

EROSION AND SEDIMENTATION CONTROL REPORT

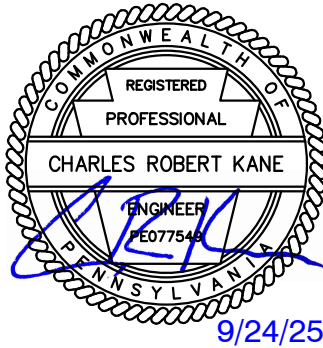
**HCPP PIPELINE
BURRELL, BLACK LICK, AND CENTER TOWNSHIPS
INDIANA COUNTY, PENNSYLVANIA**

Prepared For:

**HOMER CITY GENERATION, L.P.
HOMER CITY, PENNSYLVANIA**

Prepared By:

**CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
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CEC Project 354-010

September 2025

Certification of Plan Preparer:

I do hereby certify to the best of my knowledge, information, and belief, that the Erosion and Sediment Control Plan and the Site Restoration Plan are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Civil & Environmental Consultants, Inc.

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1.0 INTRODUCTION

On behalf of Homer City Generation, L.P. (HCG), Civil & Environmental Consultants, Inc. (CEC) presents this Erosion and Sedimentation Control (E&S) Report for the HCPP Pipeline project located in Burrell, Black Lick, and Center Townships, Indiana County, Pennsylvania. The E&S Report was prepared specifically to address the requirements of the Individual National Pollutant Discharge Elimination System (NPDES) Permit for Discharges of Stormwater Associated with Construction Activities Application. The E&S Report is part of the Individual NPDES Permit Application Package and accompanies, and is consistent with, the application form and the Post-Construction Stormwater Management/Site Restoration (PCSM/SR) Report.

Project Description and Location: HCG proposes to construct approximately 5.8 miles of one (1) 30-inch steel gas distribution pipeline and approximately 0.4 mile of one (1) overhead power line within a 70-foot to 125-foot wide limit of disturbance (LOD), as well as temporary workspace areas to support construction. This project will also consist of the construction of an approximately 0.9-acre permanent gravel Metering and Regulation (M&R) and Interconnect Facility with associated permanent gravel access roads, a 900 square foot (sf) gravel pad and associated access road for an electric tap and PCSM Stormwater Control Measures (SCMs).

The proposed project begins in Burrell Township, Indiana County approximately 1.6 miles northwest of the intersection of State Route (S.R.) 119 and S.R. 22 at the proposed M&R and Interconnect Facility. The M&R and Interconnect Facility is located off an existing third-party gravel access road that connects to Campbells Mill Road (S.R. 3011) in Burrell Township, Indiana County, Pennsylvania. From the M&R and Interconnect Facility, one (1) 30-inch steel gas distribution pipeline will traverse in a northerly direction for approximately 5.8 miles, ending at the proposed redeveloped Homer City Generating Station located in Center Township, Indiana County, Pennsylvania. The pipeline will cross Falling Run Road (Twp 449), McConnell Road (Twp 592), Blacklick Road (S.R. 3013), Dickey Road (Twp 455), and Power Plant Road (Twp 680). The electric power tap site is located off of Country Lane Road (Twp 442). From the electric power tap, an overhead electric line will traverse in a northerly direction for approximately 0.4 mile, ending at the M&R and Interconnect Facility.

Approximately nine (9) existing access roads are proposed for construction access to the project. The existing access roads will be temporarily improved, if needed, to support construction activities. Following construction, the temporary access road improvements, temporary construction workspaces and the pipeline right-of-way (ROW) will generally be restored to existing conditions or meadow-good condition in accordance with 25 Pa. Code Chapter 102.8(n).

Post-construction stormwater associated with the proposed permanent gravel M&R and Interconnect Facility and electric power tap site will be managed by stormwater conveyance structures, Rain Garden and Dry Extended Detention Basin SCMs, and riprap apron outlet protection devices to meet the volume management, rate control, and water quality requirements in accordance with 25 Pa. Code Chapter 102.8(g).

The following North American Datum 1983 coordinates may be used to locate the approximate beginning and end of the pipeline:

Proposed Beginning of Pipeline:	40.4560°N, 79.2457°W
Proposed End of Pipeline:	40.5200°N, 79.2054°W
Proposed Beginning of Powerline:	40.4516°N, 79.2437°W
Proposed End of Powerline:	40.4565°N, 79.2450°W

Wetlands and other potential natural resources conservation areas were considered during the planning stage of this project. Wetlands and streams were delineated in the vicinity of the project area by CEC on various days from February 2025 thru April 2025. Consideration was given during the preparation of the E&S Plans to minimize impacts to these sensitive areas. Six (6) wetlands and 31 streams will be temporarily impacted and by earth disturbance activities as a result of this project. A copy of the Wetland Delineation Report prepared by CEC is included in Section 14 of the Individual NPDES Permit Application package.

