1	Carbon	Kidder Township	Appalachian Plateaus	In Kidder Township, the Project area is underlain by the Mississippian-aged Spechty Kopf Formation, a light- to olive-gray, fine- to medium- grained, cross-bedded sandstone with minor pebbly mudstone, and laminite arranged in crude fining-upward cycles in some places; and the Devonian-aged Duncannon member of the Catskill Formation, a grayish-red sandstone, siltstone, and mudstone in fining-upward cycles; conglomerate occurs at base of some cycles. The topography is gently undulating.	MDsk Dcd
	33.1	40.6	Carbon	Penn Forest Township	Appalachian Plateaus and Ridge & Valley	In Penn Forest Township, the Project area is underlain by the Devonian-aged Duncannon member of the Catskill Formation, a grayish-red sandstone, siltstone, and mudstone in fining-upward cycles, with conglomerate occurring at the base of some cycles; the Mississippian-aged Spechty Kopf Formation, a light- to olive-gray, fine- to medium- grained, cross-bedded sandstone with minor pebbly mudstone, and laminite, arranged in crude fining-upward cycles in some places; and by the following members of the Devonian-aged Catskill Formation: Poplar Gap member, gray and light-olive-gray sandstone, conglomerate, and siltstone containing intermittent red beds; Packerton member, a greenish-gray to gray sandstone and some siltstone; some laterally persistent conglomerate beds in lower part; Long Run member, a gray and grayish-red sandstone and grayish-red siltstone and mudstone in fining-upward cycles. The topography is gently undulating to undulating.	Dcd MDsk Dcpg Dcp Dclr

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	40.6	47.1	Carbon	Towamensing Township	Ridge and Valley	In Towamensing Township, the Project area is underlain by the following members of the Devonian-aged Catskill Formation: Long Run member, a gray and grayish-red sandstone and grayish-red siltstone and mudstone in fining-upward cycles; Beaverdam Run Member, an alternating olive-gray siltstone and sandstone; with marine fossils; Walcksville member, a greenish-gray sandstone and red siltstone and mudstone in fining-upward cycles; and the Towamensing member, consisting of sandstone, siltstone, and shale. Other Devonian-aged Formations underlying the Project area are the Trimmers Rock Formation, olive-gray siltstone and shale, characterized by graded bedding with marine fossils and some very fine grained sandstone; Mahantango Formation, a gray, brown, and olive shale and siltstone, with marine fossils; and the Marcellus Formation, a black shale with sparse marine fauna and siderite concretions. The topography is gently undulating.	Dclr Dcbr Dcw Dct Dtr Dmh Dm
	47.1	51.1	Carbon	Lower Towamensing Township	Ridge & Valley	In Lower Towamensing Township, the Project area is underlain by the following members of the Devonian-aged Catskill Formation: Walcksville member, a greenish-gray sandstone and red siltstone and mudstone in fining-upward cycles; and the Towamensing member, consisting of sandstone, siltstone, and shale. Other Devonian-aged Formations underlying the Project area are the Trimmers Rock Formation, an olive-gray siltstone and shale, characterized by graded bedding, marine fossils, and some very fine grained sandstone; Mahantango Formation, a gray, brown, and olive shale and siltstone, with marine fossils; the Marcellus Formation, a black shale with sparse marine fauna and siderite concretions; the Buttermilk Falls Limestone, a gray fossiliferous limestone and black chert; and the Ridgeley Formation, a white siliceous sandstone. Silurian-aged Formations underlying the Project area are the Decker Formation, a gray calcareous sandstone having lenses of calcareous conglomerate, siltstone, and shale, and lenses of limestone and dolomite; the Bloomsburg Formation, a grayish-red siltstone, shale, and sandstone arranged in fining-upward cycles; and the Shawangunk Formation, a light to dark-gray, fine to very coarse grained sandstone and conglomerate, containing a few shale interbeds. The topography is gently undulating to undulating.	Dcw Dct Dtr Dmh Dm Dbe Drc Sdp Sb Ss
	51.1	53.5	Northampton	Lehigh Township	Ridge & Valley	In Lehigh Township, the Project area is underlain by the Silurian-aged Shawangunk Formation, a light to dark-gray, fine to very coarse grained sandstone and conglomerate, containing a few shale interbeds, and the Ordovician-aged Martinsburg Formation, a gray to dark gray, and infrequently tan and purple shale and slate with graywacke and shale, which consists of abundant impure sandstone (graywacke) interbeds. The topography is gently undulating.	Ss Om

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	53.5	60.3	Northampton	Moore Township	Ridge & Valley	In Moore Township, the Project area is underlain by the Ordovician-aged Martinsburg Formation, a gray to dark gray, and infrequently tan and purple shale and slate with graywacke and shale, which consists of abundant impure sandstone (graywacke) interbeds. The topography is gently undulating.	Om Omgs
	60.3	61.2	Northampton	East Allen Township	Ridge & Valley	In East Allen Township, the Project area is underlain by the Ordovician-aged Martinsburg Formation, a gray to dark gray, and infrequently tan and purple shale and slate. The topography is gently undulating.	Om
	61.2	63.9	Northampton	Upper Nazareth Township	Ridge & Valley	In Upper Nazareth Township, the Project area is underlain by Ordovician-aged Jacksonburg Formation, a dark-gray shaly limestone (cement rock) having slaty cleavage; basal medium- to thick-bedded limestone (cement limestone); the Martinsburg Formation, a gray to dark gray, and infrequently tan and purple shale and slate; and the Epler Formation, a very finely crystalline, light-gray limestone interbedded with gray dolomite; coarsely crystalline limestone lenses present. The topography is flat to gently undulating.	Ojk Om Oe
	63.9	67.1	Northampton	Lower Nazareth Township	Ridge & Valley	In Lower Nazareth Township, the Project area is underlain by Ordovician-aged Epler Formation, a very finely crystalline, light-gray limestone interbedded with gray dolomite; coarsely crystalline limestone lenses present; the Rickenbach Formation, a gray, very finely to coarsely crystalline, laminated dolomite; dark-gray chert in irregular beds, stringers, and nodules; bands of quartz sand grains in lower half; and the Cambrian-aged Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base. The topography is flat to gently undulating.	Oe Ori Cal
	67.1	70.9	Northampton	Bethlehem Township	Ridge & Valley	In Bethlehem Township, the Project area is underlain by Cambrian-aged Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base and the Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly. The topography is flat to gently undulating.	Cal Clv
	70.9	71.1	Northampton	City of Easton	Ridge & Valley	In the City of Easton, the Project area is underlain by Cambrian-aged Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly. The topography is gently undulating.	Clv

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	71.1	72.4	Northampton	Lower Saucon Township	Ridge & Valley and New England	In the Ridge and Valley Physiographic portion of Lower Saucon Township, the Project area is underlain by the Cambrian-aged Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly; and Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; color ranges from nearly white to dark gray; massive bedded; quartz-pebble conglomerate occurs at base. In the New England Physiographic portion of Lower Saucon Township, the dark, medium-grained Precambrian hornblende gneiss; and light, medium-grained felsic to mafic gneiss underlie the Project area. The topography is upslope. The elevation ranges from 200' to 600' above sea level.	Clv Chahg gn
	72.4	75.9	Northampton	Williams Township	Ridge & Valley and New England	In the Ridge and Valley Physiographic portion of Williams Township, the Project area is underlain by the Cambrian-aged Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly; Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base; and Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; color ranges from nearly white to dark gray; massive bedded; quartz-pebble conglomerate occurs at base. In the New England Physiographic portion of Williams Township, the dark, medium-grained Precambrian hornblende gneiss; and light, medium-grained felsic to mafic gneiss underlie the Project area. The topography is upslope.	Clv Calcha hg gn

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	75.9	77.7	Bucks	Durham Township	Ridge & Valley and New England	In the Ridge and Valley Physiographic portion of Durham Township, the Project area is underlain by the Cambrian-aged Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; color ranges from nearly white to dark gray; massive bedded; quartz-pebble conglomerate occurs at base; Leithsville Formation, a gray, crystalline dolomite, light-olive-gray in places, massive bedded; oolitic; pink to gray, mottled chert and dark-gray chert, thin shale and dolomitic shale interbeds, scattered sand grains; upper part is very shaly; and Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base. In the New England Physiographic portion of Durham Township, the Project area is underlain by the Trenton Gravel, a gray or pale-reddish-brown, very gravelly sand interstratified with crossbedded sand and clay-silt beds; includes areas of Holocene alluvium and swamp deposits and dark, medium-grained Precambrian hornblende gneiss; and light, medium-grained felsic to mafic gneiss also underlie the Project area.The topography is relatively flat.	Cha Clv Cal Qt hg gn
	76.7	76.9	Bucks	Riegelsville Borough	Ridge and Valley	In Riegelsville Borough, the Project area is underlain by the Cambrian-aged Allentown Formation, a dark-gray, thick-bedded dolomite and impure limestone; dark-gray chert stringers and nodules; laminated, oolitic and stromatolitic, some orange-brown-weathering calcareous siltstone at base. The topography is flat	Cal
Hellertown Lateral							
	0.0	2.1	Northampton	Lower Saucon Township	New England and Ridge and Valley	In the New England Physiographic portion of the Hellertown Lateral Project area, the bedrock is composed of the dark, medium-grained Precambrian hornblende gneiss; and the light, medium-grained felsic to mafic gneiss. This rock comprises most of the higher elevations due to its resistance to weathering. In the Ridge and Valley Physiographic portion of the Hellertown Lateral Project area, the bedrock is composed of the Cambrian-aged Leithsville Formation, a gray, fine- to medium-grained, thin- to medium-bedded dolomite; and Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; quartz-pebble conglomerate occurring at base. Elevation ranges from approximately 350' to 700' above sea level.	Hg gn Clv Cha

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
New Jersey Mainline							
	77.7	85.4	Hunterdon	Holland Township	Highlands and Piedmont	In Holland Township, the Project area is underlain by the Cambrian-aged Hardyston Formation, a light-gray, fine- to medium-grained quartzite, and feldspathic sandstone; quartz-pebble conglomerate occurring at base. Middle Proterozoic-aged Quartz-Oligoclase Gneiss Losee Metamorphic Suite, a white-weathering, light-greenish-gray, medium- to coarse-grained, moderately layered to indistinctly foliated gneiss and the Hornblende Granite - Byram Intrusive Suite, a pinkish-gray- to medium-buff-weathering, pinkish-white or light-pinkish-gray, medium- to coarse-grained, gneissoid to indistinctly foliated granite and sparse granite gneiss composed principally of microcline microperthite, quartz, oligoclase, and hornblende. The Project area is also underlain by the Cambrian-aged Leithsville Formation gray, a fine- to medium-grained, thin- to medium-bedded dolomite; the Jurassic–Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; the Passaic Formation quartzite-clast conglomerate facies, a brownish-red pebble conglomerate, medium- to coarse-grained, feldspathic sandstone and micaceous siltstone; the Passaic Formation conglomerate and sandstone facies, a brownish-red pebble conglomerate, medium- to coarse-grained, feldspathic sandstone and micaceous siltstone; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is gently rolling hills.	Ch Ylo Ybh Cl JTrp JTrpcq JTrpsc Trpg
	85.4	87.7	Hunterdon	Alexandria Township	Piedmont	In Alexandria Township, the Project area is underlain by the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is gently undulating.	JTrp Trpg

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	87.7	94.4	Hunterdon	Kingwood Township	Piedmont	In Kingwood Township, the Project area is underlain by the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation; the Triassic-aged Lockatong Formation, cyclic lacustrine sequences of silty, dolomitic or argillite; laminated mudstone; and the Lockatong Formation red bed, cyclic lacustrine sequences of silty, dolomitic or analcime-bearing argillite; laminated mudstone; silty to calcareous, argillaceous very fine grained sandstone and pyritic siltstone; and minor silty limestone, mostly light- to dark-gray, greenish gray, and black. The topography is gently undulating to flat.	JTrp Trpg Trl Trlr
	94.4	100.4	Hunterdon	Delaware Township	Piedmont	In Delaware Township, the Project area is underlain by the Jurassic-aged Diabase, which are sheet-like intrusions of medium- to fine-grained diabase and diabase dikes whose main components are labradorite and pyroxene; the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; the Triassic-aged Lockatong Formation, which consists of cyclic lacustrine sequences of silty, dolomitic or argillite; laminated mudstone; and the Triassic-aged Stockton Formation major rock type medium- to coarse-grained, light-gray, light-grayish-brown, or yellowish- to pinkish-gray arkosic sandstone and medium- to fine-grained, violet-gray to reddish-brown arkosic sandstone with minor argillaceous siltstone. The topography is flat to gently undulating.	Jd JTrp Trl Trs
	100.4	104.4	Hunterdon	West Amwell Township	Piedmont	In this portion of West Amwell Township, the Project area is underlain by theJurassic Diabase, consisting predominantly of sheet-like intrusions of medium- to fine-grained diabase and diabase dikes, main components are labradorite and pyroxene; the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; the Triassic-aged Lockatong Formation - predominantly cyclic lacustrine sequences of silty, dolomitic or argillite; laminated mudstone; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is gently undulating to flat.	Jd JTrp Trl Trpg

Table G-2

Geological Conditions Associated with the Project

Facility	Begin MP a/	End MP a/	County	Municipality	Physiographic Province	Geological Formation and Topography	Geologic Formation Symbol
	104.4	114.0	Mercer	Hopewell Township	Piedmont	In Hopewell Township, the Project area is underlain by the Jurassic-aged Diabase, which are sheet-like intrusions of medium- to fine-grained diabase and diabase dikes, whose main components are labradorite and pyroxene; the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is gently undulating to flat.	Jd JTrp Trpg
Gilbert 12-inch Lateral							
	0.0	0.1	Hunterdon	Holland Township	Piedmont	In Holland Township, the Project area is underlain by the Jurassic-Triassic-aged Passaic Formation conglomerate and sandstone facies, a brownish-red pebble conglomerate, medium- to coarse-grained, feldspathic sandstone and micaceous siltstone. The topography is gently rolling hills.	JTrpsc
Lambertville 36-inch Lateral							
	0.0	1.4	Hunterdon	West Amwell Township	Piedmont	In West Amwell Township, the Project area is underlain by the Jurassic – Triassic-aged Passaic Formation, a reddish-brown to brownish-purple and grayish-red siltstone and shale; and the Triassic-aged Passaic Formation gray bed, an Upper Triassic gray lake deposits that consists of gray to black silty mudstone, gray and greenish- to purplish-gray argillaceous siltstone, black shale, and medium- to dark-gray, argillaceous, fine-grained sandstone, this unit is abundant in the lower half of the Passaic Formation. The topography is flat to gently undulating.	JTrp Trpg

Notes:
a/ Overlapping MPs are due to crossing in and out of municipality borders.

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
Hellertown Lateral	24	0.2	0.3	0	Yes	gn	Felsic to mafic gneiss	felsic gneiss	mafic gneiss
Lambertville Lateral	36	0.0R2	0.2R2	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
Lambertville Lateral	36	0.2R2	0.2R2	0	Yes	JTrp	Passaic Formation	siltstone	sandstone
Lambertville Lateral	36	0.2R2	0.3	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
Lambertville Lateral	36	0.3	0.3	40	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
Lambertville Lateral	36	0.3	0.4	40	Yes	JTrp	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
Lambertville Lateral	36	0.4	0.4	0	Yes	JTrp	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
Lambertville Lateral	36	0.4	0.8	40	Yes	JTrp	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
Lambertville Lateral	36	0.8	0.8	0	Yes	JTrp	Passaic Formation	siltstone	sandstone
Lambertville Lateral	36	0.8	0.9	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
Lambertville Lateral	36	0.9	0.9	10	Yes	Trpg	Passaic Formation	siltstone	sandstone
Lambertville Lateral	36	0.9	1.0	10	Yes	JTrp	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
Lambertville Lateral	36	1.0	1.0	0	Yes	Trpg	Passaic Formation	siltstone	sandstone
Lambertville Lateral	36	1.0	1.0	20	Yes	Trpg	Passaic Formation	siltstone	sandstone
Lambertville Lateral	36	1.0	1.1	10	Yes	Trpg	Passaic Formation	siltstone	sandstone
Lambertville Lateral	36	1.0	1.4	10	Yes	Trpg	Passaic Formation	siltstone	sandstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
Lambertville Lateral	36	1.4	1.4	0	Yes	JTrp	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
Lambertville Lateral	36	1.4	1.4	20	Yes	Trpg	Passaic Formation	siltstone	sandstone
Gilbert Lateral	12	0.0R2	0.1R2	20	Yes	JTrpsc	Passaic Formation Conglomerate and Sandstone facies	conglomerate	sandstone
Gilbert Lateral	12	0.1R2	0.2R2	10	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
Gilbert Lateral	12	0.2R2	0.3R2	20	Yes	JTrpsc	Passaic Formation Conglomerate and Sandstone facies	conglomerate	sandstone
Gilbert Lateral	12	0.3R2	0.4R2	10	Yes	JTrpsc	Passaic Formation Conglomerate and Sandstone facies	conglomerate	sandstone
Gilbert Lateral	12	0.4R2	0.4R2	20	Yes	JTrpsc	Passaic Formation Conglomerate and Sandstone facies	conglomerate	sandstone
Gilbert Lateral	12	0.4R2	0.5R2	10	Yes	JTrpsc	Passaic Formation Conglomerate and Sandstone facies	conglomerate	sandstone
Gilbert Lateral	12	0.5R2	0.6R2	20	Yes	JTrpsc	Passaic Formation Conglomerate and Sandstone facies	conglomerate	sandstone
PennEast Mainline	36	0.0R1	0.0R1	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	0.4	0.6	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	0.7	1.3	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	1.7R2	1.8R2	20	Yes	Dck	Catskill Formation	sandstone	siltstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	1.8R2	2.1	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	2.2	2.6	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	2.6	2.8	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	2.8	3.0R2	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	3.0R2	3.3	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	3.3	3.4	10	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	3.4	3.7	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	3.7	3.8	0	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	3.8	3.8	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	3.8	3.9R2	0	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	3.9R2	4.2R2	20	Yes	Dck	Catskill Formation	sandstone	siltstone
PennEast Mainline	36	4.3R2	4.4R2	0	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	4.4R2	4.5R2	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	4.5R2	4.6R2	20	Yes	Mmc	Mauch Chunk Formation	shale	siltstone
PennEast Mainline	36	4.6R2	4.7R2	0	Yes	Mmc	Mauch Chunk Formation	shale	siltstone
PennEast Mainline	36	4.7R2	4.7R2	20	Yes	Pp	Pottsville Formation	sandstone	conglomerate

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	5.1	5.1	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	5.2	5.3	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	5.3	5.4	2	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	5.5	5.5	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	5.7	6.0	2	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	7.3	7.4R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	7.4R2	7.7R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	7.8R2	8.1R2	20	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	8.1R2	8.2R2	20	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	8.3R2	8.4R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	8.6R2	8.9R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	8.9R2	9.0R2	20	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	9.0R2	9.0R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	9.1R2	9.1R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	9.1R2	9.2R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	9.2R2	9.2R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	9.3R2	9.4R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	9.4R2	9.5R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	9.5R2	9.6R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	9.6R2	9.6R2	20	Yes	Pp	Pottsville Formation	sandstone	conglomerate
PennEast Mainline	36	9.6R2	9.6R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	9.6R2	9.7R2	0	Yes	Pp	Pottsville Formation	sandstone	conglomerate
PennEast Mainline	36	9.7R2	9.7R2	20	Yes	Pp	Pottsville Formation	sandstone	conglomerate
PennEast Mainline	36	9.7R2	9.8R2	0	Yes	Pp	Pottsville Formation	sandstone	conglomerate
PennEast Mainline	36	9.8R2	9.9R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	9.9R2	10.0R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	10.0R2	10.1R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	10.7R2	10.8R2	20	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	10.8R2	10.8R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	10.8R2	10.8R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	10.8R2	11.0R2	20	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	11.0R2	11.0R2	20	Yes	Pl	Llewellyn Formation	sandstone	siltstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	11.0R2	11.0R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	11.0R2	11.1R2	20	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	11.1R2	11.4R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	11.4R2	11.5R2	20	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	11.5R2	11.6R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	11.6R2	11.6R2	20	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	11.6R2	11.7R2	0	Yes	Pl	Llewellyn Formation	sandstone	siltstone
PennEast Mainline	36	11.7R2	11.9R2	0	Yes	Pp	Pottsville Formation	sandstone	conglomerate
PennEast Mainline	36	11.9R2	11.9R2	20	Yes	Mmc	Mauch Chunk Formation	shale	siltstone
PennEast Mainline	36	11.9R2	12.0R2	0	Yes	Mmc	Mauch Chunk Formation	shale	siltstone
PennEast Mainline	36	12.2R2	12.3R2	20	Yes	Mmc	Mauch Chunk Formation	shale	siltstone
PennEast Mainline	36	12.4R2	12.9	20	Yes	Mmc	Mauch Chunk Formation	shale	siltstone
PennEast Mainline	36	12.9	12.9	0	Yes	Mmc	Mauch Chunk Formation	shale	siltstone
PennEast Mainline	36	12.9	13.0	20	Yes	Mmc	Mauch Chunk Formation	shale	siltstone
PennEast Mainline	36	13.3	13.4	2	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	13.4	13.5	0	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	13.5	13.6	0	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	14.3	14.4	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	14.4	14.5	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	14.5	14.5	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	14.5	14.6	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	15.6	15.7	20	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	15.9	16.0	20	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	16.3	16.3	20	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	16.4	16.4	20	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	16.6	16.7	0	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	16.7	16.8	20	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	17.2	17.3	0	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	17.3	17.4	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	17.4	17.5	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	17.5	17.5	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	17.5	17.7	20	Yes	Mp	Pocono Formation	sandstone	siltstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	17.8	17.9	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	17.9	17.9	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	17.9	18.1	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	18.1	18.2	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	18.2	18.3	20	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	18.3	18.3	20	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	19.8	19.8	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	19.8	19.9	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	20.0	20.1	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	20.2	20.3	0	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	20.3	20.3	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	20.4	20.4	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	20.4	20.7	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	20.8	21.1	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	21.4	21.5	20	Yes	Mp	Pocono Formation	sandstone	siltstone
PennEast Mainline	36	22.6	22.6	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	22.7	22.9	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	23.0	23.1	0	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	23.1	23.3	0	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	23.4	23.5	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	23.5	23.6	20	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	23.6	23.8	20	Yes	MDsk	Spechty Kopf Formation	sandstone	siltstone
PennEast Mainline	36	23.8	24.0	20	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	33.2R2	33.2R2	10	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	33.2R2	33.3R2	10	Yes	Dcd	Duncannon Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	38.1	38.1	10	Yes	Dclr	Long Run Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	39.0	39.2	10	Yes	Dcp	Packerton Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	39.2	39.3R2	20	Yes	Dcp	Packerton Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	39.3R2	39.3R2	20	Yes	Dcp	Packerton Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	39.7R2	39.9R2	20	Yes	Dcbs	Berry Run and Sawmill Run Members of Catskill Formation, undivided	sandstone	siltstone
PennEast Mainline	36	39.9R2	40.2R2	20	Yes	Dcp	Packerton Member of Catskill Formation	sandstone	siltstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	40.2R2	40.3R2	10	Yes	Dcp	Packerton Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	40.3R2	40.5R2	10	Yes	Dclr	Long Run Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	41.6	41.7	10	Yes	Dcbr	Beaverdam Run Member of Catskill Formation	siltstone	sandstone
PennEast Mainline	36	41.7	41.9	10	Yes	Dcbr	Beaverdam Run Member of Catskill Formation	siltstone	sandstone
PennEast Mainline	36	41.9	41.9	10	Yes	Dcw	Walcksville Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	42.2R2	42.3R2	10	Yes	Dcw	Walcksville Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	42.3R2	42.5R2	10	Yes	Dct	Towamensing Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	43.0	43.3	10	Yes	Dmh	Mahantango Formation	shale	siltstone
PennEast Mainline	36	44.6R2	44.8R2	10	Yes	Dct	Towamensing Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	44.8R2	45.0R2	10	Yes	Dcw	Walcksville Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	45.1	45.4	10	Yes	Dcw	Walcksville Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	45.4	45.6	10	Yes	Dcbr	Beaverdam Run Member of Catskill Formation	siltstone	sandstone
PennEast Mainline	36	45.6	45.9	10	Yes	Dclr	Long Run Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	46.1	46.1	10	Yes	Dclr	Long Run Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	46.2	46.3	10	Yes	Dclr	Long Run Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	46.4	46.7	10	Yes	Dclr	Long Run Member of Catskill Formation	sandstone	siltstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	46.7	46.9	10	Yes	Dcbr	Beaverdam Run Member of Catskill Formation	siltstone	sandstone
PennEast Mainline	36	46.9	47.1	10	Yes	Dcw	Walcksville Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	47.1	47.6	10	Yes	Dcw	Walcksville Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	47.6	47.8	10	Yes	Dct	Towamensing Member of Catskill Formation	sandstone	siltstone
PennEast Mainline	36	47.9	48.1	10	Yes	Dmh	Mahantango Formation	shale	siltstone
PennEast Mainline	36	48.4R2	48.5R2	12	Yes	Dbe	Buttermilk Falls Limestone through Esopus Formation, undivided	limestone	siltstone
PennEast Mainline	36	48.5R2	48.5R2	14	Yes	Dbe	Buttermilk Falls Limestone through Esopus Formation, undivided	limestone	siltstone
PennEast Mainline	36	48.5R2	48.6R2	13	Yes	Dbe	Buttermilk Falls Limestone through Esopus Formation, undivided	limestone	siltstone
PennEast Mainline	36	48.6R2	48.6R2	13	Yes	Drc	Ridgeley Formation through Coeymans Formation, undivided	sandstone	siltstone
PennEast Mainline	36	48.6R2	48.7R2	13	Yes	Drc	Ridgeley Formation through Coeymans Formation, undivided	sandstone	siltstone
PennEast Mainline	36	48.7R2	49.1R2	16	Yes	Dbe	Buttermilk Falls Limestone through Esopus Formation, undivided	limestone	siltstone
PennEast Mainline	36	49.9R2	49.9R2	10	Yes	Sb	Bloomsburg Formation	siltstone	shale

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	49.9R2	50.1R2	10	Yes	Sb	Bloomsburg Formation	siltstone	shale
PennEast Mainline	36	50.1R2	51.2R2	20	Yes	Ss	Shawangunk Formation	sandstone	conglomerate
PennEast Mainline	36	54.4	55.5	10	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	55.5	55.6	10	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	55.7	55.8	10	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	56.0	56.6	10	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	56.7	57.0	10	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	57.0	57.0	10	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	57.0	57.0	20	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	57.0	57.2	10	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	57.2	57.2	20	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	57.2	57.2	10	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	57.2	57.4	20	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	57.4	57.8R2	10	Yes	Omgs	Graywacke and shale of Martinsburg Formation	graywacke	
PennEast Mainline	36	61.2	61.4	10	Yes	Ojk	Jacksonburg Formation	limestone	shale
PennEast Mainline	36	62.0R2	62.1R2	24	Yes	Ojk	Jacksonburg Formation	limestone	shale

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Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	62.1R2	62.2R2	24	Yes	Ojk	Jacksonburg Formation	limestone	shale
PennEast Mainline	36	78.5	79.2R2	0	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	79.2R2	79.4R2	40	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	79.4R2	79.4R2	0	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	79.4R2	79.5R2	20	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	79.5R2	79.7R2	10	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	79.7R2	79.7R2	20	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	79.7R2	79.8R2	12	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	79.8R2	80.0R2	20	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	80.0R2	80.1R2	0	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	80.1R2	80.1R2	12	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	80.1R2	80.1R2	10	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone

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Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	80.3R2	80.3R2	20	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	80.3R2	80.4R2	0	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	80.4R2	81.5R2	42	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	81.6R2	81.7	42	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	81.7	81.7	12	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	81.7	81.7	0	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	81.7	81.8	20	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	81.8	81.8	42	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	81.8	81.9R2	20	Yes	JTrpcq	Passaic Formation Quatzite-clast Conglomerate facies	conglomerate	sandstone
PennEast Mainline	36	81.9R2	82.2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	82.6R2	82.6R2	20	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	82.6R2	82.7	20	Yes	JTrp	Passaic Formation	siltstone	sandstone

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Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	82.7	82.9	0	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	82.9	83.1	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	83.1	83.1	0	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	83.1	83.2	0	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	83.2	83.2	12	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	83.2	83.3	0	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	83.3	83.4	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	83.4	83.8	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	83.8	83.9	0	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	83.9	84.1	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	84.1	84.2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	84.2	84.4	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	84.4	84.5	0	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	84.5	84.5	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	84.5	84.6	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	84.6	84.6	10	Yes	JTrp	Passaic Formation	siltstone	sandstone

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Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	84.6	84.7R1	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	84.7R1	84.8R1	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	84.8R1	84.8R1	12	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	84.8R1	84.8R1	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	84.8R1	85.0R1	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.0R1	85.0R1	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.0R1	85.1R1	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.1R1	85.1R1	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.1R1	85.2R1	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.2R1	85.3R1	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.3R1	85.3R1	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.3R1	85.4R1	12	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.5R1	85.5R1	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.5R1	85.6R1	12	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.6R1	85.7R1	0	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.7R1	85.8R1	0	Yes	JTrp	Passaic Formation	siltstone	sandstone

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Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	85.9	85.9	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	85.9	85.9	0	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	86.0R1	86.0R1	0	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	86.0R1	86.2	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	86.2	86.4R1	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	86.4R1	86.6	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	86.6	86.6	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	87.6	87.6	10	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	87.6	87.7	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	87.7	87.7	12	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	87.7	87.7	0	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	87.7	87.9	10	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	87.9	88.1R2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	88.1R2	88.1R2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	88.1R2	88.3R2	20	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	88.3R2	88.3R2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone

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Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	88.3R2	88.4R2	0	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	88.4R2	88.4R2	12	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	88.4R2	88.4R2	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	88.4R2	88.5R2	20	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	88.5R2	88.6R2	40	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	88.6R2	89.0	40	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	89.0	89.4	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	89.4	89.5	20	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	89.5	89.5	12	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	89.5	89.8R2	20	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	89.8R2	89.9R2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	89.9R2	90.0R2	0	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	90.0R2	90.1R2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	89.9R2	90.2R2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	90.2R2	90.4	20	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	90.4	90.7	21	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone

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Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	90.7	90.8	21	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	90.7	90.8	21	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	90.8	90.8	21	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	90.8	90.9	21	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	90.9	90.9	21	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	90.9	91.0R2	21	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	91.0R2	91.0R2	21	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	91.0R2	91.1R2	42	Yes	Trpg	Passaic Formation Gray bed	fine-grained mixed clastic	siltstone
PennEast Mainline	36	91.1R2	91.4R2	42	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	92.6R2	92.8R2	42	Yes	Trlr	Red bed of Lockatong Formation	argillite	mudstone
PennEast Mainline	36	92.8R2	92.8R2	42	Yes	Trl	Lockatong Formation	argillite	mudstone
PennEast Mainline	36	93.1	93.3R2	42	Yes	Trl	Lockatong Formation	argillite	mudstone
PennEast Mainline	36	93.9R2	94.0R2	42	Yes	Trlr	Red bed of Lockatong Formation	argillite	mudstone
PennEast Mainline	36	94.0R2	94.5R2	42	Yes	Trl	Lockatong Formation	argillite	mudstone
PennEast Mainline	36	94.5R2	95.6	42	Yes	Trl	Lockatong Formation	argillite	mudstone
PennEast Mainline	36	94.5R2	95.4	42	Yes	Trl	Lockatong Formation	argillite	mudstone

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Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology
PennEast Mainline	36	95.4	95.7	36	Yes	Trl	Lockatong Formation	argillite	mudstone
PennEast Mainline	36	95.7	95.8	42	Yes	Trl	Lockatong Formation	argillite	mudstone
PennEast Mainline	36	97.3R2	97.4	12	Yes	Trs	Stockton Formation	arkose	fine-grained mixed clastic
PennEast Mainline	36	99.5R2	99.6R2	40	Yes	Trl	Lockatong Formation	argillite	mudstone
PennEast Mainline	36	99.6R2	99.6R2	10	Yes	Trl	Lockatong Formation	argillite	mudstone
PennEast Mainline	36	100.9R2	101.0R2	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	101.0R2	101.0R2	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	101.0R2	101.1R2	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	101.1R2	101.1R2	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	101.1R2	101.1R2	25	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	101.1R2	101.1R2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	101.1R2	101.2R2	40	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	101.2R2	101.2R2	20	Yes	JTrp	Passaic Formation	siltstone	sandstone
PennEast Mainline	36	101.2R2	101.2R2	26	Yes	JTrp	Passaic Formation	siltstone	sandstone

Table G-3

Areas Where Blasting May be Required

Facility	Pipe Diameter (in)	Begin MP a/	End MP a/	Depth to Bedrock (in) b/	Shallow Bedrock with Potential to Require Blasting c/	Map Symbol	Geologic Unit Name	Primary Lithology	Secondary Lithology

Notes:

Source: The mainline pipeline and laterals were divided into segments demarcated by the mapped boundaries between the soil series according to their coordinates in the SSURGO database. Expected Minimum Depths to bedrock were derived from the National Resource Conservation Service's (NRCS) Official Soil Series Descriptions (OSD), which are available online. Where lacking or incomplete, additional depth information was obtained from the county soil surveys for Bucks, Carbon, Luzerne, and Northampton Counties, Pennsylvania and Hunterdon and Mercer Counties, New Jersey. Various areas crossed that were not assignable to soil series (e.g. strip mine, mine dump, mine wash, urban land, water, alluvial land,, fluvaquents, and udorthents) were assigned values based on expected depths associated with land use, considering location, topography, and adjacent soils. The on-line and published sources of information are:

- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions. Available online. Accessed September 9, 2015. [http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/soils/survey/class/data/]
- U.S. Dept. of Agriculture 1962. Soil Survey of Carbon County, Pennsylvania. Soil Conservation Service. Series 1959, No. 14. 106 p. + maps.
- U.S. Dept. of Agriculture 1972. Soil Survey of Mercer County, New Jersey. Soil Conservation Service. 108 p. + maps.
- U.S. Dept. of Agriculture 1974. Soil Survey of Northampton County, Pennsylvania. Soil Conservation Service. 120 p. + maps.
- U.S. Dept. of Agriculture 1974 (Re-issued 1981). Soil Survey of Hunterdon County, New Jersey. Soil Conservation Service. 131 p. + maps.
- U.S. Dept. of Agriculture 1975. Soil Survey of Bucks and Philadelphia Counties, Pennsylvania. Soil Conservation Service. 130 p. + maps.
- U.S. Dept. of Agriculture 1981. Soil Survey of Luzerne County, Pennsylvania. Soil Conservation Service. 104 p. + maps

a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.

b/ Expected Minimum Depth to Bedrock includes depths from the NRCS Official Soil Series Descriptions and from the county soil surveys. Where there is a discrepancy, the county data is given preference.

c/ For the given segment, the minimum expected depth of rock (for the mapped soil series) was added to the estimated minimum thickness of saprolite, based on the mineralogy and structure of the underlying bedrock. If subtracting the sum of the depth to rock and the saprolite thickness from the proposed trench depth left more than two feet of sound rock (and the bedrock is not expected to be friable), the possibility of blasting was listed. Blasting will not be used anywhere a foreign utility crossing is identified, such as water, sewer or gas.

Table G-4

Bedrock Aquifers Crossed by the PennEast Pipeline Project in Pennsylvania

Facility / County	Aquifer Type	Begin Milepost a/	End Milepost a/
Mainline			
Luzerne	Catskill Formation	0.0R1	4.3R2
Luzerne	Pocono Formation	4.3R2	4.5R2
Luzerne	Mauch Chunk Formation	4.5R2	4.7R2
Luzerne	Pottsville Formation	4.7R2	5.1
Luzerne	Llewellyn Formation	5.2	9.6R2
Luzerne	Pottsville Formation	9.6R2	9.6R2
Luzerne	Llewellyn Formation	9.6R2	9.6R2
Luzerne	Pottsville Formation	9.6R2	9.8R2
Luzerne	Llewellyn Formation	9.8R2	11.4R2
Luzerne	Pottsville Formation	11.4R2	11.9R2
Luzerne	Mauch Chunk Formation	11.9R2	13.0
Luzerne	Pocono Formation	13.0	13.4
Luzerne	Spechty Kopf Formation	13.4	14.6
Luzerne	Duncannon Member of Catskill Formation	14.6	16.9
Luzerne	Spechty Kopf Formation	16.9	17.3
Luzerne	Pocono Formation	17.3	17.9
Luzerne	Spechty Kopf Formation	17.9	18.2
Luzerne	Duncannon Member of Catskill Formation	18.2	18.4
Luzerne	Spechty Kopf Formation	18.4	19.4
Luzerne	Duncannon Member of Catskill Formation	19.4	19.8
Luzerne	Spechty Kopf Formation	19.8	19.9
Luzerne	Pocono Formation	19.9	22.6
Luzerne	Spechty Kopf Formation	22.6	23.0
Luzerne	Duncannon Member of Catskill	23.0	23.1
Carbon	Spechty Kopf Formation	23.1	23.5
Carbon	Duncannon Member of Catskill Formation	23.5	23.6
Carbon	Spechty Kopf Formation	23.6	23.8
Carbon	Duncannon Member of Catskill Formation	23.8	24.8
Carbon	Spechty Kopf Formation	24.8	27.6R2
Carbon	Duncannon Member of Catskill Formation	27.6R2	28.2R2
Carbon	Spechty Kopf Formation	28.2R2	28.8R2
Carbon	Duncannon Member of Catskill Formation	28.9R2	34.0R2
Carbon	Spechty Kopf Formation	34.0R2	34.2R2
Carbon	Duncannon Member of Catskill Formation	34.2R2	37.0
Carbon	Poplar Gap Member of Catskill Formation	37.0	37.9
Carbon	Packerton Member of Catskill Formation	37.9	38.1
Carbon	Long Run Member of Catskill Formation	38.1	39.0
Carbon	Packerton Member of Catskill Formation	39.0	39.7R2
Carbon	Berry Run and Sawmill Run Members of Catskill Formation, undivided	39.7R2	39.9R2
Carbon	Packerton Member of Catskill Formation	39.9R2	40.3R2
Carbon	Long Run Member of Catskill Formation	40.3R2	41.6
Carbon	Beaverdam Run Member of Catskill Formation	41.6	41.9
Carbon	Walcksville Member of Catskill Formation	41.9	42.3R2
Carbon	Towamensing Member of Catskill Formation	42.3R2	42.5R2
Carbon	Trimmers Rock Formation	42.5R2	42.7
Carbon	Mahantango Formation	42.7	43.3
Carbon	Marcellus Formation	43.3	44.0

Table G-4

Bedrock Aquifers Crossed by the PennEast Pipeline Project in Pennsylvania

Facility / County	Aquifer Type	Begin Milepost a/	End Milepost a/
Carbon	Mahantango Formation	44.0	44.4R2
Carbon	Trimmers Rock Formation	44.4R2	44.6R2
Carbon	Towamensing Member of Catskill Formation	44.6R2	44.8R2
Carbon	Walcksville Member of Catskill Formation	44.8R2	45.4
Carbon	Beaverdam Run Member of Catskill Formation	45.4	45.6
Carbon	Long Run Member of Catskill Formation	45.6	46.7
Carbon	Beaverdam Run Member of Catskill Formation	46.7	46.9
Carbon	Walcksville Member of Catskill Formation	46.9	47.6
Carbon	Towamensing Member of Catskill Formation	47.6	47.8
Carbon	Trimmers Rock Formation	47.8	47.9
Carbon	Mahantango Formation	47.9	48.2
Carbon	Marcellus Formation	48.2	48.4R2
Carbon	Buttermilk Falls Limestone through Esopus Formation, undivided	48.4R2	48.6R2
Carbon	Ridgeley Formation through Coeymans Formation, undivided	48.6R2	48.6R2
Carbon	Buttermilk Falls Limestone through Esopus Formation, undivided	48.6R2	48.8R2
Carbon	Ridgeley Formation through Coeymans Formation, undivided	48.8R2	49.2R2
Carbon	Decker Formation through Poxono Island Formation, undivided	49.2R2	49.6R2
Carbon	Bloomsburg Formation	49.6R2	50.1R2
Carbon	Shawangunk Formation	50.0R2	54.2
Northampton	Martinsburg Formation	51.7	54.2
Northampton	Graywacke and shale of Martinsburg Formation	54.2	57.7R2
Northampton	Martinsburg Formation	57.7R2	61.3
Northampton	Jacksonburg Formation	61.3	62.8
Northampton	Epler Formation	62.8	64.6
Northampton	Rickenbach Formation	64.6	65.3
Northampton	Epler Formation	65.3	66.3
Northampton	Rickenbach Formation	66.3	66.9
Northampton	Allentown Formation	66.9	70.9
Northampton	Leithsville Formation	70.9	71.6
Northampton	Hardyston Formation	71.6	71.7
Northampton	Felsic to mafic gneiss	71.7	72.0
Northampton	Hornblende gneiss	72.0	72.2
Northampton	Felsic to mafic gneiss	72.2	72.8
Northampton	Hornblende gneiss	72.8	73.0
Northampton	Felsic to mafic gneiss	73.0	73.1
Northampton	Hornblende gneiss	73.1	74.2
Northampton	Felsic to mafic gneiss	74.2	74.3
Northampton	Leithsville Formation	74.3	74.4
Northampton	Allentown Formation	74.4	74.8
Northampton	Leithsville Formation	74.8	75.3
Northampton	Hardyston Formation	75.3	75.5
Northampton	Hornblende gneiss	75.5	75.9
Bucks	Felsic to mafic gneiss	75.9	75.9
Bucks	Hornblende gneiss	75.9	76.0
Bucks	Hardyston Formation	76.0	76.1
Bucks	Leithsville Formation	76.1	76.2
Bucks	Allentown Formation	76.2	77.0R2
Bucks	Leithsville Formation	77.0R2	77.4

Table G-4

Bedrock Aquifers Crossed by the PennEast Pipeline Project in Pennsylvania

Facility / County	Aquifer Type	Begin Milepost a/	End Milepost a/
Bucks	Trenton Gravel	77.4	77.6
Hellertown Lateral - Pennsylvania			
Northampton	Hardyston Formation	0.0	0.2
Northampton	Felsic to mafic gneiss	0.2	0.4
Northampton	Hornblende gneiss	0.5	1.2
Northampton	Felsic to mafic gneiss	1.2	1.3
Northampton	Hardyston Formation	1.3	1.7
Northampton	Hornblende gneiss	1.7	2.0R2
Northampton	Felsic to mafic gneiss	2.0R2	2.1R2
Northampton	Leithsville Formation	2.1R2	2.1R2

Notes:
a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.
Sources:
Pennsylvania Department of Conservation and Natural Resources (PADNCR 2015a)

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
PennEast Mainline – Upper Susquehanna River Basin c/																		
0.6	Luzerne	41.34660	-75.93522	Trout Brook	092414_GO_1001_P_IM	Int.	RPW	P	CWF, MF	III	-	2,080	5	0.004	0.006	6/1-9/30	Bore	000-03-01-002
1.4	Luzerne	41.34146	-75.92179	UNT to Trout Brook	PA-NHD-002	Int.	RPW	P	CWF, MF	III	-	346	13	0.008	0.015	6/1-9/30	Dry Crossing	000-03-01-003
2.1	Luzerne	41.33700	-75.91054	UNT to Abrahams Creek	S-SUR-003	Minor	RPW	P	CWF, MF	-	-	<100	4	0.003	0.005	6/1-9/30	Dry Crossing	000-03-01-005
2.1	Luzerne	41.33779	-75.91051	UNT to Abrahams Creek	050416_DB_1001_I_MI	Minor	RPW	I	CWF, MF	-	-	<100	3	0.002	0.004	6/1-9/30	Dry Crossing	000-03-01-005
2.6	Luzerne	41.33201	-75.90463	UNT to Abrahams Creek	011815_JC_1000_I_MI	Minor	RPW	I	CWF, MF	-	-	<100	7	0.006	0.008	6/1-9/30	Dry Crossing	000-03-01-006
3.1	Luzerne	41.32574	-75.89952	UNT to Toby Creek	011815_JC_1001_P_MI	Minor	RPW	P	CWF, MF	III	-	<100	8	0.005	0.009	6/1-9/30	Dry Crossing	000-03-01-007
3.1	Luzerne	41.32562	-75.89940	UNT to Toby Creek	011815_JC_1002_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	5	0.003	0.007	6/1-9/30	Dry Crossing	000-03-01-007
3.5	Luzerne	41.32272	-75.89290	UNT to Abrahams Creek	S-SUR-005	Minor	RPW	P	CWF, MF	-	-	< 100	6	0.003	0.007	6/1-9/30	Dry Crossing	000-03-01-008
4.3R2, AR-003A	Luzerne	41.3228	-75.87946	UNT to Abrahams Creek	020916_BT_1001_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	1 d/	0.001	0.000	6/1-9/30	N/A	000-03-01-009
4.3R2	Luzerne	41.3228	-75.87946	UNT to Abrahams Creek	020916_BT_1001_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	1	0.001	0.002	6/1-9/30	Dry Crossing	000-03-01-009
4.3R2	Luzerne	41.32241	-75.87825	UNT to Abrahams Creek	020916_BT_1003_P_MI	Minor	RPW	I	CWF, MF	III	-	<100	3	0.002	0.004	6/1-9/30	Dry Crossing	000-03-01-009
4.9	Luzerne	41.31467	-75.87094	UNT to Abrahams Creek	020916_BT_1004_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	3 d/	0.003	0.000	6/1-9/30	Dry Crossing	000-03-01-010
5.0	Luzerne	41.31382	-75.87003	UNT to Abrahams Creek	020916_BT_1006_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	6	0.001	0.006	6/1-9/30	Dry Crossing	000-03-01-011
5.0	Luzerne	41.31376	-75.86960	UNT to Abrahams Creek	020916_BT_1007_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	8	0.004	0.008	6/1-9/30	Dry Crossing	000-03-01-011

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
5.9	Luzerne	41.30812	-75.85403	UNT to Abrahams Creek	092314_GO_1001_I_MI	Minor	RPW	I	CWF, MF	-	-	1,350	2	0.001	0.002	6/1 - 9/30	Dry Crossing	000-03-01-012
6.1	Luzerne	41.30726	-75.85247	UNT to Abrahams Creek	092414_GO_1002_D_MI	Int.	-	Ditch	CWF, MF	-	-	7,360	27	0.015	0.031	6/1 - 9/30	Dry Crossing	000-03-01-013
6.2R2	Luzerne	41.30595	-75.85051	UNT to Susquehanna River	092414_GO_1003_P_IM	Int.	RPW	P	CWF, MF	-	-	<100	24	0.007	0.013	6/1 - 9/30	Dry Crossing	000-03-01-013
7.1	Luzerne	41.30106	-75.83820	Susquehanna River	102315_WA_1001_P_MA	Major	TNW	P	WWF, MF	-	-	6,342,400	1,056	11.757	1.212	6/1 - 11/30	Dry Crossing	000-03-01-014 / 015
8.4R2	Luzerne	41.28984	-75.82816	UNT to Susquehanna River	043015_JC_1002_D_MI	Minor	-	Ditch	CWF, MF	-	-	<100	9	0.002	0.008	6/1 - 11/30	Dry Crossing	000-03-01-018
8.8R2	Luzerne	41.28792	-75.82144	UNT to Susquehanna River	102315_WA_001_E_MI	Minor	NRPW	E	CWF, MF	-	-	<100	5	0.002	0.004	6/1- 9/30	Dry Crossing	000-03-01-019
9.7R2	Luzerne	41.27971	-75.81170	Gardner Creek	PA-NHD-015	Int.	RPW	P	CWF, MF	-	-	5,811	56	0.003	0.070	6/1 - 9/30	Dry Crossing	000-03-01-021
10.8R2	Luzerne	41.26664	-75.80028	Mill Creek	110514_JC_1002_P_IM	Int.	RPW	P	CWF, MF	III	-	6,016	25	0.016	0.032	6/1 - 9/30	Dry Crossing	000-03-01-023
11.2R2	Luzerne	41.26350	-75.79390	UNT to Deep Creek	PA-NHD-123	Int.	RPW	P	CWF, MF	III	-	627	18	0.003	0.006	6/1 - 9/30	Dry Crossing	000-03-01-024
11.5R2	Luzerne	41.26138	-75.79114	Deep Creek	121614_JC_1000_P_MI	Minor	RPW	P	CWF, MF	III	-	608	9	0.005	0.010	6/1 - 9/30	Dry Crossing	000-03-01-024
11.6R2	Luzerne	41.26051	-75.78954	UNT to Deep Creek	121614_JC_1001_E_MI	Minor	NRPW	E	CWF, MF	III	-	<100	3	0.002	0.005	6/1 - 9/30	Dry Crossing	000-03-01-024
12.4R2	Luzerne	41.25190	-75.77836	UNT to Mill Creek	121514_JC_1001_D_MI	Minor	-	Ditch	CWF, MF	III	-	<100	2	0.007	0.003	6/1 - 9/30	Dry Crossing	000-03-01-026
13	Luzerne	41.24937	-75.77422	UNT to Mill Creek	121814_JC_1010_P_MI	Minor	RPW	P	CWF, MF	III	-	<100	6	0.011	0.010	6/1 - 9/30	Bore	000-03-01-027
13.1	Luzerne	41.24911	-75.77368	UNT to Mill Creek	121814_JC_1011_P_MI	Minor	RPW	P	CWF, MF	III	-	<100	8	0.011	0.010	6/1 - 9/30	Dry Crossing	000-03-01-027
13.2	Luzerne	41.24913	-75.77189	UNT to Mill Creek	121814_JC_1013_E_MI	Minor	NRPW	E	CWF, MF	III	-	<100	5	0.003	0.006	6/1 - 9/30	Dry Crossing	000-03-01-027
13.2	Luzerne	41.24846	-75.77048	UNT to Mill Creek	121814_JC_1012_E_MI	Minor	NRPW	E	CWF, MF	III	-	<100	7	0.004	0.008	6/1 - 9/30	Bore	000-03-01-027
13.3	Luzerne	41.24804	-75.77014	UNT to Mill Creek	121814_JC_1007_D_MI	Minor	-	Ditch	CWF, MF	III	-	<100	10	0.004	0.008	6/1 - 9/30	Bore	000-03-01-027

