

Limiting Soil Characteristics
Sunoco - Pennsylvania Pipeline Project: Southwest Region
Construction Spreads 1 and 2

Washington County

MAP UNIT SYMBOL	SOIL NAME	EASILY ERODIBLE	CUTBANKS CAVE	CORROSIVE TO CONCRETE/ STEEL	DEPTH TO SATURATED ZONE/ SEASONAL HIGH WATER TABLE	LOW STRENGTH/ LANDSLIDE PRONE	PIPING	POOR SOURCE OF TOPSOIL	HYDRIC/ HYDRIC INCLUSIONS	POTENTIAL SINKHOLE
Washington County Soils										
BoB, BoC, BoD	Brooke		X	S		X		X		
CaB, CaC, CaD	Culleoka	X	X	C		X	X	X		
DoB, DoC, DoD, DiD, DiF	Dormont	X	X	C/S	X	X	X	X	X	X
Fa	Fluquequents	X	X	C/S	X		X		X	
GdB, GdC	Glenford		X	C/S	X	X	X		X	
GeB, GeC, GeD	Guernsey	X	X	C/S	X	X		X	X	X
Hu	Huntington		X	C	X	X			X	X
Nw	Newark	X	X	S	X	X	X	X	X	X
UkF, UdB, UdD	Udorthents	X	X	C/S		X		X		
Us	Urban Land				X					
WeB, WeC, WeD	Weikert		X	C/S		X	X	X	X	

Actions taken to counteract soil limitations

- (1) Erodible Soils - E&S BMPs will be in place and functional prior to earth disturbance. Prompt stabilization practices will be implemented.
- (2) Cut Banks Caves -Almost all Pennsylvania soils are susceptible to caving of cut banks. Cut slopes will be stabilized as soon as possible with seed and mulch or erosion control blankets to prevent sliding. Slopes are designed to not exceed 2H:1V.
- (3) Corrosive to concrete or steel pipe - Pipes to be used on site shall be either HDPE or coated steel.
- (4) High Water Table -Should a high ground water table be encountered during construction, water will be drained away from disturbed areas to a well vegetated area or a placed compost filter sock prior to being discharged off site. Saturated soils the require compaction will be dried prior to being used on site.
- (5) Low Strength - Most of Pennsylvania soils (73%) have relatively low strength. Precautions will be taken to prevent slope failures due to improper construction practices. Soils will be evaluated during construction to determine whether additional measures will need to be taken.
- (6) Piping Tendencies -Piping is the erosion by percolating waters or seepage in layer of subsoil resulting in caving and the formation of tunnels or pipes thorough which the soluble or granular material is removed. Where necessary, anti-seep collars will be used to prevent piping.
- (7) Poor Topsoil -Soil amendments will be added to site soils to promote vegetative growth.
- (8) Potentially Hydric -A wetland delineation has been performed to determine the presence of wetlands.
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Allegheny County

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Allegheny County Soils										
AgB	Allegheny	X	X	C		X	X	X	X	
CkB, CkC	Clarksburg	X	X	C/S	X	X	X	X	X	X
CmB	Clymer	X	X	C		X	X	X	X	
CuC, CuD, CwB, CwC, CwD	Culleoka	X	X	C		X	X	X		
DoB, DoC, DoD, DoE	Dormont	X	X	C/S	X	X	X	X	X	X
GQF, GSF	Gilpin	X	X	C		X	X	X	X	
GuB, GuC	Guernsey	X	X	C/S	X	X		X	X	X
HaB, HaC, THE	Hazleton	X	X	C		X	X	X	X	
LbB	Library	X	X	C/S	X	X		X	X	
Ne	Newark	X	X	S	X	X	X	X	X	X
RaB, RaC	Rainsboro	X	X	X	X	X			X	
SmB, SmD, SmF	Strip Mines									
UB, UcB, UgB, UcD, UrB	Urban Land				X					