Calculations for proposed E&S Best Management Practices (BMPs) are provided in Appendix A.

2.0 SOILS INFORMATION

The Soils Map, which is provided in the Individual NPDES Permit package, illustrates the soil types and their respective boundaries. The following table presents the soils and their respective characteristics and limitations that will be encountered during construction of this project. The soils information in the following table was obtained from the United States Department of Agriculture (USDA) Custom Soil Resource Report.

SYMBOL	SOIL TYPE	SLOPE (%)
AhA	Allegheny silt loam	0-3
AhB	Allegheny silt loam	3-8
AhC	Allegheny silt loam	8-15
BkA	Brinkerton silt loam	0-3
BkB	Brinkerton silt loam	3-8
CaA	Cavode silt loam	0-3
CaB	Cavode silt loam	3-8
CaC	Cavode silt loam	8-15
CtA	Cotaco silt loam	0-3
CuB	Culleoka channery silt loam	3-8
CuC	Culleoka channery silt loam	8-15
DoC	Dormont silt loam	8-15
DrD	Dormont-Culleoka complex	15-25
ErB	Ernest silt loam	3-8
ErC	Ernest silt loam	8-15
GcA	Gilpin channery silt loam	0-3
GcB	Gilpin channery silt loam	3-8
GcC	Gilpin channery silt loam	8-15
GcD	Gilpin channery silt loam	15-25
GcF	Gilpin channery silt loam	25-60
GwC	Gilpin-Weikert channery silt loam	8-15
GwD	Gilpin-Weikert channery silt loam	15-25
GyB	Guernsey silt loam	3-8
GyC	Guernsey silt loam	8-15
HoA	Holly silt loam	0-2
LoA	Lobdell silt loam	0-3
MoB	Monongahela silt loam	3-8
PmA	Pope fine sandy loam	0-2
RnC	Rayne-Gilpin channery silt loams	8-15
UdB	Udorthents	0-8
WhA	Wharton silt loam	0-3
WhB	Wharton silt loam	3-8
WhC	Wharton silt loam	8-15

MAP SYMBOL	SOIL NAME	CORROSIVE TO CONCRETE OR STEEL	DEPTH TO SATURATED ZONE	DEPTH TO HARD BEDROCK	SLOPE	FLOODING	FROST ACTION	LOW STRENGTH	UNSTABLE FILL	CUT BANKS CAVE	POTENTIALLY HYDRIC	SHRINK/SWELL	PIPING
AhA	Allegheny silt loam	C						X	X	X		X	X
AhB	Allegheny silt loam	C			X		X			X		X	X
AhC	Allegheny silt loam	C			X		X			X		X	X
BkA	Brinkerton silt loam	C/S	X				X	X	X	X	X	X	X
BkB	Brinkerton silt loam	C/S	X		X		X	X	X	X	X	X	X
CaA	Cavode silt loam	C/S	X	X			X	X	X	X	X	X	X
CaB	Cavode silt loam	C/S	X	X	X		X	X	X	X	X	X	X
CaC	Cavode silt loam	C/S	X	X	X		X	X	X	X	X	X	X
CtA	Cotaco silt loam												
CuB	Culleoka channery silt loam	C		X	X		X	X	X	X		X	X
CuC	Culleoka channery silt loam	C		X	X		X	X	X	X		X	X
DoC	Dormont silt loam	C/S	X		X		X	X	X	X		X	X
DrD	Dormont-Culleoka complex	C/S	X		X		X	X	X	X	X	X	X
ErB	Ernest silt loam	C/S	X		X		X	X	X	X	X	X	X
ErC	Ernest silt loam	C/S	X		X		X	X	X	X	X	X	X
GcA	Gilpin channery silt loam	C/S		X			X		X	X		X	X
GcB	Gilpin channery silt loam	C/S		X	X		X	X	X	X		X	X
GcC	Gilpin channery silt loam	C/S		X	X		X	X	X	X		X	X
GcD	Gilpin channery silt loam	C/S		X	X		X	X	X	X		X	X
GcF	Gilpin channery silt loam	C/S		X	X		X		X	X		X	X