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
13.3	Luzerne	41.24775	-75.76991	UNT to Mill Creek	121814_JC_1008_P_MI	Minor	RPW	P	CWF, MF	III	-	<100	10	0.006	0.011	6/1 - 9/30	Bore	000-03-01-027
13.3, AR-029	Luzerne	41.25272	-75.76667	UNT to Mill Creek	081215_MK_017_P_IM	Minor	RPW	P	CWF, MF	III	-	<100	8	0.005	0	6/1 - 9/30	N/A	000-03-03-015
13.3, AR-029	Luzerne	41.24889	-75.76765	UNT to Mill Creek	081215_MK_016_E_MI	Minor	NRPW	E	CWF, MF	III	-	<100	2	0.002	0	6/1 - 9/30	N/A	000-03-03-015
13.3, AR-029	Luzerne	41.24862	-75.76803	UNT to Mill Creek	081215_MK_015_I_MI	Minor	RPW	I	CWF, MF	III	-	646	3	0.002	0	6/1 - 9/30	N/A	000-03-03-015
13.3, AR-029	Luzerne	41.24840	-75.76856	UNT to Mill Creek	081215_MK_014_P_IM	Int.	RPW	P	CWF, MF	III	-	627	12	0.009	0	6/1 - 9/30	N/A	000-03-03-015
13.3, AR-029	Luzerne	41.24835	-75.76880	UNT to Mill Creek	081215_MK_013_I_MI	Minor	RPW	I	CWF, MF	III	-	627	5	0.009	0	6/1 - 9/30	N/A	000-03-03-015
13.6	Luzerne	41.24419	-75.76745	UNT to Mill Creek	121814_JC_1005_P_MI	Minor	RPW	P	CWF, MF	III	-	176	7	0.004	0.007	6/1 - 9/30	Dry Crossing	000-03-01-028
13.6	Luzerne	41.24412	-75.76737	UNT to Mill Creek	121814_JC_1006_I_MI	Minor	RPW	I	CWF, MF	III	-	173	4	0.002	0.003	6/1 - 9/30	Dry Crossing	000-03-01-028
13.7	Luzerne	41.24321	-75.76622	UNT to Mill Creek	121814_JC_1004_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	5	0.002	0.005	6/1 - 9/30	Dry Crossing	000-03-01-028
13.8	Luzerne	41.24173	-75.76435	UNT to Mill Creek	121814_JC_1003_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	74 d/	0.005	0.007	6/1 - 9/30	Dry Crossing	000-03-01-028
13.9	Luzerne	41.24122	-75.76371	UNT to Mill Creek	121814_JC_1002_P_MI	Minor	RPW	P	CWF, MF	III	-	<100	6	0.004	0.007	6/1 - 9/30	Dry Crossing	000-03-01-028
13.9	Luzerne	41.24070	-75.76305	UNT to Mill Creek	121814_JC_1001_P_MI	Minor	RPW	P	CWF, MF	III	-	<100	6	0.006	0.016	6/1 - 9/30	Dry Crossing	000-03-01-028
14.1	Luzerne	41.23869	-75.76053	UNT to Mill Creek	111014_JC_1001_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	17	0.010	0.018	6/1 - 9/30	Dry Crossing	000-03-01-029
PennEast Mainline Route Pipeline - Delaware River Basin																		
15	Luzerne	41.22958	-75.74941	UNT to Little Bear Creek	043015_JC_1001_I_MI	Minor	RPW	I	HQ-CWF, MF	-	-	<100	7	0.001	0.005	6/1 - 9/30	Dry Crossing	000-03-01-030
15.7, AR-031C	Luzerne	41.21788	-75.73332	UNT to Bear Creek	112114_JC_1003_P_IM	Int.	RPW	P	HQ-CWF, MF	-	-	7744	33 d/	0.022	0.000	6/1-9/30	N/A	000-03-01-033
15.7, AR-031C	Luzerne	41.21788	-75.73333	UNT to Bear Creek	PA-NHD-028	Minor	RPW	P	HQ-CWF, MF	-	-	<100	11 d/	0.008	0.000	6/1-9/30	N/A	000-03-01-033
15.7, AR-031C	Luzerne	41.21569	-75.72967	UNT to Bear Creek	112114_JC_1001_P_MI	Minor	RPW	P	HQ-CWF, MF	-	-	<100	31 d/	0.004	0.000	6/1-9/30	N/A	000-03-01-033

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
15.7, AR-031C	Luzerne	41.21277	-75.72304	Meadow Run	112014_JC_1003_P_IM	Int.	RPW	P	HQ-CWF, MF	-	-	3526	31 d/	0.010	0.000	6/1-9/30	N/A	000-03-01-034
16.2	Luzerne	41.21717	-75.73354	UNT to Bear Creek	112114_JC_1003_P_IM	Int.	RPW	P	HQ-CWF, MF	-	-	7,744	53	0.033	0.075	6/1 - 9/30	Dry Crossing	000-03-01-033
16.2	Luzerne	41.21687	-75.73306	Bear Creek	112114_JC_1002_P_MI	Minor	RPW	P	HQ-CWF, MF	-	-	7,756	11	0.008	0.013	6/1 - 9/30	Dry Crossing	000-03-01-033
16.4	Luzerne	41.21567	-75.72966	UNT to Bear Creek	112114_JC_1001_P_MI	Minor	RPW	P	HQ-CWF, MF	-	-	<100	6	0.003	0.007	6/1 - 9/30	Dry Crossing	000-03-01-033
16.7	Luzerne	41.21243	-75.72602	Meadow Run	112014_JC_1003_P_IM	Int.	RPW	P	HQ-CWF, MF	-	-	3,526	45	0.022	0.045	6/1 - 9/30	Dry Crossing	000-03-01-034
16.9	Luzerne	41.21055	-75.72304	UNT to Meadow Run	112014_JC_1002_P_MI	Minor	RPW	P	HQ-CWF, MF	-	-	<100	2	0.003	0.003	6/1 - 9/30	Dry Crossing	000-03-01-034
17.7	Luzerne	41.20259	-75.71124	UNT to Little Shades Creek	112014_JC_1001_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	<100	4	0.002	0.004	6/1 - 9/30	Dry Crossing	000-03-01-036
18.3	Luzerne	41.19673	-75.70207	Little Shades Creek	111914_JC_1002_P_IM	Major	RPW	P	HQ-CWF, MF	III	-	563	105	0.045	0.12	6/1 - 9/30	Dry Crossing	000-03-01-037
18.4	Luzerne	41.19636	-75.70154	UNT to Little Shades Creek	111914_JC_1001_P_IM	Int.	RPW	P	HQ-CWF, MF	III	-	582	19 d/	0.009	0.004	6/1 - 9/30	Dry Crossing	000-03-01-037
19	Luzerne	41.18854	-75.69737	UNT to Little Shades Creek	121814_JC_1014_D_MI	Minor	-	Ditch	HQ-CWF, MF	III	-	<100	27 d/	0.001	0	6/1 - 9/30	N/A	000-03-01-039
19.1	Luzerne	41.18787	-75.69734	UNT to Little Shades Creek	121814_JC_1014_I_MI	Minor	RPW	I	HQ-CWF, MF	III	-	<100	32 d/	0.003	0.000	6/1 - 9/30	N/A	000-03-01-039
19.6	Luzerne	41.17961	-75.69650	Shades Creek	121614_JC_1009_P_IM	Int.	RPW	P	HQ-CWF, MF	I, III	-	1,920	26	0.017	0.031	6/1 - 9/30	Dry Crossing	000-03-01-040
20	Luzerne	41.17362	-75.69646	UNT to Shades Creek	121714_JC_1001_E_MI	Minor	NRPW	E	HQ-CWF, MF	III	-	<100	10	0.001	0.011	6/1 - 9/30	Dry Crossing	000-03-01-041
20.1	Luzerne	41.17261	-75.69638	UNT to Shades Creek	121614_JC_1006_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	<100	14	0.014	0.018	6/1 - 9/30	Dry Crossing	000-03-01-041

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
21.2	Luzerne	41.15745	-75.69377	UNT to Stony Run	121614_JC_1004_I_MI	Minor	RPW	I	HQ-CWF, MF	III	-	<100	5	0.002	0.004	6/1 - 9/30	Dry Crossing	000-03-01-043
21.8, AR-033	Luzerne	41.14844	-75.67744	Stony Run	PA-NHD-039	Int.	RPW	I	HQ-CWF, MF	III	-	2,000	12 d/	0.008	0	6/1 - 9/30	N/A	000-03-03-019.1
22.6	Luzerne	41.13739	-75.69000	UNT to Stony Run	102115_WA_002_E_MI	Minor	NRPW	E	HQ-CWF, MF	III	-	<100	8	0.001	0.003	6/1 - 9/30	N/A	000-03-01-046
22.6	Luzerne	41.13695	-75.68988	UNT to Stony Run	102115_WA_001_E_MI	Minor	NRPW	E	HQ-CWF, MF	III	-	<100	8	0.000	0.001	6/1 - 9/30	N/A	000-03-01-046
22.7	Luzerne	41.13621	-75.68944	Stony Run	050615_JC_1001_P_IM	Int.	RPW	P	HQ-CWF, MF	III	-	2,779	24	0.012	0.027	6/1 - 9/30	Dry Crossing	000-03-01-046
23	Luzerne, Carbon	41.13078	-75.68790	Lehigh River	052115_JC_1001_P_MA	Major	TNW	P	HQ-CWF, MF	III	-	146,560	444	0.504	0.51	6/1 - 9/30	Dry Crossing	000-03-01-046 / 047
23.4, AR-034C	Carbon	41.10861	-75.68615	UNT to Lehigh River	PA-NHD-124	Minor	RPW	I	HQ-CWF, MF	III	-	<100	5 d/	0.004	0.000	6/1-9/30	N/A	000-03-03-019.4
24.9, AR-034A	Carbon	41.10112	-75.66258	UNT to Porter Run	012116_DB_1003_I_MI	Minor	RPW	I	HQ-CWF, MF	III	-	< 100	3 d/	0.003	0	6/1 - 9/30	N/A	000-03-03-020.2
24.9,AR-034A	Carbon	41.10121	-75.66105	Porter Run	012116_DB_1001_P_IN (1)	Int.	RPW	P	HQ-CWF, MF	III	-	474	11 d/	0.006	0	6/1 - 9/30	N/A	000-03-03-020.2
25.0, AR-034	Carbon	41.09944	-75.68344	UNT to Lehigh River	PA-NHD-040	Minor	RPW	P	HQ-CWF, MF	III	-	339	9 d/	0.013	0	6/1 - 9/30	N/A	000-03-03-020.1
26.3,AR-034B	Carbon	41.10115	-75.66118	Porter Run	012116_DB_1001_P_IN (2)	Int.	RPW	P	HQ-CWF, MF	III	-	448	17 d/	0.008	0	6/1 - 9/30	N/A	000-03-03-020.3
26.6	Carbon	41.08407	-75.66118	UNT to Black Creek	102114_JC_1001_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	<100	13	0.005	0.009	6/1 - 9/30	Dry Crossing	000-03-01-054
29.2R2, AR-036A	Carbon	41.05151	-75.61700	UNT to Tunkhannock Creek	PA-NHD-125	Minor	RPW	P	HQ-CWF, MF	III	-	<100	6 d/	0.004	0.000	6/1-9/30	N/A	000-03-03-022.1
29.2R2, AR-036A	Carbon	41.05063	-75.60381	UNT to Tunkhannock Creek	PA-NHD-125	Minor	RPW	P	HQ-CWF, MF	III	-	<100	6 d/	0.004	0.000	6/1-9/30	N/A	000-03-03-022.1

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
29.2R2, AR-036A	Carbon	41.05020	-75.59959	UNT to Tunkhannock Creek	PA-NHD-125	Minor	RPW	P	HQ-CWF, MF	III	-	<100	6 d/	0.004	0.000	6/1-9/30	N/A	000-03-03-022.1
30.4R2	Carbon	41.04131	-75.62686	UNT to Hawk Run	042415_JC_1006_E_MI	Minor	NRPW	E	HQ-CWF, MF	III	-	<100	1 d/	0	0.046	6/1 - 9/30	N/A	000-03-01-061
31.2R2	Carbon	41.03034	-75.62434	UNT to Laurel Run	042415_JC_1005_D_MI	Minor	-	Ditch	HQ-CWF, MF	III	-	<100	5 d/	0.002	0.001	6/1 - 9/30	Dry Crossing	000-03-01-063
31.2R2	Carbon	41.03159	-75.62481	UNT to Laurel Run	042415_JC_1002_P_IN	Int.	RPW	P	HQ-CWF, MF	III	-	<100	24 d/	0.024	0.028	6/1 - 9/30	Dry Crossing	000-03-01-063
31.2R2	Carbon	41.03006	-75.62427	UNT to Laurel Run	042415_JC_1004_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	109	53 d/	0.018	0.032	6/1 - 9/30	Dry Crossing	000-03-01-063
32.8R2, AR-038	Carbon	41.00857	-75.61535	UNT to Mud Run	S-SUR-044	Minor	RPW	P	HQ-CWF, MF	III	-	<100	5	0.007	0	6/1 - 9/30	N/A	000-03-01-066
33.2R2	Carbon	41.00292	-75.61291	Mud Run	042115_JC_1001_P_IN	Int.	RPW	P	HQ-CWF, MF	III	TS	16,960	48	0.017	0.044	6/1 - 9/30	Dry Crossing	000-03-01-067
33.2R2	Carbon	41.00267	-75.61284	UNT to Mud Run	042115_JC_1002_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	307	10	0.006	0.012	6/1 - 9/30	Dry Crossing	000-03-01-067
33.4R2	Carbon	40.99912	-75.61211	UNT to Mud Run	042115_JC_1004_D_MI	Minor	-	Ditch	HQ-CWF, MF	III	-	218	15	0.014	0.047	6/1 - 9/30	Dry Crossing	000-03-01-067
33.5R2	Carbon	40.99898	-75.61184	UNT to Mud Run	042115_JC_1005_E_MI	Minor	NRPW	E	HQ-CWF, MF	III	-	<100	3	0.002	0.003	6/1 - 9/30	Dry Crossing	000-03-01-067
34.7R2	Carbon	40.98282	-75.62029	UNT to Stony Creek	042315_JC_1001_D_MI	Minor	-	Ditch	EV, MF	III	-	<100	8 d/	0.045	0.054	6/1-9/30	N/A	000-03-01-069 / 070
34.7R2	Carbon	40.98197	-75.62057	UNT to Stony Creek	042315_JC_1002_P_MI	Minor	RPW	P	EV, MF	III	-	667	5	0.003	0.009	6/1 - 9/30	Dry Crossing	000-03-01-070
34.8R2	Carbon	40.98097	-75.62119	Stony Creek	042315_JC_1003_P_IN	Int.	RPW	P	EV, MF	III	-	672	15	0.011	0.020	6/1 - 9/30	Dry Crossing	000-03-01-070
34.8R2	Carbon	40.98056	-75.62170	UNT to Stony Creek	042315_JC_1003_I_IN	Minor	RPW	I	EV, MF	III	-	<100	15 d/	0.061	0.056	6/1-9/30	Dry Crossing	000-03-01-070
36.1	Carbon	40.96232	-75.63004	Yellow Run	PA-NHD-049	Minor	RPW	P	EV, MF	III	-	518.4	3	0.001	0.003	6/1 - 9/30	Dry Crossing	000-03-01-073

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
37.5	Carbon	40.94352	-75.63469	UNT to Wild Creek	061615_DB_1001_I_MI	Minor	RPW	I	EV, MF	III	-	<100	7	0.004	0.008	6/1 - 9/30	Dry Crossing	000-03-01-075
38.3	Carbon	40.93136	-75.63452	Wild Creek	061615_DB_1002_P_IN	Int.	RPW	P	EV, MF	III	-	334	10	0.009	0.012	6/1 - 9/30	Dry Crossing	000-03-01-077
39.6R2	Carbon	40.92001	-75.61865	UNT to Pine Run	PA-NHD-054	Minor	RPW	P	EV, MF	III	-	<100	5	0.002	0.002	6/1- 9/30	Dry Crossing	000-03-01-080
40.1R2	Carbon	40.91343	-75.61355	UNT to Pine Run	PA-NHD-057	Minor	RPW	P	EV, MF	III	-	<100	5	0.003	0.006	6/1- 9/30	Dry Crossing	000-03-01-081
41.1	Carbon	40.90309	-75.60081	UNT to White Oak Run	PA-NHD-060	Minor	RPW	I	EV, MF	III	-	76.8	3	0.002	0.003	6/1 - 9/30	Dry Crossing	000-03-01-083
41.2	Carbon	40.90302	-75.59949	UNT to White Oak Run	PA-NHD-061	Minor	RPW	I	EV, MF	III	-	96	4	0.002	0.005	6/1 - 9/30	Dry Crossing	000-03-01-083
41.2	Carbon	40.90302	-75.59949	UNT to White Oak Run	PA-NHD-063	Minor	RPW	I	EV, MF	III	-	56.32	4	0.002	0.005	6/1 - 9/30	Dry Crossing	000-03-01-083
41.3	Carbon	40.90288	-75.59672	UNT to White Oak Run	PA-NHD-062	Minor	RPW	I	EV, MF	III	-	83.2	6	0.003	0.007	6/1 - 9/30	Dry Crossing	000-03-01-083
41.6	Carbon	40.90078	-75.59228	White Oak Run	PA-NHD-056	Minor	RPW	P	EV, MF	III	-	691.2	7	0.004	0.008	6/1 - 9/30	Dry Crossing	000-03-01-084
42.1R2	Carbon	40.89660	-75.58407	UNT to Wild Creek	PA-NHD-065	Minor	RPW	P	EV, MF	III	-	<100	5	0.004	0.008	6/1- 9/30	Dry Crossing	000-03-01-085
43.5	Carbon	40.88315	-75.55400	Wild Creek/ Beltzville	052215_JC_1001_LAKE_MA (1)	Major	RPW	Lake	EV, MF	III	-	13,863	164	0.000	0.000	6/1 - 9/30	HDD	000-03-01-088
43.9	Carbon	40.88341	-75.55458	UNT to Wild Creek	052215_JC_1003_I_MI	Minor	RPW	I	EV, MF	III	-	<100	3 d/	0.000	0.000	6/1- 9/30	HDD	000-03-01-088
44	Carbon	40.88315	-75.55400	Pohopoco Creek/Beltzville Lake	052215_JC_1001_LAKE_MA (2)	Major	RPW	Lake	CWF, MF	III	-	34,838	338	0.000	0.000	6/1 - 9/30	HDD	000-03-01-088 / 089
44.2R2	Carbon	40.88079	-75.54958	UNT to Pohopoco Creek	061715_DB_1001_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	20	0.000	0.000	6/1 - 9/30	HDD	000-03-01-089
44.3R2	Carbon	40.87960	-75.54768	UNT to Pohopoco Creek	122215_DB_1001_P_MI	Minor	RPW	P	CWF, MF	III	-	<100	47	0.000	0.000	6/1 - 9/30	HDD	000-03-01-089
44.4R2	Carbon	40.87931	-75.54739	UNT to Pohopoco Creek	122215_DB_1000_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	7 d/	0.022	0	6/1 - 9/30	N/A	000-03-01-089
44.4R2	Carbon	40.87942	-75.54742	UNT to Pohopoco Creek	122215_DB_1001_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	7 d/	0.018	0	6/1 - 9/30	N/A	000-03-01-089

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
44.8R2, AR-045	Carbon	40.87490	-75.54425	UNT to Hunter Creek	PA-NHD-070	Minor	RPW	I	HQ-CWF, MF	III	-	<100	7 d/	0.003	0.000	6/1-9/30	N/A	000-03-01-090
44.8R2	Carbon	40.87430	-75.54435	UNT to Hunter Creek	PA-NHD-070	Minor	RPW	I	HQ-CWF, MF	III	-	<100	7	0.037	0.008	6/1 - 9/30	Dry Crossing	000-03-01-090
45.0R2, AR-046	Carbon	40.87229	-75.54098	UNT to Hunter Creek	081715_MK_026_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	371	5 d/	0.003	0	6/1 - 9/30	N/A	000-03-03-030
45.0R2	Carbon	40.87209	-75.54161	UNT to Hunter Creek	051115_JC_1002_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	371	4	0.001	0.002	6/1 - 9/30	Dry Crossing	000-03-01-091
45.6	Carbon	40.86566	-75.53787	UNT to Hunter Creek	051115_JC_1001_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	154	3	0.001	0.002	6/1 - 9/30	Dry Crossing	000-03-01-092
48.1	Carbon	40.83732	-75.50869	Buckwha Creek	090914_WA_1000_P_IM	Int.	RPW	P	CWF, MF	III	ATW, TS	20,544	57	0.032	0.065	6/1 - 9/30	Dry Crossing	000-03-01-097
49.3R2	Carbon	40.82414	-75.51666	Aquashicola Creek	PA-NHD-079	Minor	RPW	P	HQ-CWF, MF	III	ATW	14931	35	0.008	0.020	6/1-9/30	Dry Crossing	000-03-01-100
52.4	Northampton	40.80098	-75.50997	UNT to Indian Creek	072415_JC_1001_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	2 d/	0.001	0	6/1 - 9/30	Dry Crossing	000-03-01-105
53.3	Northampton	40.79917	-75.49402	UNT to Indian Creek	S-SUR-081	Minor	RPW	P	CWF, MF	III	-	<100	7	0.004	0.008	6/1 - 9/30	Dry Crossing	000-03-01-107
53.4	Northampton	40.79907	-75.49282	UNT to Indian Creek	S-SUR-082	Minor	RPW	P	CWF, MF	III	-	<100	4	0.002	0.005	6/1 - 9/30	Dry Crossing	000-03-01-107
54.3	Northampton	40.78988	-75.48126	Indian Creek	PA-NHD-084	Int.	RPW	P	CWF, MF	III	ATW	1,651	15	0.009	0.018	6/1 - 9/30	Dry Crossing	000-03-01-109
55.7	Northampton	40.78367	-75.45889	UNT to Hokendauqua Creek	102815_WA_1001_E_MI	Minor	NRPW	E	CWF, MF	III	-	<100	14	0.008	0.015	6/1 - 9/30	Dry Crossing	000-03-01-112
55.9	Northampton	40.78109	-75.45767	Hokendauqua Creek	051215_JC_1002_P_IN/ PA-NHD-087	Int.	RPW	P	CWF, MF	III	ATW, TS	5939.2	35	0.026	0.045	6/1 - 9/30	Dry Crossing	000-03-01-112
55.9	Northampton	40.78070	-75.45721	UNT to Hokendauqua Creek	051215_JC_1001_D_MI	Minor	-	Ditch	CWF, MF	III	-	5,939	5	0.002	0.006	6/1 - 9/30	Dry Crossing	000-03-01-112
56	Northampton	40.77996	-75.45691	UNT to Hokendauqua Creek	051215_JC_1003_D_MI	Minor	-	Ditch	CWF, MF	III	-	<100	3	0.001	0.002	6/1 - 9/30	Bore	000-03-01-112

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
56.7	Northampton	40.77182	-75.44719	UNT to Hokendauqua Creek	PA-NHD-088	Minor	RPW	P	CWF, MF	III	-	851.2	22	0.005	0.020	6/1 - 9/30	Dry Crossing	000-03-01-114
58.5	Northampton	40.75520	-75.42302	UNT to Monocacy Creek	PA-NHD-089	Minor	RPW	I	HQ-CWF, MF	III	-	243.2	16	0.009	0.018	6/1 - 9/30	Dry Crossing	000-03-01-117
59	Northampton	40.74973	-75.41638	UNT to Monocacy Creek	090314_DB_1011_E_MI	Minor	NRPW	E	HQ-CWF, MF	III	-	<100	5	0.003	0.006	6/1 - 9/30	Dry Crossing	000-03-01-119
59.2	Northampton	40.74730	-75.41356	UNT to Monocacy Creek	090414_DB_1012_I_MI	Minor	RPW	I	HQ-CWF, MF	III	-	<100	5	0.001	0.006	6/1 - 9/30	Dry Crossing	000-03-01-119
59.2	Northampton	40.74730	-75.41325	UNT to Monocacy Creek	090414_DB_1013_I_MI	Minor	RPW	I	HQ-CWF, MF	III	-	<100	8	0.005	0.016	6/1 - 9/30	Dry Crossing	000-03-01-119
60.3	Northampton	40.73693	-75.39944	Monocacy Creek	051215_JC_1005_P_IN / PA-NHD-091	Int.	RPW	P	HQ-CWF, MF	I, III	ATW	2476.8	28	0.016	0.038	6/1 - 9/30	Dry Crossing	000-03-01-121
60.6	Northampton	40.73610	-75.39362	UNT to Monocacy Creek	090314_DB_1005_E_MI	Minor	NRPW	E	HQ-CWF, MF	III	-	<100	9	0.005	0.011	6/1 - 9/30	Bore	000-03-01-122
60.6	Northampton	40.73589	-75.39239	UNT to Monocacy Creek	090314_DB_1007_E_MI	Minor	NRPW	E	HQ-CWF, MF	III	-	<100	4	0.003	0.005	6/1 - 9/30	Dry Crossing	000-03-01-122
60.7	Northampton	40.73586	-75.39218	UNT to Monocacy Creek	090314_DB_1006_I_MI	Minor	RPW	I	HQ-CWF, MF	III	-	<100	6	0.003	0.007	6/1 - 9/30	Dry Crossing	000-03-01-122
61.5R2	Northampton	40.73459	-75.37730	East Branch Monocacy Creek	111214_JC_1004_P_IM	Int.	RPW	P	HQ-CWF, MF	III	-	2790.4	24	0.014	0.027	6/1 - 9/30	Dry Crossing	000-03-01-123
62.3R2	Northampton	40.73030	-75.36459	UNT to East Monocacy Creek	102715_WA_1002_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	250	3	0.000	0.004	6/1-9/30	Dry Crossing	000-03-01-125
62.8	Northampton	40.72617	-75.35676	UNT to East Monocacy Creek	051415_JC_1001_I_MI	Minor	RPW	I	HQ-CWF, MF	III	-	128	3	0.002	0.003	6/1 - 9/30	Bore	000-03-01-126
63.5	Northampton	40.72496	-75.34284	UNT to East Monocacy Creek	051415_JC_1002_P_IN	Int.	RPW	P	HQ-CWF, MF	III	-	3,002	19	0.010	0.022	6/1 - 9/30	Dry Crossing	000-03-01-128
63.7R2	Northampton	40.72322	-75.34034	UNT to East Monocacy Creek	051415_JC_1003_D_MI	Minor	-	Ditch	HQ-CWF, MF	III	-	<100	2	0.001	0.002	6/1-9/30	Bore	000-03-01-128

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
66.9	Northampton	40.69194	-75.30571	UNT to Monocacy Creek	PA-NHD-098	Minor	RPW	I	HQ-CWF, MF	III	-	83.2	2	0.001	0.002	6/1 - 9/30	Dry Crossing	000-03-01-134
70.4	Northampton	40.65089	-75.28258	UNT to Lehigh River	S-SUR-100	Minor	RPW	P	CWF, MF	-	-	1,056	6	0.000	0.000	6/1 - 9/30	HDD	000-03-01-141
70.4	Northampton	40.65079	-75.28268	UNT to Lehigh River	010616_JC_1001_E_MI	Int.	NRPW	E	CWF, MF	-	-	<100	14	0.000	0.000	6/1-9/30	HDD	000-03-01-141
70.5, AR-071	Northampton	40.65192	-75.28127	UNT to Lehigh River	010616_JC_1001A_E_MI	Minor	NRPW	E	CWF, MF	-	-	<100	3 d/	0.000	0.000	6/1-9/30	N/A	000-03-03-049.1
70.9	Northampton	40.64303	-75.27928	Lehigh Canal	PA-NHD-104	Int.	RPW	P	WWF, MF	-	-	864,000	67	0.000	0.000	6/1-9/30	HDD	000-03-01-142
71.1	Northampton	40.64144	-75.28344	Lehigh River	PA-NHD-099	Major	TNWa	P	WWF, MF	-	-	864,000	305	0.000	0.000	6/1-9/30	HDD	000-03-01-143
71.4	Northampton	40.63610	-75.27934	UNT to Lehigh River	012116_GM_1001_E_IN	Int.	NRPW	E	CWF, MF	-	-	<100	14	0.009	0.012	6/1-9/30	Dry Crossing	000-03-01-143
71.4, AR-072A	Northampton	40.63519	-75.27783	UNT to Lehigh River	081815_MK_030_E_MI	Minor	NRPW	E	CWF, MF	-	-	<100	6	0.005	0.000	6/1-9/30	N/A	000-03-03-050
72.1	Northampton	40.62854	-75.27224	UNT to Bull Run	092614_GO_1001_P_IM	Int.	RPW	P	CWF, MF	III	-	83	6	0.003	0.011	6/1 - 9/30	Dry Crossing	000-03-01-145
72.2, AR-074	Northampton	40.62809	-75.26987	UNT to Bull Run	S-SUR-112	Minor	RPW	P	CWF, MF	III	-	<100	3	0.002	0	6/1 - 9/30	N/A	000-03-01-145
72.5	Northampton	40.62496	-75.26584	UNT to Bull Run	051415_JC_1006_E_MI	Minor	NRPW	E	CWF, MF	III	-	<100	3	0.002	0.003	6/1 - 9/30	Dry Crossing	000-03-01-145 / 146
72.6	Northampton	40.62393	-75.26409	UNT to Bull Run	012016_GM_1001_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	4	0.002	0.002	6/1-9/30	Dry Crossing	000-03-01-146
72.6	Northampton	40.62317	-75.26342	UNT to Bull Run	102715_WA_1001_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	11	0.002	0.014	6/1 - 9/30	Dry Crossing	000-03-01-146
72.7	Northampton	40.62383	-75.26394	UNT to Bull Run	012016_GM_1003_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	4	0.002	0.000	6/1-9/30	Dry Crossing	000-03-01-146
72.6	Northampton	40.62311	-75.26304	UNT to Bull Run	102715_WA_1002_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	5	0.002	0.003	6/1 - 9/30	Dry Crossing	000-03-01-146
72.8	Northampton	40.62270	-75.26284	UNT to Bull Run	102715_WA_1001_P_MI	Minor	RPW	P	CWF, MF	III	-	<100	8	0.010	0.041	6/1 - 9/30	Dry Crossing	000-03-01-146
72.7	Northampton	40.62374	-75.26385	UNT to Bull Run	012016_GM_1002_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	6	0.002	0.008	6/1-9/30	Dry Crossing	000-03-01-146
72.8	Northampton	40.62202	-75.26164	UNT to Bull Run	042815_JC_1005_I_MI	Minor	RPW	I	CWF, MF	III	-	<100	6	0.004	0.007	6/1 - 9/30	Dry Crossing	000-03-01-146

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			
73	Northampton	40.62024	-75.25974	UNT to Bull Run	042815_JC_1001_E_MI	Minor	NRPW	E	CWF, MF	III	-	<100	8	0.003	0.008	6/1 - 9/30	Dry Crossing	000-03-01-146
74.6	Northampton	40.60874	-75.23343	Frya Run	091814_MK_1009_P_IM	Int.	RPW	P	HQ-CWF, MF	III	-	1,715	15	0.008	0.017	6/1 - 9/30	Dry Crossing	000-03-01-150
74.8, AR-078	Northampton	40.60753	-75.23014	UNT to Frya Run	062415_BT_1001_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	<100	33 d/	0.009	0.000	6/1-9/30	N/A	000-03-01-150
74.9	Northampton	40.60697	-75.22949	UNT to Frya Run	062415_BT_1002_I_MI	Minor	RPW	I	HQ-CWF, MF	III	-	<100	4	0.002	0.006	6/1 - 9/30	Dry Crossing	000-03-01-150
74.9	Northampton	40.60700	-75.22939	UNT to Frya Run	062415_BT_1001_P_MI	Minor	RPW	P	HQ-CWF, MF	III	-	<100	51	0.023	0.028	6/1 - 9/30	Dry Crossing	000-03-01-150
75.7	Northampton	40.60189	-75.21902	UNT to Cooks Creek	111314_JC_1002_I_MI	Minor	RPW	I	EV, MF	III	-	<100	6	0.003	0.007	6/1 - 9/30	Dry Crossing	000-03-01-152
75.7	Northampton	40.60172	-75.21911	UNT to Cooks Creek	111314_JC_1003_E_MI	Minor	NRPW	E	EV, MF	III	-	<100	2	0.000	0.002	6/1 - 9/30	Dry Crossing	000-03-01-152
75.7	Northampton	40.60133	-75.21845	UNT to Cooks Creek	111314_JC_1001_I_MI	Minor	RPW	I	EV, MF	III	-	<100	23	0.001	0.011	6/1 - 9/30	Dry Crossing	000-03-01-152
76.2	Bucks	40.59678	-75.21116	UNT to Delaware River	051515_JC_1004_E_MI	Minor	RPW	E	TSF, MF	-	-	<100	8	0.006	0.009	6/1 - 11/30	Dry Crossing	000-03-01-153
76.5, AR-079	Bucks	40.59438	-75.21206	UNT to Cook Creek	091814_MK_1007_E_MI	Minor	NRPW	E	EV, MF	III	-	<100	7 d/	0.004	0.000	6/1-11/30	N/A	000-03-03-055
76.5, AR-079	Bucks	40.59414	-75.21180	UNT to Cook Creek	PA-NHD-120	Minor	RPW	P	EV, MF	III	-	<100	10 d/	0.007	0	6/1-11/30	N/A	000-03-03-055
77.6	Bucks	40.58412	-75.19482	Delaware Canal	052915_JC_1002_C_IN	Int.	RPW	Canal	WWF, MF	-	-	4,057,600	48	0.000	0.000	6/1 - 11/30	HDD	000-03-01-156
77.6	Bucks	40.58399	-75.19344	Delaware River	122315_DB_1001_P_MA	Major	TNW	P	WWF, MF	-	-	4,057,600	481	0.000	0.000	6/1 - 11/30	HDD	000-03-01-156
Compressor Station - Delaware River Basin																		
26.7	Carbon	41.08200	-75.667761	UNT to Black Creek	082515_BT_1001_P_IM	Int.	RPW	P	HQ-CWF, MF	III	-	346	11	0.000	0.034	6/1 - 9/30	N/A	023A-03-00-001
Hellertown Lateral - Delaware River Basin																		
0.2	Northampton	40.62984	-75.28129	Bull Run	PA-NHD-110	Int.	RPW	P	CWF, MF	III	-	550	12	0.015	0.040	6/1 - 9/30	Dry Crossing	000-03-01-229
												Total	4949	13.375	3.550			

Table G-5

Waterbodies Crossed by the Project in Pennsylvania

Facility/ Mile Post a/	County	Latitude (dd nad83)	Longitude (dd nad83)	Waterbody Name	Waterbody ID	FERC Class	Waters Types	Stream Type	PA Code Ch. 93 Desig.	Wild Trout Waters	ATW	Upstream Drainage Area at Crossing (acres)	Crossing Width b/	Acres Affected		Instream Construction Period	Proposed Crossing Method	Alignment Sheet, Plan Sheet, or Figure #
														Cons.ROW	Perm.ROW			

Key:
P = Perennial, I = Intermittent, E = Ephemeral
Pennsylvania Code Ch. 93 Designated Use (Pennsylvania Code 2014).
EV = Exceptional Value Waters
HQ = High Quality Waters
Surface water that meets one or more to the conditions listed in 93.4b.
CWF = Cold Water Fishes
Maintenance or propagation, or both, to fish species including the family Salmonidae and additional flora and fauna, which are indigenous to a cold water habitat.
WWF = Warm Water Fishes
Maintenance and propagation to fish species and additional flora and fauna, which are indigenous to a warm water habitat.
MF = Migratory Fishes
Passage, maintenance, and propagation to anadromous and catadromous fishes and other fishes, which ascend to flowing waters to complete their life cycle.
[viii] Wild Trout Waters, Natural Reproduction, January 2015 (PFBC, 2015a), Wild Trout Waters (PFBC, 2015b), Class A Waters, December 2013 (PFBC, 2015c).
Wild Trout Waters include:
I = Class A Wild Trout Streams: Streams that support a population to naturally produced trout to sufficient size and abundance to support a long-term and rewarding sport fishery.
II = Wilderness Trout Streams: Wilderness trout stream management is based upon the provision to a wild trout fishing experience in a remote, natural, and unspoiled environment where man's disruptive activities are minimized.
III = Wild Trout Streams: Stream sections supporting naturally reproducing populations to trout. A wild trout stream section is a biological designation that does not determine how it is managed; therefore, these streams may also be stocked with hatchery trout by the Commission.
ATW = Approved Trout Waters
TSF Trout Stocked Fishery

Notes:
a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.
b/ Crossing width based on waters at time to delineation or aerial photography for NHD waters as provided in PennEast (2015)
c/ Susquehanna River crossing includes an additional 23.5 acres of temporary disturbance due to drying of river bed between coffer dams.
d/ Waterbody does not cross centerline. Crossing width measured along construction ROW.

Table G-6

Waterbodies Crossed by the Project in New Jersey

Facility/ Mile Post a/	County	Latitude (dd nad83) b/	Longitude (dd nad83) b/	Waterbody Name c/	Waterbody ID d/	FERC Class e/	Waters Types f/	Stream Type g/	NJDEP Water Quality Class h/	Regulated Riparian Zone i/	Crossing Width j/	Acres Affected		Instream Construction Period k/	Proposed Crossing Method l/	Alignment Sheet, Plan Sheet, or Figure #
												Cons. ROW	Perm. ROW			
PennEast Mainline – Upper Delaware River Basin																
77.7	Hunterdon	40.583814	-75.192142	Ditch	051415_SQ_1002_POND_IN	Int.	RPW	P	N/A	50	13 m/	0.00	0.00	N/A	N/A	000-03-01-156
79.7R2	Hunterdon	40.575132	-75.162298	Delaware River UNT	NJ-NHD-273	Minor	UNK	P	FW2-TPC1	300	12	<0.01	0.01	6/1 - 9/15	Dry Crossing	000-03-01-160 / 234
79.8R2	Hunterdon	40.575464	-75.160744	Delaware River UNT	NJ-NHD-271	Minor	UNK	P	FW2-TPC1	300	12	0.00	<0.01	6/1 - 9/15	Bore	000-03-01-160
80.1R2	Hunterdon	40.577096	-75.154992	Delaware River UNT	NJ-NHD-269	Minor	RPW	P	FW2-NT	50	5	<0.01	<0.01	7/1- 9/30	Dry Crossing	000-03-01-161
80.4R2	Hunterdon	40.579105	-75.150118	Delaware River UNT	NJ-NHD-274	Minor	RPW	P	FW2-NT	50	5	<0.01	<0.01	7/1- 9/30	Dry Crossing	000-03-01-161
80.6R2	Hunterdon	40.579798	-75.145565	Delaware River UNT	NJ-NHD-270	Minor	RPW	P	FW2-NT	50	5	<0.01	<0.01	7/1- 9/30	Dry Crossing	000-03-01-162
80.8R2	Hunterdon	40.5799	-75.142785	Delaware River UNT	NJ-NHD-275	Minor	RPW	P	FW2-NT	50	5	<0.01	<0.01	7/1- 9/30	Dry Crossing	000-03-01-162
81.2R2	Hunterdon	40.579657	-75.136883	Delaware River UNT	NJ-NHD-133	Minor	RPW	P	FW2-NT	50	6	<0.01	<0.01	7/1- 9/30	Dry Crossing	000-03-01-163
81.5R2	Hunterdon	40.582108	-75.131567	Delaware River UNT	NJ-NHD-134	Minor	RPW	P	FW2-NT	50	6	<0.01	<0.01	7/1- 9/30	Dry Crossing	000-03-01-163.1
81.7	Hunterdon	40.58099	-75.122419	Delaware River UNT	081215_JFL_1001_P_MI	Minor	RPW	P	FW2-NT	50	4	0.00	<0.01	7/1- 9/30	Bore	000-03-01-164
81.9	Hunterdon	40.580799	-75.117548	Spring Mills Brook UNT	081215_SAB_1004_E_MI	Minor	RPW	E	FW2-TPC1	300	4	<0.01	<0.01	6/1 - 9/15	Dry Crossing	000-03-01-164
82	Hunterdon	40.580999	-75.115538	Spring Mills Brook UNT	052015_JC_1001_E_MI	Minor	NPRW	E	FW2-TPC1	300	8	0.00	0.01	6/1 - 9/15	Bore	000-03-01-165
82.1, AR-084	Hunterdon	40.583722	-75.114967	Spring Mills Brook UNT	NJ-NHD-253	Minor	RPW	P	FW2-TPC1	300	5	<0.01	0.00	6/1 - 9/15	N/A	000-03-03-061
82.3	Hunterdon	40.582036	-75.109729	Spring Mills Brook	NJ-NHD-138	Minor	RPW	P	FW2-TPC1	300	6	0.00	0.00	6/1 - 9/15	HDD	000-03-01-165
82.4	Hunterdon	40.582131	-75.109212	Spring Mills Brook UNT	S-SUR-139	Minor	RPW	P	FW2-TPC1	300	7	0.00	0.00	6/1 - 9/15	HDD	000-03-01-165

Table G-6

Waterbodies Crossed by the Project in New Jersey

Facility/ Mile Post a/	County	Latitude (dd nad83) b/	Longitude (dd nad83) b/	Waterbody Name c/	Waterbody ID d/	FERC Class e/	Waters Types f/	Stream Type g/	NJDEP Water Quality Class h/	Regulated Riparian Zone i/	Crossing Width j/	Acres Affected		Instream Construction Period k/	Proposed Crossing Method l/	Alignment Sheet, Plan Sheet, or Figure #
												Cons. ROW	Perm. ROW			
82.5, AR-085	Hunterdon	40.582167	-75.107347	Spring Mills Brook UNT	S-SUR-213	Minor	UNK	P	FW2-TPC1	300	5	<0.01	0.00	6/1 - 9/15	N/A	000-03-01-165, 000-03-03-062
82.7	Hunterdon	40.582208	-75.102106	Spring Mills Brook UNT	NJ-NHD-140	Int.	RPW	P	FW2-TPC1	300	12	<0.01	0.01	6/1 - 9/15	Dry Crossing	000-03-01-166
82.9, AR-086	Hunterdon	40.579124	-75.101722	Spring Mills Brook UNT	NJ-NHD-256	Int.	RPW	P	FW2-TPC1	300	34 m/	<0.01	0.00	6/1 - 9/15	N/A	000-03-03-062
83.2	Hunterdon	40.582118	-75.093676	Hakihokake Creek	NJ-NHD-008	Int.	RPW	P	FW2-TPC1	300	45	<0.01	0.05	6/1 - 9/15	Dry Crossing	000-03-01-167
83.8	Hunterdon	40.58141	-75.081409	Hakihokake Creek UNT	NJ-NHD-142	Minor	RPW	P	FW2-TPC1	300	5	<0.01	<0.01	6/1 - 9/15	Dry Crossing	000-03-01-168
84.4	Hunterdon	40.575837	-75.074021	Delaware River UNT	S-SUR-144	Minor	RPW	P	FW2-NT	150	7	<0.01	0.01	3/16-10/31	Dry Crossing	000-03-01-169
84.8R1	Hunterdon	40.574556	-75.068884	Delaware River UNT	NJ-NHD-225	Minor	RPW	P	FW2-NT	150	5	<0.01	<0.01	3/16-10/31	Dry Crossing	000-03-01-170
85.2R1, AR-087C	Hunterdon	40.571727	-75.061091	Harihokake Creek UNT	NJ-NHD-234	Minor	UNK	P	FW2-TMC 1	300	5	<0.01	0.00	6/16-9/30	N/A	000-03-01-171, 000-03-03-063.1
85.4R1	Hunterdon	40.571767	-75.060232	Harihokake Creek UNT	NJ-NHD-232	Minor	RPW	P	FW2-TMC 1	300	6	0.00	0.00	6/16-9/30	Bore	000-03-01-171
85.6R1	Hunterdon	40.569956	-75.056844	Harihokake Creek	NJ-NHD-034	Int.	RPW	P	FW2-TMC 1	300	92	0.00	0.00	6/16-9/30	Bore	000-03-01-172
85.8R1	Hunterdon	40.567368	-75.056395	Harihokake Creek UNT	NJ-NHD-245	Minor	RPW	P	FW2-TMC 1	300	5	0.00	0.00	6/16-9/30	Bore	000-03-01-172
86.3R1	Hunterdon	40.561435	-75.059836	Harihokake Creek	NJ-NHD-037	Int.	RPW	P	FW2-TMC 1	300	66	0.01	0.07	6/16-9/30	Dry Crossing	000-03-01-172.1
85.9	Hunterdon	40.557574	-75.06189	Harihokake Creek UNT	091014_WA_1004_I_MI	Minor	RPW	I	FW2-TMC 1	300	7	<0.01	<0.01	6/16-9/30	Dry Crossing	000-03-01-172.2

Table G-6

Waterbodies Crossed by the Project in New Jersey

Facility/ Mile Post a/	County	Latitude (dd nad83) b/	Longitude (dd nad83) b/	Waterbody Name c/	Waterbody ID d/	FERC Class e/	Waters Types f/	Stream Type g/	NJDEP Water Quality Class h/	Regulated Riparian Zone i/	Crossing Width j/	Acres Affected		Instream Construction Period k/	Proposed Crossing Method l/	Alignment Sheet, Plan Sheet, or Figure #
												Cons. ROW	Perm. ROW			
86	Hunterdon	40.556438	-75.061827	Harihokake Creek UNT	091014_WA_1015_E_MI	Minor	NRPW	E	FW2-TMC1	300	13	<0.01	0.01	6/16-9/30	Dry Crossing	000-03-01-172.2
86.7R1	Hunterdon	40.54613	-75.059746	Harihokake Creek	NJ-NHD-043	Int.	RPW	P	FW2-TMC1	300	58	0.01	0.06	6/16-9/30	Dry Crossing	000-03-01-174
87.2	Hunterdon	40.541193	-75.056909	Delaware River UNT	NJ-NHD-154	Minor .	RPW	P	FW2-NT	50	13	0.00	0.00	7/1-9/30	Bore	000-03-01-175
87.7	Hunterdon	40.536273	-75.049029	Nishisakawick Creek	091114_WA_1001_P_IM	Int.	RPW	P	FW2-NTC1	300	59	0.01	0.06	7/1-9/30	Dry Crossing	000-03-01-176
87.8	Hunterdon	40.534616	-75.047366	Nishisakawick Creek UNT	051515_SQ_1002_P_IN	Major.	RPW	P	FW2-NTC1	300	208 m/	0.02	0.09	7/1-9/30	Dry Crossing	000-03-01-176
88.4R2	Hunterdon	40.527991	-75.04183	Little Nishisakawick Creek	NJ-NHD-014	Int.	RPW	P	FW2-NTC1	300	20	<0.01	0.02	7/1-9/30	Dry Crossing	000-03-01-177
88.8	Hunterdon	40.522817	-75.040291	Little Nishisakawick Creek UNT	091114_WA_1004_I_MI	Minor .	RPW	I	FW2-NTC1	300	10	0.00	0.00	7/1-9/30	Bore	000-03-01-178
88.6R2, AR-090B	Hunterdon	40.522421	-75.042083	Little Nishisakawick Creek UNT	NJ-NHD-265	Minor	RPW	I	FW2-NTC1	300	5	<0.01	0.00	7/1-9/30	N/A	000-03-03-067.2
88.8	Hunterdon	40.52257	-75.04021	Little Nishisakawick Creek UNT	091114_WA_1003_I_MI	Minor	RPW	I	FW2-NTC1	300	5	0.00	0.00	7/1-9/30	Bore	000-03-01-178
88.9	Hunterdon	40.521085	-75.03971	Little Nishisakawick Creek UNT	S-SUR-158	Minor	RPW	P	FW2-NTC1	300	9	0.00	0.00	7/1-9/30	Bore	000-03-01-178
89.5	Hunterdon	40.511604	-75.038931	Copper Creek UNT	NJ-NHD-159	Int.	RPW	P	FW2-NT	50	16	0.00	0.00	7/1-9/30	Bore	000-03-01-180
89.5, AR-092	Hunterdon	40.51035	-75.042844	Copper Creek	NJ-NHD-258	Int.	RPW	P	FW2-NT	50	31	0.01	0.00	7/1-9/30	N/A	000-03-03-068
90.0R2	Hunterdon	40.510427	-75.031789	Copper Creek	NJ-NHD-044	Int.	RPW	P	FW2-NT	50	36	<0.01	0.04	7/1-9/30	Dry Crossing	000-03-01-180
90.3R2	Hunterdon	40.506205	-75.026835	Copper Creek UNT	NJ-SWQS-01	Minor	RPW	P	FW2-NT	50	50 m/	<0.01	<0.01	7/1-9/30	N/A	000-03-01-181