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Westmoreland County

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Westmoreland County Soils										
BeB, BeD	Bethesda		X	C/S	X	X		X	X	
CaB, CaC	Cavode	X	X	C/S	X	X	X		X	
ChA	Chavies	X		C		X	X			
CIB, CIC	Clarksburg	X	X	C/S	X	X	X	X	X	X
CuB, CuC, CuD	Culleoka	X	X	C		X	X	X		
DoB, DoC, DoD, DoE, DrD, DrE	Dormont	X	X	C/S	X	X	X	X	X	X
ErB, ErC	Ernest	X	X	C/S	X	X	X	X	X	
FaB, FaC, FaD, FaF	Fairpoint		X	C/S		X		X	X	X
GcB, GcC, GcD, GoF, GuB, GuC, GuD, GwB, GwC, GwD, GwF	Gilpin	X	X	C		X	X	X	X	
GxA	Ginat	X	X	C/S	X	X	X	X	X	
GyB, GyC, GyD	Guernsey	X	X	C/S	X	X		X	X	X
Ho	Holly		X	C/S	X	X	X	X	X	
LIB, LIC	Library	X	X	C/S	X	X		X	X	
Ln	Lindsay		X	S	X	X	X		X	X
Lo	Lobdell	X	X	C/S	X	X	X		X	
LwB, LwC, LwD, LxF	Lowell		X	C/S		X	X	X		X
MeB, MeC, MeD, MeF	Matewan		X	C				X		
Mn	Melvin	X	X	S	X	X	X	X	X	X
MoA, MoB, MoC	Monongahela	X	X	C/S	X	X	X		X	
ShF	Shelocta		X	C		X		X		
ThA	Thorndale		X	C/S	X	X	X	X	X	X
UdB, UeB, UeD, UhB, UhD, UmB, UwD	Urban Land				X					
VaB, VaC, VaD	Vandergrift	X	X	C/S		X		X	X	
WeA	Weinbach	X	X	C/S	X	X	X	X	X	
WrB, WrC, WrD	Wharton	X	X	C/S	X	X	X	X	X	

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Indiana County Soils										
AhA, AhB	Allegheny	X	X	C		X	X	X	X	
ATA	Atkins		X	C/S	X	X	X	X	X	
BeD, BHD	Bethesda		X	C/S	X	X		X	X	
BKB	Brinkerton	X	X	C/S	X	X	X	X	X	
BuB, BuC, BxB, BxD	Buchanan	X	X	C/S	X	X	X	X	X	
CaB, CaC	Cavode	X	X	C/S	X	X	X		X	
CIB, CIC	Clymer	X	X	C		X	X	X	X	
CoB, CpD	Cookport	X	X	C/S	X	X	X	X	X	
CuB, CuC	Culleoka	X	X	C		X	X	X		
DkB	Dekalb		X	C		X	X	X		
ErA, ErB, ErC, EsD	Ernest	X	X	C/S	X	X	X	X	X	
GcA, GcB, GcC, GcD, GcF, GnB, GnD, GwC, GwD, GwF	Gilpin	X	X	C		X	X	X	X	
GyC	Guernsey	X	X	C/S	X	X		X	X	X
HnB, HnC, HnD, HsD, HsF, HxB, HxD	Hazleton	X	X	C		X	X	X	X	
LaE	Laidig	X	X	C/S	X	X	X	X	X	
MoA, MoB, MoC	Monongahela	X	X	C/S	X	X	X		X	
Ph, PhA	Philo	X	X	C/S	X	X	X	X	X	
PoA	Pope	X	X	C/S		X	X	X	X	
PuA	Purdy	X	X	C/S	X	X	X	X	X	
RnC, RnD, RsB, RsD	Rayne	X	X	C		X	X	X		
SxF	Shelocta		X	C		X		X		
TyB	Tyler	X	X	C/S	X	X	X	X	X	
WhA, WhB, WhC, WhD	Wharton	X	X	C/S	X	X	X	X	X	

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Cambria County Soils										
AbB, AbC	Albrights	X	X	C/S	X	X	X	X	X	
AmB	Armagh		X	C/S	X	X	X	X	X	
At	Atkins		X	C/S	X	X	X	X	X	
BmB, BpC	Blairton	X	X	C/S	X	X	X	X	X	
BtB, BvB	Brinkerton	X	X	C/S	X	X	X	X	X	
CaA, CaB, CaC	Cavode	X	X	C/S	X	X	X		X	
CeA, CeB, CeC, CeD, CvB, CvD	Cookport	X	X	C/S	X	X	X	X	X	
GnB, GtC, GtD, GwB, GeC, GwD, GwF	Gilpin	X	X	C		X	X	X	X	
HaB, HaC, HaD, HbB, HbD, Hx	Hazleton	X	X	C		X	X	X	X	
LaB, LaC, LdF	Laidig	X	X	C/S	X	X	X	X	X	
LkC, LkD	Leck Kill		X	C		X	X	X		
LtB	Leetonia	X	X	C				X	X	
NoB	Nolo		X	C/S	X	X	X	X	X	
Ph	Philo	X	X	C/S	X	X	X	X	X	
RaD	Rayne	X	X	C		X	X	X		
UdC	Udorhents	X	X	C/S		X		X		
URC	Urban Land				X					
WaB, WgC, WgD	Wharton	X	X	C/S	X	X	X	X	X	

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