MAP SYMBOL	SOIL NAME	CORROSIVE TO CONCRETE OR STEEL	DEPTH TO SATURATED ZONE	DEPTH TO HARD BEDROCK	SLOPE	FLOODING	FROST ACTION	LOW STRENGTH	UNSTABLE FILL	CUT BANKS CAVE	POTENTIALLY HYDRIC	SHRINK/SWELL	PIPING
GwC	Gilpin-Weikert channery silt loam	C/S		X	X		X	X	X	X		X	X
GwD	Gilpin-Weikert channery silt loam	C/S		X	X		X	X	X	X		X	
GyB	Guernsey silt loam	C/S	X	X	X		X	X	X	X		X	
GyC	Guernsey silt loam	C/S	X	X	X		X	X	X	X		X	
HoA	Holly silt loam	S	X			X	X		X	X	X		X
LoA	Lobdell silt loam	S	X			X	X			X	X	X	X
MoB	Monongahela silt loam	C/S	X		X		X	X	X	X	X	X	
PmA	Pope fine sandy loam												
RnC	Rayne-Gilpin channery silt loam	C/S		X	X		X			X		X	X
UdB	Udorthents	C					X			X			X
WhA	Wharton silt loam	C/S	X	X			X	X	X	X	X	X	X
WhB	Wharton silt loam	C/S	X	X	X		X	X	X	X	X	X	X
WhC	Wharton silt loam	C/S	X	X	X		X	X	X	X		X	X

Soil Limitations and Resolutions

LIMITATION	RESOLUTION
Corrosion to Concrete/Steel	Concrete and steel construction materials shall be coated with corrosion resistant material.
Depth to Saturated Zone	Pumps and pumped water filter bags shall be utilized if groundwater is encountered
Depth to Hard Bedrock	Excavations shall be as shallow as practicable. Site earthwork operations shall be performed in accordance with the geotechnical recommendations by CEC.
Slope	The site shall be regraded to suitable slopes for desired function.

LIMITATION	RESOLUTION
Flooding	No floodplains will be disturbed during the construction of this project.
Frost Action	Ensure proper protection from damage, especially to roadways.
Low Strength	Proper construction techniques shall be employed during earthmoving activities in order to avoid slope failures.
Unstable Fill	A project specific geohazard mitigation report was prepared to address steep slope and unstable fill construction. Refer the geohazard mitigation report for construction recommendations.
Cut Banks Cave	Trenches and cut slopes shall be excavated with appropriate layback banks to prevent cave-ins. Stockpiles shall be located at a sufficient distance away from the trenches and cut slopes. Applicable Occupational Safety and Health Administration (OSHA) standards and regulations should be implemented.
Hydric/Hydric Inclusions	A wetland study was performed by CEC. Streams and wetlands are shown on the E&S Plans and in the Wetland Delineation Report included in the NPDES Permit application.
Shrink/Swell	Replace pre-existing expansive soils with a non-expansive soil or maintain constant soil moisture.
Piping	Anti-seep collars will be utilized. Trench plugs shall be utilized in accordance with the Pennsylvania Department of Environmental Protection (PADEP) standard detail to minimize water movement via pipe bedding on slopes. Water shall be diverted away from open trenches.

3.0 PAST, PRESENT, AND PROPOSED LAND USES

The past and present land uses of this project site were determined using aerial mapping. Land uses include woodland, meadow, natural gas infrastructure, agricultural, utility and road ROW, and industrial (Homer City Generating Station). The existing topography consists of rolling hills with elevations ranging from Elevation (El.) 920 to El. 1266 based on a combination of conventional survey methods performed by CEC and LiDAR (Light Detection and Ranging) elevation points. The proposed land use will generally consist of utility and road ROW, the restored pipeline ROW, and the permanent gravel M&R and Interconnect Facility and electric power tap site. Disturbed areas associated with the project other than the proposed permanent facilities will be restored to existing condition or meadow-good condition.

4.0 PROJECT SITE RUNOFF DISCUSSION

E&S BMPs are proposed to control sediment-laden runoff from the project area during construction. The maximum drainage area to each BMP was analyzed as part of the BMP design, which was then used to determine the required capacity and each BMP was designed accordingly. The proposed permanent facilities have been designed with PCSM SCMs to manage runoff from the facilities. Disturbed areas associated with the project other than existing and proposed permanent facilities will be restored to existing condition or meadow-good condition.

The volume and rate of runoff from the project site were also analyzed for post-construction conditions, which are discussed in the PCSM/SR Narrative.

5.0 RECEIVING WATERS

Stormwater runoff from this project will drain to the receiving waters listed in the following table. Receiving waters, as with all streams in Pennsylvania, are classified based upon their designated and existing uses and water quality criteria. Designated uses for waters of the Commonwealth are found in 25 PA Code §93.9a-z at: <http://www.pacode.com/secure/data/025/chapter93/chap93toc.html>. Existing uses of waters of the Commonwealth are found at the PADEP website: <http://www.dep.state.pa.us/wave/>. The receiving waters for this project and designated/existing uses are listed below.