Table G-6

Waterbodies Crossed by the Project in New Jersey

Facility/ Mile Post a/	County	Latitude (dd nad83) b/	Longitude (dd nad83) b/	Waterbody Name c/	Waterbody ID d/	FERC Class e/	Waters Types f/	Stream Type g/	NJDEP Water Quality Class h/	Regulated Riparian Zone i/	Crossing Width j/	Acres Affected		Instream Construction Period k/	Proposed Crossing Method l/	Alignment Sheet, Plan Sheet, or Figure #
												Cons. ROW	Perm. ROW			
91.5R2	Hunterdon	40.489726	-75.018691	Lockatong Creek	NJ-NHD-248	Major.	RPW	P	FW2-NTC1	300	351 m/	0.00	0.00	7/1-9/30	HDD	000-03-01-184
92.2R2	Hunterdon	40.480372	-75.017171	Lockatong Creek	NJ-NHD-018	Int.	RPW	P	FW2-NTC1	300	43	0.00	0.00	7/1-9/30	HDD	000-03-01-185
92.4R2	Hunterdon	40.47741	-75.016435	Lockatong Creek	NJ-NHD-162	Major.	RPW	P	FW2-NTC1	300	211 m/	0.00	0.00	7/1-9/30	HDD	000-03-01-186
93.2	Hunterdon	40.471603	-75.011693	Uncoded Tributary	051915_SQ_1001_P_MI	Minor	RPW	P	FW2-NT	300	8	0.00	0.00	7/1-9/30	Bore	000-03-01-187
93.4, AR-092A	Hunterdon	40.470581	-75.013711	Uncoded Tributary	NJ-NHD-263	Minor	RPW	P	FW2-NT	300	5	<0.01	0.00	7/1-9/30	N/A	000-03-03-069.1
93.5R2	Hunterdon	40.46828	-75.010792	Lockatong Creek UNT	NJ-NHD-165	Int.	RPW	P	FW2-NTC1	300	19	0.00	0.00	7/1-9/30	HDD	000-03-01-187
94.6R2	Hunterdon	40.45648	-74.997054	Wickecheoke Creek UNT	S-SUR-166	Minor	RPW	P	FW2-NTC1	300	5	0.00	<0.01	7/1-9/30	Bore	000-03-01-190
94.6R2	Hunterdon	40.455931	-74.996414	Wickecheoke Creek UNT	S-SUR-167	Minor	RPW	P	FW2-NTC1	300	5	0.00	<0.01	7/1-9/30	Bore	000-03-01-190
94.6R2, AR-092C	Hunterdon	40.456918	-74.995659	Wickecheoke Creek UNT	S-SUR-166	Minor	RPW	P	FW2-NTC1	300	5	<0.01	0.00	7/1-9/30	N/A	000-03-01-190, 000-03-03-069.4
94.6R2, AR-092C	Hunterdon	40.45649	-74.995698	Wickecheoke Creek UNT	S-SUR-167	Minor	RPW	P	FW2-NTC1	300	31 m/	<0.01	0.00	7/1-9/30	N/A	000-03-01-190, 000-03-03-069.4
94.6R2, AR-092D	Hunterdon	40.45649	-74.995698	Wickecheoke Creek UNT	S-SUR-167	Minor	RPW	P	FW2-NTC1	300	31 m/	<0.01	0.00	7/1-9/30	N/A	000-03-01-190, 000-03-03-069.4
95.1R2	Hunterdon	40.450662	-74.990189	Wickecheoke Creek UNT	NJ-NHD-168	Minor	RPW	P	FW2-NTC1	300	5	0.00	0.00	7/1-9/30	HDD	000-03-01-191
95.3R2	Hunterdon	40.448602	-74.987762	Lake/Pond	NJ-NHD-019	Major	N/A	POND	N/A	50	132 m/	0.00	0.00	N/A	HDD	000-03-01-191
96.1	Hunterdon	40.439402	-74.978901	Wickecheoke Creek UNT	NJ-NHD-169	Minor	RPW	P	FW2-TMC1	300	6	0.00	<0.01	6/16-9/30	Bore	000-03-01-193

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												Cons. ROW	Perm. ROW			
96.3R2	Hunterdon	40.438096	-74.97623	Wickecheoke Creek UNT	NJ-NHD-170	Minor	RPW	P	FW2-TMC 1	300	6	0.00	<0.01	6/16-9/30	Bore	000-03-01-193
96.8R2	Hunterdon	40.433055	-74.970721	Wickecheoke Creek UNT	NJ-NHD-171	Minor	RPW	P	FW2-TMC 1	300	5	0.00	0.00	6/16-9/30	HDD	000-03-01-194
96.8R2	Hunterdon	40.432587	-74.970268	Wickecheoke Creek	NJ-NHD-021	Int.	RPW	P	FW2-TMC 1	300	58	0.00	0.00	6/16-9/30	HDD	000-03-01-194
97.3R2	Hunterdon	40.426161	-74.964783	Wickecheoke Creek UNT	NJ-NHD-173	Int.	RPW	P	FW2-TMC 1	300	10	0.00	0.00	6/16-9/30	Bore	000-03-01-195
98.5R2	Hunterdon	40.41364	-74.952104	Delaware and Raritan Canal UNT	NJ-NHD-174	Minor	RPW	P	FW2-NT	150	5	0.00	0.00	3/16-10/31	HDD	000-03-01-197
99.6R2	Hunterdon	40.400241	-74.943574	Alexauken Creek UNT	NJ-NHD-176	Minor	RPW	P	FW2-TMC 1	300	5	0.00	<0.01	6/16-9/30	Bore	000-03-01-200
99.8R2	Hunterdon	40.400053	-74.940942	Alexauken Creek UNT	NJ-NHD-178	Minor	RPW	P	FW2-TMC 1	300	8	0.00	0.00	6/16-9/30	HDD	000-03-01-201
99.9R2	Hunterdon	40.398344	-74.939282	Alexauken Creek UNT	NJ-NHD-178	Major	RPW	P	FW2-TMC 1	300	335 m/	0.00	0.00	6/16-9/30	HDD	000-03-01-201
100.0R2	Hunterdon	40.39744	-74.938488	Alexauken Creek UNT	NJ-NHD-178	Minor	RPW	P	FW2-TMC 1	300	10	0.00	0.00	6/16-9/30	HDD	000-03-01-201
100.4R2	Hunterdon	40.394122	-74.935277	Alexauken Creek	NJ-NHD-024	Int.	RPW	P	FW2-TMC 1	300	50	0.00	0.00	6/16-9/30	HDD	000-03-01-202
100.8R2	Hunterdon	40.388805	-74.930208	Alexauken Creek UNT	052915_SQ_1003_E_MI	Minor	UNK	E	FW2-TMC 1	300	20	0.00	0.00	6/16-9/30	HDD	000-03-01-202

Table G-6

Waterbodies Crossed by the Project in New Jersey

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												Cons. ROW	Perm. ROW			
100.9R2	Hunterdon	40.387775	-74.929278	Alexauken Creek UNT	052915_SQ_1001_E_MI	Minor	NRPW	E	FW2-TMC1	300	3	0.00	0.00	6/16-9/30	HDD	000-03-01-203
101.4R2	Hunterdon	40.382557	-74.924019	Swan Creek UNT	052815_SQ_1001_P_MI	Minor	RPW	P	FW2-NT	50	15	0.00	0.00	7/1-9/30	Bore	000-03-01-203
101.4R2, AR-099B	Hunterdon	40.382916	-74.923654	Swan Creek UNT	052815_SQ_1001_P_MI	Minor	RPW	P	FW2-NT	50	12	<0.01	0.00	7/1-9/30	N/A	000-03-01-203
102.0R2	Hunterdon	40.374044	-74.9244	Swan Creek UNT	NJ-NHD-186	Minor	RPW	P	FW2-NT	50	7	<0.01	<0.01	7/1-9/30	Dry Crossing	000-03-01-204
102.6R2	Hunterdon	40.365625	-74.926087	Swan Creek UNT	040616_SQ_1006_EPH	Minor	UNK	E	FW2-NT	50	7	0.00	0.00	7/1-9/30	Bore	000-03-01-206
102.8R2	Hunterdon	40.361806	-74.925904	Swan Creek	040616_SQ_1004_P_MI	Minor	RPW	P	FW2-NT	50	9	0.00	0.00	7/1-9/30	Bore	000-03-01-206
102.9R2	Hunterdon	40.361346	-74.925886	Swan Creek UNT	040616_SQ_1001_P_MI	Minor	RPW	P	FW2-NT	50	8	<0.01	<0.01	7/1-9/30	Dry Crossing	000-03-01-206
103.0R2	Hunterdon	40.35966	-74.92573	Swan Creek UNT	NJ-NHD-191	Minor .	RPW	P	FW2-NT	50	5	0.00	0.00	7/1-9/30	Bore	000-03-01-206
104.6R2	Mercer	40.33857	-74.919155	Moores Creek UNT	S-SUR-194	Minor	RPW	P	FW2-TM	150	7	0.00	0.00	6/16-9/30	Bore	000-03-01-210
104.8R2	Mercer	40.338091	-74.916121	Moores Creek UNT	NJ-NHD-195	Int.	RPW	P	FW2-TM	150	13	<0.01	0.01	6/16-9/30	Dry Crossing	000-03-01-210
105.3R2	Mercer	40.335827	-74.907026	Moores Creek UNT	060315_SQ_1005_P_MI	Minor	RPW	P	FW2-TM	150	4	<0.01	<0.01	6/16-9/30	Dry Crossing	000-03-01-211
105.7R2	Mercer	40.33472	-74.900123	Moores Creek	060415_SQ_1003_P_IN	Int.	RPW	P	FW2-TM	150	57	0.00	0.00	6/16-9/30	HDD	000-03-01-212
106.0R2	Mercer	40.333874	-74.894953	Moores Creek UNT	060415_SQ_1005_P_MI	Minor	RPW	P	FW2-TM	150	4	0.00	0.00	6/16-9/30	HDD	000-03-01-212
107.5R2	Mercer	40.329923	-74.86662	Fiddlers Creek UNT	S-SUR-198	Minor	RPW	P	FW2-TM	150	5	<0.01	<0.01	6/16-9/30	Dry Crossing	000-03-01-215
107.8R2	Mercer	40.329014	-74.860468	Fiddlers Creek UNT	S-SUR-199	Minor	RPW	P	FW2-TM	150	5	<0.01	<0.01	6/16-9/30	Dry Crossing	000-03-01-216
108.3R2	Mercer	40.326811	-74.851598	Fiddlers Creek	NJ-NHD-200	Minor	RPW	P	FW2-TM	150	5	0.00	0.00	6/16-9/30	Bore	000-03-01-217

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Waterbodies Crossed by the Project in New Jersey

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												Cons. ROW	Perm. ROW			
109.1R2	Mercer	40.325651	-74.837062	Jacobs Creek	061015_SQ_1007_P_IN	Int.	RPW	P	FW2-NT	50	18	0.00	0.00	7/1-9/30	Bore	000-03-01-219
109.5R2, AR-103B	Mercer	40.32215	-74.833841	Jacobs Creek UNT	NJ-NHD-262	Minor	RPW	P	FW2-NT	50	5	<0.01	0.00	7/1-9/30	N/A	000-03-03-080
109.6R2	Mercer	40.323533	-74.830162	Jacobs Creek UNT	061015_SQ_1001_I_MI	Minor	RPW	I	FW2-NT	50	2	0.00	0.00	7/1-9/30	Bore	000-03-01-220
110.2R2	Mercer	40.315763	-74.823049	Woolsey Brook UNT	NJ-NHD-203	Minor	RPW	P	FW2-NT	50	5	<0.01	<0.01	7/1-9/30	Dry Crossing	000-03-01-221
110.5	Mercer	40.312463	-74.819733	Woolsey Brook	NJ-NHD-204	Int.	RPW	P	FW2-NT	50	13	0.00	0.00	7/1-9/30	HDD	000-03-01-221
111.1R2, AR-107A	Mercer	40.308512	-74.810903	Woolsey Brook UNT	NJ-NHD-276	Minor	UNK	P	FW2-NT	50	5	<0.01	0.00	7/1-9/30	N/A	000-03-03-083
111.8R2	Mercer	40.305995	-74.798311	Woolsey Brook UNT	041316_BM_1002_I_MI	Minor	UNK	I	FW2-NT	50	2	0.00	0.00	7/1-9/30	Bore	000-03-01-224
112.9R2	Mercer	40.30769	-74.783578	Stony Brook UNT	NJ-NHD-207	Minor .	RPW	P	FW2-NT	50	5	<0.01	0.01	7/1-9/30	Dry Crossing	000-03-01-227
113.4R1	Mercer	40.315815	-74.778074	Stony Brook UNT	NJ-NHD-209	Minor	RPW	P	FW2-NT	50	7	0.00	0.00	7/1-9/30	Bore	000-03-01-227.1
113.4R1	Mercer	40.315856	-74.778139	Open Water	082115_SQ_1001_SOW	Int.	RPW	P	N/A	50	24 m/	0.00	0.00	N/A	Bore	000-03-01-227.1
113.4R1	Mercer	40.315821	-74.778187	Stony Brook UNT	082115_SQ_1002_P_MI	Minor	RPW	P	FW2-NT	50	2	0.00	0.00	7/1-9/30	Bore	000-03-01-227.1
Gilbert Lateral – Delaware River Basin																
0.4R2	Hunterdon	40.571119	-75.161585	Delaware River UNT	031416_SQ_1003_E_MI	Minor	UNK	E	FW2-NT	50	1	0.00	<0.01	7/1-9/30	Dry Crossing	000-03-01-235
0.4R2	Hunterdon	40.570521	-75.161892	Delaware River UNT	031416_SQ_1001_P_MI	Minor	UNK	P	FW2-NT	50	4	0.00	<0.01	7/1-9/30	Dry Crossing	000-03-01-235.1
Lambertville 36-inch Lateral – Delaware River Basin																
0.2R2	Hunterdon	40.389192	-74.929549	Alexauken Creek UNT	052915_SQ_1003_E_MI	Minor	UNK	E	FW2-TMC 1	300	6	<0.01	<0.01	6/16-9/30	Dry Crossing	000-03-01-236

Table G-6

Waterbodies Crossed by the Project in New Jersey

Facility/ Mile Post a/	County	Latitude (dd nad83) b/	Longitude (dd nad83) b/	Waterbody Name c/	Waterbody ID d/	FERC Class e/	Waters Types f/	Stream Type g/	NJDEP Water Quality Class h/	Regulated Riparian Zone i/	Crossing Width j/	Acres Affected		Instream Construction Period k/	Proposed Crossing Method l/	Alignment Sheet, Plan Sheet, or Figure #
												Cons. ROW	Perm. ROW			
0.4	Hunterdon	40.392438	-74.927679	Alexauken Creek UNT	NJ-NHD-183	Minor	RPW	P	FW2-TMC1	300	5	<0.01	<0.01	6/16-9/30	Dry Crossing	000-03-01-236.1
0.8	Hunterdon	40.396602	-74.921594	Alexauken Creek UNT	NJ-NHD-179	Minor	RPW	P	FW2-TMC1	300	5	<0.01	<0.01	6/16-9/30	Dry Crossing	000-03-01-237
										Total	**2,574**	**0.06**	**0.46**			

Key:
TNW = Traditional Navigable Waters, including territorial seas
NA = Non-Jurisdictional Waters; waters are exclusively regulated by NJDEP per New Jersey Administrative Code 7:13.
P = Perennial, I = Intermittent, E = Ephemeral
Notes:
a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application
b/ Latitude and Longitude are in Decimal Degrees (dd) North American Datum (nad83).
c/ USGS National Hydrology Database (NHD) Data (USGS, 2014), New Jersey Surface Water Quality Standards (NJDEP 2010).
a = Delineated waterbody; b = Designates partial waterbody delineations at time of writing due to route realignment
d/ USGS National Hydrology Database (NHD) Data (USGS, 2014), New Jersey Surface Water Quality Standards (NJDEP 2010).
Waterbody IDs were generated during field delineation or were assigned based on GIS data (NHD or SWQS) to the closest northern milepost.
e/ Wetland and Waterbody Construction and Mitigation Procedures (FERC, 2013).
FERC classifies waterbodies as any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing, and other permanent waterbodies such as ponds and lakes: "minor waterbody" (Minor) includes all waterbodies less than or equal to 10 feet wide at the water's edge at the time of crossing; "Intermediate waterbody" (Int.) includes all waterbodies greater than 10 feet wide but less than or equal to 100 feet wide at the water's edge at the time of crossing; and "major waterbody" (Major) includes all waterbodies greater than 100 feet wide at the water's edge at the time of crossing. FERC Classifications for NHD waterbodies were determined by measuring the distance of the waterbody at the crossing point using aerial photographs. If the stream was not visible on the aerial photograph the stream was designated as minor, with a crossing distance of "<10" feet. Classification may change based on conditions at time of construction.
f/ Section 10 waters per Army Corps of Engineers Data (USACE, 2010), Section 404 Guidelines (USACE, 2011).
a = TNW also refers to Section 10 waters per Army Corps of Engineers data; all other waterbodies fall under Section 404 guidelines (USACE, 2010; USACE, 2011)
g/ USGS National Hydrology Database (NHD) Data (USGS, 2014).
For delineated streams, perennial/intermittent/ephemeral determinations were made based on channel definition, i.e., having a defined bed and bank, and, as directed by PADEP (Mackowski, personal comm. 2012), by determination of stream flow using geomorphic, hydrological and biological indicators, utilizing the North Carolina Division of Water Quality (2005) identification methods as guidelines. For NHD waterbodies, perennial/intermittent/ephemeral designations were assigned in the NHD data layer.
h/ New Jersey Surface Water Quality Standards (NJDEP 2010).
Delaware River Designation per Delaware River Basin Commission, (DRBC, 2015)
FW2-NTC1 = Freshwater, non-trout, C- 1
FW2-TMC1 = Freshwater , trout-maintenance, C-1
FW2-TPC1 = Freshwater, trout-production, C- 1

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Waterbodies Crossed by the Project in New Jersey

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												Cons. ROW	Perm. ROW			

FW2-NTC2 = Freshwater, non-trout ,C-2
FW2-NT = Freshwater, non-trout
FW2-TM = Freshwater, trout-maintenance
i/ Per New Jersey Administrative Code 7:13-10.2. Regulated Riparian Zones are:
-300 feet along Category 1 streams and their tributaries within the same USGS HUC-14 watershed
-150 feet along trout production waters and all upstream tributaries; trout maintenance waters and tributaries within one mile upstream; waters flowing through an area containing documented habitat for a threatened or endangered species of plant or animal, which is critically dependent on the regulated water for survival (and tributaries within one mile upstream); and waters that flow through an area that contains acid producing soils
-50 feet along all other streams
j/ Crossing width based on waters at time of delineation or aerial photography for NHD waters and may vary at time of construction.
a = Delineated waterbody, b = Designates partial waterbody delineations at time of writing due to route realignment
k/ Per FERC Guidelines, or State restrictions where more strict – see Resource Report 3
l/ Dry crossing methods include: 1) Flumed Crossing and 2) Dam and Pump Crossing; Modified Dry crossing method (Mainline crew completes trenching using Flumed or Dam and Pump method, then flume is installed; lowering-in crew removes flume and completes lowering-in of pipe and backfilling of waterbody using Flumed or Dam and Pump Method); Wet crossing method or Open Cut Crossing (trenching and backfilling in the waterbody-not including blasting or other rock breaking measures-is complete within 24 hours).
m/ The proposed centerline does not intersect the feature in it's entirety, the length of crossing was measured at the longest portion of the feature within the proposed workspace.

Table G-7

Pennsylvania-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID	Waterbody Name	PA Code Ch. 93 Desi.	Wild Trout Waters	Proposed Crossing Method c/
PennEast Mainline Route Pipeline - Upper Susquehanna River Basin d/					
0.6	092414_GO_1001_P_IM	Trout Brook	CWF, MF	III	Bore
1.4	PA-NHD-002	UNT to Trout Brook	CWF, MF	III	Dry Crossing
2.1	S-SUR-003	UNT to Abrahams Creek	CWF, MF	-	Dry Crossing
2.1	050416_DB_1001_I_MI	UNT to Abrahams Creek	CWF, MF	-	Dry Crossing
2.6	011815_JC_1000_I_MI	UNT to Abrahams Creek	CWF, MF	-	Dry Crossing
3.1	011815_JC_1001_P_MI	UNT to Toby Creek	CWF, MF	III	Dry Crossing
3.1	011815_JC_1002_I_MI	UNT to Toby Creek	CWF, MF	III	Dry Crossing
3.5	S-SUR-005	UNT to Abrahams Creek	CWF, MF	-	Dry Crossing
4.3R2, AR-003A	020916_BT_1001_I_MI	UNT to Abrahams Creek	CWF, MF	III	N/A
4.3R2	020916_BT_1001_I_MI	UNT to Abrahams Creek	CWF, MF	III	Dry Crossing
4.3R2	020916_BT_1003_P_MI	UNT to Abrahams Creek	CWF, MF	III	Dry Crossing
4.9	020916_BT_1004_I_MI	UNT to Abrahams Creek	CWF, MF	III	Dry Crossing
5.0	020916_BT_1006_I_MI	UNT to Abrahams Creek	CWF, MF	III	Dry Crossing
5.0	020916_BT_1007_I_MI	UNT to Abrahams Creek	CWF, MF	III	Dry Crossing
5.9	092314_GO_1001_I_MI	UNT to Abrahams Creek	CWF, MF	-	Dry Crossing
6.1	092414_GO_1002_D_MI	UNT to Abrahams Creek	CWF, MF	-	Dry Crossing
6.2R2	092414_GO_1003_P_IM	UNT to Susquehanna River	CWF, MF	-	Dry Crossing
7.1	102315_WA_1001_P_MA	Susquehanna River	WWF, MF	-	Dry Crossing
8.4R2	043015_JC_1002_D_MI	UNT to Susquehanna River	CWF, MF	-	Dry Crossing
8.8R2	102315_WA_001_E_MI	UNT to Susquehanna River	CWF, MF	-	Dry Crossing
9.7R2	PA-NHD-015	Gardner Creek	CWF, MF	-	Dry Crossing
10.8R2	110514_JC_1002_P_IM	Mill Creek	CWF, MF	III	Dry Crossing
11.2R2	PA-NHD-123	UNT to Deep Creek	CWF, MF	III	Dry Crossing
11.5R2	121614_JC_1000_P_MI	Deep Creek	CWF, MF	III	Dry Crossing
11.6R2	121614_JC_1001_E_MI	UNT to Deep Creek	CWF, MF	III	Dry Crossing

Table G-7

Pennsylvania-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID	Waterbody Name	PA Code Ch. 93 Desi.	Wild Trout Waters	Proposed Crossing Method c/
12.4R2	121514_JC_1001_D_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
13	121814_JC_1010_P_MI	UNT to Mill Creek	CWF, MF	III	Bore
13.1	121814_JC_1011_P_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
13.2	121814_JC_1013_E_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
13.2	121814_JC_1012_E_MI	UNT to Mill Creek	CWF, MF	III	Bore
13.3	121814_JC_1007_D_MI	UNT to Mill Creek	CWF, MF	III	Bore
13.3	121814_JC_1008_P_MI	UNT to Mill Creek	CWF, MF	III	Bore
13.3, AR-029	081215_MK_017_P_IM	UNT to Mill Creek	CWF, MF	III	N/A
13.3, AR-029	081215_MK_016_E_MI	UNT to Mill Creek	CWF, MF	III	N/A
13.3, AR-029	081215_MK_015_I_MI	UNT to Mill Creek	CWF, MF	III	N/A
13.3, AR-029	081215_MK_014_P_IM	UNT to Mill Creek	CWF, MF	III	N/A
13.3, AR-029	081215_MK_013_I_MI	UNT to Mill Creek	CWF, MF	III	N/A
13.6	121814_JC_1005_P_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
13.6	121814_JC_1006_I_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
13.7	121814_JC_1004_I_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
13.8	121814_JC_1003_I_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
13.9	121814_JC_1002_P_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
13.9	121814_JC_1001_P_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
14.1	111014_JC_1001_I_MI	UNT to Mill Creek	CWF, MF	III	Dry Crossing
PennEast Mainline Route Pipeline - Delaware River Basin					
15	043015_JC_1001_I_MI	UNT to Little Bear Creek	HQ-CWF, MF	-	Dry Crossing
15.7, AR-031C	112114_JC_1003_P_IM	UNT to Little Bear Creek	HQ-CWF, MF	-	N/A
15.7, AR-031C	PA-NHD-028	UNT to Little Bear Creek	HQ-CWF, MF	-	N/A
15.7, AR-031C	112114_JC_1001_P_MI	UNT to Little Bear Creek	HQ-CWF, MF	-	N/A
15.7, AR-031C	112014_JC_1003_P_IM	Meadow Run	HQ-CWF, MF	-	N/A
16.2	112114_JC_1003_P_IM	UNT to Bear Creek	HQ-CWF, MF	-	Dry Crossing

Table G-7

Pennsylvania-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID	Waterbody Name	PA Code Ch. 93 Desi.	Wild Trout Waters	Proposed Crossing Method c/
16.2	112114_JC_1002_P_MI	Bear Creek	HQ-CWF, MF	-	Dry Crossing
16.4	112114_JC_1001_P_MI	UNT to Bear Creek	HQ-CWF, MF	-	Dry Crossing
16.7	112014_JC_1003_P_IM	Meadow Run	HQ-CWF, MF	-	Dry Crossing
16.9	112014_JC_1002_P_MI	UNT Meadow Run	HQ-CWF, MF	-	Dry Crossing
17.7	112014_JC_1001_P_MI	UNT to Little Shades Creek	HQ-CWF, MF	III	Dry Crossing
18.3	111914_JC_1002_P_IM	Little Shades Creek	HQ-CWF, MF	III	Dry Crossing
18.4	111914_JC_1001_P_IM	UNT to Little Shades Creek	HQ-CWF, MF	III	Dry Crossing
19	121814_JC_1014_D_MI	UNT to Little Shades Creeka	HQ-CWF, MF	III	N/A
19.1	121814_JC_1014_I_MI	UNT to Little Shades Creek	HQ-CWF, MF	III	N/A
19.6	121614_JC_1009_P_IM	Shades Creek	HQ-CWF, MF	I, III	Dry Crossing
20	121714_JC_1001_E_MI	UNT to Shades Creek	HQ-CWF, MF	III	Dry Crossing
20.1	121614_JC_1006_P_MI	UNT to Shades Creek	HQ-CWF, MF	III	Dry Crossing
21.2	121614_JC_1004_I_MI	UNT to Stony Run	HQ-CWF, MF	III	Dry Crossing
21.8, AR-033	PA-NHD-039	Stony Run	HQ-CWF, MF	III	N/A
22.6	102115_WA_002_E_MI	UNT Stony Run	HQ-CWF, MF	III	N/A
22.6	102115_WA_001_E_MI	UNT Stony Run	HQ-CWF, MF	III	N/A
22.7	050615_JC_1001_P_IM	Stony Run	HQ-CWF, MF	III	Dry Crossing
23	052115_JC_1001_P_MA	Lehigh River	HQ-CWF, MF	III	Dry Crossing
23.4, AR-034C	PA-NHD-124	UNT to Lehigh River	HQ-CWF, MF	III	N/A
24.9, AR-034A	012116_DB_1003_I_MI	UNT to Porter Run	HQ-CWF, MF	III	N/A
24.9, AR-034A	012116_DB_1001_P_IN (1)	Porter Run	HQ-CWF, MF	III	N/A
25.0, AR-034	PA-NHD-040	UNT to Lehigh River	HQ-CWF, MF	III	N/A
26.6	102114_JC_1001_P_MI	UNT to Black Creek	HQ-CWF, MF	III	Dry Crossing
29.2R2, AR-036A	PA-NHD-125	UNT to Tunkhannock Creek	HQ-CWF, MF	III	N/A
29.2R2, AR-036A	PA-NHD-125	UNT to Tunkhannock Creek	HQ-CWF, MF	III	N/A
29.2R2, AR-036A	PA-NHD-125	UNT to Tunkhannock Creek	HQ-CWF, MF	III	N/A

Table G-7

Pennsylvania-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID	Waterbody Name	PA Code Ch. 93 Desi.	Wild Trout Waters	Proposed Crossing Method c/
30.4R2	042415_JC_1006_E_MI	UNT to Hawk Run	HQ-CWF, MF	III	Dry Crossing
31.2R2	042415_JC_1004_P_MI	UNT to Laurel Run	HQ-CWF, MF	III	Dry Crossing
31.2R2	042415_JC_1002_P_IN	UNT to Laurel Run	HQ-CWF, MF	III	Dry Crossing
31.2R2	042415_JC_1005_D_MI	UNT to Laurel Run	HQ-CWF, MF	III	Dry Crossing
31.1	042415_JC_1002_P_IN (2)	Laurel Run	HQ-CWF, MF	III	Dry Crossing
32.7, AR-038	S-SUR-044	UNT to Mud Run	HQ-CWF, MF	III	N/A
33.2R2	042115_JC_1001_P_IN	Mud Run	HQ-CWF, MF	III	Dry Crossing
33.2R2	042115_JC_1002_P_MI	UNT to Mud Run	HQ-CWF, MF	III	Dry Crossing
33.4R2	042115_JC_1004_D_MI	UNT to Mud Run	HQ-CWF, MF	III	Dry Crossing
33.5R2	042115_JC_1005_E_MI	UNT to Mud Run	HQ-CWF, MF	III	Dry Crossing
34.7R2	042315_JC_1001_D_MI	UNT to Stony Creek	EV, MF	III	N/A
34.7R2	042315_JC_1002_P_MI	UNT to Stony Creek	EV, MF	III	Dry Crossing
34.8R2	042315_JC_1003_P_IN	Stony Creek	EV, MF	III	Dry Crossing
34.8R2	042315_JC_1003_I_IN	UNT to Stony Creek	EV, MF	III	Dry Crossing
36.1	PA-NHD-049	Yellow Run	EV, MF	III	Dry Crossing
37.5	061615_DB_1001_I_MI	UNT to Wild Creek	EV, MF	III	Dry Crossing
38.3	061615_DB_1002_P_IN	Wild Creek	EV, MF	III	Dry Crossing
39.6R2	UNT to Pine Run	PA-NHD-054	EV, MF	III	Dry Crossing
40.1R2	UNT to Pine Run	PA-NHD-057	EV, MF	III	Dry Crossing
41.1	PA-NHD-060	UNT to White Oak Run	EV, MF	III	Dry Crossing
41.2	PA-NHD-061	UNT to White Oak Run	EV, MF	III	Dry Crossing
41.2	PA-NHD-063	UNT to White Oak Run	EV, MF	III	Dry Crossing
41.3	PA-NHD-062	UNT to White Oak Run	EV, MF	III	Dry Crossing
41.6	PA-NHD-056	White Oak Run	EV, MF	III	Dry Crossing
42.1R2	PA-NHD-065	UNT to Wild Creek	EV, MF	III	Dry Crossing
43.5	052215_JC_1001_LAKE_MA (1)	Wild Creek/ Beltzville	EV, MF	III	HDD

Table G-7

Pennsylvania-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID	Waterbody Name	PA Code Ch. 93 Desi.	Wild Trout Waters	Proposed Crossing Method c/
44	052215_JC_1001_LAKE_MA (2)	Pohopoco Creek/Beltzville Lake	CWF, MF	III	HDD
44.2R2	061715_DB_1001_I_MI	UNT to Pohopoco Creek	CWF, MF	III	HDD
44.3R2	122215_DB_1001_P_MI	UNT to Pohopoco Creek	CWF, MF	III	HDD
44.4R2	122215_DB_1000_I_MI	UNT to Pohopoco Creek	CWF, MF	III	N/A
44.4R2	122215_DB_1001_I_MI	UNT to Pohopoco Creek	CWF, MF	III	N/A
44.8R2, AR-045	PA-NHD-070	UNT to Hunter Creek	HQ-CWF, MF	III	N/A
44.8R2	PA-NHD-070	UNT to Hunter Creek	HQ-CWF, MF	III	Dry Crossing
45.0R2, AR-046	081715_MK_026_P_MI	UNT to Hunter Creek	HQ-CWF, MF	III	N/A
45.0R2	051115_JC_1002_P_MI	UNT to Hunter Creek	HQ-CWF, MF	III	Dry Crossing
45.6	051115_JC_1001_P_MI	UNT to Hunter Creek	HQ-CWF, MF	III	Dry Crossing
48.1	090914_WA_1000_P_IM	Buckwha Creek	CWF, MF	III	Dry Crossing
49.3R2	PA-NHD-079	Aquashicola Creek	HQ-CWF, MF	III	Dry Crossing
52.4	072415_JC_1001_I_MI	UNT to Indian Creek	CWF, MF	III	Dry Crossing
53.4	S-SUR-081	UNT to Indian Creek	CWF, MF	III	Dry Crossing
53.4	S-SUR-082	UNT to Indian Creek	CWF, MF	III	Dry Crossing
53.5	S-SUR-083	UNT to Indian Creek	CWF, MF	III	Dry Crossing
54.3	PA-NHD-084	Indian Creek	CWF, MF	III	Dry Crossing
55.7	102815_WA_1001_E_MI	UNT to Hokendauqua Creek	CWF, MF	III	Dry Crossing
55.9	051215_JC_1002_P_IN/ PA-NHD-087	Hokendauqua Creek	CWF, MF	III	Dry Crossing
55.9	051215_JC_1001_D_MI	UNT to Hokendauqua Creek	CWF, MF	III	Dry Crossing
56	051215_JC_1003_D_MI	UNT to Hokendauqua Creek	CWF, MF	III	Bore
56.7	PA-NHD-088	UNT to Hokendauqua Creek	CWF, MF	III	Dry Crossing
58.5	PA-NHD-089	UNT to Monocacy Creek	HQ-CWF, MF	III	Dry Crossing
59	090314_DB_1011_E_MI	UNT to Monocacy Creek	HQ-CWF, MF	III	Dry Crossing
59.2	090414_DB_1012_I_MI	UNT to Monocacy Creek	HQ-CWF, MF	III	Dry Crossing

Table G-7

Pennsylvania-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID	Waterbody Name	PA Code Ch. 93 Desi.	Wild Trout Waters	Proposed Crossing Method c/
59.2	090414_DB_1013_I_MI	UNT to Monocacy Creek	HQ-CWF, MF	III	Dry Crossing
60.3	051215_JC_1005_P_IN / PA-NHD-091	Monocacy Creek	HQ-CWF, MF	I, III	Dry Crossing
60.6	090314_DB_1005_E_MI	UNT to Monocacy Creek	HQ-CWF, MF	III	Bore
60.6	090314_DB_1007_E_MI	UNT to Monocacy Creek	HQ-CWF, MF	III	Bore
60.7	090314_DB_1006_I_MI	UNT to Monocacy Creek	HQ-CWF, MF	III	Dry Crossing
61.5R2	111214_JC_1004_P_IM	East Branch Monocacy Creek	HQ-CWF, MF	III	Dry Crossing
62.3R2	102715_WA_1002_P_MI	UNT to East Branch Monocacy Creek	HQ-CWF, MF	III	Dry Crossing
62.8	051415_JC_1001_I_MI	UNT to East Branch Monocacy Creek	HQ-CWF, MF	III	Bore
63.5	051415_JC_1002_P_IN	UNT to East Branch Monocacy Creek	HQ-CWF, MF	III	Dry Crossing
63.7R2	051415_JC_1003_D_MI	UNT to East Branch Monocacy Creek	HQ-CWF, MF	III	Bore
66.9	PA-NHD-098	UNT to Monocacy Creek	HQ-CWF, MF	III	Dry Crossing
70.4	S-SUR-100	UNT to Lehigh River	CWF, MF	-	HDD
70.4	010616_JC_1001_E_MI	UNT to Lehigh River	CWF, MF	-	HDD
70.5, AR-071	010616_JC_1001A_E_MI	UNT to Lehigh River	CWF, MF	-	N/A
70.9	PA-NHD-104	Lehigh Canal	WWF	-	HDD
71.1	PA-NHD-099	Lehigh River	WWF	-	HDD
71.4	012116_GM_1001_E_IN	UNT to Lehigh River	CWF, MF	-	Dry Crossing
71.4, AR-072A	081815_MK_030_E_MI	UNT to Lehigh River	CWF, MF	-	N/A
72.1	092614_GO_1001_P_IM	UNT to Bull Run	CWF, MF	III	Dry Crossing
72.2, AR-074	S-SUR-112	UNT to Bull Run	CWF, MF	III	N/A
72.5	051415_JC_1006_E_MI	UNT to Bull Run	CWF, MF	III	Dry Crossing
72.6	012016_GM_1001_I_MI	UNT to Bull Run	CWF, MF	III	Dry Crossing
72.6	102715_WA_1001_I_MI	UNT to Bull Run	CWF, MF	III	Dry Crossing

Table G-7

Pennsylvania-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID	Waterbody Name	PA Code Ch. 93 Desi.	Wild Trout Waters	Proposed Crossing Method c/
72.6	102715_WA_1002_I_MI	UNT to Bull Run	CWF, MF	III	Dry Crossing
72.8	102715_WA_1001_P_MI	UNT to Bull Run	CWF, MF	III	Dry Crossing
72.7	012016_GM_1002_I_MI	UNT to Bull Run	CWF, MF	III	Dry Crossing
72.8	042815_JC_1005_I_MI	UNT to Bull Run	CWF, MF	III	Dry Crossing
73	042815_JC_1001_E_MI	UNT to Bull Run	CWF, MF	III	Dry Crossing
74.6	091814_MK_1009_P_IM	Frya Run	HQ-CWF, MF	I, III	Dry Crossing
74.8, AR-078	062415_BT_1001_P_MI	UNT to Frya Run	HQ-CWF, MF	III	N/A
74.9	062415_BT_1002_I_MI	UNT to Frya Run	HQ-CWF, MF	III	Bore
74.9	062415_BT_1001_P_MI	UNT to Frya Run	HQ-CWF, MF	III	Bore
75.7	111314_JC_1002_I_MI	UNT to Cooks Creek	EV, MF	III	Dry Crossing
75.7	111314_JC_1003_E_MI	UNT to Cooks Creek	EV, MF	III	Dry Crossing
75.7	111314_JC_1001_I_MI	UNT to Cooks Creek	EV, MF	III	Dry Crossing
76.2	051515_JC_1004_E_MI	UNT to Delaware River	WWF,MF	-	Dry Crossing
76.5, AR-079	091814_MK_1007_E_MI	UNT to Cooks Creek	EV, MF	III	N/A
76.5, AR-079	PA-NHD-120	UNT to Cooks Creek	EV, MF	III	N/A
77.6	052915_JC_1002_C_IN	Delaware Canal	WWF,MF	-	HDD
77.6	122315_DB_1001_P_MA	Delaware River	WWF	-	HDD
Compressor Station - Delaware River Basin					
26.7	082515_BT_1001_P_IM	UNT to Black Creek	HQ-CWF, MF	III	N/A
Hellertown Lateral - Delaware River Basin					
0.2	PA-NHD-110	Bull Run	CWF, MF	III	Dry Crossing

Table G-7

Pennsylvania-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID	Waterbody Name	PA Code Ch. 93 Desi.	Wild Trout Waters	Proposed Crossing Method c/

Key:
Pennsylvania Code Ch. 93 Designated Use (Pennsylvania Code 2014.)
EV = Exceptional Value Waters
HQ = High Quality Waters
Surface water that meets one or more to the conditions listed in 93.4b.
CWF = Cold Water Fishes
Maintenance or propagation, or both, to fish species including the family Salmonidae and additional flora and fauna, which are indigenous to a cold water habitat.
WWF = Warm Water Fishes
Maintenance and propagation to fish species and additional flora and fauna, which are indigenous to a warm water habitat.
MF = Migratory Fishes
Passage, maintenance, and propagation to anadromous and catadromous fishes and other fishes, which ascend to flowing waters to complete their life cycle.
[viii] Wild Trout Waters, Natural Reproduction, August 2016 (PFBC, 2016a), Wild Trout Waters (PFBC, 2016b), Class A Waters, August 2016 (PFBC, 2016c).
Wild Trout Waters include:
I = Class A Wild Trout Streams: Streams that support a population to naturally produced trout to sufficient size and abundance to support a long-term and rewarding sport fishery.
II = Wilderness Trout Streams: Wilderness trout stream management is based upon the provision to a wild trout fishing experience in a remote, natural, and unspoiled environment where man's disruptive activities are minimized.
III = Wild Trout Streams: Stream sections supporting naturally reproducing populations to trout. A wild trout stream section is a biological designation that does not determine how it is managed; therefore, these streams may also be stocked with hatchery trout by the Commission.
Notes:
a/ Pennsylvania-classified designated waterbodies include High Quality and Exceptional Value Waters, and Waters with Trout Designations.
b/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.
c/ Dry crossing methods include: 1) Flumed Crossing and 2) Dam and Pump Crossing; Modified Dry crossing method (Mainline crew completes trenching using Flumed or Dam and Pump method, then flume is installed; lowering-in crew removes flume and completes lowering-in of pipe and backfilling of waterbody using Flumed or Dam and Pump Method); Wet crossing method or Open Cut Crossing (trenching and backfilling in the waterbody-not including blasting or other rock breaking measures-is complete within 24 hours).
d/ Susquehanna River crossing includes an additional 23.5 acres of temporary disturbance due to drying of river bed between coffer dams.

Table G-8

New Jersey-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID c/	Waterbody Name c/	NJDEP Water Quality Class d/	Proposed Crossing Method e/
PennEast Mainline - Upper Delaware River Basin				
79.7R2	NJ-NHD-273	Delaware River UNT	FW2-TPC1	Dry Crossing
79.8R2	NJ-NHD-271	Delaware River UNT	FW2-TPC1	Bore
80.1R2	NJ-NHD-269	Delaware River UNT	FW2-NT	Dry Crossing
80.4R2	NJ-NHD-274	Delaware River UNT	FW2-NT	Dry Crossing
80.6R2	NJ-NHD-270	Delaware River UNT	FW2-NT	Dry Crossing
80.8R2	NJ-NHD-275	Delaware River UNT	FW2-NT	Dry Crossing
81.2R2	NJ-NHD-133	Delaware River UNT	FW2-NT	Dry Crossing
81.5R2	NJ-NHD-134	Delaware River UNT	FW2-NT	Dry Crossing
81.7	081215_JFL_1001_P_MI	Delaware River UNT	FW2-NT	Bore
81.9	081215_SAB_1004_E_MI	Spring Mills Brook UNT	FW2-TPC1	Dry Crossing
82	052015_JC_1001_E_MI	Spring Mills Brook UNT	FW2-TPC1	Bore
82.1, AR-084	NJ-NHD-253	Spring Mills Brook UNT	FW2-TPC1	N/A
82.3	NJ-NHD-138	Spring Mills Brook	FW2-TPC1	HDD
82.4	S-SUR-139	Spring Mills Brook UNT	FW2-TPC1	HDD
82.5, AR-085	S-SUR-213	Spring Mills Brook UNT	FW2-TPC1	N/A
82.7	NJ-NHD-140	Spring Mills Brook UNT	FW2-TPC1	Dry Crossing
82.9, AR-086	NJ-NHD-256	Spring Mills Brook UNT	FW2-TPC1	N/A
83.2	NJ-NHD-008	Hakihokake Creek	FW2-TPC1	Dry Crossing
83.8	NJ-NHD-142	Hakihokake Creek UNT	FW2-TPC1	Dry Crossing
84.4	S-SUR-144	Delaware River UNT	FW2-NT	Dry Crossing
84.8R1	NJ-NHD-225	Delaware River UNT	FW2-NT	Dry Crossing
85.2R1, AR-087C	NJ-NHD-234	Harihokake Creek UNT	FW2-TMC1	N/A
85.4R1	NJ-NHD-232	Harihokake Creek UNT	FW2-TMC1	Bore
85.6R1	NJ-NHD-034	Harihokake Creek	FW2-TMC1	Bore
85.8R1	NJ-NHD-245	Harihokake Creek UNT	FW2-TMC1	Bore

Table G-8

New Jersey-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID c/	Waterbody Name c/	NJDEP Water Quality Class d/	Proposed Crossing Method e/
86.3R1	NJ-NHD-037	Harihokake Creek	FW2-TMC1	Dry Crossing
85.9	091014_WA_1004_I_MI	Harihokake Creek UNT	FW2-TMC1	Dry Crossing
86	091014_WA_1015_E_MI	Harihokake Creek UNT	FW2-TMC1	Dry Crossing
86.7R1	NJ-NHD-043	Harihokake Creek	FW2-TMC1	Dry Crossing
87.2	NJ-NHD-154	Delaware River UNT	FW2-NT	Bore
87.7	091114_WA_1001_P_IM	Nishisakawick Creek	FW2-NTC1	Dry Crossing
87.8	051515_SQ_1002_P_IN	Nishisakawick Creek UNT	FW2-NTC1	Dry Crossing
88.4R2	NJ-NHD-014	Little Nishisakawick Creek	FW2-NTC1	Dry Crossing
88.8	091114_WA_1004_I_MI	Little Nishisakawick Creek UNT	FW2-NTC1	Bore
88.6R2, AR-090B	NJ-NHD-265	Little Nishisakawick Creek UNT	FW2-NTC1	N/A
88.8	091114_WA_1003_I_MI	Little Nishisakawick Creek UNT	FW2-NTC1	Bore
88.9	S-SUR-158	Little Nishisakawick Creek UNT	FW2-NTC1	Bore
89.5	NJ-NHD-159	Copper Creek UNT	FW2-NT	Bore
89.5, AR-092	NJ-NHD-258	Copper Creek	FW2-NT	N/A
90.0R2	NJ-NHD-044	Copper Creek	FW2-NT	Dry Crossing
90.3R2	NJ-SWQS-01	Copper Creek UNT	FW2-NT	N/A
91.5R2	NJ-NHD-248	Lockatong Creek	FW2-NTC1	HDD
92.2R2	NJ-NHD-018	Lockatong Creek	FW2-NTC1	HDD
92.4R2	NJ-NHD-162	Lockatong Creek	FW2-NTC1	HDD
93.2	051915_SQ_1001_P_MI	Uncoded Tributary	FW2-NT	Bore
93.4, AR-092A	NJ-NHD-263	Uncoded Tributary	FW2-NT	N/A
93.5R2	NJ-NHD-165	Lockatong Creek UNT	FW2-NTC1	HDD
94.6R2	S-SUR-166	Wickecheoke Creek UNT	FW2-NTC1	Bore
94.6R2	S-SUR-167	Wickecheoke Creek UNT	FW2-NTC1	Bore
94.6R2, AR-092C	S-SUR-166	Wickecheoke Creek UNT	FW2-NTC1	N/A
94.6R2, AR-092C	S-SUR-167	Wickecheoke Creek UNT	FW2-NTC1	N/A

Table G-8

New Jersey-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID c/	Waterbody Name c/	NJDEP Water Quality Class d/	Proposed Crossing Method e/
94.6R2, AR-092D	S-SUR-167	Wickecheoke Creek UNT	FW2-NTC1	N/A
95.1R2	NJ-NHD-168	Wickecheoke Creek UNT	FW2-NTC1	HDD
96.1	NJ-NHD-169	Wickecheoke Creek UNT	FW2-TMC1	Bore
96.3R2	NJ-NHD-170	Wickecheoke Creek UNT	FW2-TMC1	Bore
96.8R2	NJ-NHD-171	Wickecheoke Creek UNT	FW2-TMC1	HDD
96.8R2	NJ-NHD-021	Wickecheoke Creek	FW2-TMC1	HDD
97.3R2	NJ-NHD-173	Wickecheoke Creek UNT	FW2-TMC1	Bore
98.5R2	NJ-NHD-174	Delaware and Raritan Canal UNT	FW2-NT	HDD
99.6R2	NJ-NHD-176	Alexauken Creek UNT	FW2-TMC1	Bore
99.8R2	NJ-NHD-178	Alexauken Creek UNT	FW2-TMC1	HDD
99.9R2	NJ-NHD-178	Alexauken Creek UNT	FW2-TMC1	HDD
100.0R2	NJ-NHD-178	Alexauken Creek UNT	FW2-TMC1	HDD
100.4R2	NJ-NHD-024	Alexauken Creek	FW2-TMC1	HDD
100.8R2	052915_SQ_1003_E_MI	Alexauken Creek UNT	FW2-TMC1	HDD
100.9R2	052915_SQ_1001_E_MI	Alexauken Creek UNT	FW2-TMC1	HDD
101.4R2	052815_SQ_1001_P_MI	Swan Creek UNT	FW2-NT	Bore
101.4R2, AR-099B	052815_SQ_1001_P_MI	Swan Creek UNT	FW2-NT	N/A
102.0R2	NJ-NHD-186	Swan Creek UNT	FW2-NT	Dry Crossing
102.6R2	040616_SQ_1006_EPH	Swan Creek UNT	FW2-NT	Bore
102.8R2	040616_SQ_1004_P_MI	Swan Creek	FW2-NT	Bore
102.9R2	040616_SQ_1001_P_MI	Swan Creek UNT	FW2-NT	Dry Crossing
103.0R2	NJ-NHD-191	Swan Creek UNT	FW2-NT	Bore
104.6R2	S-SUR-194	Moores Creek UNT	FW2-TM	Bore
104.8R2	NJ-NHD-195	Moores Creek UNT	FW2-TM	Dry Crossing
105.3R2	060315_SQ_1005_P_MI	Moores Creek UNT	FW2-TM	Dry Crossing
105.7R2	060415_SQ_1003_P_IN	Moores Creek	FW2-TM	HDD

Table G-8

New Jersey-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID c/	Waterbody Name c/	NJDEP Water Quality Class d/	Proposed Crossing Method e/
106.0R2	060415_SQ_1005_P_MI	Moores Creek UNT	FW2-TM	HDD
107.5R2	S-SUR-198	Fiddlers Creek UNT	FW2-TM	Dry Crossing
107.8R2	S-SUR-199	Fiddlers Creek UNT	FW2-TM	Dry Crossing
108.3R2	NJ-NHD-200	Fiddlers Creek	FW2-TM	Bore
109.1R2	061015_SQ_1007_P_IN	Jacobs Creek	FW2-NT	Bore
109.5R2, AR-103B	NJ-NHD-262	Jacobs Creek UNT	FW2-NT	N/A
109.6R2	061015_SQ_1001_I_MI	Jacobs Creek UNT	FW2-NT	Bore
110.2R2	NJ-NHD-203	Woolsey Brook UNT	FW2-NT	Dry Crossing
110.5	NJ-NHD-204	Woolsey Brook	FW2-NT	HDD
111.1R2, AR-107A	NJ-NHD-276	Woolsey Brook UNT	FW2-NT	N/A
111.8R2	041316_BM_1002_I_MI	Woolsey Brook UNT	FW2-NT	Bore
112.9R2	NJ-NHD-207	Stony Brook UNT	FW2-NT	Dry Crossing
113.4R1	NJ-NHD-209	Stony Brook UNT	FW2-NT	Bore
113.4R1	082115_SQ_1002_P_MI	Stony Brook UNT	FW2-NT	Bore
Gilbertville Lateral - Delaware River Basin				
0.4R2	031416_SQ_1003_E_MI	Delaware River UNT	FW2-NT	Dry Crossing
0.4R2	031416_SQ_1001_P_MI	Delaware River UNT	FW2-NT	Dry Crossing
Lambertville Lateral - Delaware River Basin				
0.2R2	052915_SQ_1003_E_MI	Alexauken Creek UNT	FW2-TMC1	Dry Crossing
0.4	NJ-NHD-183	Alexauken Creek UNT	FW2-TMC1	Dry Crossing
0.8	NJ-NHD-179	Alexauken Creek UNT	FW2-TMC1	Dry Crossing

Table G-8

New Jersey-Classified Designated Waterbodies Crossed by the Project a/

Facility/ Mile Post b/	Waterbody ID c/	Waterbody Name c/	NJDEP Water Quality Class d/	Proposed Crossing Method e/

Notes:
a/ New Jersey-classified designated waterbodies include Freshwater and Trout Designation Waters.
b/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.
c/ USGS National Hydrology Database (NHD) Data (USGS, 2014), New Jersey Surface Water Quality Standards (NJDEP 2010). Waterbody IDs were generated during field delineation or were assigned based on GIS data (NHD or SWQS) to the closest northern milepost.
d/ New Jersey Surface Water Quality Standards (NJDEP 2010). Delaware River Designation per Delaware River Basin Commission, (DRBC, 2015)
FW = Freshwater TM = Trout Maintenance C1 = Category 1 NT = Non-trout Waters
e/ Dry crossing methods include: 1) Flumed Crossing and 2) Dam and Pump Crossing; Modified Dry crossing method (Mainline crew completes trenching using Flumed or Dam and Pump method, then flume is installed; lowering-in crew removes flume and completes lowering-in of pipe and backfilling of waterbody using Flumed or Dam and Pump Method); Wet crossing method or Open Cut Crossing (trenching and backfilling in the waterbody-not including blasting or other rock breaking measures-is complete within 24 hours).
Key:
NA = Non-Jurisdictional Waters; waters are exclusively regulated by NJDEP per New Jersey Administrative Code 7:13.

Table G-9

Designated Category 1 Waters Crossed by the Project in New Jersey

Facility/Mile Post a/	Waterbody ID b/	Waterbody Name b/	NJDEP Water Quality Class c/	Proposed Crossing Method d/
PennEast Mainline - Upper Delaware River Basin				
79.7R2	NJ-NHD-273	Delaware River UNT	FW2-TPC1	Dry Crossing
79.8R2	NJ-NHD-271	Delaware River UNT	FW2-TPC1	Bore
81.9	081215_SAB_1004_E_MI	Spring Mills Brook UNT	FW2-TPC1	Dry Crossing
82	052015_JC_1001_E_MI	Spring Mills Brook UNT	FW2-TPC1	Bore
82.1, AR-084	NJ-NHD-253	Spring Mills Brook UNT	FW2-TPC1	N/A
82.3	NJ-NHD-138	Spring Mills Brook	FW2-TPC1	HDD
82.4	S-SUR-139	Spring Mills Brook UNT	FW2-TPC1	HDD
82.5, AR-085	S-SUR-213	Spring Mills Brook UNT	FW2-TPC1	N/A
82.7	NJ-NHD-140	Spring Mills Brook UNT	FW2-TPC1	Dry Crossing
82.9, AR-086	NJ-NHD-256	Spring Mills Brook UNT	FW2-TPC1	N/A
83.2	NJ-NHD-008	Hakihokake Creek	FW2-TPC1	Dry Crossing
83.8	NJ-NHD-142	Hakihokake Creek UNT	FW2-TPC1	Dry Crossing
85.2R1, AR-087C	NJ-NHD-234	Harihokake Creek UNT	FW2-TMC1	N/A
85.4R1	NJ-NHD-232	Harihokake Creek UNT	FW2-TMC1	Bore
85.6R1	NJ-NHD-034	Harihokake Creek	FW2-TMC1	Bore
85.8R1	NJ-NHD-245	Harihokake Creek UNT	FW2-TMC1	Bore
86.3R1	NJ-NHD-037	Harihokake Creek	FW2-TMC1	Dry Crossing
85.9	091014_WA_1004_I_MI	Harihokake Creek UNT	FW2-TMC1	Dry Crossing
86	091014_WA_1015_E_MI	Harihokake Creek UNT	FW2-TMC1	Dry Crossing
86.7R1	NJ-NHD-043	Harihokake Creek	FW2-TMC1	Dry Crossing
87.7	091114_WA_1001_P_IM	Nishisakawick Creek	FW2-NTC1	Dry Crossing
87.8	051515_SQ_1002_P_IN	Nishisakawick Creek UNT	FW2-NTC1	Dry Crossing
88.4R2	NJ-NHD-014	Little Nishisakawick Creek	FW2-NTC1	Dry Crossing
88.8	091114_WA_1004_I_MI	Little Nishisakawick Creek UNT	FW2-NTC1	Bore
88.6R2, AR-090B	NJ-NHD-265	Little Nishisakawick Creek UNT	FW2-NTC1	N/A
88.8	091114_WA_1003_I_MI	Little Nishisakawick Creek UNT	FW2-NTC1	Bore

Table G-9

Designated Category 1 Waters Crossed by the Project in New Jersey

Facility/Mile Post a/	Waterbody ID b/	Waterbody Name b/	NJDEP Water Quality Class c/	Proposed Crossing Method d/
88.9	S-SUR-158	Little Nishisakawick Creek UNT	FW2-NTC1	Bore
91.5R2	NJ-NHD-248	Lockatong Creek	FW2-NTC1	HDD
92.2R2	NJ-NHD-018	Lockatong Creek	FW2-NTC1	HDD
92.4R2	NJ-NHD-162	Lockatong Creek	FW2-NTC1	HDD
93.5R2	NJ-NHD-165	Lockatong Creek UNT	FW2-NTC1	HDD
94.6R2	S-SUR-166	Wickecheoke Creek UNT	FW2-NTC1	Bore
94.6R2	S-SUR-167	Wickecheoke Creek UNT	FW2-NTC1	Bore
94.6R2, AR-092C	S-SUR-166	Wickecheoke Creek UNT	FW2-NTC1	N/A
94.6R2, AR-092C	S-SUR-167	Wickecheoke Creek UNT	FW2-NTC1	N/A
94.6R2, AR-092D	S-SUR-167	Wickecheoke Creek UNT	FW2-NTC1	N/A
95.1R2	NJ-NHD-168	Wickecheoke Creek UNT	FW2-NTC1	HDD
96.1	NJ-NHD-169	Wickecheoke Creek UNT	FW2-TMC1	Bore
96.3R2	NJ-NHD-170	Wickecheoke Creek UNT	FW2-TMC1	Bore
96.8R2	NJ-NHD-171	Wickecheoke Creek UNT	FW2-TMC1	HDD
96.8R2	NJ-NHD-021	Wickecheoke Creek	FW2-TMC1	HDD
97.3R2	NJ-NHD-173	Wickecheoke Creek UNT	FW2-TMC1	Bore
99.6R2	NJ-NHD-176	Alexauken Creek UNT	FW2-TMC1	Bore
99.8R2	NJ-NHD-178	Alexauken Creek UNT	FW2-TMC1	HDD
99.9R2	NJ-NHD-178	Alexauken Creek UNT	FW2-TMC1	HDD
100.0R2	NJ-NHD-178	Alexauken Creek UNT	FW2-TMC1	HDD
100.4R2	NJ-NHD-024	Alexauken Creek	FW2-TMC1	HDD
100.8R2	052915_SQ_1003_E_MI	Alexauken Creek UNT	FW2-TMC1	HDD
100.9R2	052915_SQ_1001_E_MI	Alexauken Creek UNT	FW2-TMC1	HDD

Table G-9

Designated Category 1 Waters Crossed by the Project in New Jersey

Facility/Mile Post a/	Waterbody ID b/	Waterbody Name b/	NJDEP Water Quality Class c/	Proposed Crossing Method d/
Gilbertville Lateral - Delaware River Basin				
None				
Lambertville Lateral - Delaware River Basin				
0.2R2	052915_SQ_1003_E_MI	Alexauken Creek UNT	FW2-TMC1	Dry Crossing
0.4	NJ-NHD-183	Alexauken Creek UNT	FW2-TMC1	Dry Crossing
0.8	NJ-NHD-179	Alexauken Creek UNT	FW2-TMC1	Dry Crossing

Notes:
a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.
b/ USGS National Hydrology Database (NHD) Data (USGS, 2014), New Jersey Surface Water Quality Standards (NJDEP 2010).
Waterbody IDs were generated during field delineation or were assigned based on GIS data (NHD or SWQS) to the closest northern milepost.
c/ New Jersey Surface Water Quality Standards (NJDEP 2010). Delaware River Designation per Delaware River Basin Commission, (DRBC, 2015)
FW2-NTC1 = Freshwater, non-trout, C- 1 FW2-TMC1 = Freshwater , trout-maintenance, C-1 FW2-TPC1 = Freshwater, trout-production, C- 1
FW2-NTC2 = Freshwater, non-trout ,C-2 FW2-NT = Freshwater, non-trout FW2-TM = Freshwater , trout-maintenance
d/ Dry crossing methods include: 1) Flumed Crossing and 2) Dam and Pump Crossing; Modified Dry crossing method (Mainline crew completes trenching using Flumed or Dam and Pump method, then flume is installed; lowering-in crew removes flume and completes lowering-in of pipe and backfilling of waterbody using Flumed or Dam and Pump Method); Wet crossing method or Open Cut Crossing (trenching and backfilling in the waterbody-not including blasting or other rock breaking measures-is complete within 24 hours).
Key:
NA = Non-Jurisdictional Waters; waters are exclusively regulated by NJDEP per New Jersey Administrative Code 7:13.

Table G-10

Summary of Wetland and Waterbody Crossings – Site Specific Justification for ATWS within 50 feet of Wetlands and Waterbodies

MP a/	Workspace ID	Feature ID	Feature Type	Survey	Exception to FERC Procedure	Workspace Justification
6.5R2	ATWS-1363	110915_WA_002_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, foreign pipeline crossing and wetland crossing.
6.6R2	ATWS-088	051115_JC_1004_P_MA	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, foreign pipeline crossing, side bend construction and major river.
6.9	ATWS-1111	102315_WA_1001_P_MA	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for major river crossing.
6.9	ATWS-11105	N/A	Waterbody	N/A	ATWS within 50 feet of waterbody	ATWS is required for major river crossing.
7.3	ATWS-0090	102215_WA_005_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for major river, road crossing and side bend construction.
12.4R2	ATWS-1339	121514_JC_1001_D_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for steam crossing
13.0	ATWS-0151	121514_JC_1010_P_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS required for crossing of stream.
13.2	ATWS-0157	081215_MK_018_PSS	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing and stream crossing.
13.3	ATWS-0161	121814_JC_1009_E_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for road crossing, stream crossing and access road.
13.3	ATWS-0161	121814_JC_002_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, stream crossing and access road.
22.7	ATWS-0210	102115_WA_002_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for wetland crossing.
22.7	ATWS-0210	102115_WA_003_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for wetland crossing.
24.3	ATWS-0214	110614_JC_004_PF	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS required for wetland crossing.
36.0	ATWS-0267	NWI-010	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for wetland crossing and stream crossing.
36.1	ATWS-0268	NWI-010	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for wetland crossing and stream crossing.
36.4	ATWS-0269	050615_JC_1001_PFO	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for wetland crossing and stream crossing.
36.8	ATWS-0272	011116_GM_1001_PFO	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for wetland crossing.
37.2	ATWS-0275	061615_DB_1002_PFO	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for wetland crossing.
44.4R2	ATWS-0330	122215_DB_1000_P_MI	Waterbody	Surveyed	ATWS within a waterbody	ATWS required for HDD construction and road crossing.
44.4R2	ATWS-0330	122215_DB_1001_P_MI	Waterbody	Surveyed	ATWS within a waterbody	ATWS required for HDD construction and road crossing.
44.4R2	ATWS-0330	122215_DB_1001_I_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for HDD construction and road crossing.

Table G-10

Summary of Wetland and Waterbody Crossings – Site Specific Justification for ATWS within 50 feet of Wetlands and Waterbodies

MP a/	Workspace ID	Feature ID	Feature Type	Survey	Exception to FERC Procedure	Workspace Justification
44.8R2	ATWS-1623	PA-NHD-070	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for stream crossing.
45.5	ATWS-0350	051115_JC_1001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, wetland crossing and stream crossing.
48.1	ATWS-0370	090914_WA_001_PSS	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, wetland crossing and access road.
52.4	ATWS-1656	031516_NJ_006_VP	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for wetland crossing
52.6	ATWS-1629	031516_NJ_003_PSS	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for wetland crossing
56.0	ATWS-0434	051215_JC_1003_D_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for road crossing, wetland crossing, side bend construction and topsoil segregation
56.0	ATWS-0434	081815_MK_042_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, wetland crossing, side bend construction and topsoil segregation
58.1R2	ATWS-0460	PA-NHD-089	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for road crossing, topsoil segregation and rugged topography / sloped construction
59.2	ATWS-0473	090414_DB_008_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, wetland crossing and stream crossing
59.2	ATWS-0474	090414_DB_008_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, wetland crossing and stream crossing
60.3	ATWS-0478	PA-NHD-091	Stream	Public	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, stream crossing and road crossing
60.3	ATWS-0479	051215_JC_1005_P_IN	Stream	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, stream crossing and road crossing
60.3	ATWS-0479	PA-NHD-091	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, stream crossing and road crossing
60.6	ATWS-0484	090314_DB_004_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, stream crossing and wetland crossing
61.4	ATWS-0490	111214_JC_1004_P_IM	Stream	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for road crossing and stream crossing.
62.8	ATWS-0508	051415_JC_1001_I_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for access road, stream crossing, and railroad crossing
62.8	ATWS-0509	051415_JC_1001_I_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, stream crossing and railroad crossing.

Table G-10

Summary of Wetland and Waterbody Crossings – Site Specific Justification for ATWS within 50 feet of Wetlands and Waterbodies

MP a/	Workspace ID	Feature ID	Feature Type	Survey	Exception to FERC Procedure	Workspace Justification
62.8	ATWS-0510	051415_JC_1001_I_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for rugged topography/sloped construction topsoil segregation, stream crossing and railroad crossing.
63.7R2	ATWS-0515	051415_JC_1003_D_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for road crossing and side bend construction.
64.3R2	ATWS-0526	042815_JC_1003_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS required for road crossing
72.0	ATWS-0598	092614_GO_001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation,road crossing, wetland crossing and stream crossing.
72.9	ATWS-0607	042815_JC_1001_PFO	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for access road, wetland crossing and stream crossing.
74.7	ATWS-0634	062415_BT_1001_P_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, stream crossing, wetland crossing and rugged topography / sloped construction.
75.0	ATWS-0638	062415_BT_1002_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation and road crossing.
79.6R2	ATWS-1865	NJ-NHD-273	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for road crossing, stream crossing, topsoil segregation, and residential construction.
79.7R2	ATWS-1863	NJDEP-205	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for road crossing and stream crossing
79.7R2	ATWS-1863	NJDEP-203	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for road crossing and stream crossing
79.7R2	ATWS-1863	NJDEP-206	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for road crossing and stream crossing
79.8R2	ATWS-1861	NJDEP-206	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for stream crossing
79.8R2	ATWS-1862	NJDEP-206	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for stream crossing
79.8R2	ATWS-1861	NJDEP-AG-051	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for stream crossing
81.2R2	ATWS-1870	NJ-NHD-133	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for stream crossing
81.4R2	ATWS-1873	NJ-NHD-134	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for stream crossing
81.5R2	ATWS-1872	NJ-NHD-134	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for stream crossing
81.6	ATWS-0709	081215_JFL_1003_PEM	Waterbody	Surveyed	ATWS within 50 feet of stream	ATWS is required for topsoil segregation, road crossing, and residential construction.

Table G-10

Summary of Wetland and Waterbody Crossings – Site Specific Justification for ATWS within 50 feet of Wetlands and Waterbodies

MP a/	Workspace ID	Feature ID	Feature Type	Survey	Exception to FERC Procedure	Workspace Justification
81.6	ATWS-0709	081215_JFL_1002_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, road crossing, and residential construction.
81.6	ATWS-0709	081215_JFL_1001_P_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, road crossing, and residential construction.
81.6	ATWS-0710	081215_JFL_1003_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, road crossing, and residential construction.
81.6	ATWS-0710	081215_JFL_1002_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, road crossing, and residential construction.
81.6	ATWS-0710	081215_JFL_1001_P_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, road crossing, and residential construction.
82.8	ATWS-0727	NJDEP-AG-003	Wetland	Public	ATWS within a wetland	ATWS is required for wetland crossing, stream crossing, rugged topography / sloped construction, road crossing, and topsoil segregation.
82.9	ATWS-0728	NJDEP-AG-003	Wetland	Public	ATWS within a wetland	ATWS is required for rugged topography / sloped construction, road crossing, and topsoil segregation.
84.4	ATWS-0743	S-SUR-144	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, road crossing, and rugged topography / sloped construction.
84.6	ATWS-0746	091014_WA_1003_I_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for wetland crossing, stream crossing and topsoil segregation.
84.7R1	ATWS-1212	NJDEP-AG-035	Wetland	Public	ATWS within a wetland	ATWS is required for topsoil segregation, wetland crossing, stream crossing, and driveway crossing.
85.3R1	ATWS-1218	NJDEP-134	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for wetland and stream crossing.
85.6R1	ATWS-1222	NJDEP-137	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for wetland and stream crossing.
85.6R1	ATWS-1222	NJ-NHD-034	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for wetland and stream crossing.
85.8R1	ATWS-1228	NJDEP-139	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for stream crossing and topsoil segregation.
86.3R1	ATWS-1231	NJDEP-AG-149	Wetland	Public	ATWS within a wetland	ATWS is required for soil segregation, wetland and stream crossing, and road crossing.
86.3R1	ATWS-1232	NJDEP-AG-040	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for soil segregation, wetland and stream crossing, and road crossing.

Table G-10

Summary of Wetland and Waterbody Crossings – Site Specific Justification for ATWS within 50 feet of Wetlands and Waterbodies

MP a/	Workspace ID	Feature ID	Feature Type	Survey	Exception to FERC Procedure	Workspace Justification
86.3R1	ATWS-1231	NJDEP-AG-040	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for soil segregation, wetland and stream crossing, and road crossing.
86.0	ATWS-0770	NJDEP-039	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
87.4	ATWS-0783	091114_WA_001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing.
87.4	ATWS-0785	091114_WA_001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, wetland crossing and topsoil segregation.
87.4	ATWS-0786	091114_WA_001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, wetland crossing, topsoil segregation, and residential construction
87.7	ATWS-0787	091114_WA_1001_P_IM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, stream crossing, and wetland crossing
87.7	ATWS-0788	091114_WA_1001_P_IM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, stream crossing, and wetland crossing
88.8	ATWS-0803	NJDEP-052	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for road crossing, topsoil segregation, and rugged topography / sloped construction
90.7	ATWS-0820	NJDEP-AG-006	Wetland	Public	ATWS within a wetland	ATWS is required for wetland crossing residential construction and topsoil segregation
90.7	ATWS-0819	NJDEP-AG-006	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for wetland crossing residential construction and topsoil segregation
90.8	ATWS-0821	NJDEP-AG-006	Wetland	Public	ATWS within a wetland	ATWS is required for wetland crossing residential construction and topsoil segregation
90.8	ATWS-0822	NJDEP-AG-006	Wetland	Public	ATWS within a wetland	ATWS is required for wetland crossing residential construction and topsoil segregation
90.9	ATWS-0824	NJDEP-AG-009	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, wetland crossing, and HDD construction.
90.9	ATWS-0824	NJDEP-AG-042	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, wetland crossing, and HDD construction.
90.9	ATWS-0824	NJDEP-AG-041	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, wetland crossing, and HDD construction.
90.9	ATWS-0824	NJDEP-AG-041A	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, wetland crossing, and HDD construction.

Table G-10

Summary of Wetland and Waterbody Crossings – Site Specific Justification for ATWS within 50 feet of Wetlands and Waterbodies

MP a/	Workspace ID	Feature ID	Feature Type	Survey	Exception to FERC Procedure	Workspace Justification
90.9	ATWS-0824	NJDEP-AG-009A	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, wetland crossing, and HDD construction.
91.4R2	ATWS-1234	NJDEP-AG-009	Wetland	Public	ATWS within 50 feet of wetland	ATWS required for HDD construction
92.6R2	ATWS-1235	NJDEP-AG-012	Wetland	Public	ATWS within a wetland	ATWS required for HDD construction
92.8R2	ATWS-1238	NJDEP-AG-013	Wetland	Public	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation and road crossing.
93.1	ATWS-0847	NJDEP-072	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation and road crossing.
93.3R2	ATWS-0849	NJDEP-074	Wetland	Public	ATWS within 50 feet of wetland	ATWS required HDD
93.3R2	ATWS-1886	NJDEP-073	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for HDD and equipment mobility
93.9R2	ATWS-0852	NJDEP-082	Wetland	Public	ATWS within 50 feet of wetland	ATWS required for HDD
94.3R2	ATWS-0855	NJDEP-086	Wetland	Public	ATWS within 50 feet of wetland	ATWS required for wetland crossing
94.4R2	ATWS-0857	NJDEP-AG-014	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation
94.5R2	ATWS-0858	NJDEP-AG-088	Wetland	Public	ATWS within 50 feet of a wetland	ATWS is required for topsoil segregation, wetland crossing and stream crossing
94.5R2	ATWS-0858	NJDEP-AG-014	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, wetland crossing and stream crossing
94.6R2	ATWS-0860	NJDEP-AG-014	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation and stream crossing
97.3R2	ATWS-0901	NJ-NHD-173	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation and wetland crossing
97.3R2	ATWS-0901	NJDEP-097	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation and wetland crossing
97.5	ATWS-0905	NJDEP-AG-016	Wetland	Public	ATWS within a wetland	ATWS required road crossing and topsoil segregation
99.7R2	ATWS-1272	NJDEP-AG-018	Wetland	Public	ATWS within 50 feet of waterbody	ATWS required for HDD construction and topsoil segregation
101.0R2	ATWS-0969	032916_BM_1001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for stream crossing
101.0R2	ATWS-0970	032916_BM_1001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for stream crossing
101.1R2	ATWS-0971	032916_BM_1001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for stream crossing and topsoil segregation
101.1R2	ATWS-0971	NJDEP-180	Wetland	Public	ATWS within a 50 feet of a wetland	ATWS is required for stream crossing and topsoil segregation

Table G-10

Summary of Wetland and Waterbody Crossings – Site Specific Justification for ATWS within 50 feet of Wetlands and Waterbodies

MP a/	Workspace ID	Feature ID	Feature Type	Survey	Exception to FERC Procedure	Workspace Justification
101.1R 2	ATWS-0972	032916_BM _1001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation
101.3R 2	ATWS-0975	052815_SQ _1002_PSS	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation, road crossing, and stream crossing
102.2R 2	ATWS-0986	080515_SQ _1003_E_MI	Waterbody	Surveyed	ATWS within 50 feet of a waterbody	ATWS is required for topsoil segregation, rugged topography / sloped construction, road crossing and stream crossing
102.2R 2	ATWS-0989	080515_SQ _1004_E_MI	Waterbody	Surveyed	ATWS within 50 feet of a waterbody	ATWS is required for topsoil segregation, rugged topography / sloped construction, and road crossing
102.7R 2	ATWS-0993	040616_CM _1007_PFO	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for Utility crossing
102.8R 2	ATWS-1915	040616_SQ _1003_PFO	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for wetland crossing and stream crossing
102.8R 2	ATWS-1915	040616_SQ _1004_P_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for wetland crossing and stream crossing
102.9R 2	ATWS-1918	040616_SQ _1002_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, wetland crossing and stream crossing
102.9R 2	ATWS-1918	040616_SQ _1001_P_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for road crossing, wetland crossing and stream crossing
104.9R 2	ATWS-1027	060315_SQ _1004_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, topsoil segregation, Utility crossing, rugged topography / sloped construction, wetland crossing, and stream crossing
105.4R 2	ATWS-1029	060415_SQ _1001_PEM	Wetland	Surveyed	ATWS within 50 feet of a wetland	ATWS is required for for topsoil segregation and wetland crossing
105.4R 2	ATWS-1029	060415_SQ _1002_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for for topsoil segregation and wetland crossing
105.4R 2	ATWS-1030	NJDEP-106	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for for topsoil segregation and wetland crossing and HDD construction
105.4R 2	ATWS-1030	060415_SQ _1001_PEM	Wetland	Surveyed	ATWS within 50 feet of a wetland	ATWS is required for for topsoil segregation and wetland crossing and HDD construction
108.1R 2	ATWS-1295	060315_SQ _1009_I_MI	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for power line crossing, side bend construction, and wetland crossing
109.6R 2	ATWS-1303	061015_SQ _1001_I_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation, stream crossing, and road crossing

Table G-10

Summary of Wetland and Waterbody Crossings – Site Specific Justification for ATWS within 50 feet of Wetlands and Waterbodies

MP a/	Workspace ID	Feature ID	Feature Type	Survey	Exception to FERC Procedure	Workspace Justification
110.2R 2	ATWS-1306	NJDEP-114	Wetland	Public	ATWS within 50 feet of wetland	ATWS is required for wetland crossing, stream crossing, and rugged topography / slope construction
110.9	ATWS-1308	041316_BM _1006_1007 _PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for topsoil segregation
111.8R 2	ATWS-1906	041316_BM _1001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing and residential construction
111.8R 2	ATWS-1906	041316_BM _1002_I_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for road crossing and residential construction
111.8R 2	ATWS-1907	041316_BM _1001_PEM	Wetland	Surveyed	ATWS within 50 feet of wetland	ATWS is required for road crossing, topsoil segregation, and residential construction
111.8R 2	ATWS-1907	041316_BM _1002_I_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for road crossing, topsoil segregation, and residential construction
112.2R 2	ATWS-1321	NJ-NHD-050	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for gas line crossing and topsoil segregation
114.0	ATWS-1107	S-SUR-210	Waterbody	Public	ATWS within 50 feet of waterbody	ATWS is required for access to Transco Receiver Site
Hellertown Lateral - Pennsylvania						
HL - 1.4	ATWS-0594	010515_JC_ 1001_E_MI	Waterbody	Surveyed	ATWS within 50 feet of waterbody	ATWS is required for topsoil segregation and rugged topography / sloped construction

Note:
a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.

Table G-11

Wetlands Crossed by the Project in Pennsylvania

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/ Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
PennEast Mainline – Upper Susquehanna River Basin							
0.0, AR-001	Luzerne	PEM	281 f/	0	0	0.15	N/A
0.0, AR-001	Luzerne	PSS	236 f/	0	0	0.04	N/A
0.0, AR-001	Luzerne	PEM	156 f/	0	0	0.02	N/A
0.0, AR-001	Luzerne	PSS	141 f/	0	0	0.08	N/A
0.1	Luzerne	PSS	558	0.89	0.37	0	Open Cut
0.1	Luzerne	PEM	76 f/	0.02	0	0	N/A
0.1	Luzerne	PEM	4 f/	0.00 e/	0	0	N/A
2.1	Luzerne	PFO	52	0.09	0.04	0	Open Cut
3.1	Luzerne	PFO	159	0.26	0.10	0	Open Cut
5.8	Luzerne	PSS	7 f/	0.00 e/	0.00	0	N/A
6.0	Luzerne	PSS	7	0.01	0.01	0	Open Cut
6.6R2	Luzerne	PEM	59 f/	0.01	0 e/	0	Open Cut
7.1, AR-006A	Luzerne	PFO	402 f/	0.27	0	0	N/A
7.5R2	Luzerne	PEM	48 f/	0.03	0	0	N/A
7.9R2	Luzerne	PEM	55 f/	0.01	0 e/	0	N/A
13.3, AR-029	Luzerne	PEM	17 f/	0.00 e/	0	0	N/A
13.3, AR-029	Luzerne	PEM	85 f/	0.06	0	0	N/A
13.3, AR-029	Luzerne	PEM	42 f/	0.01	0	0	N/A
13.7	Luzerne	PEM	41 f/	0.01	0	0	N/A
14.1	Luzerne	PFO	106 f/	0.05	0 e/	0	N/A
PennEast Mainline – Delaware River Basin							
14.9	Luzerne	PFO	154	0.22	0.10	0	Open Cut
15.0	Luzerne	PEM	152 f/	0.02	0	0	N/A
15.7, AR-31C	Luzerne	PSS	389 f/	0.25	0	0	N/A
15.7, AR-31C	Luzerne	PSS	65 f/	0.03	0	0	N/A

Table G-11

Wetlands Crossed by the Project in Pennsylvania

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/ Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
15.7, AR-31C	Luzerne	PSS	143 f/	0.07	0	0	N/A
15.7, AR-31C	Luzerne	PSS	215 f/	0.12	0	0	N/A
15.7, AR-31C	Luzerne	PSS	208 f/	0.14	0	0	N/A
16	Luzerne	PFO	639	1.06	0.44	0	Open Cut
16.2	Luzerne	PSS	3	0.01	0.00 e/	0	Open Cut
16.2	Luzerne	PSS	165	0.28	0.11	0	Open Cut
16.4	Luzerne	PSS	87	0.16	.0.06	0	Open Cut
16.4	Luzerne	PEM	38 f/	0.00 e/	0	0	N/A
16.5	Luzerne	PEM	50 f/	0.02	0	0	N/A
16.8	Luzerne	PFO	218	0.34	0.16	0	Open Cut
16.8	Luzerne	PEM	306 f/	0.06	0	0	N/A
17.7	Luzerne	PEM	31 f/	0.00 e/	0	0	N/A
17.7	Luzerne	PFO	332	0.53	0.23	0	Open Cut
19.6	Luzerne	PFO	206	0.34	0.14	0	Open Cut
19.7	Luzerne	PEM	33 f/	0.00 e/	0	0	N/A
20.4, AR-032	Luzerne	PFO	127 f/	0.05	0	0	N/A
22.5	Luzerne	PEM	125 f/	0.01	0	0	N/A
22.7	Luzerne	PFO	28 f/	0.02	0.00 e/	0	Open Cut
24.2	Carbon	PSS	2 f/	0.00 e/	0	0	N/A
24.2	Carbon	PFO	230 f/	0.09	0	0	N/A
24.5	Carbon	PFO	24 f/	0.01	0	0	N/A
26.4	Carbon	PFO	28	0.00	0.02	0	Open Cut
26.5	Carbon	PEM	145	0.59	0.18	0	Open Cut
26.7	Carbon	PSS	303 f/	0.20	0.01	0	Open Cut
26.9R2	Carbon	PEM	25	0.00	0	0	HDD
27.0R2	Carbon	PEM	188	0.00	0	0	HDD

Table G-11

Wetlands Crossed by the Project in Pennsylvania

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/ Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
27.1R2	Carbon	PFO	74	0.00	0	0	HDD
27.1R2	Carbon	PSS	1,427	0.00	0	0	HDD
27.7R2	Carbon	PEM	89 f/	0.00	0	0	N/A
28.1R2	Carbon	PSS	74 f/	0.01	0	0	N/A
29.2R2, AR-036A	Carbon	PFO	328 f/	0.23	0	0	N/A
29.6R2	Carbon	PEM	1,182 f/	0.24	0	0	N/A
29.6R2	Carbon	PFO	843	1.29	0.58	0	Open Cut
30.1R1	Carbon	PEM	643 f/	0.16	0	0	N/A
30.4R2	Carbon	PSS	95	0.08	0.06	0	Open Cut
31.0R2	Carbon	PEM	1,549 f/	0.38	0	0	N/A
31.0R2	Carbon	PFO	1,705	2.52	1.16	0	Open Cut
33.2R2	Carbon	PSS	30 f/	0.01	0	0	N/A
33.6R	Carbon	PFO	1	0.25	0.05	0	Open Cut
34.6R2	Carbon	PFO	893	1.31	0.58	0	Open Cut
34.6R2	Carbon	PEM	76	0.35	0	0	Open Cut
34.8R2	Carbon	PEM	194 f/	0.03	0	0	N/A
35.4	Carbon	PFO	90 f/	0.04	0.01	0	Open Cut
35.5	Carbon	Vernal Pool	47 f/	0.02	0	0	N/A
36.1	Carbon	PFO	147 f/	0.12	0.02	0	Open Cut
36.5	Carbon	PFO	1,008	1.39	0.61	0	Open Cut
36.8	Carbon	PFO	9 f/	0.00	0	0	N/A
37.1	Carbon	PFO	337	0.58	0.23	0	Open Cut
37.5	Carbon	PEM	59 f/	0.01	0	0	N/A
43.9	Carbon	PFO	61 f/	0	0	0	HDD
44.3R2	Carbon	PSS	13	0	0	0	HDD

Table G-11

Wetlands Crossed by the Project in Pennsylvania

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/ Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
45.0R2	Carbon	PEM	31	0.06	0	0	Open Cut
45.6	Carbon	PEM	39	0.08	0	0	Open Cut
48.1	Carbon	PSS	53	0.06	0.04	0	Open Cut
48.2	Carbon	PSS	22	0.02	0.01	0	Open Cut
49.3R2	Carbon	PFO	296	0.51	0.20	0	Open Cut
52.5	Northampton	PEM	5 f/	0.00 e/	0	0	Open Cut
52.2	Northampton	PEM	38 f/	0.00	0	0	N/A
52.3	Northampton	PFO	11	0.01	0.00 e/	0	Open Cut
52.4	Northampton	Vernal Pool	25	0.09	0	0	Open Cut
52.5	Northampton	PSS	42 f/	0.02	0	0	N/A
52.6	Northampton	Vernal Pool	67	0.09	0	0	Open Cut
52.7	Northampton	Vernal Pool	12	0.01	0	0	Open Cut
53.0	Northampton	PSS	53 f/	0.03	0	0	N/A
53.5	Northampton	PFO	105	0.18	0.07	0	Open Cut
54.3	Northampton	PFO	185	0.31	0.13	0	Open Cut
55.9, AR-054	Northampton	PEM	105 f/	0.07	0	0	n/a
56	Northampton	PEM	56	0.10	0	0	Bore
56	Northampton	PFO	124 f/	0.06	0.02	0	Open Cut
59.2	Northampton	PEM	41	0.07	0	0	Open Cut
60.6	Northampton	PEM	60	0.11	0	0	Open Cut
61.5R2	Northampton	PEM	2 f/	0.00 e/	0	0	N/A
64.3R2	Northampton	PEM	38 f/	0.02	0	0	Bore
70.1	Northampton	PEM	17 f/	0.00	0	0	HDD
72.1	Northampton	PFO	78	0.21	0.06	0	Open Cut
72.5	Northampton	PFO	9 f/	0.00 e/	0	0	N/A
72.6	Northampton	PEM	6	0.01	0	0	Open Cut

Table G-11

Wetlands Crossed by the Project in Pennsylvania

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/ Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
72.6	Northampton	PFO	1 f/	0.00 e/	0	0	N/A
72.6	Northampton	PFO	13	0.06	0.02	0	Open Cut
72.8	Northampton	PFO	879	1.30	0.59	0	Open Cut
73.1	Northampton	PSS	99	0.18	0.07	0	Open Cut
74.9	Northampton	PEM	104	0.15	0	0	Open Cut
75.7	Northampton	PFO	57 f/	0.02	0.00 e/	0	N/A
77.5	Bucks	PFO	65	0	0	0	HDD
Compressor Station - Delaware River Basin							
26.7	Carbon	PEM	29 f/	0	0	0.00 e/	N/A
26.7	Carbon	PEM	22 f/	0	0	0.01	N/A
26.7	Carbon	PFO	96 f/	0.19	0.19	0	Open Cut
26.7	Carbon	PFO	223 f/	0.04	0.04	0	N/A
		Total	**21,273**	**19.7**	**6.7**	**0.3**	

Notes:
PEM = Palustrine Emergent
PSS = Palustrine Scrub-Shrub
PFO = Palustrine Forested

a/ Wetland Cover Type based on Cowardin, 1979 and NJDEP, 1986 data

b/ Approximate wetland crossing distance measured within the proposed workspace.

c/ For temporary impacts, acreage affected based on ATWS, temporary workspace, and temporary impacts within the permanent ROW. For permanent conversion within the 30-foot maintained operational ROW, acreage affected based on permanent workspace as presented on GIS shapefile, subject to change based on construction methodologies.

d/ Pipeline trench width will vary based upon site-specific conditions to account for worker safety and substrate stability. Construction procedures to preserve the integrity and function of the wetland will be used and the sites will be restored in accordance with FERC's Wetland and Waterbody Construction and Mitigation Procedures and in compliance with applicable permit conditions.

e/ Acreage less than 0.005 acres.

f/ Wetland does not cross centerline. Crossing width measured along construction ROW.

Table G-12

Wetlands Crossed by the Project in New Jersey

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
PennEast Mainline - Upper Delaware River Basin; Middle Delaware-Musconetcong HUC-8 Watershed							
77.7	Hunterdon	PSS	107	0	0	0	HDD
79.8R2	Hunterdon	PSS	63	0.040	0.044	0	Bore
79.8R2	Hunterdon	MODag	16	0.010	0	0	Bore
81.6	Hunterdon	PEM	14 f/	0.000 e/	0	0	Bore
81.6	Hunterdon	PEM	6	0.000 e/	0	0	Bore
81.8, AR-084A	Hunterdon	PSS	564 f/	0.230	0	0	N/A
81.8, AR-084A	Hunterdon	PEM	107 f/	0.020	0	0	N/A
82.1, AR-084	Hunterdon	PEM	776 f/	0.470	0	0	N/A
82.3	Hunterdon	PEM	112	0	0	0	HDD
82.3	Hunterdon	PSS	191	0	0	0	HDD
82.4	Hunterdon	MODag	116	0	0	0	HDD
82.7	Hunterdon	PFO	117	0.150	0.080	0	Open Cut
82.9, AR-086	Hunterdon	PFO	122 f/	0.040	0	0	N/A
82.9, AR-086	Hunterdon	PEM	210 f/	0.080	0	0	N/A
82.9, AR-086	Hunterdon	MODag	366	0.250	0	0	N/A
82.9	Hunterdon	MODag	386 f/	0.530	0	0	Open Cut
83.9	Hunterdon	PFO	196	0.280	0.136	0	Open Cut
84.6	Hunterdon	PFO	40	0.040	0.027	0	Open Cut
84.6	Hunterdon	MODag	124	0.160	0	0	Open Cut
84.8R1	Hunterdon	PSS	48	0.050	0.033	0	Open Cut
84.8R1	Hunterdon	PSS	78	0.090	0.053	0	Open Cut
85.3R1	Hunterdon	PSS	227	0	0.158	0	Bore
85.4R1	Hunterdon	PEM	79	0	0	0	Bore
85.2R1, AR-087C	Hunterdon	PFO	324 f/	0.150	0	0	N/A

Table G-12

Wetlands Crossed by the Project in New Jersey

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
86.3R1	Hunterdon	PFO	92	0.120	0.063	0	Open Cut
86.3R1	Hunterdon	MODag	107	0.140	0	0	Open Cut
85.9	Hunterdon	PSS	70	0.080	0.048	0	Open Cut
86	Hunterdon	PFO	96	0.130	0.066	0	Open Cut
86.4, AR-090	Hunterdon	PFO	144 f/	0.010	0	0	N/A
86.7R1	Hunterdon	PSS	47	0.060	0.033	0	Open Cut
87.2R1	Hunterdon	PFO	127 f/	0	0.054	0	Bore
87.4	Hunterdon	PEM	52 f/	0.010	0	0	Open Cut
87.8	Hunterdon	PFO	250	0.320	0.172	0	Open Cut
88.4R2	Hunterdon	PFO	97	0.130	0.066	0	Open Cut
88.4R2	Hunterdon	PFO	52	0.060	0.036	0	Open Cut
88.6, AR-090B	Hunterdon	PFO	48 f/	0.010	0	0	N/A
88.8	Hunterdon	PFO	76	0	0.053	0	Bore
89.5	Hunterdon	PFO	38	0	0.026	0	Bore
89.5, AR-092	Hunterdon	PFO	291	0.200	0	0	N/A
89.5, AR-092	Hunterdon	PFO	130	0.090	0	0	N/A
90.7	Hunterdon	MODag	635	2.050	0	0	Open Cut
90.8	Hunterdon	PEM	188 f/	0.080	0	0	Open Cut
90.8	Hunterdon	PEM	370	0.420	0	0	Open Cut
90.9	Hunterdon	PFO	25	0.020	0.017	0	Open Cut
91.1R2	Hunterdon	MODag	895	2.490	0	0	Open Cut
91.3R2	Hunterdon	MODag	152 f/	0.090	0	0	Open Cut
91.3R2	Hunterdon	MODag	170 f/	0.060	0	0	Open Cut
91.3R2	Hunterdon	MODag	48 f/	0.010	0	0	Open Cut
91.3R2	Hunterdon	MODag	237 f/	0.270	0	0	Open Cut

Table G-12

Wetlands Crossed by the Project in New Jersey

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
91.3R2	Hunterdon	PFO	21 f/	0.000 e/	0	0	Open Cut
91.5R2	Hunterdon	PFO	207 f/	0	0	0	HDD
91.5R2	Hunterdon	PFO	176 f/	0	0	0	HDD
91.7R2	Hunterdon	PFO	85	0	0	0	HDD
92.0	Hunterdon	MODag	711	0	0	0	HDD
92.4	Hunterdon	PFO	500	0	0	0	HDD
92.1R2 / 92.4R2	Hunterdon	PFO	457	0	0	0	HDD
92.5R2	Hunterdon	MODag	123 f/	0	0	0	HDD
93.1	Hunterdon	PFO	199	0	0.137	0	Bore
93.2	Hunterdon	PFO	384 f/	0.430	0.215	0	Open Cut
93.3R2	Hunterdon	PFO	921 f/	0	0	0	HDD
93.4R2, AR-092A	Hunterdon	PFO	117 f/	0.010	0	0	N/A
93.4R2, AR-092A	Hunterdon	PFO	137 f/	0.040	0	0	N/A
93.5R2	Hunterdon	PEM	1145	0	0	0	HDD
93.7R2	Hunterdon	PFO	332 f/	0	0	0	HDD
93.8R2	Hunterdon	PEM	350	0	0	0	HDD
94.3R2	Hunterdon	PFO	199 f/	0.040	0.002	0	Open Cut
94.4R2	Hunterdon	MODag	1574 f/	1.750	0	0	Open Cut
94.6R2	Hunterdon	PFO	83	0.080	0.057	0	Bore
94.9R2	Hunterdon	PFO	53	0	0	0	HDD
94.9R2	Hunterdon	PEM	212 f/	0	0	0	HDD
95.1R2	Hunterdon	PFO	197	0	0	0	HDD
95.1R2	Hunterdon	PFO	217 f/	0	0	0	HDD

Table G-12

Wetlands Crossed by the Project in New Jersey

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
95.6	Hunterdon	MODag	49 f/	0.000 e/	0	0	Open Cut
96.7R2	Hunterdon	PFO	222 f/	0	0	0	HDD
97.3R2	Hunterdon	PFO	138 f/	0	0.065	0	Bore
97.4	Hunterdon	MODag	283	0.510	0	0	Open Cut
98.4R2	Hunterdon	PFO	388	0	0	0	HDD
98.5R2	Hunterdon	MODag	146 f/	0	0	0	HDD
98.7R2	Hunterdon	PFO	249 f/	0	0	0	HDD
98.7R2	Hunterdon	PFO	158 f/	0	0	0	HDD
99.5R2	Hunterdon	MODag	131 f/	0.140	0	0	Open Cut
99.7R2	Hunterdon	MODag	307 f/	0.020	0	0	HDD
100.3R2	Hunterdon	PFO	231	0	0	0	HDD
100.4R2	Hunterdon	PEM	43	0	0	0	HDD
100.8R2	Hunterdon	PFO	247	0	0	0	HDD
101.1R2	Hunterdon	PEM	77 f/	0.020	0	0	Open Cut
101.4R2	Hunterdon	PSS	8 f/	0	0.001	0	Bore
101.4R2	Hunterdon	PEM	5	0	0	0	Bore
102.6R2	Hunterdon	PFO	373	0	0.258	0	Bore
102.6R2	Hunterdon	PSS	393 f/	0	0	0	Bore
102.8R2	Hunterdon	PFO	88	0	0.030	0	Bore
102.9R2	Hunterdon	PEM	19	0.010	0	0	Open Cut
103.0R2	Hunterdon	PFO	110	0.120	0.076	0	Bore
103.8	Hunterdon	PEM	323 f/	0.190	0	0	Open Cut
104.9R2	Mercer	PEM	55	0.010	0	0	Open Cut
105.3R2	Mercer	PEM	25	0.021	0	0	Open Cut
105.4R2	Mercer	PEM	442 f/	1.210	0	0	Open Cut

Table G-12

Wetlands Crossed by the Project in New Jersey

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
105.4R2	Mercer	PEM	34 f/	0.010	0	0	Open Cut
105.6R2	Mercer	PFO	74	0	0	0	HDD
106.0R2	Mercer	PFO	10	0	0	0	HDD
106.0R2	Mercer	PFO	61	0	0	0	HDD
108.2R2	Mercer	PFO	243	0	0.167	0	Bore
108.7R2	Mercer	PFO	412 f/	0	0.208	0	Bore
109.1R2	Mercer	PFO	98	0	0.066	0	Bore
109.1R2	Mercer	PFO	62	0	0.043	0	Bore
109.6R2	Mercer	PEM	59 f/	0	0	0	Bore
110.2R2	Mercer	PFO	132	0.170	0.091	0	Open Cut
110.8	Mercer	PEM	162	0	0	0	HDD
111.0R2	Mercer	PEM	11	0	0	0	Bore
111.8R2	Mercer	PEM	2	0	0	0	Bore
112.5R2	Mercer	PFO	307 f/	0.020	0	0	Open Cut
112.5R2	Mercer	PFO	324	0.400	0.222	0	Open Cut
112.6R2	Mercer	PFO	30	0.030	0.201	0	Open Cut
112.8R2	Mercer	PFO	123 f/	0.070	0.033	0	Open Cut
112.8R2	Mercer	PEM	75 f/	0.010	0	0	Open Cut
112.8R2	Mercer	PFO	221 f/	0.150	0.072	0	Open Cut
112.8R2	Mercer	PSS	245 f/	0.070	0	0	Open Cut
112.8R2	Mercer	MODag	267	0.270	0	0	Open Cut
112.9R2	Mercer	PEM	623	0.830	0	0	Open Cut
113.4	Mercer	PEM	11	0.000	0	0	Bore
		Total	**25322**	**16.070**	**3.109**	**0**	

Table G-12

Wetlands Crossed by the Project in New Jersey

MP	County	Wetland Cover Type a/	Crossing Width (ft) b/	Temporary Wetland Impact for Construction (acre) c/	Forested and Scrub/Shrub Wetlands Permanently Converted to Herbaceous Wetland for Operation of the Pipeline (acre) c/	Wetland/Water Area Permanently Filled (acre)	Proposed Pipeline Crossing Method d/
Gilbert Lateral – Upper Delaware River Basin							
0.4R2	Hunterdon	PEM	14 f/	0.000 e/	0	0	Open Cut
Lambertville Lateral – Upper Delaware River Basin							
0.1R2	Hunterdon	PEM	95 f/	0.010	0	0	Open Cut
0.2R2	Hunterdon	PEM	26 f/	0.000 e/	0	0	Open Cut

Notes:
PEM = Palustrine Emergent
PSS = Palustrine Scrub-Shrub
PFO = Palustrine Forested

a/ Wetland Cover Type based on Cowardin, 1979 and NJDEP, 1986 data

b/ Approximate wetland crossing distance measured within the proposed workspace.

c/ For temporary impacts, acreage affected based on ATWS, temporary workspace, and temporary impacts within the permanent ROW. For permanent conversion within the 30-foot maintained operational ROW, acreage affected based on permanent workspace as presented on GIS shapefile, subject to change based on construction methodologies.

d/ Pipeline trench width would vary based upon site-specific conditions to account for worker safety and substrate stability. Construction procedures to preserve the integrity and function of the wetland would be implemented, and the sites would be restored in accordance with FERC's Wetland and Waterbody Construction and Mitigation Procedures and in compliance with applicable permit conditions.

e/ Acreage less than 0.005 acres.

f/ Wetland does not cross centerline. Crossing width measured along construction ROW.