STREAM NAME	WATERSHED	DESIGNATED/ EXISTING USE	SILTATION IMPAIRMENTS
Stream 2	Blacklick Creek	CWF/CWF	Yes
Stream 3	Blacklick Creek	CWF/CWF	Yes
Stream 4	Blacklick Creek	CWF/CWF	Yes
Stream 5	Blacklick Creek	CWF/CWF	Yes
Stream 6	Blacklick Creek	CWF/CWF	Yes
Stream 7	Blacklick Creek	CWF/CWF	Yes
Stream 8	Blacklick Creek	CWF/CWF	Yes
Stream 9	Blacklick Creek	CWF/CWF	Yes
Stream 10	Blacklick Creek	CWF/CWF	Yes
Stream 12	Blacklick Creek	CWF/CWF	Yes
Stream 13	Blacklick Creek	CWF/CWF	Yes
Stream 14	Blacklick Creek	CWF/CWF	Yes
Stream 15	Blacklick Creek	CWF/CWF	Yes
Stream 16	Blacklick Creek	CWF/CWF	Yes
Stream 17	Blacklick Creek	CWF/CWF	Yes
Stream 18 (Blacklick Creek)	Blacklick Creek	TSF/TSF	Yes
Stream 20	Blacklick Creek	CWF/CWF	Yes
Stream 21	Blacklick Creek	CWF/CWF	Yes
Stream 22	Blacklick Creek	CWF/CWF	Yes
Stream 25	Blacklick Creek	CWF/CWF	Yes
Stream 28	Blacklick Creek	CWF/CWF	Yes
Stream 41	Blacklick Creek	CWF/CWF	Yes

STREAM NAME	WATERSHED	DESIGNATED/ EXISTING USE	SILTATION IMPAIRMENTS
Stream 42	Blacklick Creek	CWF/CWF	Yes
Stream 44	Blacklick Creek	CWF/CWF	Yes
Stream 46	Blacklick Creek	CWF/CWF	Yes
Stream 48	Blacklick Creek	CWF/CWF	Yes
Stream 49	Blacklick Creek	CWF/CWF	Yes
Stream 50	Blacklick Creek	CWF/CWF	Yes
Stream 51	Blacklick Creek	CWF/CWF	Yes
Stream 52	Blacklick Creek	CWF/CWF	Yes
Stream 54	Blacklick Creek	CWF/CWF	Yes
Stream 56	Blacklick Creek	CWF/CWF	Yes
Stream 59	Blacklick Creek	CWF/CWF	Yes
Stream 60	Blacklick Creek	CWF/CWF	Yes
Stream 61	Blacklick Creek	CWF/CWF	Yes
Stream 62	Blacklick Creek	CWF/CWF	Yes
Stream 63	Blacklick Creek	CWF/CWF	Yes
Stream 64	Blacklick Creek	CWF/CWF	Yes
Stream 65	Blacklick Creek	CWF/CWF	Yes
Stream 66	Blacklick Creek	CWF/CWF	Yes
Stream 67	Blacklick Creek	CWF/CWF	Yes
Stream 68	Blacklick Creek	CWF/CWF	Yes
Stream 69	Blacklick Creek	CWF/CWF	Yes
Stream 70	Blacklick Creek	CWF/CWF	Yes
Stream 71	Blacklick Creek	CWF/CWF	Yes
Stream 72	Blacklick Creek	CWF/CWF	Yes
Stream 73	Blacklick Creek	CWF/CWF	Yes

6.0 EROSION CONTROL AND STORMWATER BEST MANAGEMENT PRACTICES

The BMPs listed in this plan shall be installed and maintained in accordance with the *Erosion and Sediment Pollution Control Manual No. 363-2134-008*, as amended and updated, and the *Oil and Gas Operator's Manual No. 550-0300-001*, as amended and updated. The BMPs contained in this plan shall be installed as shown on the approved E&S Plans prior to earth disturbance (including clearing and grubbing) within the tributary area of each BMP. Each BMP shall be kept functional until all earth disturbing activities within the tributary area are completed and a uniform 70 percent perennial vegetated cover is achieved over the entire disturbed area or other suitable permanent erosion protection has been installed.

E&S BMPs shall be installed and maintained as specified in this plan. The permittee shall keep a written record documenting each inspection, and BMP repair or replacement and maintenance activities.

The following standard BMPs have been provided to fulfill the requirements of this plan. Additional BMPs are listed in the *Erosion and Sedimentation Pollution Control Manual* as well as the *Oil and Gas Operator's Manual*. BMP construction details are provided on the E&S Plans. Supporting calculations for each BMP, if applicable, are provided in Appendix A.