Table G-13

Federally and State Listed Species Potentially Occurring Within the Project Area

Species Group Species Common Name *Scientific Name*	**Federal Status**	**State Status a/**	**Project Components where Present**	**Mile Post/County/State of Potential Occurrence within Project Area b/**	**Surveys Conducted (Y/N) c/**	**Status and Results of Species Surveys**	**Agency Consultation Recommendations for Avoidance, Minimization, and/or Mitigation of Impacts to Listed Species d/**
Mammals							
Indiana bat *Myotis sodalis*	Endangered	Endangered (PA, NJ)	Pipeline	Entire Route in PA, Entire Route in NJ	Yes	PA- Complete NJ- 16 mist net sites remain to be completed No Indiana bats detected in project area.	Mist net surveys and radio-telemetry conducted in coordination with USFWS, NJDEP-DFW, and PGC. Report submitted to USFWS October 2015. Response Pending.
Northern long-eared bat *Myotis septentrionalis*	Threatened	Special Concern (PA) Proposed Endangered (NJ)	Pipeline	Entire Route in PA, Entire Route in NJ (Hibernacula near MP 10.7 and MP 77.4)	Yes	PA- Complete NJ- 16 mist net sites remain to be completed Northern long-eared bats detected in project area (both PA and NJ).	Mist net surveys and telemetry conducted in coordination with USFWS, NJDEP-DFW, and PGC. Northern long-eared bats detected in project area. Report submitted to USFWS October 2015. Response Pending. PGC requiring all trees greater than 5" diameter at breast height (DBH) are harvested between November 1 and March 31 to prevent impacts to northern long-eared bats. PennEast will comply. USFWS mandated 0.25-mile activity restriction buffer near known hibernacula at 10.7R2 and 77.4. PennEast will comply.
Northern flying squirrel *Glaucomys sabrinus macrotis*	Not Listed	Endangered (PA)	Pipeline	MP 27.1-MP 32.1 Carbon, PA	No	N/A	PGC is requiring northern flying squirrel avoidance areas and tree clearing restrictions between April 15 - June 15, as well as a habitat mitigation plan, between MP 27.1 and 32.1. PennEast will adhere to PGC recommendations.
Bobcat *Lynx rufus*	Not Listed	Endangered (NJ)	Pipeline	Hunterdon County, NJ	No	N/A	NJ Natural Heritage Program listed as species of concern and mapped by NJ Landscape Project (Version 3.1). No surveys required. NJDEP requests that potential impacts to den habitat be assessed;
Allegheny woodrat *Neotoma magister*	Not Listed	Threatened (PA) Endangered (NJ)	None	MP 50.9-Mp 53.5 Carbon & Northampton, PA	Yes	MP 50.9-52.9 Surveys Complete, Woodrat sign. MP 52.9-53.3- Surveys pending, no access MP 53.3-53.5 Surveys Complete, no woodrat sign	A habitat survey by qualified biologist in PGC-specified areas was conducted. Potential habitat and woodrat sign observed outside workspace. Report submitted to PGC in October 2015. Response pending 2016 survey results.

Table G-13

Federally and State Listed Species Potentially Occurring Within the Project Area

Species Group Species Common Name *Scientific Name*	**Federal Status**	**State Status a/**	**Project Components where Present**	**Mile Post/County/State of Potential Occurrence within Project Area b/**	**Surveys Conducted (Y/N) c/**	**Status and Results of Species Surveys**	**Agency Consultation Recommendations for Avoidance, Minimization, and/or Mitigation of Impacts to Listed Species d/**
Eastern small-footed bat *Myotis leibii*	Not Listed	Threatened (PA) Endangered (NJ)	Pipeline	MP 50.9-MP 53.5 Carbon & Northampton, PA	Yes	MP 50.9-52.9- Phase I Surveys completed, potential roost habitat identified. MP 52.9-53.3- Habitat Surveys pending, no access MP 53.3-53.5 Surveys Complete, no habitat	Eastern small-footed bat survey (day roosts) by qualified biologist was conducted in PGC-specified areas. ESF bats identified in other areas during mist net surveys. Emergence surveys completed on Sept. 2015 route and roost identified. Roost is avoided by Sept. 2016 route but additional Phase 2 surveys will be necessary on the Sept. 2016 route. Survey report provided to PGC in October 2015. Response pending submission of 2016 survey results.
Reptiles							
Bog turtle *Glyptemys muhlenbergii*	Threatened	Endangered (PA, NJ)	Pipeline	Carbon County (Aquashicola drainage only) Northampton & Bucks, PA; NJ	Yes	PA: Phase I surveys completed at approximately 45 percent of delineated wetlands to date. Phase 2 surveys ongoing. Phase 3 surveys completed in 2016 at 1 wetland, no bog turtles found; however, some areas of wetland were inaccessible. NJ: No Phase 2 surveys completed to date. Phase I surveys pending access and completion of wetland delineations (9 of 23).	Technical Reports for 2015 Phase I and Phase 2 Bog Turtle Surveys completed in Pennsylvania submitted to USFWS in October 2015. Response pending. MP 49.3 = Known Bog Turtle Wetland Avoidance Required

Timber rattlesnake *Crotalus horridus*	Not Listed	Candidate (PA) Endangered (NJ)	Pipeline	Luzerne, Carbon, & Northampton, PA	Yes	Survey Area 4 MP 10.7-10.9 Phase I Surveys Complete, habitat found, Phase 2 surveys completed- no dens Survey Area 5 MP 12.9-13.1 Phase I Surveys complete, habitat found. Phase 2 surveys completed- no dens. Survey Area 13 MP 15.8-16.8 Phase I surveys complete, habitat found. Mitigation measures to recreate gestation habitat. Survey Area 6 MP 22.6-23.1 Phase I surveys complete, habitat found. Phase 2 surveys completed- no dens. Survey Area 7 MP 23.7-24.1 Phase I surveys complete, habitat found. Mitigation measures to avoid habitat during construction. Survey Area 8 MP 29.3-29.5 Phase I Surveys complete, habitat found. Mitigation measures to recreate gestation habitat and avoid denning habitat. Survey Area 9 MP 30.2-31.0 Phase I Surveys Complete, habitat found. Mitigation measures to recreate gestation habitat and avoid denning habitat. Survey Area 14 MP 33.0-33.6 Phase I Surveys complete no habitat identified. Survey Area 15 MP 37.9-40.6 Phase I Surveys complete, habitat found. Phase 2 surveys identified ACTIVE DEN Survey Area 16 old MP no longer on route but close to MP 50.9-52.1	Mitigation measures to include minor alignment shifts to avoid potential denning habitat in Survey areas 7,8,9,13. On –site construction monitors required where impacts unavoidable. PennEast will comply. Potential gestating habitat in Survey Areas 6, 8, and 9 may be disturbed by construction and should be rebuilt. A timber rattlesnake encounter pre-construction encounter plan required for Survey Area 6. PennEast will comply. To avoid impacts to den identified near MP 39.3, PFBC asking that PennEast adhere to a 300 foot buffer from the den and a rattlesnake monitor on-site during construction between April 15 and October 15. PennEast will comply. Phase 2 Impact assessment to dens completed in survey areas 4, 5, 6, 15 & 16. Surveys completed but for one parcel in 15 (NIS Hollow Hunt Club PE-CA-125) as well as new areas in Sept 2016 route (MP 50.9R2-52.1R2). Additional Phase 2 study will be required here in 2017.

Table G-13

Federally and State Listed Species Potentially Occurring Within the Project Area

Species Group Species Common Name *Scientific Name*	**Federal Status**	**State Status a/**	**Project Components where Present**	**Mile Post/County/State of Potential Occurrence within Project Area b/**	**Surveys Conducted (Y/N) c/**	**Status and Results of Species Surveys**	**Agency Consultation Recommendations for Avoidance, Minimization, and/or Mitigation of Impacts to Listed Species d/**
Eastern redbelly turtle (Delaware River) *Pseudemys rubriventris*	Not Listed	Threatened (PA)	Delaware River	PA	No	N/A	PennEast will comply with PFBC requirement to HDD the Delaware River crossing to avoid redbelly turtle impacts.
Wood turtle *Glyptemys insculpta*	Not Listed	Threatened (NJ)	Pipeline	NJ	Habitat Assessment	Potential Habitat Identified at MP 80.6-80.7, portions between MP 98.6-99.7, MP 106-106.2, 106.5-108, and 113.4-114.02	NJ Natural Heritage Program listed as species of concern. PennEast will comply with timing restriction from November 15 through March 15 for in-stream work , as well as conduct pre-construction clearance surveys and herpetological monitoring.
Northern copperhead *Agkistrodon contortrix mokasen*	Not Listed	Special Concern (NJ)	Pipeline	NJ	Yes	Critical Habitat Assessment conducted on Accessible Parcels; Potential Habitat requires re-evaluation at 80.9-81 due to alignment shift to north.	NJ Natural Heritage Program listed as species of concern. ENSP stated in July 2015 correspondence that surveys on county-lands will be required to identify potential gestating and hibernating habitat. Qualified venomous snake surveyor has completed critical habitat assessment on accessible parcels and identified areas where further targeted surveys are planned.
Eastern box turtle *Terrapene carolina*	Not Listed	Special Concern (NJ)	Pipeline	PA, NJ	No	N/A	Species was not identified in consultation with NJNHP or ENSP but FERC commented that it should be added to this list; also it was observed during field surveys. Therefore minimization measures, including herpetological monitoring during construction, will be developed with NJDEP and ENSP during permit process.
Plants- Federal							
Northeastern bulrush *Scirpus ancistrochaetus*	Endangered	Endangered (PA)	Pipeline	Wetlands over 1300' in elevation in Carbon & Northampton, PA See Table 3.5-5 in RR3	Yes	Based on analysis of inaccessible wetland parcels, 3 wetlands remain to be surveyed (i.e., 29 out of 32 potential habitats have been surveyed). No Scirpus ancistorochaetus have been found to date.	A northeastern bulrush survey was conducted by qualified botanist (June 1-Sept. 30, 2015). No bulrush found in targeted surveys completed. Report submitted to USFWS in October 2015. Response pending. Supplemental survey report to be submitted in fall 2016 for additional wetlands surveyed in August 2016.

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Federally and State Listed Species Potentially Occurring Within the Project Area

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Plants- State e/							
Variable sedge *Carex polymorpha*	Not Listed	Endangered (PA)	Pipeline	Penn Forest Township, Carbon County	Yes	Completed- C. polymorpha found at MPs: 36.2, 36.45, 36.75, 36.85, and 36.9. Additional impact assessment surveys completed in July 2016.	Recommend pre-construction flagging of plant locations. In its letter dated 10/22/2015, DCNR requested additional assessment of population by botanist. If population is large and robust enough, DCNR may determine that project will not impact the plant. Survey completed, report submission pending September 2016 filing.
White Fringed Orchid *Platanthera blephariglottis*	Not Listed	Endangered (PA)	Pipeline	Penn Forest Township, Carbon, PA	Yes	Surveys completed- P. blephariglottis identified at MPs: 27.1, 27.3, 34.7	Will be impacted by project if plant site cannot be avoided. DCNR requested in its 10/22/15 letter that the pipeline be shifted to the west side of the existing ROW to minimize impacts to the plant population. PennEast will implement pre-construction flagging of plant locations for avoidance. DCNR states that transplantation is not likely to succeed and if impacts cannot be avoided additional mitigation will need to be determined.
Screw stem *Bartonia paniculata*	Not Listed	Rare (PA)	None	SGL 129 and Penn Forest Township, Carbon, PA	Yes	Completed- no B. paniculata found	Department of Conservation and Natural Resources (DCNR), Bureau of Forestry, listed as rare plant in vicinity of project. Surveys were conducted for this plant by a qualified botanist and none were found. No impact letter issued by DCNR on 10/22/2015.
Collin's Sedge *Carex collinsii*	Not Listed	Endangered (PA)	None	Penn Forest Township, Carbon, PA	Yes	Completed- no C. collinsii found	Department of Conservation and Natural Resources (DCNR), Bureau of Forestry, listed as rare plant in vicinity of project. Surveys were conducted for this plant by a qualified botanist and none were found. No impact letter issued by DCNR on 10/22/2015.

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Rough-leaved aster *Eurybia radula*	Not Listed	Endangered (PA)	Pipeline	Weiser State Forest, Penn Forest Township, Carbon, PA	Yes	Completed- E. radula identified at MP 36.8	Department of Conservation and Natural Resources (DCNR), Bureau of Forestry, listed as rare plant in vicinity of project. Plant identified during targeted surveys. Will be impacted by project if plant site cannot be avoided. PennEast will implement pre-construction flagging of plant locations. In its letter dated 10/22/15 DCNR recommends shifting pipeline to west to avoid population and also collection of seed for later dispersal or transplantation. Botanist submitted sketch to suggest route to avoid the plant- bore under adjacent wetland could help.
Creeping snowberry *Gaultheria hispidula*	Not Listed	Rare (PA)	None	Kidder Township, Carbon County and SGL 129	Yes	Completed- no G. hispidula found.	Department of Conservation and Natural Resources (DCNR), Bureau of Forestry, listed as rare plant in vicinity of project. Surveys were conducted for this plant by a qualified botanist and none were found. No impact letter issued by DCNR on 10/22/2015.
Bog sedge *Carex paupercula*	Not Listed	Threatened (PA)	None	Kidder Township, Carbon, PA	Yes	Completed- no C. paupercula found.	Department of Conservation and Natural Resources (DCNR), Bureau of Forestry, listed as rare plant in vicinity of project. Surveys were conducted for this plant by a qualified botanist and none were found. No impact letter issued by DCNR on 10/22/2015.
Spotted pondweed *Potomogeton pulcher*	Not Listed	Endangered (PA)	None	SGL 168, Moore Township, Northampton County, PA	Yes	No longer needed	DCNR listed as rare plant in vicinity of project. Reroute in July 2015 avoided the potential site.
Wild Bleeding Hearts *Dicentra exima*	Not Listed	Endangered (PA)	None	Beltzville State Park, Towamensing Township, Carbon, PA	Yes	Completed- no D. exima found.	Department of Conservation and Natural Resources (DCNR), Bureau of Forestry, listed as rare plant in vicinity of project. Surveys were conducted for this plant by a qualified botanist and none were found. No impact letter issued by DCNR on 10/22/2015.

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Squirrel-corn *Dicentra canadensis*	Not Listed	Endangered (NJ)	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	NJ Natural Heritage Program listed as species of concern (updated February 2016). None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
Bush's sedge *Carex bushii*	Not Listed	Endangered (NJ)	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	NJ Natural Heritage Program listed as species of concern (updated February 2016). None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
James' sedge *Carex jamesii*	Not Listed	Endangered (NJ)	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	NJ Natural Heritage Program listed as species of concern (updated February 2016). None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
Buttonbush dodder *Cuscuta cyphalanthi*	Not Listed	Endangered (NJ)	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	NJ Natural Heritage Program listed as species of concern (updated February 2016). None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
Missouri gooseberry *Ribes missouriense*	Not Listed	Endangered (NJ)	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	NJ Natural Heritage Program listed as species of concern (updated February 2016). None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
Wild Blue Phlox *Phlox divericata*	Not Listed	Endangered (NJ)	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	NJ Natural Heritage Program listed as species of concern (not included in February 2016 update). None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
Holmes' Hawthorne *Crataegus holmesiana*	Not Listed	Endangered (NJ)	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	NJ Natural Heritage Program listed as species of concern (not included in February 2016 update). None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.

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Glomerate sedge *Carex aggregata*	Not Listed	Of concern	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
Wild comfrey *Cynoglossum virginianum*	Not Listed	Of Concern	Pipeline	Hunterdon & Mercer, NJ	Yes	Pending additional access	Species found during surveys in 2015 near MP 107.6R2
Marsh bedstraw *Galium palustre*	Not Listed	Of Concern	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
Blazing star *Liastris spicata*	Not Listed	Of Concern	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
Woodland flax *Linum virginianum*	Not Listed	Of Concern	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
White bear lake sedge *Carex albursina*	Not Listed	Of Concern	Pipeline	Hunterdon County, NJ	Yes	Identified approximately 37 feet' from workspace at MP 81. Current alignment to be surveyed.	Not identified as present by NJ Natural Heritage Program; however, identified by project botanist during field surveys.
Rock spike moss *Selaginella rupestris*	Not Listed	Of Concern	TBD	Hunterdon & Mercer, NJ	Yes	Pending additional access	None identified during targeted surveys of accessible parcels. Additional surveys in NJ to be conducted next season.
Matted spike rush *Eleocharis intermedia*	Not Listed	Of Concern	None	Beltzville State Park (Carbon Co, PA)	Yes	Completed- no E. intermedia found	Special request by DCNR Bureau of State Parks/Forestry. Surveys were conducted for this plant by a qualified botanist and none were found. No impact letter issued by DCNR on 10/22/2015.
Sweet-gale *Myrica gale*	Not Listed	Threatened (PA)	None	Luzerne & Carbon, PA	Yes	Completed- no M. gale found.	Department of Conservation and Natural Resources (DCNR), Bureau of Forestry, listed as rare plant in vicinity of project. Surveys were conducted for this plant by a qualified botanist and none were found. No impact letter issued by DCNR on 10/22/2015.

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Torrey's bulrush *Schoenoplectus torreyi*	Not Listed	Endangered (PA)	Pipeline	Carbon, PA	Yes	Completed- S. torreyi identified at MP 26.52	This species was not identified in coordination with DCNR but was identified during botanical surveys of the project area. Plant is just outside project workspace so pre-construction fencing of plant location is recommended.
Appalachian climbing fern *Lygodium palmatum*	Not Listed	Of Concern	Pipeline	Weiser State Forest, Carbon PA	Yes	Complete- L. palmatum identified at MP 36.7	Special request by DCNR Bureau of State Parks/Forestry. Survey conducted by qualified botanist and plant found within existing utility ROW. Site location will be flagged prior to construction and plant relocated if avoidance not possible.
Birds f/							
Bald eagle *Haliaeetus leucocephalus*	Protected under the Bald and Golden Eagle Protection Act	Delisted (PA) Endangered (NJ)	pipeline	PA, NJ Vicinity Nest Locations: 23.2 23.7 43 79.1	Yes	Completed- no additional nests identified aside from those mapped in RR3	NJ Natural Heritage Program requesting time restriction from December 15 through July 31 for known nest habitats. Nearest known nest in NJ is well outside project corridor. USFWS listed as migratory bird of concern and requested Bald Eagle Screening. Bald Eagle Project Screening form completed and submitted to USFWS in October 2015. Recommended avoidance measures (AM) that will be followed includes AM 3, AM 4, and AM 5 plus AM for blasting (see bald eagle section of RR3 for details of AMs).
Osprey *Pandion haliaetus*	Not Listed	Threatened (PA, NJ)	Delaware River	(MP 77.1- MP 77.6) Bucks, PA & Hunterdon, NJ	Yes	Potential habitat at Delaware River. No osprey nests noted during surveys.	PGC and NJ Natural Heritage Program listed as bird of concern. Osprey restriction area between MP 77.1- MP 77.6 in Bucks, PA and Hunterdon, NJ. PGC states that work should be done between August 1 and March 24 in this area. PennEast will comply with timing restriction. Will be coordinated with the November 1- March 31 acceptable tree clearing timeframe for bats. NJ: A nest survey is proposed in Landscape Project mapped habitats in NJ when parcels are accessible to ensure no nest trees are present within the alignment.

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Red-shouldered hawk *Buteo lineatus*	Not Listed	Endangered (NJ)	Pipeline	NJ	Yes	Potential habitat; callback surveys pending access.	NJDEP recommended time restriction from March 1 through July 31. Callback surveys are proposed in mapped habitats on accessible parcels in May – July, 2016. Additional location data provided by NJDEP and in a landowner comment letter in April, 2016.
American kestrel *Falco sparverius*	Not Listed	Threatened (NJ)	Pipeline	NJ	Yes	Potential habitat; Species identified at MP 81.7. Point count surveys to continue pending site access.	NJ Natural Heritage Program listed as bird of concern. Must identify presence/absence of raptor nests for listed species; American Kestrel included as target species for point count bird surveys to begin May, 2016. Assume presence and implement timing restriction on tree clearing for woodland raptors. Identify snags that may be left in place and consult with NJDEP-DFW on potential contribution to nest box program.
Bobolink *Dolichonyx oryzivorus*	Not Listed	Threatened (NJ)	Pipeline	NJ	Yes	Potential habitat in open fields; Species not identified to date. Point count surveys to continue pending site access.	NJ Natural Heritage Program listed as bird of concern. Included as target species for point count bird surveys to begin May, 2016. Implement construction timing restriction and post-construction mowing restrictions March 15- September 10 in suitable habitat.
Grasshopper sparrow *Ammodramus savannarum*	Not Listed	Threatened (NJ)	Pipeline	NJ	Yes	Potential habitat in open fields; Species identified at MP 81.8R2. Point count surveys to continue pending site access.	NJ Natural Heritage Program listed as bird of concern. Included as target species for point count bird surveys to begin May, 2016. Implement construction timing restriction and post-construction mowing restrictions March 15- September 10 in suitable habitat.
Barred owl *Strix varia*	Not Listed	Threatened (NJ)	Pipeline	NJ	Yes	Potential habitat located on currently non-accessible parcels; habitat evaluation and callback surveys pending access.	NJ Natural Heritage Program requesting time restriction from March 1-June 15. Implement timing restriction on tree clearing for woodland raptors. Conduct callback surveys in mapped habitat, and identify & avoid nest trees (dbh > 20”).
Long-eared owl *Asio otus*	Not Listed	Threatened (NJ)	Pipeline	NJ	No	No surveys requested	Non-breeding sighting noted by NJNHP in February 2016 consultation but no surveys are required for this species.

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Savannah sparrow *Passerculus sandwichensis*	Not Listed	Threatened (NJ)	Pipeline	NJ	Yes	Potential habitat in open fields; Species identified at MP 81.8. Point count surveys to continue pending site access.	NJ Natural Heritage Program listed as bird of concern. Included as target species for point count bird surveys to begin May, 2016. Implement construction timing restriction and post-construction mowing restrictions March 15- September 10 in suitable habitat.
Red-headed woodpecker *Melanerpes erythrocephalus*	Not Listed	Threatened (NJ)	Pipeline (observed at MP 104.9R2)	PA, NJ	Yes	Identified in project area; critical habitat assessment pending site access.	USFWS and Natural Heritage Program listed as species of concern. Species identified in project area. Critical habitat assessment proposed at reported locations. Avoidance to include timing restriction on tree clearing. Additional location data provided by NJDEP and in a landowner comment letter in April, 2016.
Brown thrasher *Toxostoma rufum*	Not Listed	Special Concern (NJ)	Pipeline	NJ	Yes	Species identified at MP81.5, 81.9, 102.2-102.3. Point count surveys to continue pending site access.	NJ Natural Heritage Program listed as species of concern. Breeding bird surveys initiated April, 2016. Implement MBTA timing restrictions and USFWS “Adaptive Management Practices for Conserving Migratory Birds”
Cliff swallow *Petrochelidon pyrrhonota*	Not Listed	Special Concern (NJ)	None	NJ	Habitat Assessment	Suitable habitat mapped at Delaware River crossing near MP77.7	NJ Natural Heritage Program listed as species of concern. No permanent habitat disturbance anticipated since suitable habitat will be crossed via HDD. Implement MBTA timing restrictions and USFWS “Adaptive Management Practices for Conserving Migratory Birds”
Cooper's hawk *Accipiter cooperii*	Not Listed	Special Concern (NJ)	Pipeline	NJ	Yes	Call-back surveys conducted however alignment has shifted near MP 81.5 and further surveys may be required. Surveys in additional suitable habitats to continue pending site access.	NJ Natural Heritage Program listed as species of concern. Callback surveys initiated in March, 2016. Implement timing restriction on tree clearing for woodland raptors.

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Eastern meadowlark *Sturnella magna*	Not Listed	Special Concern (NJ)	Pipeline	NJ	Habitat Assessment	Potential habitat in open fields; Species not identified to date. Point count surveys to continue pending site access.	NJ Natural Heritage Program listed as bird of concern. Included as target species for point count bird surveys to begin May, 2016. Implement construction timing restriction and post-construction mowing restrictions March 15- September 10 in suitable habitat.
Great blue heron *Ardea herodias*	Not Listed	Special Concern (NJ)	Pipeline	NJ	Habitat Assessment	Potential habitat in ponded wetlands.	NJ Natural Heritage Program listed as species of concern. Assume presence and expect that planned wetland protection measures will prevent impacts to this species.
American bittern *Botaurus lentiginosus*	Not Listed	Endangered (NJ)	None	NJ	Habitat Assessment	No potential habitat in accessible parcels	NJ Endangered and Nongame Species Program requesting surveys for "secretive marsh birds" in suitable habitat. No suitable habitat identified to date. No impacts expected from project.
Least bittern *Ixobrychus exilis*	Not Listed	Special Concern (NJ)	None	NJ	Habitat Assessment	No potential habitat in accessible parcels	NJ Endangered and Nongame Species Program requesting surveys for "secretive marsh birds" in suitable habitat. No suitable habitat identified to date. No impacts expected from project.
Vesper sparrow *Pooecetes gramineus*	Not Listed	Endangered (NJ)	Pipeline	NJ	Habitat Assessment	Potential habitat in open fields; Species identified at MP 81.8 and 81.8. Point count surveys to continue pending site access.	NJ Natural Heritage Program listed as bird of concern in Feb 2016 update. Included as target species for point count bird surveys to begin May, 2016. Implement construction timing restriction and post-construction mowing restrictions March 15- September 10 in suitable habitat.
Northern harrier *Circus cyaneus*	Not Listed	Special Concern (NJ)	Pipeline	NJ	Habitat Assessment	Potential foraging habitat in open fields	NJ Natural Heritage Program listed as species of concern. Alignment contains grassland habitat and agricultural areas suitable for harrier foraging. Large tidal marshes suitable for nesting have not been identified to date. Breeding habitat for Northern harrier has not been mapped onsite. If suitable breeding habitat is identified, implement construction timing restriction from March 1-July 31

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Northern parula *Parula americana*	Not Listed	Special Concern (NJ)	Pipeline	NJ	Yes	Potential habitat in forest areas; Species not identified to date. Surveys to continue pending site access.	NJ Natural Heritage Program listed as species of concern. Breeding bird surveys initiated April, 2016. Implement MBTA timing restrictions and USFWS "Adaptive Management Practices for Conserving Migratory Birds"
Kentucky warbler *Geothlypis formosa*	Not Listed	Special Concern (NJ)					
Cerulean warbler *Dendroidea cerulea*	Not Listed	Special Concern (NJ)					
Veery *Catharus fuscescens*	Not Listed	Special Concern (NJ)	Pipeline	NJ	Yes	Potential habitat in forest areas; Species identified at MP81.5, 83.6 and 87.7. Surveys to continue pending site access.	NJ Natural Heritage Program listed as species of concern. Breeding bird surveys initiated April, 2016. Implement MBTA timing restrictions and USFWS "Adaptive Management Practices for Conserving Migratory Birds"
Wood thrush *Hylocichla mustelina*	Not Listed	Special Concern (NJ)	Pipeline	PA, NJ	Yes	Potential habitat in forest areas; Species identified near MP 81.5, 81.8, 83.6, 83.8, 84, 85.7, 87.7, and 103.1. Surveys to continue pending site access.	NJ Natural Heritage Program listed as species of concern. Breeding bird surveys initiated April, 2016. Implement MBTA timing restrictions and USFWS "Adaptive Management Practices for Conserving Migratory Birds"
Worm eating warbler *Helmitheros vermivorum*	Not Listed	Special Concern (NJ)	Pipeline	PA, NJ	Yes	Potential habitat in forest areas; Species not identified to date. Surveys to continue pending site access.	NJ Natural Heritage Program listed as species of concern. Breeding bird surveys initiated April, 2016. Implement MBTA timing restrictions and USFWS "Adaptive Management Practices for Conserving Migratory Birds"
Sharp-shinned hawk *Accipiter striatus*	Not Listed	Special concern (NJ)	Pipeline	NJ	No	Potential habitat in forested areas; species observed at MP81.6. Presence assumed in additional suitable habitats.	USFWS listed as species of concern. Assume presence and implement MBTA timing restrictions and USFWS "Adaptive Management Practices for Conserving Migratory Birds"

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Amphibians							
Northern cricket frog *Acris crepitans*	Not Listed	Endangered (PA)	None	(MP 28.7- 30.2) Carbon, PA	Yes	Completed- no cricket frogs found.	Surveys were conducted by qualified northern cricket frog surveyor and habitat was identified; no frogs found in presence/absence search. No impacts anticipated. Report submitted to PFBC in October 2015- concurrence letter received November 5, 2015- "no impact to Acris crepitans"
Long-tailed salamander *Eurycea longicauda longicauda*	Not Listed	Threatened (NJ)	Pipeline	NJ	Habitat Assessment/Targeted survey if HDD not feasible.	suitable habitat identified on accessible parcels (MP 87.7). Habitat assessments to continue as recommended by NJDEP pending access.	NJ Natural Heritage Program species of concern and mapped by NJ Landscape Project (Version 3.1). Critical habitat survey conducted on accessible parcel. NJDEP recommends avoidance through HDD crossings of suitable habitat.
Southern Gray Treefrog *Hyla chrysoscelis*	Not Listed	Endangered (NJ)	None	NJ	No- outside of species range in NJ	Potential habitat in forested wetlands and ponds	Stakeholder comment raised this species as issue; however this species is not known to occur in Mercer or Hunterdon Counties. Inhabits forested wetlands often with vernal pools. Additional wetland surveys in non-accessible parcels planned. Wetland buffers required as part of FERC and permitting process will serve as protection/impact minimization.
Fish							
Atlantic sturgeon *Acipenser oxyrinchus*	Not Listed	Endangered (PA/ NJ)	Delaware River	PA	No	N/A	PFBC requiring HDD for Delaware River crossing to avoid sturgeon impacts. PennEast will comply- no impact expected.
Shortnose sturgeon *Acipenser brevirostrum*	Not Listed	Endangered (PA) Endangered (NJ)	Delaware River	PA	No	N/A	PFBC requiring HDD for Delaware River crossing to avoid sturgeon impacts. USFWS (PA) listed species of concern. PennEast will comply- no impact expected.

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Invertebrates							
Dwarf wedgemussel *Alasmidonta heterodon*	Endangered	Endangered (PA, NJ)	Delaware River	PA, NJ	No	N/A	PFBC requiring HDD for Delaware River crossing to avoid mussel impacts. USFWS (NJ) requiring HDD be used to avoid need to survey for mussels. PennEast will comply- no impact expected. NJDEP-ENSP still recommends surveys in suitable habitat; need will be refined during permitting process with NJDEP.
Tidewater mucket *Leptodea ochracea*	Not Listed	Threatened (NJ)	Delaware River	NJ	Habitat Assessment followed by targeted surveys in suitable habitat.	Delaware River surveyed at MP77.7; no listed species encountered. Additional Habitat Assessment and targeted surveys as necessary pending site access.	Freshwater mussels listed by NJ Natural Heritage Program as occurring within one mile of the proposed alignment. NJDEP requests habitat assessments of all stream crossings and targeted surveys where suitable habitat is present.
Triangle floater *Alasmidonta undulata*	Not Listed	Threatened (NJ)	Stream Crossings	NJ	Habitat Assessment followed by targeted surveys in suitable habitat.	Delaware River surveyed at MP77.7; no listed species encountered. Additional Habitat Assessment and targeted surveys as necessary pending site access.	Freshwater mussels listed by NJ Natural Heritage Program as occurring within one mile of the proposed alignment. NJDEP requests habitat assessments of all stream crossings and targeted surveys where suitable habitat is present.
Yellow lampmussel *Lampsilis cariosa*	Not Listed	Threatened (NJ)	Delaware River	NJ	Habitat Assessment followed by targeted surveys in suitable habitat.	Delaware River surveyed at MP77.7; no listed species encountered. Additional Habitat Assessment and targeted surveys as necessary pending site access.	Freshwater mussels listed by NJ Natural Heritage Program as occurring within one mile of the proposed alignment. NJDEP requests habitat assessments of all stream crossings and targeted surveys where suitable habitat is present.
Creeper *Strophitus undulates*	Not Listed	Special Concern (NJ)	Stream Crossings	NJ	Habitat Assessment followed by targeted surveys in suitable habitat.	Delaware River surveyed at MP77.7; no listed species encountered. Additional Habitat Assessment and targeted surveys as necessary pending site access.	Freshwater mussels listed by NJ Natural Heritage Program as occurring within one mile of the proposed alignment. NJDEP requests habitat assessments of all stream crossings and targeted surveys where suitable habitat is present.

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Species Group Species Common Name *Scientific Name*	**Federal Status**	**State Status a/**	**Project Components where Present**	**Mile Post/County/State of Potential Occurrence within Project Area b/**	**Surveys Conducted (Y/N) c/**	**Status and Results of Species Surveys**	**Agency Consultation Recommendations for Avoidance, Minimization, and/or Mitigation of Impacts to Listed Species d/**
Brook snaketail *Ophiogomphus asperus*	Not Listed	Threatened (NJ)	Pipeline	NJ	Targeted surveys in suitable habitat.	Emergence surveys planned for 2017.	Listed by NJ Natural Heritage Program as occurring within one mile of the proposed alignment. NJDEP requests habitat assessments on public lands and targeted surveys where suitable habitat is present.
Cobra clubtail *Gomphus vastus*	Not Listed	Special Concern (NJ)	Pipeline	NJ	Targeted surveys in suitable habitat.	Emergence surveys planned for 2017.	Listed by NJ Natural Heritage Program as occurring within one mile of the proposed alignment. NJDEP requests habitat assessments on public lands and targeted surveys where suitable habitat is present.
Cobblestone tiger beetle *Cicindela marginipennis*	Not Listed	Rare (NJ)	Delaware River	NJ	No	N/A	NJNHP listed as rare species of concern. Habitat is restricted to cobblestone and sand/gravel bars along river edges. Riverbank will not be impacted by pipeline through HDD installation methods, therefore no impact to this species is anticipated.

Sources: CWFNJ, 2012; CWFNJ, 2013; DCNR, 2014; Markuson, 2014; NJNHP 2015; NOAA, 2015c; PFBC, 2014; PFBC, 2015h,i,j. PGC, 2013b; PGC, 2014. PGC, 2015. PNHP, n.d.; PNHP, 2014; Shellenberger, 2014; Taucher, 2014. Taucher, 2015. The Pennsylvania Code, 2014; USDOI, 2014(a-e); USFWS, n.d.;

Notes:

a/ Status listed for ALL states affected by the Project though occurrence may not have been identified within Project area in some states – see column titled "Mile Post/County/State of Potential Occurrence within Project Area" for locations of possible occurrence.

b/ Based on federal and state resource agency feedback.

c/ Survey conducted information is current as of surveys completed by the end of April 2016.

d/ Detected within Project area information is current as of surveys completed by the end of April 2016.

e/ Plant species are based upon correspondence and communications received from DCNR and NJNHP. For New Jersey, only endangered plants are listed however surveys included all "of concern" species identified in February 2016 letter.

f/ Only birds within Project area that are either federally or state-listed AND which are identified in Agency Correspondence are included in this table. PA & NJ migratory birds potentially occurring in Project area and birds solely identified by IPAC system are listed in Appendix 3C.

Table G-14

Federal, State, County, Municipal Lands, and Public Conservation Areas That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Type of Area/Name of Associated Area	Land Ownership/Land Management	Approx. Crossing Length (feet)	Land Affected		Crossing Method
							Cont. (acres)	Oper. (acres)	
PennEast Mainline - Pennsylvania									
Luzerne	Kingston	2.1	2.5	General State Authority	State owned land/Frances Slocum	1,708	4.3	1.2	Open Cut
Luzerne	West Wyoming	5.6	5.7	Luzerne County Redevelopment Authority	County owned land	141	0.4	0.1	Open Cut
Luzerne	West Wyoming	6.0	6.0	Luzerne County Redevelopment Authority	County owned land	59	0	0	Bore
Luzerne	Wyoming	6.1	6.2R2	Luzerne County Flood Protection Authority	County owned land	205	0.7	0.1	Open Cut
Luzerne	Jenkins	7.3	7.3	Luzerne County Redevelopment Authority	County owned land	72	0.1	0	Access Road
Luzerne	Jenkins	7.8R2	8.1R2	Luzerne County Redevelopment Authority	County owned land	2,006	3	0.9	Open Cut
Luzerne	Plains	9.7R2	9.7R2	Luzerne County Redevelopment Authority	County owned land	42	0.1	0	Bore
Luzerne	Plains	11.4R2	11.6R2	Pennsylvania Commonwealth	State owned land	851	2.7	0.6	Open Cut
Luzerne	Plains	12.0R2	12.3R2	Pennsylvania Commonwealth	State owned land	1,534	3.7	1.1	Open Cut
Luzerne	Bear Creek	15.7	17.8	Pennsylvania Commonwealth	State owned land / State Game Land area No. 91	14,648	43.4	10.1	Open Cut / Access Road
Luzerne	Bear Creek Buck	21.5	23.0	Pennsylvania Commonwealth	State owned land / State Game Land area No. 91	7,836	36.7	5.4	Open Cut / Access Road
Luzerne	Buck	22.8	22.8	Pennsylvania Commonwealth	State owned land	--	0	--	Access Road
Luzerne	Buck	22.4	22.4	Pennsylvania Commonwealth	State owned land / State Game Land area No. 91	--	0	--	Access Road
Luzerne	Bear Creek	23.0	23.0	U.S. Army Corps of Engineers	Federally owned land/Francis E. Walter Dam	305	0.8	0.3	Open Cut
					Luzerne County Subtotal	**29,407**	**95.9**	**19.8**	
Carbon	Kidder	23.0	23.0	U.S. Army Corps of Engineers	Federally owned land/Francis E. Walter Dam	44	0.1	0	Open Cut

Table G-14

Federal, State, County, Municipal Lands, and Public Conservation Areas That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Type of Area/Name of Associated Area	Land Ownership/Land Management	Approx. Crossing Length (feet)	Land Affected		Crossing Method
							Cont. (acres)	Oper. (acres)	
Carbon	Kidder	23.0	23.1	U.S. Government	Federally owned land/Francis E. Walter Dam	252	0.6	0.2	Open Cut
Carbon	Kidder	24.8	25.8	Pennsylvania Commonwealth	State owned land/State Game Land No. 40	4,499	24.3	3.1	Open Cut / Access Road
Carbon	Kidder	29.2R2	30.0R2	Pennsylvania Commonwealth	State owned land/Hickory Run State Park	4,309	9.9	3	Open Cut / Access Road
Carbon	Kidder	29.3R2	29.8R2	Pennsylvania Commonwealth	State owned land/State Game Land No. 129	2,508	7.9	1.7	Open Cut / Access Road
Carbon	Kidder	30.5R2	31.5R2	Pennsylvania Commonwealth	State owned land/Hickory Run State Park	4,673	10.7	3.2	Open Cut
Carbon	Kidder	31.4R2	31.4R2	Pennsylvania Commonwealth	State owned land/Hickory Run State Park	424	1.0	0.3	Open Cut
Carbon	Kidder	32.9R2	33.2R2	Pennsylvania Commonwealth	State owned land/Hickory Run State Park	1,548	3.7	1.1	Open Cut
Carbon	Penn Forest	33.2R2	34.8R2	Pennsylvania Commonwealth	State owned land/ Hickory Run State Park	7,328	18.1	5	Open Cut
Carbon	Penn Forest	35.3	37.1	Pennsylvania Commonwealth, Dept of Forests & Waters	State owned land/ Weiser State Forest	3,358	8.0	2.3	Open Cut
Carbon	Penn Forest	37.1	37.8	Bethlehem Authority	Municipal owned land	2,176	7.3	1.5	Open Cut / Access Road
Carbon	Penn Forest	37.5	38.6	Bethlehem Authority	Municipal owned land	5,389	14.7	3.8	Open Cut
Carbon	Penn Forest	38.6	38.8	Bethlehem Authority	Municipal owned land	1,057	2.3	0.7	Open Cut
Carbon	Penn Forest	38.8	39.8R2	Bethlehem Authority	Municipal owned land	5,752	14.6	4.0	Open Cut
Carbon	Towamensing	41.7	42.6R2	Bethlehem Water Authority	Municipal owned land	4,825	13.6	3.3	Open Cut
Carbon	Towamensing	43.1	43.8	USA	Federally owned land/Beltzville State Park	3,872	6.6	2.7	Open Cut / HDD
Carbon	Towamensing	43.8	43.8	USA	Federally owned land/Beltzville State Park	0	0	0	HDD
Carbon	Towamensing	43.8	43.9	USA	Federally owned land/Beltzville State Park	259	0.3	0.2	HDD

Table G-14

Federal, State, County, Municipal Lands, and Public Conservation Areas That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Type of Area/Name of Associated Area	Land Ownership/Land Management	Approx. Crossing Length (feet)	Land Affected		Crossing Method
							Cont. (acres)	Oper. (acres)	
Carbon	Towamensing	43.9	44.0	U.S. Army Corps of Engineers	Federally owned land/Beltzville State Park	844	1.0	0.6	HDD
Carbon	Towamensing	44.0	44.1	USA	Federally owned land/Beltzville State Park	576	0.7	0.4	HDD
Carbon	Towamensing	44.1	44.6R2	Bethlehem Authority	Municipal owned land	2,259	5.3	1.6	HDD / Open Cut
Carbon	Lower Towamensing	50.8R2	51.1R2	Pennsylvania Commonwealth	State owned land/State Game Land No. 168	440	1.6	0.3	Bore / Open Cut
Carbon	Lower Towamensing	50.9R2	51.0R2	USA	Federally owned land	--	0	--	Open Cut
					Carbon County Subtotal	**56,392**	**152.3**	**39.0**	
Northampton	Lehigh	51.1R2	51.5R2	Pennsylvania Commonwealth	State owned land/State Game Land No. 168	1,990	4.9	1.4	Open Cut / Bore
Northampton	Lehigh	51.6R2	51.7R2	Pennsylvania Commonwealth	State owned land/State Game Land No. 168	400	0.9	0.3	Open Cut
Northampton	Lehigh	51.7R2	51.9R2	Bethlehem Water Co.	Municipal owned land	717	1.6	0.5	Open Cut
Northampton	Lehigh	51.9R2	51.9R2	Pennsylvania Commonwealth	State owned land/State Game Land No. 168	410	0.9	0.3	Open Cut
Northampton	Lehigh	51.9R2	52.8	Pennsylvania Commonwealth	State owned land/State Game Land No. 168	6,349	15.9	4.4	Open Cut
Northampton	Lehigh	52.8	52.9	Pennsylvania Commonwealth	State owned land/State Game Land No. 168	823	1.9	0.6	Open Cut
Northampton	Lehigh	53.1R2	53.3	Pennsylvania Commonwealth	State owned land/State Game Land No. 168	1,204	3	0.9	Open Cut
Northampton	Moore	53.5	53.6	Pennsylvania Commonwealth	State owned land/State Game Land No. 168	420	1.2	0.3	Open Cut
Northampton	Bethlehem	68.3	68.9	Pennsylvania Commonwealth	State owned land	3,033	8.6	2.1	Open Cut / Bore
Northampton	Bethlehem	69.2	69.7	Bethlehem Township	Township owned land	1,958	5.9	1.4	Open Cut / Access Road

Table G-14

Federal, State, County, Municipal Lands, and Public Conservation Areas That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Type of Area/Name of Associated Area	Land Ownership/Land Management	Approx. Crossing Length (feet)	Land Affected		Crossing Method
							Cont. (acres)	Oper. (acres)	
Northampton	Bethlehem	69.5R2	69.6	Pennsylvania Commonwealth	State owned land	727	1.5	0.5	Open Cut / Access Road
Northampton	Bethlehem	70.3	70.3	Bethlehem Township	Township owned land	63	0.1	0	Access Road / HDD
Northampton	Easton City	70.9	71	Easton City	Municipal owned land	516	0.6	0.4	HDD
Northampton	Bethlehem	70.9	70.9	Bethlehem/Palmer Township	Municipal owned land	147	0	0	HDD
Northampton	Bethlehem	70.9	70.9	Pennsylvania Commonwealth	State owned land	115	0	0	HDD
					Northampton County Subtotal	**18,872**	**47.0**	**13.1**	
Bucks	Durham	77.6	77.6	Pennsylvania Commonwealth	State owned land/ Delaware Canal State Park	199	0.2	0.1	HDD
					Bucks County Subtotal	**199**	**0.2**	**0.1**	
Hellertown Lateral									
None									
PennEast Mainline – New Jersey									
Hunterdon	Holland	80.8R2	80.8R2	Township of Holland	Township owned land	33	0.1	0	Open Cut
Hunterdon	Holland	81.4R2	81.7R2	New Jersey Dept. of Environmental Protection	State owned land	1,163	4	0.8	Open Cut / Access Road
Hunterdon	Holland	81.7R2	81.6	New Jersey Dept. of Environmental Protection	State owned land	1,531	4.6	1.1	Open Cut
Hunterdon	Kingwood	89.2	89.6R2	Kingwood Township	Municipal owned land (Green Acres)	1,810	5.2	2.1	Open Cut / Access Road
Hunterdon	West Amwell	103.1R2	103.1R2	New Jersey Dept. of Environmental Protection	State owned land	191	0.8	0.1	Open Cut
					Hunterdon County Subtotal	**4,728**	**14.7**	**4.1**	
Mercer	Hopewell	105.4R2	105.7R2	County of Mercer	County owned land	1,672	4.0	1.2	HDD / Open Cut
Mercer	Hopewell	105.7R2	107.0R2	County of Mercer	County owned land	5,079	12.9	3.5	HDD / Open Cut
Mercer	Hopewell	106.2R2	106.7R2	County of Mercer	County owned land	1,862	5.8	1.3	Open Cut

Table G-14

Federal, State, County, Municipal Lands, and Public Conservation Areas That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Type of Area/Name of Associated Area	Land Ownership/Land Management	Approx. Crossing Length (feet)	Land Affected		Crossing Method
							Cont. (acres)	Oper. (acres)	
Mercer	Hopewell	107.0R2	107.5R2	New Jersey Dept. of Environmental Protection	State owned land	2,307	7.3	1.6	Open Cut / Access Road
Mercer	Hopewell	107.5R2	107.8R2	NJDEP & County of Mercer	State/County owned Land	1,590	5.4	1.1	Open Cut / Access Road
Mercer	Hopewell	109.7R2	109.8R2	Township of Hopewell	Township owned land	218	0.9	0.2	Open Cut / Access Road
Mercer	Hopewell	109.8R2	110.1R2	Renze Wen	Township owned land	1,528	4.4	1.1	Open Cut
Mercer	Hopewell	110.1R2	110.5	Township of Hopewell	Township owned land	2,087	7.2	1.4	Open Cut / HDD
Mercer	Hopewell	111.4R2	111.5R2	Township of Hopewell	Township owned land	178	1.2	0.1	Open Cut
Mercer	Hopewell	111.5R2	111.5R2	Cf Hopewell Cc&I LLC	Township owned land	40	0.1	0	Bore
Mercer	Hopewell	111.5R2	111.7R2	Cf Hopewell Cc&I LLC	Township owned land	970	1.8	0.6	Open Cut
Mercer	Hopewell	112.1R2	112.6R2	Township of Hopewell	Township owned land	2,313	6.1	1.6	Open Cut
Mercer	Hopewell	112.6R2	112.6R2	Township of Hopewell	Township owned land	--	0	--	Open Cut
					Mercer County Subtotal	**19,844**	**57.1**	**13.7**	
Gilbert Lateral									
None									
Lambertville Lateral									
Hunterdon	West Amwell	1.4	1.4	State of New Jersey - Dept. Of Transportation	State owned land	0	0.2	0	Access Road
					Lambertville Lateral Total	**0**	**0.2**	**0**	
					Project Total	**129,441**	**367.5**	**89.7**	