Rock Construction Entrance (100-foot Alternative): Rock Construction entrances within siltation impaired watersheds shall be extended an additional 50 feet for a total length of 100 feet of 8-inch thick AASHTO No. 1 rock. In addition to the entrance construction, the use of a vacuum truck sweeper with a catch bin attachment shall be utilized to clean the paved public roadways. Refer to Rock Construction Entrance detail specified in the E&S Plans. The construction entrances shall be maintained during the course of the project. Rock construction entrance thicknesses shall be constantly maintained to the specified dimensions by adding rock. A stockpile shall be maintained on-site for this purpose. Sediment deposited on paved roadways shall be removed and returned to the construction site immediately. If excessive amounts of sediment are being deposited on the roadway, extend the length of the rock construction entrance by 50-foot increments until the

condition is alleviated or install a wash rack. Washing the roadway or sweeping the deposits into roadway ditches, sewers, culverts, or other drainage courses is not acceptable.

Rock Construction Entrance (Option B Alternate): Rock Construction entrances located within stream floodways shall be installed per the requirements of Options A, B, or C, but installed via excavation, such that the construction entrance does not result in fill greater than 6 inches in depth being placed within the floodway.

Multi-Layer Geotextile Filter Fence (Silt Fence): Silt Fence shall be installed on or parallel to the contour at the edge of disturbed areas. Both ends of each fence section must be extended upslope at 45 degrees to the main silt fence alignment. Silt Fence shall be installed in accordance with the manufacturer's specifications. Traffic shall not be permitted to cross silt fence. Accumulated sediment shall be removed when it reaches one-half (1/2) of the aboveground height of the fence. Refer to the detail specified in the E&S Plans for material specifications and additional notes. Upon stabilization of the area tributary to the fence, stakes and silt fence shall be removed. Silt Fence shall be inspected at least weekly and after each runoff event. Damaged fence sections shall be repaired according to manufacturer's specification or replaced within 24 hours.

Waterbar: Waterbars were designed in accordance with the recommended spacing and will be placed in the pipeline ROW as indicated on the drawings. Waterbars are shown on the E&S Plans as general guidance as to the approximate location of installation. The waterbars shall be sloped at a maximum of 2 percent downgrade. Waterbars shall be oriented to discharge runoff downslope of the ROW to prevent it from re-entering the ROW. Sumps may be installed at the waterbar outlets based on conditions encountered during construction, as necessary, to minimize accelerated erosion from the site. Installation of waterbar sumps should be limited to warm season construction (April through October). Accumulated sediment shall be removed when it reaches three quarters (3/4) of the waterbar sump depth. Waterbars located within a special protection watershed or within 150 feet of an existing stream, wetland, or stormwater drainage feature shall be installed with 12-inch compost filter socks at the outlet points. Temporary waterbars shall be removed once the tributary area is stabilized. Waterbars and waterbar sumps shall be inspected weekly and after each runoff event. Damaged or eroded waterbars shall be restored to original dimensions

immediately upon inspection. During final restoration of the pipeline ROW, waterbar sumps shall be removed by backfilling with suitable fill material. Maintenance of waterbars shall be provided until ROW has achieved permanent stabilization.

Trench Plugs: A trench plug is a flow obstruction, constructed from clay, bentonite, or concrete fill sack, that is placed in a trench to prevent flow along the waterline either prior to or after backfilling of the trench. Impervious trench plugs are required for all stream, river, wetland, or other surface water crossings regardless of trench slope. Trench plugs not located at surface water crossings may be fitted with a controlled drainage outlet, if deemed necessary for geohazard prevention and mitigation. The approximate locations of trench plug installation are shown on the E&S drawings.

Slope Stabilization: Slope stabilization shall be installed in disturbed areas for all slopes 3 horizontal to 1 vertical (3H:1V) or steeper, within 50 feet of a surface water, or where soil conditions indicate blanketing is needed to achieve adequate vegetative cover. Refer to the detail specified in the E&S Plans for anchoring and stapling requirements. Manufacturer's recommendations should be followed for installation and maintenance requirements.

Pumped Water Filter Bag: Filter bags shall be made from nonwoven geotextile material sewn with high strength, double stitched "J" type seams and shall trap particles larger than 150 microns. Pumping rates shall be no greater than 750 gallons per minute or one-half (1/2) the maximum specified by the manufacturer, whichever is less. Filter bags shall be replaced when they become one-half (1/2) full. A suitable means of accessing the bag with machinery required for disposal purposes must be provided. Spare bags shall be kept available for replacement of those that have failed or are filled. Bags shall be located in well-vegetated (grassy) areas and discharge onto stable, erosion resistant areas. Where this is not possible, a geotextile flow path shall be provided. Bags shall not be placed on slopes greater than 5 percent. Bags shall be placed on straps to facilitate removal unless bags come with lifting straps already attached.

Wood Mats: Wood mats (also called timber mats) shall be installed in the locations shown on the plans and in accordance with the "Wood Mat for Wetland Crossing" standard detail provided. A

layer of geotextile shall be placed between the wood mats and wetland. Inspect wood mats routinely to provide proper protection and stability. Replace geotextile in any locations where tears are found.

Channels: Channels shall be installed at the locations shown on the plans and in accordance with the vegetated channel detail. Channels shall be inspected weekly and after each runoff event (0.25-inch of runoff or greater in a 24-hour period). Channels should be maintained to ensure that the specified dimensions and protective lining are available. A channel should be cleaned whenever total channel depth is reduced by 25 percent at any location. Damaged channel linings should be promptly replaced.

Culverts: The proposed culverts shall be installed as soon as grading operations for the permanent access road allow for its installation. A minimum of 1-foot of cover shall be maintained over the culverts at all times. Culverts shall be inspected weekly during construction and after any large rainfall event (0.25-inch of runoff or greater in 24 hours). Any accumulated sediment and debris shall be removed immediately. Upon completion of construction activity, culverts shall be inspected at least bi-annually.

Temporary Stabilization: Temporary stabilization will be applied upon temporary cessation of earth disturbance activity or any stage of an activity exceeding four (4) days; the site shall immediately be seeded, mulched, or otherwise protected from accelerated erosion pending future earth disturbance activities. For an earth disturbance activity or any stage of an activity to be considered temporarily stabilized, the disturbed areas shall be covered with one (1) of the following: a minimum uniform coverage of mulch and seed with a density capable of resisting accelerated erosion or an acceptable BMP that temporarily minimizes accelerated erosion. Temporary stabilization will not occur on active vehicular travel ways within the project LOD. The on-site environmental inspector will log daily activity within the project LOD and notify HCG of areas requiring temporary stabilization [i.e., areas where work has ceased for at least four (4) days]. These areas will be temporarily stabilized in accordance with the plan drawings and specifications.

Permanent Stabilization: Permanent stabilization shall occur at the conclusion of the construction phase. Upon completion or temporary cessation of the earth disturbance activity in a special protection watershed, that portion of the project site tributary to the special protection waters must be immediately stabilized. Disturbed areas shall be seeded and mulched in accordance with the specification presented herein. Soil amendments shall be applied before seeding. It is recommended that soil tests be completed by a qualified professional to determine proper soil amendment application rates for the proposed site conditions and seed mixtures.

7.0 BEST MANAGEMENT PRACTICE INSTALLATION SEQUENCE

The HCPP Pipeline project will consist of the construction and maintenance of one (1) 30-inch steel gas distribution line, one (1) overhead electric line, an M&R and Interconnect Facility, an electric power tap site, and E&S BMPs. E&S BMPs shall be installed in accordance with the approved E&S Plan and the PADEP *Erosion and Sediment Pollution Control Program Manual* dated March 2012. Refer to the E&S Plans for the location of the proposed work and the associated BMPs.

A generalized construction sequence is provided below. The construction sequence is intended to provide a general course of action in order to conform to the applicable regulatory agency requirements for temporary and permanent soil E&S. Necessary parts for proper and complete execution of work pertaining to this plan, whether specifically mentioned or not, are to be performed by the contractor. It is not intended the drawings and this report show every detailed piece of material or equipment. The contractor shall comply with all requirements listed in this section. The contractor may be required to alter controls based on effectiveness of controls or differing conditions encountered in the field.

A pre-construction meeting is required prior to the start of any construction activity. PADEP must be invited to this meeting at least seven (7) days in advance. Also, at least three (3) days before starting earth disturbance activities, contractors involved in those activities shall notify the Pennsylvania One-Call System Incorporated at 1-800-242-1776 to locate buried utilities.

Pipeline construction is expected to be performed in a segmental fashion to progress along the project route. As such, different segments of the pipeline may be at different stages in the construction sequence during the life of the project. For each segment of pipeline, the contractor should generally follow steps below and repeat for each new segment of pipeline construction. Upon completion of an earth disturbance activity or any stage or phase of an activity, the site shall be immediately stabilized or otherwise protected from accelerated erosion and discharge of sediment.

All BMPs shall be installed in accordance with the E&S Plan standard details, specifications defined in the PADEP E&S BMP Manual or Alternative BMP list and, where applicable, the product manufacturer's recommendations. A copy of the approved drawings (stamped, signed, and dated) must be available at the project site at all times.

1. Layout the limits of the project, including survey staking the LOD, establish benchmarks, reference points, and sensitive areas, which are to be preserved or avoided during construction. Install orange construction safety fence in the locations identified on the E&S Plans to protect sensitive areas.
2. Locate access points, including construction entrances and staging areas. Install sediment barriers as shown on the E&S Plans downslope of these areas.
3. Install rock construction entrances (RCE) at the locations shown on the E&S Plans and in accordance with the standard details. RCE locations may be adjusted within the LOD at the locations shown on the E&S Plans to account for prevailing site conditions. RCE maintenance stockpiles may be relocated within the LOD from locations shown on the E&S Plans to allow for efficient flow of construction traffic.
4. Minimize total area of disturbance. Remove trees and brush to effectively install perimeter controls. Level side cuts to grant access for vehicles and workers to safely perform the installation of sediment barriers as shown on the E&S Plans. Installation, BMP sizing, and spacing must conform to the details and specifications provided on the E&S Plans.
5. Clear and grub only within the LOD defined on the E&S Plans. No grubbing or earth disturbance shall occur until BMPs are installed downslope of tributary areas.
6. During clearing along the ROW, install temporary equipment crossings at wetlands and streams as shown on the E&S Plans. Crossings must be installed in accordance with the requirements of the approved Chapter 105 General Permit documents associated with each individual crossing location.