Note:
a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft EIS. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
Pennsylvania Mainline										
ATWS-0003	0.2	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for wetland crossing and rugged topography / sloped construction.
ATWS-0004	0.3	Luzerne	1.1	0.0	0.0	1.1	0.0	0.0	0.0	ATWS is required for rugged topography and road crossing.
ATWS-0005	0.5	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0006	0.5	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0007	0.6	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-0008	0.6	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-0009	0.7	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-0010	0.7	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-0011	1.1	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0012	1.1	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0013	1.1	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0014	1.1	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0016	1.4	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0017	1.4	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0018	1.4	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0019	1.4	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1460	1.6R2	Luzerne	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for road crossing.
ATWS-1349	1.6R2	Luzerne	0.2	0.0	0.0	0.0	0.2	0.0	0.0	ATWS is required for road crossing.
ATWS-1459	1.7R2	Luzerne	0.3	0.2	0.0	0.0	0.0	0.0	0.1	ATWS is required for road crossing and topsoil segregation.
ATWS-0025	2.0	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and side bend construction.
ATWS-0026	2.1	Luzerne	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for rugged topography / sloped construction and road crossing.
ATWS-0027	2.1	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and road crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1348	2.4	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography/rock removal.
ATWS-0029	2.5	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0030	2.6	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0031	2.6	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography / sloped construction.
ATWS-0033	2.8	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and foreign pipeline crossing.
ATWS-1374	2.9R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography/sloped construction and foreign pipeline crossing.
ATWS-0034	2.9R2	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and foreign pipeline crossing.
ATWS-0035	3.0R2	Luzerne	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction, foreign pipeline crossing, topsoil segregation and road crossing.
ATWS-1451	3.0R2	Luzerne	0.2	0.1	0.0	0.0	0.0	0.0	0.1	ATWS is required for rugged topography/ sloped construction, road crossing, wetland crossing and stream crossing.
ATWS-0037	3.0R2	Luzern	0.3	0.0	0.0	0.0	0.3	0.0	0.0	ATWS is required for rugged topography/ sloped construction, road crossing, wetland crossing and stream crossing.
ATWS-1362	3.0R2	Luzerne	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for rugged topography / sloped construction, road crossing, wetland crossing and stream crossing.
ATWS-0040	3.2	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0042	3.5	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and road crossing.
ATWS-0043	3.5	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and road crossing.
ATWS-0044	3.5	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and road crossing.
ATWS-1444	3.5	Luzerne	1.2	0.0	0.0	1.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction, stream crossing, and road crossing.
ATWS-0045	3.6	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0046	3.7	Luzerne	0.9	0.0	0.0	0.9	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and road crossing.
ATWS-0047	3.9R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for forested construction
ATWS-1442	4.0R2	Luzerne	0.6	0.0	0.0	0.6	0.0	0.0	0.0	ATWS is required for forested construction.
ATWS-1329	4.2R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1338	4.2R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1336	4.3R2	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1337	4.3R2	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1441	4.3R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for equipment mobility and rugged topography.
ATWS-0059	5.0	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography
ATWS-0060	5.0	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography
ATWS-0061	5.0	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography
ATWS-0062	5.1	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography
ATWS-0063	5.4	Luzerne	0.3	0.0	0.0	0.1	0.0	0.0	0.2	ATWS is required for road crossing.
ATWS-0064	5.4	Luzerne	0.2	0.0	0.0	0.0	0.0	0.0	0.2	ATWS is required for road crossing.
ATWS-0065	5.4	Luzerne	0.3	0.0	0.0	0.2	0.0	0.0	0.1	ATWS is required for road crossing and stream crossing.
ATWS-0066	5.5	Luzerne	0.3	0.0	0.0	0.1	0.0	0.0	0.2	ATWS is required for road crossing and stream crossing.
ATWS-0067	5.7	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0068	5.8	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0069	5.8	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0070	5.8	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0071	5.9	Luzerne	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0072	5.9	Luzerne	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and wetland crossing.
ATWS-0073	6.0	Luzerne	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for road crossing and side bend construction.
ATWS-0075	6.0	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing, and road crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0076	6.0	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and side bend construction.
ATWS-0077	6.1	Luzerne	0.4	0.3	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation.
ATWS-1367	6.2R2	Luzerne	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and wetland crossing.
ATWS-1368	6.2R2	Luzerne	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation.
ATWS-1369	6.2R2	Luzerne	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and wetland crossing.
ATWS-0083	6.3R2	Luzerne	0.4	0.0	0.0	0.0	0.1	0.0	0.3	ATWS is required for road crossing.
ATWS-1371	6.3R2	Luzerne	0.2	0.1	0.1	0.0	0.0	0.0	0.0	ATWS is required for equipment mobility and side bend construction.
ATWS-0082	6.4R2	Luzerne	0.2	0.0	0.0	0.0	0.2	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0084	6.5R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1364	6.5R2	Luzerne	0.5	0.2	0.1	0.2	0.0	0.0	0.0	ATWS is required for topsoil segregation, foreign pipeline crossing, wetland crossing and road crossing.
ATWS-1363	6.5R2	Luzerne	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, foreign pipeline crossing and wetland crossing.
ATWS-0087	6.6R2	Luzerne	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, foreign pipeline crossing and side bend construction.
ATWS-0088	6.6R2	Luzerne	6.2	2.2	0.0	1.3	0.0	2.7	0.0	ATWS is required for topsoil segregation, foreign pipeline crossing, side bend construction, and major river.
ATWS-1111	6.9	Luzerne	4.2	0.0	0.0	1.8	0.0	2.4	0.0	ATWS is required for major river crossing.
ATWS-1110	7.0	Luzerne	9.2	1.3	0.2	1.9	0.0	5.8	0.0	ATWS is required for major river crossing.
ATWS-0089	7.3	Luzerne	0.8	0.0	0.0	0.2	0.6	0.0	0.0	ATWS is required for road crossing.
ATWS-0090	7.3	Luzerne	1.9	0.0	0.0	0.3	1.6	0.0	0.0	ATWS is required for major river, road crossing and side bend construction.
ATWS-1340	7.8R2	Luzerne	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for equipment mobility and reduced TWS due to residential proximity.
ATWS-1347	7.9R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for reduced TWS due to residential proximity.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0093	8.1R2	Luzerne	0.5	0.0	0.0	0.3	0.0	0.0	0.2	ATWS is required for road crossing, side bend construction and foreign pipeline crossing.
ATWS-1420	8.1R2	Luzerne	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for reduced TWS due to residential proximity and road crossing.
ATWS-0099	8.2R2	Luzerne	0.9	0.1	0.0	0.3	0.1	0.0	0.4	ATWS is required for topsoil segregation, rugged topography / sloped construction and stream crossing.
ATWS-1419	8.2R2	Luzerne	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for reduced TWS due to residential proximity and road crossing.
ATWS-0100	8.4R2	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing.
ATWS-0101	8.4R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0102	8.5R2	Luzerne	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for stream crossing.
ATWS-1360	8.7R2	Luzerne	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for equipment mobility and side bend construction.
ATWS-1414	8.7R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for sidebend construction
ATWS-1331	8.8R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1332	8.9R2	Luzerne	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for stream crossing.
ATWS-0107	8.9R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for access road.
ATWS-1144	9.0R2	Luzerne	0.6	0.0	0.5	0.1	0.4	0.0	0.0	ATWS is required for side bend construction, rock storage, and a pipe bore.
ATWS-1357	9.1R2	Luzerne	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for rock storage, and a pipe bore.
ATWS-1356	9.2R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for rock storage, and a pipe bore.
ATWS-1355	9.3R2	Luzerne	0.3	0.0	0.1	0.2	0.0	0.0	0.0	ATWS is required for a pipe bore.
ATWS-1354	9.3R2	Luzerne	0.4	0.0	0.3	0.1	0.0	0.0	0.0	ATWS is required for a pipe bore.
ATWS-1353	9.4R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for a pipe bore.
ATWS-1352	9.5R2	Luzerne	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for a pipe bore.
ATWS-1151	9.6R2	Luzerne	0.2	0.0	0.1	0.1	0.0	0.0	0.0	ATWS is required for access road.
ATWS-1152	9.6R2	Luzerne	2.7	0.0	0.0	2.7	0.0	0.0	0.0	ATWS is required for RR crossing and sloped construction requiring significant benching and topsoil segregation.
ATWS-1330	9.6R2	Luzerne	0.5	0.0	0.4	0.0	0.1	0.0	0.0	ATWS is required for RR crossing and sloped construction requiring significant benching and topsoil segregation.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1153	9.7R2	Luzerne	1.6	0.0	1.1	0.5	0.0	0.0	0.0	ATWS is required for road crossing and sloped construction.
ATWS-1154	9.9R2	Luzerne	1.2	0.0	1.2	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1155	9.9R2	Luzerne	2.0	0.0	0.2	1.8	0.0	0.0	0.0	ATWS is required for HDD Construction.
ATWS-1923	10.0R2	Luzerne	0.7	0.0	0.0	0.7	0.0	0.0	0.0	ATWS is required for water storage to be utilized for hydrostatic testing of the pipeline.
ATWS-1156	10.6R2	Luzerne	0.9	0.0	0.0	0.9	0.0	0.0	0.0	ATWS is required for HDD Construction.
ATWS-1157	10.6R2	Luzerne	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for HDD Construction.
ATWS-1158	10.6R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for sloped construction, stream crossing, and side bend construction.
ATWS-1335	10.7R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossing
ATWS-1342	10.8R2	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for steam crossing
ATWS-1341	10.9R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossing
ATWS-1343	10.9R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossing
ATWS-1482	11.1R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossing
ATWS-1481	11.1R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossing
ATWS-1345	11.2R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-1344	11.2R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-1489	11.2R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1479	11.2R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1164	11.4R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossing and sloped construction.
ATWS-1165	11.4R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossing and sloped construction.
ATWS-1166	11.5R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossings and sloped construction.
ATWS-1167	11.5R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossings and sloped construction.
ATWS-1920	11.5R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossing
ATWS-1921	11.5R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for steam crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1168	11.6R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and RR crossing.
ATWS-1169	11.6R2	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and RR crossing.
ATWS-1170	11.6R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for RR crossing.
ATWS-1171	11.6R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for RR crossing.
ATWS-1346	11.8R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for forested construction
ATWS-1172	11.9R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for gas line crossing, wetland proximity, and rugged topography.
ATWS-1173	12.0R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for gas line crossing and side bend construction.
ATWS-1174	12.0R2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for gas line crossing, side bend construction, and side slope construction.
ATWS-1334	12.4R2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for steam crossing
ATWS-1339	12.4R2	Luzerne	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for steam crossing
ATWS-0149	12.9	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction.
ATWS-0150	13.0	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and residential construction.
ATWS-0151	13.0	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-0152	13.0	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing
ATWS-0153	13.0	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing
ATWS-0154	13.1	Luzerne	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation and stream crossing.
ATWS-0155	13.1	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and wetland crossing.
ATWS-0156	13.1	Luzerne	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation and stream crossing.
ATWS-0157	13.2	Luzerne	0.8	0.0	0.0	0.0	0.0	0.0	0.8	ATWS is required for road crossing and stream crossing.
ATWS-0160	13.3	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-0161	13.3	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing, and access road.
ATWS-0119	13.6	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing and wetland crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0163	13.6	Luzerne	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing.
ATWS-0165	13.8	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction, stream crossing and wetland crossing.
ATWS-0166	13.9	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing.
ATWS-0167	13.9	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing.
ATWS-0168	14.1	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and wetland crossing.
ATWS-0169	14.1	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0170	14.4	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0171	14.4	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, access road and stream crossing.
ATWS-0172	14.7	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0173	14.8	Luzerne	1.0	0.0	0.0	1.0	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0174	15.0	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0175	15.6	Luzerne	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing and side bend construction.
ATWS-0176	15.7	Luzerne	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing and side bend construction.
ATWS-0177	15.9	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and wetland crossing and stream crossing.
ATWS-0178	16.2	Luzerne	0.7	0.0	0.0	0.7	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and wetland crossing and stream crossing.
ATWS-0179	16.4	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and wetland crossing and stream crossing.
ATWS-0180	16.5	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0183	16.6	Luzerne	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing.
ATWS-0184	16.7	Luzerne	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing.
ATWS-0186	16.9	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0187	17.3	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0188	17.5	Luzerne	0.9	0.0	0.0	0.9	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction.
ATWS-0190	17.8	Luzerne	0.4	0.0	0.0	0.3	0.0	0.0	0.1	ATWS is required for stream crossing, road crossing and rugged topography / sloped construction.
ATWS-0191	18.3	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing and stream crossing.
ATWS-0192	18.4	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing and stream crossing.
ATWS-0193	18.6	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing and side bend construction.
ATWS-0194	18.6	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing and side bend construction.
ATWS-0195	19.0	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0196	19.6	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0197	19.6	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, and stream crossing.
ATWS-0198	19.6	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for wetland crossing, stream crossing and side bend construction.
ATWS-0199	19.7	Luzerne	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0200	20.0	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0201	20.1	Luzerne	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0202	20.2	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography / sloped construction.
ATWS-0203	20.4	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing and access road.
ATWS-0204	20.4	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing.
ATWS-0205	21.1	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0206	21.2	Luzerne	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1491	21.8	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for equipment mobility
ATWS-1507	22.5	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for forested construction
ATWS-0209	22.7	Luzerne	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0210	22.7	Luzerne	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0211	22.7	Luzerne	2.4	0.0	0.0	2.4	0.0	0.0	0.0	ATWS is required for major river and rugged topography / sloped construction.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0212	23.1	Carbon	1.8	0.0	0.0	1.8	0.0	0.0	0.0	ATWS is required for major river and rugged topography / sloped construction.
ATWS-0213	24.1	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0214	24.3	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1510	24.5	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1509	24.5	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1490	24.9	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for equipment mobility
ATWS-0217	25.2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0218	25.2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0219	26.1	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for side bend construction.
ATWS-0221	26.3	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1495	26.3	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0222	26.4	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, side bend construction and wetland crossing.
ATWS-0223	26.4	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0224	26.5	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-1508	26.6	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0227	27.5R2	Carbon	1.4	0.0	0.0	1.4	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-1492	27.5R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0229	28.0R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0230	28.1R2	Carbon	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for wetland crossing and side bend construction.
ATWS-1924	28.9R2	Carbon	1.1	0.0	0.0	1.1	0.0	0.0	0.0	ATWS is required for water storage to be utilized for hydrostatic testing of the pipeline.
ATWS-0231	29.1R2	Carbon	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for side bend construction.
ATWS-0232	29.2R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for side bend construction.
ATWS-0233	29.5R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0234	29.5R2	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for wetland crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0235	30.3R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0236	30.5R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0237	30.9R2	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0238	31.3R2	Carbon	0.5	0.1	0.0	0.4	0.0	0.0	0.0	ATWS is required for wetland crossing, stream crossing, and topsoil segregation.
ATWS-0240	31.8R2	Carbon	0.5	0.1	0.0	0.4	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0241	32.0R2	Carbon	0.3	0.0	0.0	0.0	0.3	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0242	32.2R2	Carbon	0.3	0.0	0.0	0.0	0.0	0.0	0.3	ATWS is required for topsoil segregation, road crossing, and stream crossing.
ATWS-0243	32.3R2	Carbon	0.4	0.3	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and stream crossing.
ATWS-0244	32.8R2	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for access road.
ATWS-0246	33.1R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for rugged topography, stream crossing, and wetland crossing.
ATWS-0247	33.2R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography, stream crossing, and wetland crossing.
ATWS-0248	33.4R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0249	33.5R2	Carbon	0.6	0.0	0.0	0.6	0.0	0.0	0.0	ATWS is required for stream crossing, road crossing, and wetland crossing.
ATWS-0250	33.8R2	Carbon	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction, wetland crossing and stream crossing.
ATWS-1494	34.5R2	Carbon	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0253	34.8	Carbon	0.2	0.0	0.0	0.1	0.0	0.0	0.1	ATWS is required for wetland crossing, stream crossing and side bend construction.
ATWS-0254	34.8	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for side bend construction.
ATWS-0255	35.3	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and side bend construction.
ATWS-0256	35.3	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and side bend construction.
ATWS-0257	35.4	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0258	35.4	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0259	35.5	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, side bend construction and pipeline crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0260	35.6	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and pipeline crossing.
ATWS-0261	35.6	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing and pipeline crossing.
ATWS-0262	35.6	Carbon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and pipeline crossing.
ATWS-0263	35.6	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation and pipeline crossing.
ATWS-0264	35.6	Carbon	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for road crossing, topsoil segregation and pipeline crossing.
ATWS-0265	35.7	Carbon	0.5	0.0	0.0	0.1	0.4	0.0	0.0	ATWS is required for topsoil segregation, side bend construction, and residential construction.
ATWS-0266	35.8	Carbon	0.3	0.0	0.0	0.0	0.3	0.0	0.0	ATWS is required for access road, topsoil segregation, side bend construction, and residential construction.
ATWS-0267	36.0	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0268	36.1	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0269	36.4	Carbon	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0271	36.8	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for wetland crossing, stream crossing, side bend construction, and pipeline crossing.
ATWS-0272	36.8	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0273	37.1	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and access road.
ATWS-0274	37.1	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0275	37.2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0276	37.2	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0277	37.4	Carbon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for stream crossing, wetland crossing, and pipeline crossing.
ATWS-0278	37.4	Carbon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for stream crossing, wetland crossing, and pipeline crossing.
ATWS-0279	37.5	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing, and pipeline crossing.
ATWS-0280	37.5	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing, and pipeline crossing.
ATWS-0281	37.7	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0282	37.7	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and residential construction.
ATWS-0283	37.8	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0284	37.8	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and residential construction.
ATWS-0285	38.0	Carbon	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and side bend construction.
ATWS-0286	38.1	Carbon	0.6	0.0	0.0	0.6	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction.
ATWS-0287	38.3	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography / sloped construction.
ATWS-0288	38.3	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography / sloped construction.
ATWS-1506	39.2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS required for foreign utility crossing and sidebend construction
ATWS-1504	39.3R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS required for foreign utility crossing
ATWS-1505	39.3R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS required for foreign utility crossing
ATWS-1502	39.5R2	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS required for stream crossing and sidebend construction
ATWS-1503	39.5R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS required for stream crossing and sidebend construction
ATWS-1501	39.6R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1498	39.7R2	Carbon	0.9	0.0	0.0	0.9	0.0	0.0	0.0	ATWS required for forested construction and construction adjacent to AC lines
ATWS-1499	40.0R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1500	40.1R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1497	40.2R2	Carbon	1.1	0.0	0.0	1.1	0.0	0.0	0.0	ATWS required for forested construction and construction adjacent to AC lines
ATWS-1622	40.8R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1621	40.8R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1496	40.9	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS required for foreign utility crossing and sidebend construction
ATWS-0298	41.0	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-0299	41.1	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-0300	41.1	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0301	41.1	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0302	41.2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0303	41.2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0304	41.3	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0305	41.3	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0306	41.3	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0307	41.3	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0308	41.5	Carbon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0309	41.6	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0310	41.6	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography / sloped construction.
ATWS-0311	41.6	Carbon	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for stream crossing, rugged topography / sloped construction and road crossing.
ATWS-0312	41.7	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and road crossing.
ATWS-0313	41.7	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0314	41.7	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0315	42.0	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0316	42.0	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0317	42.0	Carbon	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-0318	42.0	Carbon	0.3	0.0	0.1	0.2	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-1512	42.1R2	Carbon	1.0	0.0	0.0	1.0	0.0	0.0	0.0	ATWS is required for road crossing, sidebend construction and stream crossing.
ATWS-1511	42.5R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for sidebend construction.
ATWS-0321	42.7	Carbon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0322	42.7	Carbon	0.3	0.2	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation and road crossing.
ATWS-0323	42.8	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0324	42.8	Carbon	3.6	3.3	0.0	0.1	0.1	0.0	0.1	ATWS is required for topsoil segregation, road crossing and rugged topography / sloped construction.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0325	43.0	Carbon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction and road crossing.
ATWS-0326	43.1	Carbon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, road crossing and waterbody.
ATWS-0327	43.1	Carbon	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, road crossing and waterbody.
ATWS-0328	43.2	Carbon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for waterbody.
ATWS-0329	44.4R2	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for HDD construction and road crossing.
ATWS-0330	44.4R2	Carbon	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for HDD construction and road crossing.
ATWS-1140	44.5R2	Carbon	0.2	0.0	0.0	0.0	0.2	0.0	0.0	ATWS is required for access road and road crossing.
ATWS-1141	44.6R2	Carbon	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for road crossing and bend construction.
ATWS-1142	44.6R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1143	44.6R2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1623	44.8R2	Carbon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for stream crossing.
ATWS-0338	44.8R2	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, road crossing and stream crossing.
ATWS-0339	44.9R2	Carbon	0.2	0.0	0.1	0.1	0.0	0.0	0.0	ATWS is required for road crossing, rugged topography / sloped construction and stream crossing.
ATWS-0340	44.9R2	Carbon	0.5	0.0	0.0	0.2	0.0	0.0	0.3	ATWS is required for road crossing, rugged topography / sloped construction and topsoil segregation.
ATWS-0341	45.0R2	Carbon	0.2	0.0	0.0	0.2	0.1	0.0	0.0	ATWS is required for wetland crossing, stream crossing, road crossing, and residential construction.
ATWS-0342	45.0R2	Carbon	0.2	0.0	0.0	0.0	0.1	0.0	0.1	ATWS is required for wetland crossing, stream crossing, road crossing, and access road.
ATWS-0345	45.1	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing, stream crossing, and road crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)					Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0347	45.3	Carbon	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for rugged topography / sloped construction, road crossing and topsoil segregation.
ATWS-0346	45.1	Carbon	0.1	0.2	0.0	1.3	0.1	0.0	0.0	ATWS is required for wetland crossing, stream crossing, and road crossing.
ATWS-0348	45.4	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0349	45.4	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0350	45.5	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, and stream crossing.
ATWS-0351	45.5	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, and stream crossing.
ATWS-0353	45.6	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, stream crossing and rugged topography / sloped construction.
ATWS-0354	45.6	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, stream crossing and rugged topography / sloped construction.
ATWS-0355	45.8R2	Carbon	0.9	0.8	0.0	0.0	0.1	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction and road crossing.
ATWS-0356	46.0	Carbon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0357	46.0	Carbon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0358	46.1	Carbon	2.4	1.7	0.0	0.1	0.6	0.0	0.0	ATWS is required for topsoil segregation, road crossing, rugged topography / sloped construction and side bend construction.
ATWS-0359	47.0	Carbon	0.4	0.2	0.0	0.2	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction and road crossing.
ATWS-0360	47.1	Carbon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction and road crossing.
ATWS-0361	47.1	Carbon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction and road crossing.
ATWS-0362	47.1	Carbon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction and road crossing.
ATWS-0364	47.6	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0365	47.6	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0366	47.6	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0367	47.9	Carbon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction, topsoil segregation and wetland crossing.
ATWS-1794	48.0	Carbon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0370	48.1	Carbon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, and access road.
ATWS-0371	48.2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction stream crossing and wetland crossing.
ATWS-0372	48.2	Carbon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction stream crossing and wetland crossing.
ATWS-1790	49.3R2	Carbon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1789	49.3R2	Carbon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing, and sidebend construction
ATWS-1636	49.4R2	Carbon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1659	49.4R2	Carbon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0379	49.5R2	Carbon	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for side bend construction and commercial site construction.
ATWS-0380	49.5R2	Carbon	0.1	0.0	0.1	0.0	0.0	0.0	0.0	ATWS is required for side bend construction and commercial site construction.
ATWS-0381	49.6R2	Carbon	0.6	0.0	0.6	0.0	0.0	0.0	0.0	ATWS is required for road crossing and commercial site construction.
ATWS-1645	49.9R2	Carbon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for residential construction.
ATWS-1785	50.0R2	Carbon	1.1	0.0	1.1	0.0	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction.
ATWS-1646	50.5R2	Carbon	0.1	0.0	0.1	0.0	0.0	0.0	0.0	ATWS is required for bore
ATWS-1647	50.5R2	Carbon	0.1	0.0	0.1	0.0	0.0	0.0	0.0	ATWS is required for bore
ATWS-0384	50.9R2	Carbon	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for road crossing, side bend construction, and facility site construction.
ATWS-1783	51.0R2	Carbon	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for bore
ATWS-1782	51.0R2	Carbon	1.0	0.0	0.0	1.0	0.0	0.0	0.0	ATWS is required for bore
ATWS-1780	51.2R2	Northampton	0.8	0.0	0.0	0.7	0.1	0.0	0.0	ATWS is required for bore.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1781	51.2R2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for bore.
ATWS-0390	52.5	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for pipeline bend and rugged topography / sloped construction
ATWS-1658	52.2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1625	52.2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1657	52.2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1634	52.3	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1655	52.3	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1633	52.4	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1656	52.4	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1632	52.4	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1653	52.4	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0391	52.4	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for pipeline bend and rugged topography / sloped construction
ATWS-1654	52.4	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0394	52.5	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for pipeline bend and rugged topography / sloped construction
ATWS-0393	52.6	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for access road
ATWS-1652	52.6	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1629	52.6	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0395	52.7	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for pipeline bend and rugged topography / sloped construction
ATWS-1651	52.7	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1627	52.9	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-1626	53.0	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0398	53.3R2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for side bend construction and stream crossing
ATWS-0399	53.3	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for side bend construction and stream crossing
ATWS-0400	53.3	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for side bend construction and stream crossing
ATWS-0401	53.4	Northampton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing
ATWS-0402	53.4	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0403	53.4	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and wetland crossing
ATWS-0404	53.4	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and wetland crossing
ATWS-1650	53.5	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0405	53.5	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing and side bend construction
ATWS-0406	53.5	Northampton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing and side bend construction
ATWS-0407	53.6	Northampton	0.3	0.2	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0408	53.7	Northampton	1.3	1.1	0.0	0.2	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0409	54.0	Northampton	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0410	54.1	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0411	54.1	Northampton	0.3	0.2	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0412	54.2	Northampton	0.4	0.3	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, pipeline bend and wetland crossing
ATWS-0413	54.3	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and wetland crossing
ATWS-0414	54.3	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and wetland crossing
ATWS-1639	54.3	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and wetland crossing.
ATWS-0415	54.4	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing and rugged topography / sloped construction
ATWS-0416	54.6	Northampton	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, pipeline bend, road crossing and rugged topography / sloped construction
ATWS-0417	54.7	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0422	55.2	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, pipeline bend and rugged topography / sloped construction

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0423	55.3	Northampton	0.4	0.3	0.1	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, pipeline bend, road crossing and rugged topography / sloped construction
ATWS-0424	55.3	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing and rugged topography / sloped construction
ATWS-0425	55.3	Northampton	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, pipeline bend and rugged topography / sloped construction
ATWS-0426	55.4	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0427	55.5	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0428	55.5	Northampton	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing and pipeline bend
ATWS-1648	55.6	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1756	55.6	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1649	55.7	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0429	55.7	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing and rugged topography / sloped construction
ATWS-1755	55.8	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0431	55.9	Northampton	0.1	0.0	0.1	0.0	0.0	0.0	0.0	ATWS is required for stream crossing / rugged topography / sloped construction
ATWS-0434	56.0	Northampton	0.3	0.1	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, side bend construction and topsoil segregation
ATWS-0435	56.0	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland crossing
ATWS-0436	56.1	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0437	56.3	Northampton	1.1	1.0	0.0	0.1	0.0	0.0	0.1	ATWS is required for topsoil segregation, pipeline bend, road crossing and rugged topography / sloped construction
ATWS-0438	56.6	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and pipeline bend
ATWS-0439	56.6	Northampton	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for road crossing and stream crossing
ATWS-0440	56.6	Northampton	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing
ATWS-0441	56.7	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0442	56.7	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing
ATWS-0443	56.8	Northampton	0.4	0.3	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and pipeline bend
ATWS-0444	56.9	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing and rugged topography / sloped construction
ATWS-0445	57.0	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing and rugged topography / sloped construction
ATWS-0446	57.0	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing and rugged topography / sloped construction
ATWS-0447	57.0	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing and rugged topography / sloped construction
ATWS-0448	57.0	Northampton	0.9	0.8	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, pipeline bend and rugged topography / sloped construction
ATWS-0449	57.4	Northampton	0.5	0.3	0.1	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, pipeline bend and rugged topography / sloped construction
ATWS-0450	57.5	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing and pipeline bend
ATWS-0453	57.6R2	Northampton	0.5	0.5	0.0	0.0	0.0	0.0	0.4	ATWS is required for residential construction, topsoil segregation, road crossing and rugged topography / sloped construction
ATWS-1673	57.8R2	Northampton	0.2	0.1	0.1	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0456	57.8R2	Northampton	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-1672	57.8R2	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1676	58.0R2	Northampton	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-1671	58.1R2	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0460	58.1R2	Northampton	1.8	1.7	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation and rugged topography / sloped construction
ATWS-1670	58.2R2	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0461	58.5	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0462	58.5	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing
ATWS-0463	58.5	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing
ATWS-0464	58.6	Northampton	0.8	0.7	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation, pipeline bend, road crossing and rugged topography / sloped construction
ATWS-0465	58.9	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0466	58.9	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0467	58.9	Northampton	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing and stream crossing
ATWS-0468	59.0	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing and road crossing
ATWS-0469	59.0	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing and road crossing
ATWS-0470	59.0	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing and road crossing
ATWS-0471	59.0	Northampton	0.6	0.3	0.0	0.3	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0472	59.2	Northampton	0.2	0.0	0.0	0.0	0.0	0.0	0.2	ATWS is required for topsoil segregation and road crossing
ATWS-0473	59.2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing and stream crossing
ATWS-0474	59.2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing and stream crossing
ATWS-0475	59.3	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing and rugged topography / sloped construction
ATWS-0476	59.3	Northampton	1.1	0.6	0.0	0.5	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing, topsoil segregation, and rugged topography / sloped construction
ATWS-1644	59.5R2	Northampton	2.8	0.8	0.0	2.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, and rugged topography / sloped construction
ATWS-0477	60.2	Northampton	0.5	0.4	0.1	0.0	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing and rugged topography / sloped construction
ATWS-0478	60.3	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing and road crossing
ATWS-0479	60.3	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing and road crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0480	60.3	Northampton	0.3	0.1	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing
ATWS-0481	60.3	Northampton	1.4	1.1	0.0	0.3	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing
ATWS-1925	60.5	Northampton	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for water storage to be utilized for hydrostatic testing of the pipeline.
ATWS-0483	60.6	Northampton	0.2	0.0	0.0	0.0	0.0	0.0	0.2	ATWS is required for road crossing, stream crossing and wetland crossing
ATWS-0484	60.6	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing and wetland crossing
ATWS-0485	60.7	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and wetland crossing
ATWS-0486	60.7	Northampton	2.0	1.8	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing and topsoil segregation
ATWS-0487	61.4	Northampton	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, and road crossing
ATWS-0488	61.4	Northampton	0.2	0.1	0.0	0.1	0.0	0.0	0.1	ATWS is required for topsoil segregation, road crossing, and stream crossing.
ATWS-0489	61.4	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-0490	61.4	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for road crossing and stream crossing.
ATWS-0491	61.5R2	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing, and road crossing.
ATWS-1707	61.5R2	Northampton	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0493	61.7R2	Northampton	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing, topsoil segregation and road crossing.
ATWS-1660	61.9R2	Northampton	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-1664	62.0R2	Northampton	0.1	0.0	0.1	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1833	62.0R2	Northampton	0.8	0.7	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0501	62.3R2	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for stream crossing and road crossing.
ATWS-0503	62.3R2	Northampton	0.1	0.0	0.1	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-0504	62.4R2	Northampton	0.8	0.7	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0506	62.6	Northampton	0.9	0.5	0.4	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, side bend construction, road crossing, and stream crossing.
ATWS-0507	62.7	Northampton	0.4	0.0	0.4	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-0508	62.8	Northampton	0.5	0.0	0.5	0.0	0.0	0.0	0.0	ATWS is required for access road, stream crossing, and railroad crossing
ATWS-0509	62.8	Northampton	0.3	0.0	0.0	0.0	0.3	0.0	0.0	ATWS is required for topsoil segregation, stream crossing, and railroad crossing.
ATWS-0510	62.8	Northampton	2.3	1.9	0.0	0.1	0.3	0.0	0.0	ATWS is required for rugged topography/sloped construction topsoil segregation, stream crossing and railroad crossing.
ATWS-0511	63.3	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for access road.
ATWS-0512	63.5	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-1665	63.6R2	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0515	63.7R2	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and side bend construction.
ATWS-0518	63.7R2	Northampton	0.2	0.0	0.0	0.0	0.0	0.0	0.2	ATWS is required for road crossing, topsoil segregation, stream crossing, and side bend construction.
ATWS-0519	63.8	Northampton	0.0	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation, stream crossing, and side bend construction.
ATWS-0520	63.8	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-0521	63.9	Northampton	0.4	0.0	0.0	0.2	0.2	0.0	0.0	ATWS is required for side bend construction and topsoil segregation.
ATWS-0522	63.9	Northampton	0.9	0.0	0.0	0.5	0.0	0.0	0.4	ATWS is required for side bend construction and topsoil segregation.
ATWS-1696	64.1R2	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for equipment mobility.
ATWS-1695	64.2R1	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for equipment mobility.
ATWS-0525	64.2R2	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation, road crossing, and wetland crossing.
ATWS-1922	64.3R2	Northampton	0.2	0.0	0.0	0.0	0.0	0.0	0.2	ATWS is required for road crossing.
ATWS-0526	64.4	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0527	64.3R2	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and wetland crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0528	64.5	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and pipeline crossing.
ATWS-0529	64.5	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and pipeline crossing.
ATWS-0530	64.5	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and pipeline crossing.
ATWS-0531	64.6	Northampton	0.6	0.6	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and pipeline crossing.
ATWS-0532	65.0	Northampton	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, side bend construction, and road crossing.
ATWS-0534	65.0	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation and road crossing.
ATWS-0535	65.1	Northampton	0.3	0.0	0.0	0.0	0.0	0.0	0.3	ATWS is required for topsoil segregation and road crossing.
ATWS-0536	65.1	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0537	65.1	Northampton	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-0538	65.4	Northampton	1.6	1.4	0.0	0.0	0.0	0.0	0.2	ATWS is required for topsoil segregation, side bend construction, and road crossing.
ATWS-0539	65.7	Northampton	0.4	0.3	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation, side bend construction, and road crossing.
ATWS-0540	65.8	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0541	65.8	Northampton	1.3	1.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and side bend construction.
ATWS-0542	66.2	Northampton	1.6	1.5	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and side bend construction.
ATWS-0544	66.7	Northampton	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0545	66.8	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0546	66.8	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0547	66.9	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0549	66.9	Northampton	2.1	2.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0548	67.0	Northampton	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and access road.
ATWS-0550	67.5	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0551	67.6R2	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and foreign pipeline crossing.
ATWS-1881	67.6R2	Northampton	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1867	67.7R2	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0553	67.8R2	Northampton	0.4	0.0	0.4	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, side bend construction, and foreign pipeline crossing.
ATWS-0554	67.8R2	Northampton	1.3	0.7	0.5	0.1	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0555	68.2R2	Northampton	0.5	0.4	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation and road crossing.
ATWS-0556	68.3	Northampton	0.2	0.1	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation and road crossing.
ATWS-0557	68.4	Northampton	0.7	0.0	0.0	0.2	0.5	0.0	0.0	ATWS is required for road crossing and side bend construction.
ATWS-0559	68.4	Northampton	0.7	0.0	0.0	0.0	0.7	0.0	0.0	ATWS is required for road crossing.
ATWS-0558	68.5	Northampton	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for topsoil segregation and residential construction.
ATWS-0560	68.7	Northampton	0.6	0.0	0.0	0.0	0.6	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and residential construction.
ATWS-0561	68.8	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for access road, topsoil segregation, road crossing, and residential construction.
ATWS-0562	68.8	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for access road, road crossing, and residential construction.
ATWS-0564	68.9	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for residential construction, side bend construction, and road crossing.
ATWS-0567	69.0R2	Northampton	1.6	0.0	0.1	0.2	1.2	0.0	0.0	ATWS is required for residential construction, side bend construction, and topsoil segregation.
ATWS-0568	69.7	Northampton	0.4	0.0	0.3	0.0	0.1	0.0	0.0	ATWS is required for residential construction and side bend construction.
ATWS-0570	69.8	Northampton	0.8	0.0	0.8	0.0	0.0	0.0	0.0	ATWS is required for road crossing, HDD construction and parking lot crossing.
ATWS-0571	69.8	Northampton	0.6	0.0	0.5	0.0	0.1	0.0	0.0	ATWS is required for road crossing, HDD construction and parking lot crossing.
ATWS-0572	70.3	Northampton	2.2	2.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, major river, road crossing, and HDD construction.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0572.01	70.5	Northampton	1.7	1.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, major river, road crossing, and HDD construction.
ATWS-0574	70.5	Northampton	1.0	1.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, major river, road crossing, and HDD construction.
ATWS-0573	70.5	Northampton	2.9	2.9	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, major river, road crossing, and HDD construction.
ATWS-0576	71.3	Northampton	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for major river, road crossing, HDD construction and rugged topography / sloped construction.
ATWS-0577	71.3	Northampton	0.6	0.0	0.0	0.3	0.3	0.0	0.0	ATWS is required for major river, road crossing, HDD construction, stream crossing, and rugged topography / sloped construction.
ATWS-0578	71.4	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0579	71.5	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1105[1]	71.6	Northampton	-	-	-	-	-	-	-	ATWS is required for launcher/receiver.
ATWS-0598	72.0	Northampton	0.7	0.5	0.1	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, wetland crossing, and stream crossing.
ATWS-0599	72.0	Northampton	1.1	0.7	0.0	0.2	0.0	0.0	0.2	ATWS is required for topsoil segregation, road crossing, wetland crossing, and stream crossing.
ATWS-0600	72.2	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-0601	72.3	Northampton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-0603	72.5	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0604	72.5	Northampton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0605	72.6	Northampton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0606	72.7	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction, wetland crossing and stream crossing.
ATWS-0607	72.9	Northampton	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for access road, wetland crossing, and stream crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0608	73.0	Northampton	0.5	0.0	0.0	0.0	0.0	0.0	0.5	ATWS is required for topsoil segregation, wetland crossing, stream crossing, and road crossing.
ATWS-0609	73.0	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, stream crossing, and road crossing.
ATWS-0612	73.2	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and side bend construction.
ATWS-1834	73.2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, stream crossing and road crossing.
ATWS-1868	73.6R2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1869	73.6R2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1840	73.6R2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1841	73.6R2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1839	73.7R2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1879	73.7R2	Northampton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1880	73.7R2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1878	73.8R2	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1877	73.8R2	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1875	73.9R2	Northampton	0.2	0.0	0.1	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1876	73.9R2	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-0622	74.0	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for access road and side bend construction
ATWS-0623	74.0	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for access road and side bend construction
ATWS-0624	74.0	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing.
ATWS-0625	74.0	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing.
ATWS-0626	74.1	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing.
ATWS-0627	74.1	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for foreign pipeline crossing.
ATWS-0628	74.3	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0630	74.4	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-1874	74.4	Northampton	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-1837	75.8	Northampton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0632	74.6	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0631	74.6	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and stream crossing.
ATWS-0633	74.7	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0634	74.7	Northampton	0.8	0.7	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing, wetland crossing and rugged topography / sloped construction.
ATWS-0635	74.9	Northampton	0.2	0.0	0.0	0.0	0.2	0.0	0.0	ATWS is required for wetland crossing, stream crossing, and road crossing.
ATWS-0637	75.0	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0638	75.0	Northampton	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0639	75.1	Northampton	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and side bend construction.
ATWS-0640	75.5	Northampton	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing and rugged topography / sloped construction.
ATWS-0641	75.5	Northampton	0.3	0.3	0.0	0.4	0.3	0.0	0.0	ATWS is required for topsoil segregation, stream crossing and rugged topography / sloped construction.
ATWS-1838	75.7	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland and stream crossing.
ATWS-0642	75.7	Northampton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing and rugged topography / sloped construction.
ATWS-0643	75.8	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing.
ATWS-0644	75.8	Northampton	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing, topsoil segregation, road crossing and rugged topography / sloped construction.
ATWS-0645	75.9	Northampton	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, and road crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0646	75.9	Bucks	0.2	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0647	75.9	Bucks	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing / residential construction
ATWS-0648	76.0	Bucks	0.6	0.6	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing / residential construction
ATWS-0649	76.1	Bucks	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0650	76.2	Bucks	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation / road crossing, and stream crossing
ATWS-0651	76.2	Bucks	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography / sloped construction.
ATWS-0652	76.3	Bucks	0.7	0.5	0.0	0.2	0.0	0.0	0.0	ATWS is required for topsoil segregation and rugged topography / sloped construction.
ATWS-0653	76.5	Bucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for access road, topsoil segregation, and road crossing.
ATWS-0654	76.5	Bucks	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for access road, topsoil segregation, and road crossing.
ATWS-0655	76.5	Bucks	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0656	76.6	Bucks	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0657	76.7	Bucks	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0658	76.7	Bucks	0.1	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-1883	76.9R2	Bucks	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-1884	76.9R2	Bucks	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-1893	77.1R2	Bucks	1.8	1.7	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-0659	77.1R2	Bucks	1.1	1.1	0.0	0.8	0.0	0.0	0.0	ATWS is required for HDD construction.
ATWS-0660	77.3	Bucks	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, stream crossing, and HDD construction.
Hellertown Lateral										
ATWS-0580	0.0	Northampton	0.8	0.0	0.0	0.2	0.6	0.0	0.0	ATWS is required for road crossing, stream crossing, topsoil segregation, and facility site construction
ATWS-0581	0.3	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0582	0.3	Northampton	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing
ATWS-0583	0.6	Northampton	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction
ATWS-0584	0.7	Northampton	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for residential construction
ATWS-0586	0.7	Northampton	0.3	0.0	0.0	0.0	0.1	0.0	0.2	ATWS is required for residential construction and road crossing
ATWS-0585	0.8	Northampton	2.0	0.8	0.1	1.1	0.0	0.0	0.0	ATWS is required for residential construction, road crossing, topsoil segregation, and rugged topography /sloped construction
ATWS-0587	0.8	Northampton	0.2	0.0	0.0	0.0	0.0	0.0	0.2	ATWS is required for residential construction, road crossing, and topsoil segregation
ATWS-0588	1.2	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-0590	1.3	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-0593	1.3	Northampton	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-0596	1.3	Northampton	0.5	0.4	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0594	1.4	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and rugged topography / sloped construction
ATWS-0595	1.4	Northampton	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing
ATWS-0589	1.6	Northampton	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, foreign pipeline crossing, and rugged topography / sloped construction
ATWS-0591	1.7	Northampton	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, foreign pipeline crossing, and rugged topography / sloped construction
ATWS-0592	1.7	Northampton	1.7	0.2	0.0	1.4	0.1	0.0	0.0	ATWS is required for topsoil segregation, foreign pipeline crossing, and rugged topography / sloped construction
ATWS-0597	2.0R2	Northampton	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for topsoil segregation, foreign pipeline crossing, and rugged topography / sloped construction
		Pennsylvania Total	**226.4**	**81.9**	**13.3**	**99.5**	**12.1**	**10.9**	**8.7**	
New Jersey Mainline										

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0661	77.9	Hunterdon	0.9	0.8	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and residential construction.
ATWS-0662	77.9	Hunterdon	1.0	0.2	0.1	0.7	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and residential construction.
ATWS-0663	78.1	Hunterdon	0.5	0.4	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-0665	78.3	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for residential construction and road crossing.
ATWS-0664	78.3	Hunterdon	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation, road crossing, and residential construction.
ATWS-0666	78.3	Hunterdon	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for road crossing.
ATWS-0667	78.3	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0668	78.7R2	Hunterdon	0.4	0.0	0.0	0.1	0.3	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-1252	78.9R2	Hunterdon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for sloped construction and rugged topography.
ATWS-1253	78.9R2	Hunterdon	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for sloped construction and rugged topography.
ATWS-1882	79.0R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for slope construction and rugged topography.
ATWS-1254	79.4R2	Hunterdon	0.2	0.0	0.0	0.0	0.0	0.0	0.2	ATWS is required for road crossing and soil segregation.
ATWS-1255	79.4R2	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for gas line crossing and power line crossing
ATWS-1175	79.5R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for gas line crossing, power line crossing, side bend construction, and road crossing.
ATWS-1866	79.6R2	Hunterdon	0.3	0.2	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation, road crossing, and residential construction.
ATWS-1865	79.6R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing, topsoil segregation, and residential construction.
ATWS-1864	79.7R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-1863	79.7R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-1862	79.8R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1861	79.8R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1860	79.9R2	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-1859	80.0R2	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1858	80.0R2	Hunterdon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1856	80.1R2	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation.
ATWS-1857	80.1R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1855	80.2R2	Hunterdon	0.5	0.4	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation.
ATWS-1851	80.3R2	Hunterdon	0.3	0.1	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1852	80.4R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-1854	80.4R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-1853	80.4R2	Hunterdon	0.8	0.7	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation.
ATWS-1850	80.6R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1849	80.6R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and foreign utility crossing.
ATWS-1835	80.7R2	Hunterdon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1836	80.7R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1847	80.8R2	Hunterdon	0.2	0.0	0.0	0.1	0.0	0.0	0.1	ATWS is required for road crossing and stream crossing.
ATWS-1848	80.8R2	Hunterdon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-1846	80.8R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing.
ATWS-1844	80.9R2	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, reduced temporary workspace along colocation and side bend construction
ATWS-1845	80.9R2	Hunterdon	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for road crossing, reduced temporary workspace along colocation and side bend construction
ATWS-1843	81.0R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, reduced temporary workspace along colocation and side bend construction
ATWS-1842	81.0R2	Hunterdon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing, reduced temporary workspace along colocation and side bend construction
ATWS-1871	81.1R2	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for stream crossing.
ATWS-1870	81.2R2	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for stream crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1873	81.4R2	Hunterdon	0.3	0.0	0.0	0.0	0.3	0.0	0.0	ATWS is required for stream crossing.
ATWS-1872	81.5R2	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for stream crossing.
ATWS-1210	81.6R2	Hunterdon	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-1209	81.7R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-1211	81.8R2	Hunterdon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-0709	81.6	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and residential construction.
ATWS-0710	81.6	Hunterdon	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation, road crossing, and residential construction.
ATWS-0711	81.7	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0712	81.7	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and wetland crossing.
ATWS-0713	81.8	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-0714	81.8	Hunterdon	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction and road crossing.
ATWS-0715	81.8	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0716	81.9	Hunterdon	0.5	0.4	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0717	82.0	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction and road crossing.
ATWS-0718	82.0	Hunterdon	0.4	0.4	0.0	0.4	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction and road crossing.
ATWS-0725	82.5R2	Hunterdon	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for HDD and topsoil segregation.
ATWS-1888	82.5R2	Hunterdon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for HDD.
ATWS-0726	82.7	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-0727	82.8	Hunterdon	1.1	0.7	0.0	0.0	0.4	0.0	0.0	ATWS is required for wetland crossing, stream crossing, rugged topography / sloped construction, road crossing, and topsoil segregation.
ATWS-0728	82.8	Hunterdon	0.3	0.1	0.0	0.0	0.2	0.0	0.0	ATWS is required for rugged topography / sloped construction, road crossing, and topsoil segregation.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0729	82.9	Hunterdon	0.6	0.6	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation, and stream crossing.
ATWS-0730	83.1	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0731	83.2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-0732	83.2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and road crossing.
ATWS-0733	83.2	Hunterdon	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for road crossing and rugged topography / sloped construction.
ATWS-0734	83.2	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and rugged topography / sloped construction.
ATWS-0735	83.4	Hunterdon	0.6	0.0	0.0	0.6	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction.
ATWS-0736	83.7	Hunterdon	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing, and wetland crossing.
ATWS-0738	83.9	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing and wetland crossing.
ATWS-0739	84.0	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for wetland crossing and road crossing.
ATWS-0740	84.0	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for wetland crossing.
ATWS-0741	84.2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-0742	84.2	Hunterdon	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0743	84.4	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and rugged topography / sloped construction.
ATWS-0744	84.5	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and rugged topography / sloped construction.
ATWS-1892	84.5	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0746	84.6	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing, stream crossing, and topsoil segregation.
ATWS-1212	84.7R1	Hunterdon	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, stream crossing, and driveway crossing.
ATWS-1213	84.7R1	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, stream crossing, and driveway crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1214	84.8R1	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-1215	84.8R1	Hunterdon	0.7	0.6	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-1216	85.1R1	Hunterdon	0.3	0.1	0.0	0.1	0.0	0.0	0.1	ATWS is required for topsoil segregation.
ATWS-1217	85.2R1	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-1218	85.3R1	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for wetland and stream crossing.
ATWS-1219	85.4R1	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1220	85.4R1	Hunterdon	0.3	0.2	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing.
ATWS-1257	85.5R1	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-1221	85.5R1	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland and stream crossing.
ATWS-1222	85.6R1	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland and stream crossing.
ATWS-1223	85.6R1	Hunterdon	0.0	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland and stream crossing.
ATWS-1224	85.67R1	Hunterdon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland and stream crossing.
ATWS-1225	85.7R1	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing.
ATWS-1226	85.7R1	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation.
ATWS-1227	85.8R1	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation.
ATWS-1228	85.8R1	Hunterdon	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation.
ATWS-1229	86.0R1	Hunterdon	1.2	1.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland, and stream crossing.
ATWS-1230	86.2R1	Hunterdon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland, and stream crossing.
ATWS-1231	86.3R1	Hunterdon	0.5	0.0	0.0	0.0	0.5	0.0	0.0	ATWS is required for soil segregation, wetland and stream crossing, and road crossing.
ATWS-1232	86.3R1	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for soil segregation, wetland and stream crossing, and road crossing.
ATWS-1233	86.4R1	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0767	85.8	Hunterdon	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, residential construction, road crossing, wetland crossing, and stream crossing.
ATWS-0768	85.8	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-0769	85.9	Hunterdon	0.6	0.6	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-0770	86.0	Hunterdon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-0771	86.0	Hunterdon	0.9	0.9	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-0774	86.3	Hunterdon	1.1	1.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing.
ATWS-0772	86.4	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for access road and topsoil segregation.
ATWS-0773	86.4	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for access road and topsoil segregation.
ATWS-1258	86.7R1	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for soil segregation, wetland and stream crossing.
ATWS-1260	86.8R1	Hunterdon	0.2	0.0	0.0	0.1	0.0	0.0	0.1	ATWS is required for access road.
ATWS-1261	87.0R1	Hunterdon	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-0780	87.0R1	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.
ATWS-0783	87.4	Hunterdon	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for road crossing.
ATWS-0784	87.4	Hunterdon	0.2	0.0	0.1	0.0	0.1	0.0	0.0	ATWS is required for road crossing.
ATWS-0785	87.4	Hunterdon	0.2	0.0	0.0	0.0	0.2	0.0	0.0	ATWS is required for road crossing, wetland crossing, and topsoil segregation.
ATWS-0786	87.4	Hunterdon	0.3	0.0	0.0	0.0	0.3	0.0	0.0	ATWS is required for road crossing, wetland crossing, topsoil segregation, and residential construction
ATWS-0787	87.7	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing, and wetland crossing
ATWS-0788	87.7	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing, and wetland crossing
ATWS-0789	87.7	Hunterdon	0.3	0.0	0.0	0.3	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing, and wetland crossing
ATWS-0790	87.7	Hunterdon	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing, wetland crossing, and rugged topography / sloped construction
ATWS-0791	87.9	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing, and topsoil segregation

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0792	87.9	Hunterdon	0.5	0.4	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing, and topsoil segregation
ATWS-0793	88.1R2	Hunterdon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-0794	88.2R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-0795	88.2R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-0796	88.2R2	Hunterdon	0.7	0.7	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation, wetland crossing, and stream crossing
ATWS-0797	88.3R2	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and stream crossing
ATWS-0798	88.5R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing, and rugged topography / sloped construction
ATWS-0799	88.5R2	Hunterdon	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing, and rugged topography / sloped construction
ATWS-0800	88.7	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, and stream crossing
ATWS-0801	88.8	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing, and rugged topography / sloped construction
ATWS-0802	88.8	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing, and rugged topography / sloped construction
ATWS-0803	88.8	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation, and rugged topography / sloped construction
ATWS-0804	88.8	Hunterdon	0.3	0.2	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation, and rugged topography / sloped construction
ATWS-0806	88.9	Hunterdon	0.6	0.6	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0807	89.5	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, and stream crossing
ATWS-0808	89.5	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for road crossing, wetland crossing, stream crossing, and rugged topography / sloped construction

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0809	89.6R2	Hunterdon	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream and wetland crossing, topsoil segregation, and rugged topography.
ATWS-0810	89.6R2	Hunterdon	1.5	1.4	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream and wetland crossing and topsoil segregation.
ATWS-1262	89.9R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream and wetland crossing, and rugged topography.
ATWS-1263	90.0R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream and wetland crossing, and rugged topography.
ATWS-1264	90.0R2	Hunterdon	1.4	1.0	0.4	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-1265	90.4R2	Hunterdon	0.2	0.0	0.1	0.0	0.0	0.0	0.1	ATWS is required for road crossing.
ATWS-1266	90.5R2	Hunterdon	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-1267	90.5R2	Hunterdon	0.2	0.0	0.2	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0819	90.7	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing residential construction and topsoil segregation
ATWS-0820	90.8	Hunterdon	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing residential construction and topsoil segregation
ATWS-0821	90.8	Hunterdon	0.2	0.0	0.0	0.0	0.0	0.0	0.2	ATWS is required for wetland crossing residential construction and topsoil segregation
ATWS-0822	90.8	Hunterdon	0.3	0.0	0.0	0.0	0.0	0.0	0.3	ATWS is required for wetland crossing residential construction and topsoil segregation
ATWS-0824	90.9	Hunterdon	3.7	3.6	0.1	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing, and HDD construction.
ATWS-1234	91.4R2	Hunterdon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for HDD construction.
ATWS-1235	92.6R2	Hunterdon	0.8	0.7	0.0	0.1	0.0	0.0	0.0	ATWS is required for HDD construction.
ATWS-1236	92.6R2	Hunterdon	0.9	0.8	0.0	0.1	0.0	0.0	0.0	ATWS is required for HDD construction and topsoil segregation.
ATWS-1238	92.8R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0847	93.1	Hunterdon	0.3	0.2	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, stream crossing, and wetland crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0848	93.1	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, stream crossing, and wetland crossing
ATWS-0849	93.3R2	Hunterdon	0.9	0.0	0.0	0.9	0.0	0.0	0.0	ATWS is required for HDD
ATWS-1886	93.3R2	Hunterdon	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for HDD and equipment mobility.
ATWS-0852	93.9R2	Hunterdon	0.5	0.0	0.0	0.2	0.3	0.0	0.0	ATWS is required for HDD
ATWS-1885	93.9R2	Hunterdon	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for HDD.
ATWS-0854	94.3R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing
ATWS-0855	94.3R2	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for wetland crossing
ATWS-0857	94.4R2	Hunterdon	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0858	94.5R2	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing and stream crossing
ATWS-0859	94.6R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing
ATWS-0860	94.6R2	Hunterdon	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing
ATWS-1887	94.7R2	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for HDD
ATWS-0875	95.4R2	Hunterdon	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0877	95.4R2	Hunterdon	0.8	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-0878	95.5R2	Hunterdon	0.8	0.8	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-0879	95.5	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0880	95.6	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0881	95.9	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0882	96.0	Hunterdon	0.3	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing
ATWS-0883	96.1	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing
ATWS-0884	96.1	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing
ATWS-0885	96.2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing
ATWS-0886	96.3R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0887	96.3R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation
ATWS-0889	96.3R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing, topsoil segregation, and road crossing
ATWS-1889	96.3R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and stream crossing.
ATWS-0890	96.3R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for access road and road crossing
ATWS-1890	96.4R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-1891	96.5R2	Hunterdon	0.9	0.9	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing.
ATWS-0899	97.1R2	Hunterdon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0900	97.1R2	Hunterdon	0.6	0.5	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and wetland crossing
ATWS-0902	97.3R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-0901	97.3R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and wetland crossing
ATWS-0903	97.4	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for stream crossing, wetland crossing and road crossing
ATWS-0904	97.4	Hunterdon	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for side bend construction, topsoil segregation and wetland crossing
ATWS-0905	97.5	Hunterdon	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-0906	97.6	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-0907	97.6	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-0908	97.6	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-0909	97.6	Hunterdon	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for Utility crossing, forested construction and residential construction
ATWS-0910	97.7	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for Utility crossing, Forested construction and residential construction
ATWS-0911	97.8	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for Utility crossing, Forested construction, topsoil segregation and residential construction
ATWS-0912	97.8	Hunterdon	0.1	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for Utility crossing, Forested construction, topsoil segregation and residential construction

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-0913	97.8	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and residential construction
ATWS-0914	97.8	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-0915	97.9	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-0916	97.9	Hunterdon	1.6	1.5	0.0	0.1	0.0	0.0	0.2	ATWS is required for road crossing and topsoil segregation
ATWS-1919	98.2R2	Hunterdon	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for HDD
ATWS-0926	98.8	Hunterdon	0.9	0.44	0.0	0.5	0.0	0.0	0.0	ATWS is required for wetland crossing and topsoil segregation
ATWS-1267.01	99.3R2	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1917	99.3R2	Hunterdon	0.7	0.5	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation.
ATWS-1268	99.6R2	Hunterdon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-1269	99.6R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and soil segregation.
ATWS-1270	99.6R2	Hunterdon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and soil segregation.
ATWS-1271	99.7R2	Hunterdon	2.3	2.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for HDD construction and topsoil segregation.
ATWS-1272	99.7R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for HDD construction and topsoil segregation.
ATWS-0969	101.0R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing
ATWS-0970	101.0R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing
ATWS-0971	101.1R2	Hunterdon	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation
ATWS-0972	101.1R2	Hunterdon	0.7	0.6	0.0	0.0	0.0	0.0	0.1	ATWS is required for topsoil segregation
ATWS-0973	101.3R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-0974	101.3R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and stream crossing
ATWS-0975	101.3R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, road crossing, and stream crossing
ATWS-1276	101.4R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and soil segregation.
ATWS-1277	101.4R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and soil segregation.
ATWS-1278	101.4R2	Hunterdon	1.3	1.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation.