Pipeline Construction

7. Begin pipeline construction. Segregation of topsoil and subsoil shall take place throughout the ROW. Soil stockpile locations shall be adjusted, as necessary, during construction to allow for efficient flow of construction or to accommodate prevailing site conditions. The ROW shall be used as the work area for excavation, equipment movement, and material stockpiles. Equipment, stockpiles, and other materials must remain upslope of BMPs during construction activity.
8. For the duration of construction, pooling water encountered within the construction area shall be dewatered by using pumps, hoses, and pumped water filter bags that discharge into well vegetated areas.
9. Coal or other potential acid producing rock (APR) material shall be handled in accordance with the approved APR Management Plan.
10. Apply soil supplements and temporarily seed and mulch topsoil stockpiles on disturbed areas that will receive no construction activity within four (4) days.
11. Proceed with gas pipeline installation.
12. Install trench plugs and geological hazard mitigation plan (GHMP) BMPs at the locations identified on the E&S Plans. GHMP BMP locations may be adjusted, relocated, or added per prevailing site conditions and at the discretion of a qualified professional under direct supervision of the appropriate licensed professional.
13. Upon completion of pipeline installation, backfill the trench with suitable material.

Permanent Facility Construction

14. Concurrent with pipeline construction, begin bulk earthwork for the proposed M&R and Interconnect Facility and electric power tap site as well as associated access roads. Earthwork operations shall be performed in concurrence with the geotechnical recommendations for the project, as applicable.
15. As facility access road earthwork progresses, cut/grade in channels for access road drainage working upslope as grading operations for the access road continue. Install cross-drain culverts and riprap aprons at the locations shown on the plans and in accordance with the standard details. Stabilize channels immediately with riprap as specified on the detail sheets. Stabilize the access road with gravel once final subgrade is reached.
16. Complete clearing and grubbing activities and strip topsoil from the site for the proposed facility pads. Stockpile topsoil and subsoils at the temporary and permanent locations shown on the plans. Limit clearing, grubbing, and disturbance to only what can be completed in one (1) work day. Topsoil shall be stripped as construction progresses and placed in topsoil stockpiles. Stabilize permanent and temporary soil stockpiles as fill progresses and reaches final grades shown.
17. Concurrent with facility pad construction, commence construction of PCSM SCMs. While constructing the embankments, install permanent outlet structures, outlet pipes, anti-seep collars, and spillways. Note that construction of the anti-seep collars is a critical stage of construction for which the engineer or their designee must be present.
18. Construction waste materials shall be disposed of at a PADEP-approved waste site and in accordance with local and state codes and permit requirements (verification of permits to be provided by the contractor).

19. As grading of the facility pads progresses, new fill placed during the workday should be back-sloped compacted with a smooth-drum roller to reduce the impacts of precipitation and the potential erosion of finished slope faces.
20. Install any remaining channel sections and riprap aprons as indicated on plans. Install features starting on downstream end and work upstream.
21. Cut and fill operations shall continue until the sites are brought to approximate final subgrade. Place gravel on the facility pads to provide a stabilized surface.
22. Respread topsoil from the topsoil stockpiles, as necessary, to establish vegetation. Install slope stabilization on all slopes 3H:1V or greater immediately upon reaching final grade.

Right-of-Way Restoration

23. Apply soil supplements and permanent seed and mulch to disturbed areas that have achieved final grade and will no longer be subjected to construction activity. For slope areas 3H:1V and steeper, the area shall be vertically tracked and erosion control blankets shall be installed once soil supplements, seed, and mulch have been applied. For slope areas 3H:1V and steeper, a steep slope seed mixture shall be used.
24. Upon completion of construction activities, the site shall be restored in accordance with the PCSM/SR Plan. During restoration of the ROW, the contractor shall implement decompactive procedures (ripping, discing, tilling, etc.) through the upper 12 to 18 inches of subsoil to promote root growth. Topsoil will be respread above the decompacted soils. Apply soil supplements and permanent seed and mulch to all remaining disturbed areas. Existing third party access roads crossed by the pipeline shall be restored to their pre-construction condition.
25. Reseed, as necessary, any areas that become disturbed or where vegetation has not been established.