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1913	101.9R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation
ATWS-0983	102.0R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing
ATWS-0984	102.0R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography / sloped construction
ATWS-0985	102.1R2	Hunterdon	0.5	0.5	0.0	0.5	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, road crossing and stream crossing
ATWS-0986	102.2R2	Hunterdon	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, road crossing and stream crossing
ATWS-0987	102.2R2	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, and road crossing
ATWS-0988	102.2R2	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, and road crossing
ATWS-0989	102.2R2	Hunterdon	1.1	1.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, rugged topography / sloped construction, and road crossing
ATWS-0990	102.3R2	Hunterdon	0.9	0.9	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and rugged topography / sloped construction
ATWS-0993	102.6	Hunterdon	0.6	0.0	0.0	0.5	0.1	0.0	0.0	ATWS is required for Utility crossing
ATWS-1915	102.8R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing
ATWS-1914	102.8R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing
ATWS-1912	102.9R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for raod crossing, wetland crossing and stream crossing.
ATWS-1918	102.9R2	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing and stream crossing
ATWS-1903	103.0R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing
ATWS-1900	103.0R2	Hunterdon	0.2	0.0	0.0	0.1	0.0	0.0	0.1	ATWS is required for road crossing and stream crossing
ATWS-1901	103.1R2	Hunterdon	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for road crossing and stream crossing
ATWS-1902	103.1R2	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	00	ATWS is required for road crossing and stream crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1002	103.4	Hunterdon	0.8	0.0	0.0	0.8	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction
ATWS-1003	103.6	Hunterdon	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1004	103.6	Hunterdon	0.2	0.0	0.0	0.1	0.0	0.0	0.1	ATWS is required for road crossing
ATWS-1005	103.6	Hunterdon	0.2	0.0	0.0	0.0	0.1	0.0	0.1	ATWS is required for road crossing and residential construction
ATWS-1006	103.6	Hunterdon	0.4	0.0	0.0	0.0	0.4	0.0	0.0	ATWS is required for road crossing
ATWS-1007	103.7	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and rugged topography / sloped construction
ATWS-1008	103.7	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and rugged topography / sloped construction
ATWS-1009	103.8	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and rugged topography / sloped construction
ATWS-1010	103.8	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and rugged topography / sloped construction
ATWS-1011	103.8	Hunterdon	1.2	0.0	0.0	1.1	0.1	0.0	0.0	ATWS is required for rugged topography / sloped construction and road crossing
ATWS-1012	104.0	Hunterdon	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for rugged topography / sloped construction and road crossing
ATWS-1014	104.1R2	Hunterdon	0.8	0.4	0.0	0.4	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-1282	104.1R2	Hunterdon	0.4	0.3	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-1910	104.3R2	Hunterdon	0.2	0.1	0.0	0.1	0.0	0.0	0.0	ATWS is required for side bend construction and topsoil segregation
ATWS-1016	104.3R2	Hunterdon	1.3	1.2	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing, Utility crossing and topsoil segregation
ATWS-1909	104.4R2	Hunterdon	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for side bend construction and topsoil segregation
ATWS-1905	104.5R2	Mercer	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS if required for Utility crossing and side bend construction
ATWS-1017	104.5R2	Mercer	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for Utility crossing and side bend construction
ATWS-1926	104.5R2	Mercer	0.7	0.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for water storage to be utilized for hydrostatic testing of the pipeline.
ATWS-1238	104.6R2	Mercer	0.8	0.0	0.0	0.8	0.0	0.0	0.0	ATWS is required for road crossing and stream crossing
ATWS-1021	104.8R2	Mercer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1022	104.8R2	Mercer	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for stream crossing and topsoil segregation
ATWS-1284	104.8R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing
ATWS-1027	104.9R2	Mercer	2.2	2.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation, Utility crossing, rugged topography / sloped construction, wetland crossing, and stream crossing
ATWS-1026	104.9R2	Mercer	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction, road crossing, topsoil segregation, and Utility crossing
ATWS-1286	105.3R2	Mercer	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing, stream crossing and soil segregation
ATWS-1287	105.3R2	Mercer	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and soil segregation
ATWS-1288	105.3R2	Mercer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-1029	105.4R2	Mercer	0.6	0.6	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and wetland crossing
ATWS-1030	105.4R2	Mercer	0.8	0.7	0.0	0.1	0.0	0.0	0.0	ATWS is required for topsoil segregation and wetland crossing and HDD construction
ATWS-1031	106.0R2	Mercer	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for HDD construction
ATWS-1289	106.0R2	Mercer	1.0	0.0	0.0	1.0	0.0	0.0	0.0	ATWS is required for HDD construction
ATWS-1290	106.2R2	Mercer	0.8	0.0	0.0	0.1	0.7	0.0	0.0	ATWS is required for topsoil segregation
ATWS-1291	106.5R2	Mercer	1.2	0.0	0.0	1.2	0.0	0.0	0.0	ATWS is required for sloped construction
ATWS-1033	106.8R2	Mercer	2.3	0.0	0.0	2.2	0.1	0.0	0.0	ATWS is required for rugged topography / sloped construction
ATWS-1034	107.2R2	Mercer	0.2	0.0	0.1	0.0	0.1	0.0	0.0	ATWS is required for access road
ATWS-1035	107.4R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for Utility crossing and side bend construction
ATWS-1036	107.4R2	Mercer	0.6	0.0	0.0	0.5	0.1	0.0	0.0	ATWS is required for Utility crossing, side bend construction and rugged topography / sloped construction
ATWS-1038	107.5R2	Mercer	1.0	0.0	0.0	1.0	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and side bend construction
ATWS-1292	107.7R2	Mercer	0.8	0.0	0.0	0.8	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography / sloped construction
ATWS-1293	107.8R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for stream crossing and rugged topography / sloped construction

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1043	107.8R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction.
ATWS-1044	107.8R2	Mercer	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing
ATWS-1045	108.0R2	Mercer	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing
ATWS-1294	108.0R2	Mercer	0.6	0.0	0.0	0.3	0.3	0.0	0.0	ATWS is required for power line crossing, side bend construction, and wetland crossing
ATWS-1295	108.1R2	Mercer	0.6	0.0	0.0	0.5	0.1	0.0	0.0	ATWS is required for power line crossing, side bend construction, and wetland crossing
ATWS-1296	108.3R2	Mercer	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing
ATWS-1297	108.3R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing
ATWS-1048	108.4R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing, stream crossing and road crossing
ATWS-1049	108.4R2	Mercer	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-1050	108.4R2	Mercer	1.1	1.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing, road crossing and topsoil segregation
ATWS-1051	108.6R2	Mercer	0.3	0.3	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing
ATWS-1908	108.8R2	Mercer	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for bore
ATWS-1054	108.8R2	Mercer	0.9	0,9	0.0	0.0	0.0	0.0	0.0	ATWS is required for bore and topsoil segregation
ATWS-1055	109.1R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing
ATWS-1056	109.1R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing
ATWS-1057	109.1R2	Mercer	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing, stream crossing and topsoil segregation
ATWS-1300	109.3R2	Mercer	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-1301	109.4R2	Mercer	0.2	0.0	0.0	0.1	0.1	0.0	0.0	ATWS is required for access roads and topsoil segregation
ATWS-1302	109.5R2	Mercer	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for stream crossing and topsoil segregation
ATWS-1060	109.5R2	Mercer	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing and stream crossing
ATWS-1303	109.6R2	Mercer	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, stream crossing, and road crossing

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1061	109.6R2	Mercer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation, wetland crossing and stream crossing
ATWS-1064	109.7R2	Mercer	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and road crossing
ATWS-1304	109.7R2	Mercer	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and topsoil segregation
ATWS-1065	109.7R2	Mercer	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1305	109.8R2	Mercer	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-1067	110.1R2	Mercer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing
ATWS-1068	110.2R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing
ATWS-1069	110.2R2	Mercer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for wetland crossing and stream crossing
ATWS-1306	110.2R2	Mercer	1.8	0.0	0.0	1.8	0.0	0.0	0.0	ATWS is required for wetland crossing, stream crossing, and rugged topography / slope construction
ATWS-1071	110.3R2	Mercer	0.7	0.0	0.0	0.6	0.1	0.0	0.0	ATWS is required for HDD construction
ATWS-1307	110.9	Mercer	1.5	0.0	0.0	1.5	0.0	0.0	0.0	ATWS is required for access road, road crossing, and topsoil segregation
ATWS-1308	110.9	Mercer	0.7	0.3	0.0	0.4	0.0	0.0	0.0	ATWS is required for topsoil segregation
ATWS-1310	111.1R2	Mercer	0.4	0.4	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1312	111.1R2	Mercer	1.6	1.5	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation, and HDD crossing
ATWS-1311	111.3R2	Mercer	0.7	0.6	0.0	0.1	0.0	0.0	0.0	ATWS is required for HDD construction
ATWS-1894	111.5R2	Mercer	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1895	111.5R2	Mercer	0.2	0.2	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1896	111.7R2	Mercer	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and residential construction
ATWS-1897	111.7R2	Mercer	1.5	1.4	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation, and residential construction.
ATWS-1906	111.8R2	Mercer	0.6	0.6	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing and residential construction.
ATWS-1907	111.8R2	Mercer	1.7	1.7	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing, topsoil segregation, and residential construction.
ATWS-1315	112.0R2	Mercer	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for road construction and topsoil segregation

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1317	112.0R2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for road construction and topsoil segregation
ATWS-1316	112.0R2	Mercer	0.1	0.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for road construction and topsoil segregation
ATWS-1320	112.1R2	Mercer	0.9	0.8	0.1	0.0	0.0	0.0	0.0	ATWS is required for gas line crossing and topsoil segregation
ATWS-1321	112.2R2	Mercer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for gas line crossing and topsoil segregation
ATWS-1322	112.3R2	Mercer	0.8	0.5	0.0	0.3	0.0	0.0	0.0	ATWS is required for gas line crossing, side bend construction, and topsoil segregation
ATWS-1323	112.5R2	Mercer	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for wetland crossing
ATWS-1324	112.6R2	Mercer	0.5	0.0	0.2	0.3	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1325	112.7R2	Mercer	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, and stream crossing
ATWS-1243	113.0R2	Mercer	0.5	0.5	0.0	0.1	0.0	0.0	0.0	ATWS is required for road crossing, wetland crossing, and stream crossing
ATWS-1244	113.1R2	Mercer	0.4	0.0	0.0	0.4	0.0	0.0	0.1	ATWS is required for road crossing and gas line crossing
ATWS-1245	113.2R2	Mercer	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for gas line crossing and topsoil segregation
ATWS-1246	113.2R2	Mercer	0.4	0.0	0.0	0.4	0.0	0.0	0.0	ATWS is required for gas line crossing and topsoil segregation
ATWS-1247	113.3R2	Mercer	0.5	0.0	0.0	0.5	0.0	0.0	0.0	ATWS is required for topsoil segregation and side bend construction.
ATWS-1248	113.3	Mercer	0.5	0.2	0.0	0.3	0.0	0.0	0.0	ATWS is required for topsoil segregation and bore
ATWS-1326	113.3	Mercer	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for bore
ATWS-1327	113.4R1	Mercer	0.2	0.0	0.0	0.2	0.0	0.0	0.0	ATWS is required for bore
ATWS-1328	113.5R1	Mercer	1.1	1.1	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation and wareyard
ATWS-1099	114.0	Mercer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ATWS is required for road crossing
ATWS-1100	114.0	Mercer	0.1	0.0	0.0	0.0	0.0	0.0	0.1	ATWS is required for road crossing and residential construction
ATWS-1106[1]	114.0	Mercer	-	-	-	-	-	-	-	ATWS is required for access to Transco Receiver Site
ATWS-1107[1]	114.0	Mercer	-	-	-	-	-	-	-	ATWS is required for access to Transco Receiver Site
Lambertville Lateral										

Table G-15

Additional Temporary Work Space and Extra Work/Staging Areas for the Project a/

ATWS Number	MP b/	County	Total Area (Acres)	Existing Land Use (Acres)						Reason Needed
				Agricultural	Commercial /Industrial	Forest/ Woodland	Open Land	Open Water	Residential	
ATWS-1898	0.0R1	Hunterdon	0.2	0.0	0.0	0.0	0.2	0.0	0.0	ATWS is required for facility tie in, wetland crossing, and side bend construction
ATWS-1916	0.0R1	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS required for facility tie in
ATWS-1899	0.1R2	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS required for facility tie in and side bend construction
ATWS-1273	0.2R2	Hunterdon	0.8	0.0	0.0	0.8	0.0	0.0	0.0	ATWS is required for topsoil segregation and side bend construction
ATWS-1904	0.2R2	Hunterdon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	ATWS required for wetland crossing
ATWS-0965	0.4	Hunterdon	0.1	0.0	0.0	0.1	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing
ATWS-0966	0.4	Hunterdon	2.3	0.0	0.0	2.3	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and stream crossing
ATWS-0967	0.9	Hunterdon	1.6	1.5	0.0	0.1	0.0	0.0	0.0	ATWS is required for rugged topography / sloped construction and topsoil segregation
ATWS-0968	1.3	Hunterdon	0.5	0.5	0.0	0.0	0.0	0.0	0.0	ATWS is required for topsoil segregation
Gilbert Lateral										
(none)										
		New Jersey Total	**135.3**	**82.6**	**1.7**	**41.8**	**6.8**	**0.0**	**2.4**	
		Project Total	**361.7**	**164.5**	**15.0**	**141.3**	**18.9**	**10.9**	**11.1**	

Notes:

a/ All units in acres and rounded to the nearest 0.1. Values of 0.0 represent impacts less than 0.05 acre and are included in the total project impacts. The totals shown in this table may not equal the sum of addends due to rounding.

b/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.

Agricultural Land - Active cropland, pasture, orchards, vineyards, and/or hay fields;

Forest and Woodland - Tracts of upland or wetland forest or woodland that would be removed for the construction right-of-way or extra work or staging areas;

Open Land - Non-forested lands, herbaceous and scrub-shrub wetlands, and maintained utility right-of-way;

Residential Land - Residential yards, residential subdivisions, and planned new residential developments;

Industrial or Commercial Land – Electric power or gas utility stations, manufacturing or industrial plants, landfills, mines, quarries, commercial or retail facilities, and roads;

Open Water - Water Crossings greater than 100 feet.

1. The following ATWS are required for the construction of aboveground facilities: ATWS-1105, ATWS-1106, and ATWS-1107. The acreage associated with these ATWS are being accounted for in the facility acreage and are not listed in this table.

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Pennsylvania Mainline						
Luzerne	Dallas Twp	Openair (N/A)	0.0	SW	297	49
Luzerne	Kingston Twp	Shed (N/A)	1.5	SE	104	45
Luzerne	Kingston Twp	Building (Residential)	1.6	SW	83	23
Luzerne	Kingston Twp	Building (Residential)	1.6	NE	104	39
Luzerne	Kingston Twp	Openair (N/A)	1.6	NE	88	23
Luzerne	Kingston Twp	Shed (N/A)	1.7	NE	121	31
Luzerne	Kingston Twp	Shed (N/A)	3.0	SW	64	5
Luzerne	Kingston Twp	Building (Residential)	3.1	NE	79	44
Luzerne	Kingston Twp	Building (Residential)	3.1	NE	57	27
Luzerne	Kingston Twp	Building (Residential)	3.2	NE	55	25
Luzerne	West Wyoming Boro	Building (Residential)	5.4	SW	91	16
Luzerne	West Wyoming Boro	Shed (N/A)	5.4	SW	55	0
Luzerne	West Wyoming Boro	Building (Non-Residential)	5.4	NE	90	8
Luzerne	West Wyoming Boro	Shed (N/A)	5.5	W	0	0
Luzerne	West Wyoming Boro	Building (Residential)	5.5	NE	134	19
Luzerne	West Wyoming Boro	Building (Non-Residential)	5.5	NE	147	38
Luzerne	West Wyoming Boro	Building (Non-Residential)	5.5	NE	144	41
Luzerne	West Wyoming Boro	Openair (N/A)	5.5	SW	45	0
Luzerne	West Wyoming Boro	Building (Residential)	6.3	NE	67	7
Luzerne	Wyoming Boro	Building (Non-Residential)	6.4	SW	98	13
Luzerne	Wyoming Boro	Building (Non-Residential)	6.4	SW	109	5
Luzerne	Wyoming Boro	Building (Residential)	6.4	NE	140	25
Luzerne	Wyoming Boro	Building (Residential)	6.4	SW	165	7
Luzerne	Wyoming Boro	Openair (N/A)	6.5	NW	27	2
Luzerne	Jenkins Twp	Openair (N/A)	7.3	SW	726	10

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Luzerne	Jenkins Twp	Building (Non-Residential)	7.4	SW	503	1
Luzerne	Jenkins Twp	Building (Non-Residential)	7.4	SW	487	50
Luzerne	Jenkins Twp	Openair (N/A)	7.8	SE	106	28
Luzerne	Jenkins Twp	Openair (N/A)	7.8	SE	54	18
Luzerne	Jenkins Twp	Building (Residential)	7.8	SE	87	36
Luzerne	Jenkins Twp	Openair (N/A)	7.9	SE	89	24
Luzerne	Jenkins Twp	Openair (N/A)	7.9	SE	111	46
Luzerne	Jenkins Twp	Openair (N/A)	7.9	SE	111	34
Luzerne	Jenkins Twp	Building (Residential)	8.0	NW	69	34
Luzerne	Jenkins Twp	Shed (N/A)	8.1	NW	9	0
Luzerne	Plains Twp	Shed (N/A)	8.1	SE	44	0
Luzerne	Plains Twp	Shed (N/A)	8.1	SE	17	0
Luzerne	Plains Twp	Building (Residential)	8.1	NW	77	42
Luzerne	Plains Twp	Garage (N/A)	8.2	NW	246	31
Luzerne	Plains Twp	Storage (N/A)	8.2	NW	109	10
Luzerne	Plains Twp	Building (Residential)	8.2	NW	257	31
Luzerne	Plains Twp	Storage (N/A)	8.2	NW	167	25
Luzerne	Plains Twp	Storage (N/A)	8.2	NW	150	48
Luzerne	Plains Twp	Shed (N/A)	8.2	NW	60	0
Luzerne	Plains Twp	Building (Non-Residential)	8.2	NW	84	14
Luzerne	Plains Twp	Shed (N/A)	8.2	SW	31	0
Luzerne	Plains Twp	Building (Residential)	8.2	SW	48	3
Luzerne	Plains Twp	Building (Non-Residential)	8.2	SW	40	5
Luzerne	Plains Twp	Garage (N/A)	8.2	NE	121	46
Luzerne	Plains Twp	Shed (N/A)	8.3	NE	98	4
Luzerne	Plains Twp	Shed (N/A)	8.3	NE	107	2

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Luzerne	Plains Twp	Building (Residential)	8.3	NE	145	39
Luzerne	Plains Twp	Shed (N/A)	8.4	NE	110	1
Luzerne	Plains Twp	Shed (N/A)	8.4	NE	113	4
Luzerne	Plains Twp	Building (Residential)	8.4	NE	158	48
Luzerne	Plains Twp	Shed (N/A)	8.4	NE	120	6
Luzerne	Plains Twp	Building (Residential)	8.4	NE	163	48
Luzerne	Plains Twp	Building (Non-Residential)	8.4	SW	62	3
Luzerne	Plains Twp	Shed (N/A)	8.4	SW	133	43
Luzerne	Plains Twp	Shed (N/A)	8.4	SW	129	39
Luzerne	Plains Twp	Shed (N/A)	8.4	SW	105	15
Luzerne	Plains Twp	Shed (N/A)	8.4	NE	48	0
Luzerne	Plains Twp	Shed (N/A)	8.5	NE	59	6
Luzerne	Plains Twp	Shed (N/A)	8.5	NE	56	21
Luzerne	Plains Twp	Shed (N/A)	8.5	NE	69	34
Luzerne	Plains Twp	Shed (N/A)	8.6	NE	66	31
Luzerne	Plains Twp	Shed (N/A)	8.6	NE	68	33
Luzerne	Plains Twp	Shed (N/A)	8.6	NE	41	6
Luzerne	Plains Twp	Shed (N/A)	8.6	NE	61	26
Luzerne	Plains Twp	Shed (N/A)	8.8	NW	78	3
Luzerne	Plains Twp	Building (Residential)	8.8	NW	98	21
Luzerne	Plains Twp	Building (Residential)	8.9	NE	115	18
Luzerne	Plains Twp	Shed (N/A)	9.0	NE	33	0
Luzerne	Jenkins Twp	Building (Residential)	9.0	NE	1,501	37
Luzerne	Laflin Boro	Building (Non-Residential)	9.0	NE	2,220	25
Luzerne	Jenkins Twp	Building (Residential)	9.0	NE	2,264	37
Luzerne	Laflin Boro	Shed (N/A)	9.0	NE	2,309	1

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Luzerne	Plains Twp	Storage (N/A)	9.1	NE	145	30
Luzerne	Plains Twp	Storage (N/A)	9.1	NE	149	34
Luzerne	Plains Twp	Storage (N/A)	9.1	NE	138	23
Luzerne	Plains TWP	Storage (N/A)	9.1	NE	72	47
Luzerne	Plains Twp	Storage (N/A)	9.4	NE	66	41
Luzerne	Plains Twp	Building (Non-Residential)	9.4	NE	68	43
Luzerne	Plains Twp	Building (Non-Residential)	9.4	NE	45	15
Luzerne	Plains Twp	Building (Non-Residential)	9.8	NE	405	29
Luzerne	Plains Twp	Shed (N/A)	9.8	NE	110	43
Luzerne	Plains Twp	Building (Non-Residential)	9.8	NE	366	44
Luzerne	Plains Twp	Building (Non-Residential)	9.8	NE	547	33
Luzerne	Plains Twp	Shed (N/A)	9.8	NE	83	18
Luzerne	Plains Twp	Other (N/A)	9.9	NE	183	42
Luzerne	Plains Twp	Storage (N/A)	9.9	NE	286	46
Luzerne	Plains Twp	Garage (N/A)	9.9	NE	1,260	46
Luzerne	Jenkins TWP	Building (Non-Residential)	10.4	NE	4,069	38
Luzerne	Plains Twp	Shed (N/A)	10.5	NE	3,758	34
Luzerne	Plains Twp	Garage (N/A)	10.5	NE	3,688	10
Luzerne	Plains Twp	Openair (N/A)	11.4	NE	77	23
Luzerne	Bear Creek Twp	Building (Residential)	13.0	NE	550	21
Luzerne	Bear Creek Twp	Building (Non-Residential)	13.0	NE	406	13
Luzerne	Bear Creek Twp	Building (Residential)	13.0	NE	118	30
Luzerne	Bear Creek Twp	Building (Residential)	13.1	SW	127	15
Luzerne	Bear Creek Twp	Shed (N/A)	13.1	SW	86	11
Luzerne	Bear Creek TWP	Garage (N/A)	13.1	SW	114	29
Luzerne	Bear Creek TWP	Openair (N/A)	13.1	SW	199	12

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Luzerne	Bear Creek TWP	Building (Non-Residential)	14.0	NE	7,388	17
Luzerne	Bear Creek TWP	Building (Non-Residential)	14.1	NE	6,965	25
Luzerne	Bear Creek TWP	Other (N/A)	14.5	NE	835	31
Luzerne	Bear Creek TWP	Other (N/A)	14.6	NE	1,521	32
Luzerne	Bear Creek TWP	Garage (N/A)	17.7	SW	90	45
Luzerne	Bear Creek TWP	Building (Residential)	17.8	SW	121	50
Luzerne	Bear Creek TWP	Openair (N/A)	17.8	SW	108	26
Luzerne	Buck TWP	Building (Residential)	20.3	NE	3,150	28
Carbon	Kidder Twp	Shed (N/A)	25.4	NE	5,972	0
Carbon	Kidder Twp	Building (Non-Residential)	25.4	NE	2,367	24
Carbon	Kidder Twp	Shed (N/A)	25.4	NE	5,911	0
Carbon	Kidder Twp	Building (Non-Residential)	25.5	NE	5,766	10
Carbon	Kidder Twp	Building (Non-Residential)	26.2	SW	68	33
Carbon	Kidder Twp	Building (Non-Residential)	26.2	SW	68	33
Carbon	Kidder Twp	Shed (N/A)	31.7	SW	73	38
Carbon	Kidder Twp	Openair (N/A)	31.7	SW	63	28
Carbon	Kidder Twp	Building (Residential)	31.7	NE	64	24
Carbon	Kidder Twp	Shed (N/A)	31.8	NE	13	0
Carbon	Kidder Twp	Building (Non-Residential)	31.8	W	0	0
Carbon	Kidder Twp	Shed (N/A)	31.8	NE	57	0
Carbon	Kidder Twp	Building (Non-Residential)	31.8	SW	78	43
Carbon	Kidder Twp	Shed (N/A)	31.8	W	0	0
Carbon	Kidder Twp	Shed (N/A)	31.9	NE	28	0
Carbon	Kidder Twp	Shed (N/A)	31.9	NE	45	0
Carbon	Kidder Twp	Building (Non-Residential)	31.9	SW	83	48
Carbon	Kidder Twp	Shed (N/A)	31.9	NE	62	0

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Carbon	Kidder Twp	Shed (N/A)	31.9	NE	27	0
Carbon	Kidder Twp	Shed (N/A)	31.9	NE	3	0
Carbon	Kidder Twp	Shed (N/A)	31.9	W	0	0
Carbon	Kidder Twp	Shed (N/A)	31.9	NE	66	1
Carbon	Kidder Twp	Shed (N/A)	31.9	W	0	0
Carbon	Kidder Twp	Openair (N/A)	31.9	NE	109	44
Carbon	Kidder Twp	Building (Residential)	31.9	NE	133	1
Carbon	Kidder Twp	Shed (N/A)	31.9	NE	101	36
Carbon	Kidder Twp	Shed (N/A)	31.9	SW	112	0
Carbon	Kidder Twp	Building (Non-Residential)	31.9	SW	145	0
Carbon	Kidder Twp	Shed (N/A)	31.9	NE	113	16
Carbon	Kidder Twp	Shed (N/A)	31.9	W	0	0
Carbon	Kidder Twp	Shed (N/A)	31.9	SW	133	22
Carbon	Kidder Twp	Shed (N/A)	32.0	NE	40	0
Carbon	Kidder Twp	Building (Non-Residential)	32.0	NE	573	44
Carbon	Kidder Twp	Shed (N/A)	32.3	SW	1,322	25
Carbon	Penn Forest Twp	Building (Residential)	34.9	SE	55	21
Carbon	Penn Forest Twp	Shed (N/A)	35.1	SE	80	15
Carbon	Penn Forest Twp	Building (Residential)	35.1	SE	110	47
Carbon	Penn Forest Twp	Shed (N/A)	35.2	NW	54	19
Carbon	Penn Forest Twp	Building (Residential)	35.3	NW	81	46
Carbon	Penn Forest Twp	Shed (N/A)	35.3	NW	41	6
Carbon	Penn Forest Twp	Openair (N/A)	35.3	NW	43	8
Carbon	Penn Forest Twp	Building (Non-Residential)	35.7	NW	116	42
Carbon	Penn Forest Twp	Garage (N/A)	37.7	NE	116	39
Carbon	Towamensing Twp	Building (Residential)	42.8	NE	111	7

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Carbon	Towamensing Twp	Shed (N/A)	42.9	NE	311	11
Carbon	Towamensing Twp	Garage (N/A)	43.0	NE	279	8
Carbon	Towamensing Twp	Garage (N/A)	44.5	SE	104	39
Carbon	Towamensing Twp	Garage (N/A)	44.6	SW	98	17
Carbon	Towamensing Twp	Building (Non-Residential)	44.8	NE	239	46
Carbon	Towamensing Twp	Shed (N/A)	44.9	NE	160	45
Carbon	Towamensing Twp	Building (Non-Residential)	45.0	NE	124	9
Carbon	Towamensing Twp	Shed (N/A)	45.0	NE	98	0
Carbon	Towamensing Twp	Building (Non-Residential)	45.0	NE	121	6
Carbon	Towamensing Twp	Shed (N/A)	45.0	NE	109	0
Carbon	Towamensing Twp	Shed (N/A)	45.1	SW	40	5
Carbon	Towamensing Twp	Shed (N/A)	45.2	SW	56	21
Carbon	Towamensing Twp	Shed (N/A)	45.5	NE	68	0
Carbon	Towamensing Twp	Building (Residential)	45.6	NE	135	20
Carbon	Towamensing Twp	Building (Non-Residential)	45.8	NE	114	49
Carbon	Towamensing Twp	Building (Non-Residential)	46.6	NE	254	25
Carbon	Towamensing Twp	Shed (N/A)	46.6	NE	125	5
Carbon	Towamensing TWP	Shed (N/A)	46.6	NE	113	0
Carbon	Towamensing TWP	Shed (N/A)	46.6	SW	44	9
Carbon	Towamensing TWP	Building (Residential)	46.8	NE	120	45
Carbon	Towamensing TWP	Shed (N/A)	46.8	NE	68	3
Carbon	Lower Towamensing TWP	Shed (N/A)	48.5	NE	829	0
Carbon	Lower Towamensing TWP	Shed (N/A)	48.6	NE	833	0
Carbon	Lower Towamensing TWP	Shed (N/A)	48.7	SE	2,047	10
Carbon	Lower Towamensing TWP	Shed (N/A)	48.7	SE	2,026	17
Carbon	Lower Towamensing TWP	Building (Non-Residential)	49.6	NE	150	35

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Carbon	Lower Towamensing TWP	Shed (N/A)	49.7	SW	24	0
Carbon	Lower Towamensing TWP	Shed (N/A)	49.8	NW	67	4
Carbon	Lower Towamensing TWP	Shed (N/A)	49.9	NW	50	4
Carbon	Lower Towamensing TWP	Building (Non-Residential)	49.9	NW	47	0
Carbon	Lower Towamensing TWP	Building (Non-Residential)	50.3	NE	52	7
Carbon	Lower Towamensing TWP	Shed (N/A)	50.3	SE	109	41
Carbon	Lower Towamensing TWP	Building (Non-Residential)	50.4	NW	29	4
Northampton	Lehigh Twp	Building (Residential)	52.6	SE	709	12
Northampton	Moore Twp	Building (Non-Residential)	54.5	NE	114	43
Northampton	Moore Twp	Shed (N/A)	54.5	NE	62	0
Northampton	Moore Twp	Shed (N/A)	54.5	NE	65	0
Northampton	Moore Twp	Openair (N/A)	54.5	NE	37	0
Northampton	Moore Twp	Storage (N/A)	54.5	NE	102	22
Northampton	Moore Twp	Storage (N/A)	54.6	NE	125	35
Northampton	Moore Twp	Shed (N/A)	54.7	NE	132	17
Northampton	Moore Twp	Building (Residential)	54.8	SW	59	24
Northampton	Moore Twp	Building (Residential)	54.8	NE	65	25
Northampton	Moore Twp	Shed (N/A)	54.8	NE	39	0
Northampton	Moore Twp	Garage (N/A)	54.9	SW	84	49
Northampton	Moore Twp	Shed (N/A)	54.9	SW	82	47
Northampton	Moore Twp	Building (Residential)	55.3	NE	162	47
Northampton	Moore Twp	Openair (N/A)	55.9	NE	142	27
Northampton	Moore Twp	Shed (N/A)	55.9	NE	144	28
Northampton	Moore Twp	Shed (N/A)	57.6	NE	15	0
Northampton	Moore Twp	Shed (N/A)	59.2	SW	120	35
Northampton	Moore Twp	Shed (N/A)	59.2	SW	112	27

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Northampton	Moore Twp	Shed (N/A)	59.2	SW	105	20
Northampton	Moore Twp	Openair (N/A)	59.5	SW	44	9
Northampton	Moore Twp	Building (Residential)	59.5	SW	68	33
Northampton	East Allen Twp	Shed (N/A)	60.2	SW	229	13
Northampton	Moore Twp	Shed (N/A)	60.2	SW	218	12
Northampton	East Allen Twp	Shed (N/A)	60.2	SW	248	17
Northampton	East Allen Twp	Building (Residential)	60.2	SW	353	45
Northampton	East Allen Twp	Shed (N/A)	60.6	NE	118	15
Northampton	East Allen Twp	Shed (N/A)	60.6	NE	71	0
Northampton	East Allen Twp	Shed (N/A)	60.6	W	0	0
Northampton	Upper Nazareth Twp	Shed (N/A)	61.4	NE	159	44
Northampton	Upper Nazareth Twp	Openair (N/A)	61.4	SW	26	0
Northampton	Upper Nazareth Twp	Openair (N/A)	61.4	NE	7	0
Northampton	Upper Nazareth Twp	Garage (N/A)	62.0	NE	65	30
Northampton	Upper Nazareth Twp	Shed (N/A)	62.3	SW	2	0
Northampton	Upper Nazareth Twp	Building (Residential) d/	62.3	W	0[5]	0[5]
Northampton	Upper Nazareth Twp	Shed (N/A)	62.3	SW	28	0
Northampton	Upper Nazareth Twp	Building (Non-Residential)	62.3	SW	126	36
Northampton	Upper Nazareth Twp	Garage (N/A)	62.5	NE	107	27
Northampton	Upper Nazareth Twp	Shed (N/A)	62.5	NE	50	15
Northampton	Upper Nazareth Twp	Shed (N/A)	62.5	SW	1,031	45
Northampton	Upper Nazareth Twp	Building (Non-Residential)	62.5	SW	1,016	34
Northampton	Upper Nazareth Twp	Building (Non-Residential)	62.6	SW	896	31
Northampton	Upper Nazareth Twp	Openair (N/A)	62.7	NE	101	10
Northampton	Upper Nazareth Twp	Shed (N/A)	62.7	NE	126	11
Northampton	Upper Nazareth Twp	Building (Non-Residential)	62.7	NE	141	26

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Northampton	Upper Nazareth Twp	Building (Non-Residential)	62.7	NE	35	7
Northampton	Upper Nazareth Twp	Storage (N/A)	62.8	SW	16	10
Northampton	Upper Nazareth Twp	Building (Non-Residential)	62.8	SW	146	12
Northampton	Upper Nazareth Twp	Shed (N/A)	62.8	SW	125	0
Northampton	Upper Nazareth Twp	Shed (N/A)	63.3	SW	272	21
Northampton	Upper Nazareth Twp	Shed (N/A)	63.5	SW	676	46
Northampton	Upper Nazareth Twp	Building (Residential)	63.7	SW	97	16
Northampton	Upper Nazareth Twp	Shed (N/A)	63.7	SW	20	0
Northampton	Upper Nazareth Twp	Shed (N/A)	63.9	NE	97	0
Northampton	Upper Nazareth Twp	Building (Residential)	63.9	NE	128	13
Northampton	Upper Nazareth Twp	Building (Residential)	64.0	NE	542	37
Northampton	Lower Nazareth Twp	Shed (N/A)	64.0	NE	29	0
Northampton	Lower Nazareth Twp	Openair (N/A)	64.0	NE	60	0
Northampton	Lower Nazareth Twp	Shed (N/A)	64.0	NE	4	0
Northampton	Lower Nazareth Twp	Building (Residential)	64.1	SW	458	33
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	575	41
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	417	31
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	579	26
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	648	36
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	845	31
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	719	40
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	783	37
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	872	34
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	442	37
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	846	34
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	816	31

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	788	32
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	SW	661	25
Northampton	Lower Nazareth Twp	Building (Residential)	64.2	NE	105	36
Northampton	Lower Nazareth Twp	Shed (N/A)	64.3	NE	128	49
Northampton	Lower Nazareth Twp	Garage (N/A)	64.3	NE	84	19
Northampton	Lower Nazareth Twp	Building (Residential)	64.3	NE	95	30
Northampton	Lower Nazareth Twp	Building (Non-Residential)	64.7	NE	4,285	0
Northampton	Lower Nazareth Twp	Openair (N/A)	65.1	SW	54	19
Northampton	Lower Nazareth Twp	Building (Residential)	65.1	NE	74	4
Northampton	Lower Nazareth Twp	Shed (N/A)	67.0	SW	1,166	29
Northampton	Bethlehem Twp	Building (Residential)	67.0	SW	1,205	51
Northampton	Lower Nazareth Twp	Building (Residential)	67.0	SW	1,081	10
Northampton	Bethlehem Twp	Building (Residential)	67.0	SW	505	30
Northampton	Bethlehem Twp	Building (Non-Residential)	67.8	SW	93	0
Northampton	Bethlehem Twp	Building (Residential)	68.7	NE	71	36
Northampton	Bethlehem Twp	Garage (N/A)	68.7	NE	80	45
Northampton	Bethlehem Twp	Shed (N/A)	68.8	NE	69	8
Northampton	Bethlehem Twp	Building (Residential)	68.8	NE	128	38
Northampton	Bethlehem Twp	Shed (N/A)	68.8	NE	79	9
Northampton	Bethlehem Twp	Shed (N/A)	68.9	NE	114	24
Northampton	Bethlehem Twp	Building (Residential)	68.9	NE	115	45
Northampton	Bethlehem Twp	Shed (N/A)	68.9	SW	68	43
Northampton	Bethlehem Twp	Openair (N/A)	68.9	SW	72	22
Northampton	Bethlehem Twp	Building (Residential)	68.9	SW	78	14
Northampton	Bethlehem Twp	Building (Non-Residential)	69.0	SE	30	5
Northampton	Bethlehem Twp	Shed (N/A)	69.0	NW	18	0

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Northampton	Bethlehem Twp	Building (Non-Residential)	69.7	NE	59	5
Northampton	Bethlehem Twp	Building (Non-Residential)	69.7	NW	163	32
Northampton	Bethlehem Twp	Building (Non-Residential)	69.9	NE	87	17
Northampton	Bethlehem Twp	Shed (N/A)	70.1	NE	1,012	0
Northampton	Bethlehem Twp	Building (Non-Residential)	70.4	SW	537	26
Northampton	Lower Saucon Twp	Shed (N/A)	71.9	SW	50	25
Northampton	Lower Saucon Twp	Building (Residential)	72.0	NE	110	25
Northampton	Lower Saucon Twp	Openair (N/A)	72.0	NE	185	30
Northampton	Lower Saucon Twp	Building (Non-Residential)	72.0	NE	198	43
Northampton	Lower Saucon Twp	Shed (N/A)	72.0	SW	242	0
Northampton	Lower Saucon Twp	Building (Non-Residential)	72.0	SW	327	7
Northampton	Lower Saucon Twp	Shed (N/A)	72.1	SW	119	39
Northampton	Lower Saucon Twp	Building (Residential)	72.2	NE	553	40
Northampton	Williams Twp	Openair (N/A)	72.9	NE	165	43
Northampton	Williams Twp	Garage (N/A)	73.0	SW	102	42
Northampton	Williams Twp	Shed (N/A)	73.1	SW	119	33
Northampton	Williams Twp	Shed (N/A)	73.3	SE	55	20
Northampton	Williams Twp	Shed (N/A)	73.7	SW	109	49
Bucks	Durham Twp	Building (Non-Residential)	76.0	NE	64	0
Bucks	Durham Twp	Storage (N/A)	76.0	NE	93	28
Bucks	Durham Twp	Storage (N/A)	76.0	NE	81	16
Bucks	Durham Twp	Building (Residential)	76.3	SW	1,642	45
Bucks	Durham Twp	Building (Non-Residential)	76.3	SW	2,050	1
Bucks	Durham Twp	Openair (N/A)	76.3	SW	2,021	10
Bucks	Durham Twp	Shed (N/A)	76.3	SW	1,957	17
Bucks	Durham Twp	Building (Residential)	76.3	SW	2,200	14

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Bucks	Durham Twp	Shed (N/A)	77.5	SW	576	46
Hellertown Lateral						
Northampton	Lower Saucon Twp	Shed (N/A)	0.1	NW	132	47
Northampton	Lower Saucon Twp	Shed (N/A)	0.1	NW	131	46
Northampton	Lower Saucon Twp	Building (Residential)	0.7	SE	88	8
Northampton	Lower Saucon Twp	Shed (N/A)	0.7	NW	81	21
Northampton	Lower Saucon Twp	Building (Residential)	0.8	NW	53	0
Northampton	Lower Saucon Twp	Building (Residential)	0.8	SE	125	45
Northampton	Lower Saucon Twp	Shed (N/A)	0.8	NW	23	0
Northampton	Lower Saucon Twp	Shed (N/A)	0.8	SE	110	30
Northampton	Lower Saucon Twp	Shed (N/A)	0.8	SE	52	22
Northampton	Lower Saucon Twp	Shed (N/A)	0.8	SE	51	21
Northampton	Lower Saucon Twp	Shed (N/A)	0.9	SE	55	25
Northampton	Lower Saucon Twp	Shed (N/A)	1.0	SE	78	48
Northampton	Lower Saucon Twp	Shed (N/A)	1.0	SE	72	42
Northampton	Lower Saucon Twp	Shed (N/A)	1.0	SE	79	49
Northampton	Lower Saucon Twp	Other (N/A)	1.3	NE	10	0
Northampton	Lower Saucon Twp	Other (N/A)	1.3	NE	62	0
Northampton	Lower Saucon Twp	Storage (N/A)	2.1	SW	64	14
Northampton	Lower Saucon Twp	Shed (N/A)	2.1	SW	192	0
Northampton	Lower Saucon Twp	Shed (N/A)	2.1	SW	166	34
Northampton	Lower Saucon Twp	Shed (N/A)	2.1	SW	119	16
Northampton	Lower Saucon Twp	Storage (N/A)	2.1	SW	54	9
Northampton	Lower Saucon Twp	Storage (N/A)	2.1	SW	61	9
Northampton	Lower Saucon TWP	Shed (N/A)	2.1	SW	330	0
Northampton	Lower Saucon TWP	Building (Residential)	2.1	SW	400	27

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
New Jersey Mainline						
Hunterdon	Holland Twp	Building (Residential)	77.9	SW	200	26
Hunterdon	Holland Twp	Shed (N/A)	77.9	SW	82	3
Hunterdon	Holland Twp	Shed (N/A)	78.3	SW	44	9
Hunterdon	Holland Twp	Shed (N/A)	78.3	SW	43	8
Hunterdon	Holland Twp	Shed (N/A)	78.3	SW	104	19
Hunterdon	Holland Twp	Building (Residential)	78.3	NE	118	40
Hunterdon	Holland Twp	Shed (N/A)	79.4	NW	157	42
Hunterdon	Holland Twp	Shed (N/A)	79.4	NW	95	30
Hunterdon	Holland Twp	Building (Non-Residential)	79.5	NW	76	11
Hunterdon	Holland Twp	Other (N/A)	80.4	SE	42	7
Hunterdon	Holland Twp	Openair (N/A)	80.4	SE	65	30
Hunterdon	Holland Twp	Shed (N/A)	80.9	NE	104	14
Hunterdon	Holland Twp	Shed (N/A)	81.8	SE	95	35
Hunterdon	Holland Twp	Building (Residential)	82.1	NW	974	36
Hunterdon	Holland Twp	Building (Non-Residential)	82.2	NW	854	46
Hunterdon	Holland Twp	Shed (N/A)	84.3	SW	342	17
Hunterdon	Alexandria Twp	Other (N/A)	85.5	SW	86	40
Hunterdon	Alexandria Twp	Building (Non-Residential)	85.9	SW	598	0
Hunterdon	Alexandria Twp	Garage (N/A)	86.0	SW	558	7
Hunterdon	Alexandria Twp	Shed (N/A)	86.0	SW	614	0
Hunterdon	Alexandria Twp	Shed (N/A)	86.0	SW	570	1
Hunterdon	Alexandria Twp	Shed (N/A)	86.0	SW	653	40
Hunterdon	Alexandria Twp	Shed (N/A)	86.0	SW	499	2
Hunterdon	Alexandria Twp	Building (Non-Residential)	86.0	SW	459	4
Hunterdon	Alexandria Twp	Storage (N/A)	86.0	SW	572	0

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Hunterdon	Alexandria Twp	Storage (N/A)	86.0	SW	565	5
Hunterdon	Alexandria Twp	Storage (N/A)	86.0	SW	558	17
Hunterdon	Alexandria Twp	Storage (N/A)	86.0	SW	531	10
Hunterdon	Alexandria Twp	Garage (N/A)	86.3	SW	383	46
Hunterdon	Alexandria Twp	Building (Residential)	86.4	SE	85	20
Hunterdon	Alexandria Twp	Building (Residential)	86.4	SW	379	35
Hunterdon	Alexandria Twp	Building (Non-Residential)	86.5	SW	2,208	40
Hunterdon	Alexandria Twp	Building (Residential)	86.8	NE	46	1
Hunterdon	Alexandria Twp	Shed (N/A)	86.8	NE	82	37
Hunterdon	Alexandria Twp	Building (Non-Residential)	86.8	NE	91	45
Hunterdon	Alexandria Twp	Shed (N/A)	87.0	NE	852	32
Hunterdon	Alexandria Twp	Shed (N/A)	87.3	NE	69	4
Hunterdon	Alexandria Twp	Shed (N/A)	87.3	NE	22	0
Hunterdon	Alexandria Twp	Shed (N/A)	87.3	NE	109	44
Hunterdon	Alexandria Twp	Shed (N/A)	87.3	W	0	0
Hunterdon	Alexandria Twp	Garage (N/A)	87.3	NE	107	42
Hunterdon	Alexandria Twp	Openair (N/A)	87.5	NE	133	43
Hunterdon	Kingwood Twp	Shed (N/A)	88.7	SW	525	1
Hunterdon	Kingwood Twp	Building (Non-Residential)	88.7	SW	543	23
Hunterdon	Kingwood Twp	Building (Residential)	88.7	SW	513	3
Hunterdon	Kingwood Twp	Shed (N/A)	88.7	SW	424	38
Hunterdon	Kingwood Twp	Building (Non-Residential)	89.5	SW	466	45
Hunterdon	Kingwood Twp	Shed (N/A)	90.4	NE	100	15
Hunterdon	Kingwood Twp	Building (Non-Residential)	90.4	SW	124	44
Hunterdon	Kingwood Twp	Shed (N/A)	90.4	SW	76	0
Hunterdon	Kingwood Twp	Building (Non-Residential)	90.4	SW	102	22

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Hunterdon	Kingwood Twp	Shed (N/A)	90.7	NE	60	5
Hunterdon	Kingwood Twp	Building (Residential)	90.8	NE	76	17
Hunterdon	Kingwood Twp	Building (Non-Residential)	90.8	SW	80	36
Hunterdon	Kingwood Twp	Openair (N/A)	90.9	NE	67	32
Hunterdon	Kingwood Twp	Shed (N/A)	90.9	SW	60	35
Hunterdon	Kingwood Twp	Other (N/A)	93.1	SW	715	0
Hunterdon	Kingwood Twp	Other (N/A)	93.1	SW	630	8
Hunterdon	Kingwood Twp	Other (N/A)	93.1	SW	637	1
Hunterdon	Kingwood Twp	Storage (N/A)	93.1	SW	652	25
Hunterdon	Kingwood Twp	Shed (N/A)	93.1	SW	642	40
Hunterdon	Kingwood Twp	Shed (N/A)	93.3	NW	44	9
Hunterdon	Kingwood Twp	Shed (N/A)	93.3	NW	45	10
Hunterdon	Kingwood Twp	Garage (N/A)	93.7	NE	57	32
Hunterdon	Kingwood Twp	Pool (N/A)	93.8	NE	49	24
Hunterdon	Kingwood Twp	Openair (N/A)	93.8	SW	8	0
Hunterdon	Kingwood Twp	Openair (N/A)	93.8	NE	610	48
Hunterdon	Kingwood Twp	Building (Residential)	93.9	NE	524	35
Hunterdon	Delaware Twp	Shed (N/A)	94.6	NE	173	7
Hunterdon	Delaware Twp	Shed (N/A)	94.8	W	0	0
Hunterdon	Delaware Twp	Building (Residential)	95.4	NE	67	42
Hunterdon	Delaware Twp	Building (Residential)	95.8	NE	114	49
Hunterdon	Delaware Twp	Shed (N/A)	95.8	NE	96	31
Hunterdon	Delaware Twp	Shed (N/A)	95.8	NE	67	2
Hunterdon	Delaware Twp	Garage (N/A)	96.9	SW	333	0
Hunterdon	Delaware Twp	Shed (N/A)	96.9	SW	253	27
Hunterdon	Delaware Twp	Building (Residential)	96.9	SW	417	27

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Hunterdon	Delaware Twp	Shed (N/A)	97.0	SW	284	1
Hunterdon	Delaware Twp	Openair (N/A)	97.0	SW	266	12
Hunterdon	Delaware Twp	Shed (N/A)	97.4	NE	45	0
Hunterdon	Delaware Twp	Shed (N/A)	97.5	NE	71	6
Hunterdon	Delaware Twp	Shed (N/A)	97.5	NE	61	2
Hunterdon	Delaware Twp	Building (Residential)	97.8	NE	88	23
Hunterdon	Delaware Twp	Storage (N/A)	99.2	NE	79	14
Hunterdon	Delaware Twp	Shed (N/A)	99.3	NE	72	36
Hunterdon	Delaware Twp	Building (Residential)	99.3	NW	74	39
Hunterdon	Delaware Twp	Building (Non-Residential)	99.3	SE	39	4
Hunterdon	West Amwell Twp	Shed (N/A)	100.5	W	0	0
Hunterdon	West Amwell Twp	Shed (N/A)	101.2	NE	130	18
Hunterdon	West Amwell Twp	Shed (N/A)	101.2	NE	244	43
Hunterdon	West Amwell TWP	Shed (N/A)	101.2	NE	212	10
Hunterdon	West Amwell TWP	Shed (N/A)	101.3	NE	207	6
Hunterdon	West Amwell TWP	Garage (N/A)	101.3	NE	219	18
Hunterdon	West Amwell TWP	Openair (N/A)	101.3	NE	207	5
Hunterdon	West Amwell TWP	Building (Residential)	101.3	NE	220	18
Hunterdon	West Amwell TWP	Openair (N/A)	101.3	SW	160	45
Hunterdon	West Amwell TWP	Building (Residential)	101.3	SW	146	31
Hunterdon	West Amwell TWP	Shed (N/A)	101.3	SW	127	12
Hunterdon	West Amwell TWP	Shed (N/A)	101.3	SW	128	20
Hunterdon	West Amwell TWP	Storage (N/A)	101.3	SW	112	15
Hunterdon	West Amwell TWP	Building (Residential)	101.4	NE	218	29
Hunterdon	West Amwell TWP	Building (Residential)	102.9	SW	53	13
Hunterdon	West Amwell TWP	Building (Residential)	103.0	NE	104	15

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Hunterdon	West Amwell TWP	Shed (N/A)	103.1	SW	54	19
Hunterdon	West Amwell TWP	Building (Residential)	103.6	SW	104	19
Mercer	Hopewell Twp	Shed (N/A)	107.2	NE	17	0
Mercer	Hopewell Twp	Building (Non-Residential)	109.3	SW	926	27
Mercer	Hopewell Twp	Building (Non-Residential)	109.3	SW	705	6
Mercer	Hopewell Twp	Shed (N/A)	109.3	SW	912	0
Mercer	Hopewell Twp	Shed (N/A)	109.3	SW	896	0
Mercer	Hopewell Twp	Building (Residential)	109.3	SW	919	31
Mercer	Hopewell Twp	Building (Non-Residential)	109.3	SW	551	0
Mercer	Hopewell Twp	Building (Non-Residential)	109.7	SW	2	0
Mercer	Hopewell Twp	Shed (N/A)	109.8	NE	458	37
Mercer	Hopewell Twp	Shed (N/A)	109.8	NE	535	32
Mercer	Hopewell Twp	Openair (N/A)	110.6	SW	62	37
Mercer	Hopewell Twp	Building (Non-Residential)	110.6	SW	43	18
Mercer	Hopewell Twp	Building (Non-Residential)	110.7	SW	64	39
Mercer	Hopewell Twp	Building (Residential)	112.0	SW	45	10
Mercer	Hopewell Twp	Garage (N/A)	112.0	NE	59	14
Mercer	Hopewell Twp	Building (Residential)	112.0	NE	65	17
Mercer	Hopewell Twp	Building (Residential)	112.0	NE	74	9
Mercer	Hopewell Twp	Building (Residential)	112.0	SW	58	14
Mercer	Hopewell Twp	Shed (N/A)	112.1	NE	48	3
Mercer	Hopewell Twp	Shed (N/A)	112.1	NE	42	0
Mercer	Hopewell Twp	Openair (N/A)	112.1	NE	60	0
Mercer	Hopewell Twp	Shed (N/A)	112.1	NE	77	0
Mercer	Hopewell Twp	Openair (N/A)	112.2	SW	19	0
Mercer	Hopewell Twp	Shed (N/A)	112.8	SE	91	1

Table G-16

Existing Residences and Structures Within 50 Feet of the Construction Workspace

State/Facility/County	Municipality	Description a/	Nearest MP b/	Direction	Distance From Centerline (feet)	Distance From Workspace (feet) c/
Mercer	Hopewell Twp	Shed (N/A)	112.9	NW	46	20
Mercer	Hopewell Twp	Building (Residential)	113.2	SE	139	29
Mercer	Hopewell Twp	Shed (N/A)	113.2	SE	132	18
Mercer	Hopewell Twp	Building (Residential)	113.3	SE	107	22
Mercer	Hopewell Twp	Shed (N/A)	113.4	SE	113	28
Mercer	Hopewell Twp	Openair (N/A)	113.9	SW	149	0
Mercer	Hopewell Twp	Other (N/A)	114.0	SW	35	0
Mercer	Hopewell Twp	Building (Residential)	114.0	SW	76	19
Gilbert Lateral						
Hunterdon	Holland Twp	Storage (N/A)	0.6	NW	213	33
Lambertville Lateral						
Hunterdon	West Amwell Twp	Shed (N/A)	0.3	NW	52	17

Notes:
Structure types will be confirmed prior to Implementation Plan.
a/ N/A - Not Applicable. Residential/Non-Residential are listed for buildings, all other categories (e.g. shed, garage, openair) are not applicable
b/ Nearest mileposts for structures within 50 ft. of the workspace is rounded to the nearest tenth of a mile.
c/ Workspace includes all construction workspace required for the project.
d/ Landowner has plans to develop the property and remove the listed structure prior to construction of the pipeline.
Source: The structures are based on digitized flown imagery from 2015 and Mott MacDonald civil survey.

Table G-17

Private Conservation Easements That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Landowner	Managing Agency/Site Name	Easement Type b/	Approx. Crossing Length (feet) c/	Land Affected c/	
								Cont. (acres)	Oper. (acres)
Pennsylvania Mainline									
Luzerne	Bear Creek Twp	14.8	15.7	Eastern PA Synod of the Lutheran Church	North Branch Land Trust	CPE Act; Keystone Act	5,099	14.0	5.9
Carbon	Penn Forest	38.8	39.8R2	Bethlehem Authority	The Nature Conservancy	CPE Act	5,752	14.6	6.6
Carbon	Towamensing	43	43.1	Roy B. & Linda A. Christman	Carbon County	ASA Law	716	2.8	0.8
Carbon	Towamensing	45.7R2	46.1	Albertine J Anthony	Carbon County	ASA Law	1,684	5.0	1.8
Carbon	Lower Towamensing	46.7	47.2	Patrick Wade Seifert	Township of Towamensing and Carbon County	ASA Law	2,628	7.2	3.0
Carbon	Lower Towamensing	47.5	48.1	Harry L. & Elaine D. Eckhart	Carbon County	ASA Law	2,803	7.4	3.2
Carbon	Lower Towamensing	49.9R2	50.8R2	Tuthill Corp DBA Blue Mountain Ski Area	United States of America	Federal trail	4,762	11.3	5.5
Northampton	Moore	54.1	54.7	Kleintop Family Farm	Township of Moore, Northampton County	ASA Law	3,412	9.6	3.9
Northampton	Moore	55.3	55.5	Sherwood P. Geiger	Township of Moore, Northampton County	ASA Law	839	3.2	1.0
Northampton	Moore	55.5	55.6	Sherwood P. Geiger	Township of Moore, Northampton County	ASA Law	803	2.5	0.9
Northampton	Moore	55.9	56.0	Joan L. Schlegel	Township of Moore, Northampton County	ASA Law	254	0.6	0.3
Northampton	Moore	57.7R2	57.8R2	Conrad & Eva Chroust	Township of Moore, Northampton County	ASA Law	851	2.7	1.0
Northampton	Moore	57.8R2	58.1R2	George J. Schweitzer	Township of Moore, Northampton County	ASA Law	1,217	3.7	1.4
Northampton	Moore	58.8	58.9	Donald M. & Catherine L. Pike	Township of Moore, Northampton County	ASA Law	651	1.9	0.7

Table G-17

Private Conservation Easements That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Landowner	Managing Agency/Site Name	Easement Type b/	Approx. Crossing Length (feet) c/	Land Affected c/	
								Cont. (acres)	Oper. (acres)
Northampton	Moore	58.9	59.0	Anton Schweitzer	Township of Moore, Northampton County	ASA Law	750	2.7	0.9
Northampton	Moore	59.2	59.3	Mathias & Anna Schweitzer	Township of Moore, Northampton County	ASA Law	468	1.1	0.5
Northampton	Moore	59.9R2	60.3	Herman R. & Dixie L. Winter	Northampton County, Township of Moore	ASA Law	1,996	6.2	2.3
Northampton	East Allen	60.7	60.7	Mark E. Deysher	Northampton County	ASA Law	222	0.9	0.3
Northampton	East Allen	60.7	61.1	Mark E., Susan, Mark J., & John Deysher	Northampton County	ASA Law	1,911	5.5	2.2
Northampton	Upper Nazareth	63.3	63.6R2	Henry Yeska Jr.	Northampton County	ASA Law	1,630	5.5	1.9
Northampton	Upper Nazareth	63.6R2	63.7R2	Henry Yeska Jr.	Northampton County	ASA Law	53	0.4	0.1
Northampton	Upper Nazareth	63.7R2	63.7R2	Henry Yeska Jr.	Northampton County	ASA Law	281	0.5	0.3
Northampton	Lower Nazareth	65.4	65.5	Willard E. Setzer	Northampton County	ASA Law	285	1.0	0.3
Northampton	Lower Nazareth	65.5	65.8	Rady C., Kimberly S., Jeffery L., & Sharon J. Setzer	Township of Lower Nazareth and Commonwealth of PA	ASA Law	1,330	4.6	1.5
Northampton	Williams	73.6R2	73.9R2	Ned D & Linda H Heindel Living Trust	Williams Township and Northampton County	ASA Law; open space	1,168	3.0	1.3
Northampton	Williams	73.8R2	73.9R2	Ned D & Linda H Heindel Living Trust	Williams Township and Northampton County	ASA Law; open space	237	0.8	0.3
Northampton	Williams	74.0R2	74.1	Ned, Linda H., Alan D., Kirby, & Particia A. Spaziani Heindel	Northampton County	Conservation restriction	1,121	3.3	1.3
Northampton	Williams	74.4	74.8	Jeffery C. & Mary T. Mcguire	Commonwealth of PA and Northampton County, Township of Williams	ASA Law	2,486	8.0	2.9

Table G-17

Private Conservation Easements That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Landowner	Managing Agency/Site Name	Easement Type b/	Approx. Crossing Length (feet) c/	Land Affected c/	
								Cont. (acres)	Oper. (acres)
Northampton	Williams	75.1	75.5	Isidore C. & Lorraine C. Mineo	Northampton County	ASA Law	2,506	6.8	2.9
Bucks	Durham	76.4 (AR-079)	76.4 (AR-079)	Manfred Marschewski	Bucks County	ASA Law	--	0.5	--
Bucks	Durham	76.9R2	77.1R2	Serenity Investors LP	Durham Township and Commonwealth of PA	ASA Law	844	2.4	1.0
Bucks	Durham	77.1R2	77.6	AP Creations LP	Durham Township and Commonwealth of PA	ASA Law	2,466	9.5	2.8
Bucks	Durham	77.4	77.5	Serenity Investors LP	Durham Township	ASA Law	338	0.4	0.4
Hellertown Lateral									
Northampton	Lower Saucon	HL 0.0	HL 0.1	Bruce R. & Ginger L. Petrie	Williams Township Board of Supervisors, Lower Saucon Township	ASA Law; open space	373	1.1	0.4
Northampton	Lower Saucon	HL 0.1	HL 0.2	Bruce R. & Ginger L. Petrie	Williams Township Board of Supervisors	ASA Law; open space	658	1.8	0.8
Northampton	Lower Saucon	HL 0.2	HL 0.3	Bruce R. & Ginger L. Petrie	Lower Saucon Township	ASA Law; open space	574	1.4	0.7
Northampton	Lower Saucon	HL 1.8R2	HL 2.0R2	Thomas & Mary Ann Rowe	Northampton County, Lower Saucon Twp.	ASA Law; open space	1,200	3.5	1.4
Northampton	Lower Saucon	HL 2.0R2	HL 2.1R2	Thomas & Mary Ann Rowe	Northampton County, Lower Saucon Twp.	ASA Law; open space	741	5.0	0.5
						Pennsylvania Subtotal	**55,109**	**162.5**	**62.7**
New Jersey Mainline									
Hunterdon	Holland	79.7R2	79.9R2	Walter Jenness	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	--	0.2	--

Table G-17

Private Conservation Easements That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Landowner	Managing Agency/Site Name	Easement Type b/	Approx. Crossing Length (feet) c/	Land Affected c/	
								Cont. (acres)	Oper. (acres)
Hunterdon	Holland	79.9R2	80.1R2	Richard Z. & Kelsey E. Lafevre / Richard D. & Pamela A. Lafevre Life Estate	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	1,124	3.1	1.3
Hunterdon	Holland	80.4R2	80.6R2	Kathleen M. & Duane C. Young	New Jersey State Agriculture Development Committee	SADC	1,319	3.9	1.5
Hunterdon	Holland	82.2	82.3	NCP No. Three-Holland LLC	New Jersery Department of Environmental Protection	Conservation restriction	688	0.8	0.8
Hunterdon	Holland	82.4	82.8	David W. Farmer Revocable Living Trust	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	2,049	5.8	2.4
Hunterdon	Holland	82.8	83.1	Bernard E. Berlinger III and Mary K. Berlinger	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	1,768	7.4	2.0
Hunterdon	Holland	84.4	85.0R1	Paul E. & Edith S. Kozak	Hunterdon County Agriculture Development Board and Township of Holland (with SADC approval)	SADC	3,248	9.4	3.7
Hunterdon	Alexandria	86.0R1	86.4R1	Christopher & Elizbaeth Kroese	Hunterdon County Agriculture Development Board / SADC Board	SADC	1,829	6.2	2.1
Hunterdon	Alexandria	86.4 (AR-090)	86.5 (AR-090)	William H. & Diane M. Kappus	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	--	0.0	--
Hunterdon	Alexandria	86.4R1	86.5	Ronald W. & Johanna M. Kappus	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	3,764	12.8	4.3
Hunterdon	Alexandria Kingwood	87.4	87.7	Thomas E. & Maryellen Sandor	New Jersey Department of Environmental Protection	Green Acres	1,566	4.4	1.8
Hunterdon	Kingwood	89	89.2	Ruth Kjaer	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	1,120	3.0	1.3

Table G-17

Private Conservation Easements That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Landowner	Managing Agency/Site Name	Easement Type b/	Approx. Crossing Length (feet) c/	Land Affected c/	
								Cont. (acres)	Oper. (acres)
Hunterdon	Kingwood	89.9R2	90.0R2	Cynthia K. Niciecki	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	529	0.9	0.6
Hunterdon	Kingwood	91.9R2	92.3R2	Frenchtown III Solar, LLC	Township of Kingwood Delaware & Raritan Canal Commission	Open Space/agriculture Stream corridor	2,135	2.5	2.5
Hunterdon	Kingwood	92.5R2	92.7R2	Hunterdon Land Trust (70%) New Jersey Water Supply Authority (30%)	Department of Environmental Protection	Green Acres	1,318	3.7	1.5
Hunterdon	Kingwood	92.7R2	93.1	Hunterdon Land Trust Alliance	New Jersey Department of Environmental Protection & The County of Hunterdon	Green Acres	483	1.6	0.6
Hunterdon	Kingwood	93.9R2	94.1R2	Carole & Gary Davis et al	Kingwood Township	Conservation restriction	--	2.0	0.3
Hunterdon	Kingwood	94.1R2	94.1R2	Kryon James Corus et al	Kingwood Township	Conservation restriction	--	0.1	0.0
Hunterdon	Kingwood	94.4R2	94.5R2	Fred J. & Debra S. Nanni	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	273	0.6	0.3
Hunterdon	Delaware	94.5R2	94.8R2	Frederick J. & Debra Sue Nanni	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	1,682	5.8	1.9
Hunterdon	Delaware	95.0R2	95.0R2	William Embley	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	426	0.5	0.5
Hunterdon	Delaware	95.0R2	95.5R2	Dan H. Mackey & Carla Kelley-Mackey	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	2,274	4.6	2.6
Hunterdon	Delaware	95.5R2	95.9	Dan H. Mackey & Carla Kelley-Mackey	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	1,988	5	2.3

Table G-17

Private Conservation Easements That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Landowner	Managing Agency/Site Name	Easement Type b/	Approx. Crossing Length (feet) c/	Land Affected c/	
								Cont. (acres)	Oper. (acres)
Hunterdon	Delaware	96.5R2	96.7R2	John Bulger	New Jersey Conservation Foundation	Conservation restriction	1,226	2.9	1.4
Hunterdon	Delaware	96.7R2	96.8R2	New Jersey Conservation Foundation	New Jersey Conservation Foundation	Green Acres	635	0.7	0.4
Hunterdon	Delaware	96.9R2	96.9R2	Brook Hollow Farms Of Serg LLC	New Jersey Conservation Foundation	SADC	50	0.1	0.1
Hunterdon	Delaware	97.1R2	97.4	Joseph & Adele Gugliotta	Township of Delaware	Conservation restriction	1,226	3.9	1.1
Hunterdon	Delaware	98.7R2	99.2R2	William A. Spolar	New Jersey State Agriculture Development Committee	SADC	2,103	4.9	2.4
Hunterdon	Delaware	100.2R2	100.4R2	Eugene & Mary Ellen Caffrey	New Jersey State Agriculture Development Committee	SADC	921	1.1	1.1
Hunterdon	West Amwell	101.1R2	101.2R2	Lambert Farm, LLC	Hunterdon County Agriculture Development Board (with SADC approval)	SADC	750	2.8	0.9
Hunterdon	West Amwell	101.3R2	101.5R2	Leon A. Walters	New Jersey State Agriculture Development Committee	SADC	826	3.1	0.9
Hunterdon	West Amwell	101.5R2	101.7R2	Leon IV Walter	New Jersey State Agriculture Development Committee	SADC; Green Acres	1,188	3.6	1.4
Hunterdon	West Amwell	101.7R2	102.1R2	Kim/Karen/Kyle & Joyce S. Kilmer	Township of West Amwell	Green Acres	1,834	4.5	2.1
Hunterdon	West Amwell	102.4R2	102.5R2	Marie Janyszewski	Hunterdon County Agriculture Development Board / SADC Boad	SADC	920	3.2	1.1
Hunterdon	West Amwell	102.6R2	102.9R2	Lambertville Water Company	New Jersey Department of Environmental Protection	Green Acres	1,923	5.0	1.3
Mercer	Hopewell	104.9R2	105.3R2	L. Thomas Jr & Virginia L. Welsh	Delaware Raritan	Green Acres	1,941	7.0	2.2
Mercer	Hopewell	107.4R2	107.7R2	NJDEP & County of Mercer	Friends of Hopewell Valley Open Space	Green Acres	1,590	5.5	1.8

Table G-17

Private Conservation Easements That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Landowner	Managing Agency/Site Name	Easement Type b/	Approx. Crossing Length (feet) c/	Land Affected c/	
								Cont. (acres)	Oper. (acres)
Mercer	Hopewell	107.7R2	108.1R2	Thomas Otto & Wendy T. Niederer	New Jersey SADC	SADC	1,617	5.4	1.9
Mercer	Hopewell	108.1R2	108.4R2	Thomas Otto & Wendy T. Niederer	New Jersey SADC	SADC	1,717	5.6	2.0
Mercer	Hopewell	109.0R2	109.7R2	Francis E. & Judith B. Batcha	Friends of Hopewell Valley Open Space	Conservation restriction	4,026	12	4.6
Mercer	Hopewell	111.1R2 (AR-107A)	111.1R2 (AR-107A)	Hopewell Properties LLC	Delaware Raritan and Township of Hopewell	Stream corridor; open space	--	0.6	--
Mercer	Hopewell	111.1R2	111.2R2	Mercer Development Properties LLC	Delaware Raritan and Township of Hopewell	Stream corridor; open space	851	3.0	1.0
Mercer	Hopewell	111.3R2	111.4R2	Cf Hopewell Cc&I LLC	Delaware Raritan and Township of Hopewell	Stream corridor; wetlands conservation	518	1.3	0.5
Mercer	Hopewell	112.8R2	112.9R2	Wellington Manor Homeowners Association	New Jersey Department of Environmental Protection	FWPA	391	0.6	0.3
Gilbert Lateral									
Hunterdon	Holland	GL 0.0R2	GL 0.1R2	Walter Jenness	Hunterdon County Agriculture Development Board	SADC	--	0.2	--
Lambertville Lateral									
Hunterdon	West Amwell	LL 0.1R2	LL 0.8	Mowry Properties LLC	Hunterdon County Agriculture Development Board (with SADC approval)	Agricultural	3,552	12.6	4.5
						New Jersey Subtotal	**59,456**	**173.8**	**67.3**
						Project Total	**114,565**	**336.3**	**130.0**

Table G-17

Private Conservation Easements That Would be Crossed by the Project Facilities

State/ Facility/ County	Municipality	Begin MP a/	End MP a/	Landowner	Managing Agency/Site Name	Easement Type b/	Approx. Crossing Length (feet) c/	Land Affected c/	
								Cont. (acres)	Oper. (acres)

Notes:
a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft EIS. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.
b/ CPE Act: Pennsylvania Conservation and Preservation Easements Act, 32 P.S. §§ 5051 et. seq.
Keystone Act: Keystone Recreation, Park, and Conservation Fund Act, Act of July 2, 1993, P.L. 359 No. 50
FWPA: Freshwater Wetlands Prservation Act, N.J.S.A. 13:9B-1 et. seq.
c/ A value of "--" denotes a lack of impact. If an easement is only crossed by construction workspace, the crossing length and land affected during operation will be "--".

Table G-18

Private Recreational and Special Use Areas That Would be Crossed by or Located in Proximity to the Project Facilities a/

State/ Facility/ County	Municipality	Nearest MP b/	Approx. Distance from Project Facilities	Special Use Area Type	Name of Special Use Area	Land Affected	
						Cont. (acres)	Oper. (acres)
Pennsylvania Mainline							
Luzerne	Dallas Twp	0.0R1 (Access Road)	0.1 miles	Religious Institution	Fellowship Church	--	--
Luzerne	Dallas Twp	0.6 (Access Road)	0.1 miles	Religious Institution	East Dallas Church	--	--
Luzerne	Swoyersville Boro, West Wyoming Boro	5.2	0.2 miles	Cemetery	Cemetery (HMMID 13493)	--	--
Luzerne	West Wyoming Boro	5.5	320 feet	Cemetery	Cemetery (HMMID 13512)	--	--
Luzerne	Wyoming Boro	6.2R2	240 feet	Recreational Facility	Baseball field	--	--
Luzerne	Wyoming Boro	6.4R2	0.1 miles	Historical Site	Swetland Homestead	--	--
Luzerne	Wyoming Boro	6.6R2	180 feet	Historical Site	Wyoming Monument	--	--
Luzerne	Wyoming Boro	6.7	0.3 miles	School	Tenth Street Elementary School	--	--
Luzerne	Jenkins Twp	7.3	200 feet	Recreational Facility	Softball Field	--	--
Luzerne	Plains Twp	8.2R2	40 feet	Recreational Facility	Baseball field	--	--
Luzerne	Plains Twp	9.3R2	0.1 miles	Cemetery/Church	Saint Joseph Cemetery	--	--
Luzerne	Plains Twp, Wilkes-Barre City	10.2R2	0.1 miles	Race Track	Pocono Downs	--	--
Luzerne	Bear Creek Twp	13.1 (Access Road)	0.1 miles	School	Kresgeville School	--	--
Carbon	Kidder Twp	25.3	120 feet	Golf Course	Jack Frost National Golf Course and Club	--	--
Carbon	Kidder Twp	25.3 (Access Road)	60 feet	Recreational Facility	Jack Frost Ski Area	--	--
Carbon	Kidder Twp	28.6R2	0.3 miles	Park/Recreational Facility	Mosey Wood Pond	--	--

Table G-18

Private Recreational and Special Use Areas That Would be Crossed by or Located in Proximity to the Project Facilities a/

State/ Facility/ County	Municipality	Nearest MP b/	Approx. Distance from Project Facilities	Special Use Area Type	Name of Special Use Area	Land Affected	
						Cont. (acres)	Oper. (acres)
Carbon	Kidder Twp	29.2R2 (Access Road)	0.5 miles	Park	Lake Harmony	--	--
Carbon	Kidder Twp	29.7R2	0.4 miles	Park	Boulder Field Natural Area in Hickory Run State Park	--	--
Carbon	Kidder Twp	30R2	100 feet	Park/Recreational Facility	Jack Frost Big Boulder Lake and Resort	--	--
Carbon	Kidder Twp	30.3R2	30 feet	Recreational Facility	Jack Frost Big Boulder Ski Area	--	--
Carbon	Kidder Twp	32R2	20 feet	Religious Institution	St. Paul's Lutheran Church	--	--
Carbon	Kidder Twp	32.6R2 (Access Road)	0.7 miles	Park	Mud Swamp Natural Area in Hickory Run State Park	--	--
Carbon/ Northampton	Lower Towamensing Twp, Lehigh Twp	50R2	Project Intersects Property/Area	Recreational Facility	Blue Mountain Ski Area	19.0	8.9
Northampton	Moore Twp, Lehigh Twp	54.1	0.2 miles	Recreational Facility	1132 Delps Road	--	--
Northampton	Moore Twp	59.3	0.2 miles	School	Mount Vernon School	--	--
Northampton	Moore Twp	60.2	30 feet	Golf Course	Whitetail Golf Club	--	--
Northampton	Upper Nazareth Twp	62.5R2	192 feet	Recreational Facility	Baseball field	--	--
Northampton	Lower Nazareth Twp, Bethlehem Twp	67.1	177 feet	Park	Louise W. Moore Park	--	--
Northampton	Bethlehem Twp	67.5	0.2 miles	Park	Matson's Woods	--	--
Northampton	Bethlehem Twp	67.9R2	Project Intersects Property/Area	Religious Institution	Calvary Baptist Church	2.7	0.9
Northampton	Bethlehem Twp	68R2	0.1 miles	Golf Course	Green Pond Golf Course	--	--
Northampton	Bethlehem Twp	68.9	50 feet	Golf Course	Northampton County Country Club Golf Course	--	--
Northampton	Bethlehem Twp	69.9	0.2 miles	School	The Cambridge Schools	--	--
Northampton	Bethlehem Twp	70.1	300 feet	Hospital	St. Luke's Hospital	--	--
Northampton	Bethlehem Twp, Easton City	71	410 feet	Recreational Facility	Bethlehem Boating Club	--	--

Table G-18

Private Recreational and Special Use Areas That Would be Crossed by or Located in Proximity to the Project Facilities a/

State/ Facility/ County	Municipality	Nearest MP b/	Approx. Distance from Project Facilities	Special Use Area Type	Name of Special Use Area	Land Affected	
						Cont. (acres)	Oper. (acres)
Northampton	Williams Twp	73.2	0.1 miles	School	Klein School	--	--
Northampton	Williams Twp	73.9R2	300 feet	Park/Recreational Facility	Hexenkopf Rock	--	--
Northampton	Williams Twp	74.6	310 feet	Historical Site	Isaac Stout House	--	--
Northampton	Williams Twp	74.7	0.2 miles	Historical Site	Bridge in Williams Township	--	--
Hellertown Lateral							
Northampton	Lower Saucon Twp	0.6	0.1 miles	Park/ Historical Site	Kingston Park/Lutz Franklin Schoolhouse	--	--
Northampton	Lower Saucon Twp	0.9	0.1 miles	Golf Course	Woodland Hills Country Club and Golf Course	--	--
Northampton	Lower Saucon Twp	1	400 feet	Religious Institution	2550 Applebutter Road	--	--
Northampton	Lower Macungie Twp, Upper Milford Twp, Macungie Boro	2.14R2	14 miles	Farm	Brook Hollow Farm	--	--
New Jersey Mainline							
Hunterdon	Holland Twp	79.4R2	0.1 miles	Recreational Facility	Baseball Field c/	--	--
Hunterdon	Holland Twp	82	Project Intersects Property/Area	Park	Thomas F. Breden Preserve at Milford Bluffs	<0.1	--
Hunterdon	Kingwood Twp	92.2R2	0 (HDD)	Solar farm	Frenchtown III Solar, LLC	--	--
Hunterdon	Delaware Twp	97.9	0.2 miles	Cemetery/Church	Sandy Ridge Church and Cemetery	--	--
Hunterdon	West Amwell Twp	100.5R2	450 feet	Park	Titus Property (Park Land) c/	--	--
Hunterdon	West Amwell Twp	102.1R2	0.1 miles	Religious Institution	First Baptist Church of Lambertville	--	--
Hunterdon	West Amwell Twp	103.4	0.1 miles	Park/Recreational Facility	Hewitt Park/Baseball Fields	--	--
Mercer	Hopewell Twp	104.6R2	400 feet	Park/Recreational Facility	Belle Mountain Ski	--	--

Table G-18

Private Recreational and Special Use Areas That Would be Crossed by or Located in Proximity to the Project Facilities a/

State/ Facility/ County	Municipality	Nearest MP b/	Approx. Distance from Project Facilities	Special Use Area Type	Name of Special Use Area	Land Affected	
						Cont. (acres)	Oper. (acres)
Mercer	Hopewell Twp	104.9R2	150 feet	Park	Mercer County Park and Valley Road Picnic Area	--	--
Mercer	Hopewell Twp	105.7R2	280 feet	Farm	Howell living farm	--	--
Mercer	Hopewell Twp	110.6	150 feet	Park/Recreational Facility	Hopewell Township Park/Baseball Fields	--	--
Mercer	Hopewell Twp	110.8	190 feet	Recreational Facility	Hopewell Skatepark	--	--
Mercer	Hopewell Twp	111.6R2	180 feet	School (Day Care)	Bright Horizons at Hopewell	--	--
Mercer	Pennington Boro	113.4R1	20 feet	Park	Curlis Lake Woods	--	--
Mercer	Hopewell Twp	114	0.5 miles	Park	Mercer Meadows	--	--
Gilbert Lateral							
Hunterdon	Holland Twp	0.6R2	10 feet	Recreational Facility	Baseball Field c/	--	--
Lambertville Lateral							
Hunterdon	West Amwell Twp	0.4	450 feet	Park	Titus Property (Park Land) c/	--	--
Hunterdon	West Amwell Twp	1.4 (Access Road)	400 feet	Cemetery/Church	Second English (Mt Airy) Presbyterian Church	--	--
Hunterdon	West Amwell Twp	1.43	0.2 miles	School (Day Care)	Mt. Airy Happy Time School	--	--

Notes:

a/– Table includes additional properties located greater than 0.25 mile from the Project facilities to address comments received by FERC.

b/ – All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application.

c/ – Special Use Area that falls within both the PennEast Mainline and Lateral search radius.

Table G-19

Native American Outreach Conducted by PennEast

Tribe	Correspondence Date	Summary
Federally Recognized Tribes		
Absentee-Shawnee Tribe of Indians of Oklahoma	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request. No response received.
	August 4, 2015	URS e-mail to tribe as follow-up and request for formal response to Dec letter. No response received.
Cayuga Nation	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request. Representative confirmed, no response
	February 13, 2015	Telephone record to follow up on Dec letter. Receptionist provided e-mail address Timothy Two Guns.
	February 13, 2015	URS e-mail to tribe as follow-up and request for formal response to Dec letter. No response received.
	March 20, 2015	Subsequent e-mail to request response from tribe.
	August 4, 2015	E-mail to request response from tribe.
Delaware Nation	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	February 11, 2015	In letter, the Delaware Nation stated that no resources of interest will be endangered by the Project but requested that they be contacted in the case of unanticipated discoveries.
	February 11, 2015	E-mail from Mr. Holcomb, Delaware Nation, to URS requesting that the PennEast Project halt all construction and ground disturbance activities and immediately contact appropriate state agencies and the Delaware Nation cultural Preservation Office (within 24 hours) should the Project inadvertently uncover an archaeological site or objects.
	February 17, 2015	URS sent e-mail to Ms. Alligood, Delaware Nation to confirm that she is appropriate contact for Delaware Nation.
	February 17, 2015	Ms. Alligood confirmed that she is the appropriate contact.
Delaware Tribe of Indians	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	January 8, 2015	Delaware Tribe of Indians requested consulting party status.
	March 4, 2015	Delaware Tribe of Indians confirmed that Ms. Bachor and Ms. Fink are the appropriate tribal representatives to receive reports for review for the Project.
	September 24, 205	URS provided Phase I Archaeological Survey reports for PA and NJ to Ms. Bachor, Delaware Tribe of Indians, for review.
	October 16, 2015	Record of Telephone Conversation, Ms. Bachor, Delaware Tribe of Indians, with Ms. Aiesing, URS. Ms. Bachor has received information from Indian groups in NJ regarding a known site and requested information about Project survey status.
Eastern Shawnee Tribe of Oklahoma	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	February 13, 2015	URS followed up by telephone. Ms. Dushane confirmed as appropriate Section 106 contact for the tribe.

Table G-19

Native American Outreach Conducted by PennEast

Tribe	Correspondence Date	Summary
	August 4, 2015	Follow-up on Project from URS to Ms. Dushane to request a formal response regarding the tribe's possible participation in the FERC process.
Oneida Indian Nation	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	January 16, 2015	Record of Telephone Conversation, Mr. Bergevin, Oneida Nation Cultural Resource Specialist, with Ms. Ziesing, URS. Requested cultural survey status and some details and expressed concern about stone piles. Requested to be informed of sites of potential significance when they are found. He noted he is available for consultation on specific finds while crews are still in the field.
	January 20, 2015	Letter indicated Oneida Indian Nations' interest in the Project and requested information on cultural resources survey methods.
	February 6, 2015	URS letter to Oneida Indian Nation regarding field methods and recordation of stone piles.
	September 24, 2015	Transmittal of Phase I archaeological survey reports to Oneida Indian Nation for review and comment.
Oneida Nation of Wisconsin	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	February 13, 2015	Record of Telephone Conversation. Mr. Wyatt, AECOM, talked with Ms. Misita, Oneida Nation Land Administrator to ask about appropriate contact for Section 106 consultation. Mr. Jesse Bergevin identified as appropriate contact.
Onondaga Nation	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
Seneca Nation of Indians	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	February 18, 2015	Record of Telephone Conversation. Mr. Wyatt, AECOM, with Mr. Abrams. Mr. Abrams is now THPO and requested Project information.
	February 19, 2015	E-mail from the Seneca Nation of Indians noted that the tribe had no concerns with the Project and that the Nation would defer to the Delaware Nation. However, the Seneca Nation of Indians requested to be contacted if the Project scope changes or if cultural/burial sites are encountered.
Seneca-Cayuga Tribe of Oklahoma	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	February 13, 2015	Record of Telephone Conversation. Mr. Wyatt, AECOM, with Secretary, Seneca-Cayuga Tribe of Oklahoma. Requested a return call from Mr. Barton, THPO regarding initial consultation letter.
Shawnee Tribe	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	February 18, 2015	Record of Telephone Conversation. Mr. Wyatt, AECOM with K. Jumber, Shawnee Tribe THPO regarding initial consultation letter.
	February 18, 2015	E-mail follow-up from AECOM to Shawnee Tribe re-sending initial consultation letter.
	February 19, 2015	E-mail to A. Wyatt, AECOM, from Shawnee Tribe THPO, K. Jumper. THPO Department concurs that no known historic properties will be negatively impacted by the Project. If archaeological materials are encountered during construction, use, or maintenance of this location, please re-notify the tribe to resume consultation.

Table G-19

Native American Outreach Conducted by PennEast

Tribe	Correspondence Date	Summary
St. Regis Mohawk Tribe	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	February 18, 2015	Record of Telephone Conversation, A. Wyatt, AECOM, with A. Printup, St. Regis Mohawk Tribe THPO who requested re-send of the initial consultation letter.
	February 24, 2015	E-mail from A. Printup, St. Regis Mohawk THPO, to B. Holcomb AECOM, formally requesting to participate in the Section 106 Process for PennEast Project.
Stockbridge-Munsee Band of Mohicans	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	January 27, 2015	The Stockbridge-Munsee Band of Mohicans responded by e-mail on January 27, 2015 and requested continuing consultation. The Band's specific area of interest was in Bucks County, Pennsylvania, where the Project crossed the Delaware River. The Band requested a copy of field survey protocols that would be used by PennEast's contractor.
	February 5, 2015	E-mail from A. Wyatt, AECOM, to H. Bonney, Assistant THPO for Stockbridge-Munsee Band of Mohicans, provided archaeological field survey methods.
	February 19, 2015	Record of Telephone Conversation. S. White, THPO for Stockbridge-Munsee Band of Mohicans, to A. Wyatt, AECOM regarding new Band President, Wally Miller and environmental affairs specialist, G. Bunker. Initial request for participation in Section 106 Process was forwarded by Ms. White to W. Miller and G. Bunker.
	February 19, 2015	E-mail from A. Wyatt, AECOM, to S. White, THPO for Stockbridge-Munsee Band of Mohicans, providing December 31, 2014 letter.
	February 25, 2015	E-mail from S. White, THPO for Stockbridge-Munsee Band of Mohicans, to B. Holcomb, URS noting that Bonney Hartley would handle Section 106 consultation for the tribe.
	March 26, 2015	Letter from B. Hartley, Assistant THPO, Stockbridge-Munsee Band of Mohicans, requesting to continue consultation on the Project, the archaeological testing schedule, and requested that URS incorporate the tribe's inadvertent discovery policy into their archaeological testing protocols.
	April 9, 2015	Record of Telephone Conversation, Ms. Hartley, Assistant THPO, Stockbridge-Munsee Band of Mohicans, with G. Ziesing, J. West and A. Wyatt, AECOM regarding archaeological testing schedule as she may wish to participate.
	April 10, 2015	E-mail from B. Hartley, THPO, Stockbridge-Munsee Band of Mohicans, informs A.Wyatt, AECOM, that she has been recently appointed THPO for tribe.
	June 3, 2015	E-mails A. Wyatt, AECOM, to B. Hartley, THPO, Stockbridge-Munsee Band of Mohicans, providing archaeology field schedule and an invitation for THPO representative to join in field.
	June 5, 2015	E-mails between A. Wyatt, AECOM, and B. Hartley, THPO, Stockbridge-Munsee Band of Mohicans. Ms. Hartley is comfortable with the testing plans as discuss in April and will not send a monitor. She asked to be contacted if survey crews found large, dense sites.
	September 24, 2015	Letter transmitting Phase I Archaeological survey reports to Stockbridge-Munsee Mohican THPO by AECOM
Tonawanda Seneca Nation	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request

Table G-19

Native American Outreach Conducted by PennEast

Tribe	Correspondence Date	Summary
	February 18, 2015	E-mail, A. Wyatt, AECOM, to Tonawanda Seneca Nation, to request comments regarding cultural resources and participation as an interested party.
Tuscarora Nation	December 31, 2014	PennEast Letter to introduce Project and FERC Process Participation Request
	February 13, 2015	E-mail, A. Wyatt, AECOM, to Tuscarora Nation to request comments regarding cultural resources and participation as an interested party.

Table G-20

USDOT Class Locations by Milepost

Facility / County	Begin MP a/	End MP a/	USDOT Class b/
Pennsylvania Mainline			
Luzerne	0.0R1	2.0	1
Luzerne	2.0	2.6	2
Luzerne	2.6	2.9R2	1
Luzerne	2.9R2	3.7	2
Luzerne	3.7	5.0	1
Luzerne	5.0	6.8	3
Luzerne	6.8	7.1	1
Luzerne	7.1	10.5R2	3
Luzerne	10.5R2	12.5R2	1
Luzerne	12.4R2	13.2	2
Luzerne	13.2	19.2	1
Luzerne	19.2	19.9	2
Luzerne and Carbon	19.9	26.0	1
Carbon	26.0	26.5	3
Carbon	26.5	31.5R2	1
Carbon	31.5R2	32.1R2	2
Carbon	32.1R2	32.4R2	3
Carbon	32.4R2	34.5R2	1
Carbon	34.5R2	35.9	2
Carbon	35.9	42.5R2	1
Carbon	42.5R2	43.2	2
Carbon	43.2	44.4R2	1
Carbon	44.4R2	44.8R2	3
Carbon	44.8R2	47.6	2
Carbon	47.6	49.3R2	1
Carbon and Northampton	49.3R2	51.2R2	3
Northampton	51.2R2	52.4	1
Northampton	52.4	53.8	2
Northampton	53.8	54.1	3
Northampton	54.1	60.5	2
Northampton	60.5	60.7	3
Northampton	60.7	61.8	2
Northampton	61.8	62.9	3
Northampton	62.9	63.5	1
Northampton	63.5	65.3	3
Northampton	65.3	66.2	1
Northampton	66.2	66.5	3
Northampton	66.5	67.6R2	1

Table G-20

USDOT Class Locations by Milepost

Facility / County	Begin MP a/	End MP a/	USDOT Class b/
Northampton	67.6R2	70.8	3
Northampton	70.8	71.5	1
Northampton	71.5	73.9R2	2
Northampton and Bucks	73.9R2	77.4	1
Bucks	77.4	77.7	3
Hellertown Lateral			
Northampton	0.0	1.5	2
Northampton	1.5	2.1R2	1
New Jersey Mainline			
Hunterdon	77.7	78.0	3
Hunterdon	78.0	81.2R2	2
Hunterdon	81.2R2	84.5	1
Hunterdon	84.5	87.3	2
Hunterdon	87.3	87.5	3
Hunterdon	87.5	90.4R2	1
Hunterdon	90.4R2	91.1R2	3
Hunterdon	91.1R2	92.7R2	1
Hunterdon	92.7R2	99.9R2	2
Hunterdon	99.9R2	101.1R2	1
Hunterdon	101.1R2	101.5R2	2
Hunterdon and Mercer	101.5R2	104.7R2	1
Mercer	104.7R2	105.9R2	2
Mercer	105.9R2	109.1R2	1
Mercer	109.1R2	109.9R2	2
Mercer	109.9R2	110.5	1
Mercer	110.5	110.9	3
Mercer	110.9	111.3R2	1
Mercer	111.3R2	113.1R2	3
Mercer	113.1R2	114.0	2
Lambertville Lateral			
Hunterdon	0.0R2	1.4	1
Gilbert Lateral			
Hunterdon	0.0R2	0.5R2	2
Hunterdon	0.5R2	0.6R2	3

Notes:
a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application
b/ Class Location Study performed per CFR Part 192.5 using 2015 aerial data and subject to additional field survey information as it becomes available

Table G-21

High Consequence and Unusually Sensitive Areas Crossed by the Pipeline Facilities, by County

Facility/County	Begin Milepost a/	End Milepost a/	HCA Type b/
Pennsylvania Mainline			
Luzerne	2.0	3.4	2
Luzerne	5.0	6.8	1
Luzerne	7.1	10.5R2	1
Luzerne	10.8R2	11.3R2	2
Carbon	26.0	26.5	1
Carbon	31.8R2	32.1R2	3
Carbon	32.1R2	32.4R2	1
Carbon	44.4R2	44.8R2	1
Carbon	45.9	46.2	3
Carbon	49.2R2	49.3R2	3
Carbon and Northampton	49.3R2	51.2R2	1
Northampton	53.6	53.8	3
Northampton	53.8	54.1	1
Northampton	54.1	54.2	3
Northampton	54.3	55.6	2
Northampton	57.4	57.8R2	2
Northampton	59.2	60.5	3
Northampton	60.5	60.7	1
Northampton	60.7	60.9	3
Northampton	60.9	61.6R2	2
Northampton	61.7	61.8	3
Northampton	61.8	62.9	1
Northampton	62.9	63.1	3
Northampton	63.5	65.3	1
Northampton	65.3	65.4	3
Northampton	66.1	66.2	3
Northampton	66.2	66.5	1
Northampton	66.5	67.6R2	3
Northampton	67.6R2	70.8	1
Northampton	72.8	73.4R2	2
Bucks	77.4	77.7	1
Hellertown Lateral			
Northampton	0.7	1.2	3
New Jersey Mainline			
Hunterdon	77.7	78.0	1
Hunterdon	78.0	78.1	3
Hunterdon	79.3R2	79.6R2	3
Hunterdon	84.3	85.1R1	3

Table G-21

High Consequence and Unusually Sensitive Areas Crossed by the Pipeline Facilities, by County

Facility/County	Begin Milepost a/	End Milepost a/	HCA Type b/
Hunterdon	87.2	87.3	3
Hunterdon	87.3	87.5	1
Hunterdon	87.5	87.6	3
Hunterdon	90.1R1	90.4R2	3
Hunterdon	101.0R2	101.7R2	3
Hunterdon	102.5R2	102.9R2	3
Mercer	110.4	110.5	3
Mercer	110.5	110.9	1
Mercer	110.9	111.3R2	3
Mercer	111.3R2	113.1R2	1
Mercer	113.1R2	114.0	2
Gilbert Lateral			
Hunterdon	0.0R2	0.5R2	3
Hunterdon	0.5R2	0.6R2	1
Lambertville Lateral			
Hunterdon	1.3	1.4	3

Notes:
Based upon aerial data dated 2015, and updated with additional field survey information on September 2016
a/ All route deviations implemented after the September 2015 FERC Filing are denoted with an "R" and indicate a milepost equation. Mileposts with an "R1" indicate route deviations implemented and provided to FERC prior to the issuance of the Draft Environmental Impact Statement. Mileposts with an "R2" indicate route deviations implemented as part of this September 2016 Supplemental Filing. All mileposts without an "R" indicate that the route has not changed since the September 2015 Application
b/ HCA Types:
HCA Type 1. A Class 3 location under CFR 192.5
HCA Type 2. Any area in a Class 1 or Class 2 location where the potential impact radius is greater than 660 feet, and the area within a potential impact circle contains 20 or more buildings intended for human occupancy
HCA Type 3. Any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site.