26. Remove all temporary BMPs once a uniform 70 percent perennial vegetative cover has established on all previously disturbed areas.

27. If future maintenance activities along the ROW are required, HCG and the contractor shall monitor equipment leaving the ROW to ensure sediment is not tracked onto the roadway. HCG shall obtain additional permits, if necessary, depending on the scope of the maintenance activities. Sediment deposited onto the roadway shall be removed and returned to the construction site by the end of each work day.

Minor modifications to the E&S and PCSM/SR Plans shall be noted on the plan that is available at the site and initialed by the appropriate PADEP staff. Minor changes to the plan may include adjustments to BMPs and locations within the permitted boundary to improve environmental performance, prevent potential pollution, change in ownership or address, typographical errors, on-site field adjustments such as the addition or deletion of BMPs, or alteration of earth disturbance activities to address unforeseen circumstances. Major modifications to the approved E&S Plans involving new or additional earth disturbance activities other than those described as minor modifications above and/or the addition of a discharge will require prior approval by the reviewing entity and may require the submittal of a new plan.

8.0 MATERIAL RECYCLING AND DISPOSAL

Practices and procedures must be in place to ensure the proper handling, storage, control, disposal, and recycling of garbage, fuels, or any substance which may be harmful to human, aquatic, or fish life. The listed items shall be prevented from entering springs, streams, ponds, lakes, wetlands, or a water course or water body. Oils, fuels, lubricants, and coolants shall be placed in suitable containers and disposed of properly. All synthetic erosion control features (e.g., silt fencing, nettings, mats), which are intended for temporary use during construction, shall be completely removed and properly disposed of after their purpose has been served. Orange construction fence, and similar, shall be removed and properly disposed of immediately upon completion of its intended purpose. Only natural fiber materials which will “completely breakdown” within a reasonable timeframe, as to be indistinguishable from the natural environment, may be abandoned in place. Trash and garbage shall be collected and disposed of properly.

9.0 NATURALLY OCCURRING GEOLOGIC FORMATIONS, MINING, AND SOIL CONDITIONS

Refer to the Naturally Occurring Geologic Condition Assessment (Geohazard) Report provided in Section 12 of Individual NPDES Permit Application package.

10.0 POTENTIAL THERMAL IMPACTS

A majority of the project will not have significant changes in land cover, therefore, the principal source of thermal impacts is related to proposed temporary vegetation disturbance; however, gravel surfaces will be constructed for the M&R and Interconnect Facility and the electric power tap site. Thermal impacts from the temporary disturbance of the pipeline ROW will be minimized by allowing runoff to flow over vegetated surfaces prior to entering any surface waters. Additionally, the pipeline ROW and workspace areas, with the exception of areas previously permitted for a less pervious ground cover (i.e., existing access roads, well pads, etc.), will be restored as soon as practicable to meadow-good condition, which will allow runoff to flow over vegetated surfaces prior to discharging to surface waters thus reducing the effects of thermal impacts on the surface waters. Likewise, vegetation removal will be limited to the extent practicable. Further, maintaining existing tree canopies and riparian buffers will limit ground surface exposure to direct sunlight. Lastly, proposed PCSM SCMs will be installed to minimize thermal impacts due to the gravel cover at the permanent facility sites by allowing runoff to flow over vegetated surfaces and infiltrate prior to discharge to surface waters.

11.0 RIPARIAN FOREST BUFFERS

The PADEP requires a 150-foot riparian forest buffer for projects located within a High Quality (HQ) or special protection watershed. The site is located within the Black Lick Creek, watershed which is not HQ; therefore, the 150-foot riparian buffer requirement is not applicable to this project.

12.0 ANTI-DEGRADATION ANALYSIS

Chapter 93 of the PA Code was used to determine if the receiving waters for the project are classified as special protection or siltation impaired. The Blacklick Creek watershed is classified as siltation impaired and Cold Water Fishes (CWF); therefore an antidegradation analysis is required for this project. Antidegradation Best Available Combination of Technologies (ABACT) approved E&S BMPs were utilized throughout the project to prevent degrading discharge. Below is a narrative of the “Non-Discharge” BMPs utilized on this project.

Limited Disturbed Area – The amount of land disturbed within the LODs will be minimized to the extent practicable at all times. Land will only be disturbed at the rate necessary to progress installation of the proposed pipeline and associated facilities.

Immediate Stabilization – All disturbed areas will be restored to meadow–good condition, agricultural use, or a stable gravel cover as soon as practicable following construction.

Other - Revegetation – All disturbed areas will be restored to meadow-good condition as soon as practicable following construction, unless otherwise noted on the plan drawings.

ABACTs are proposed for this project and include the following:

- Preparedness, Prevention, and Contingency (PPC) Plan – A PPC Plan will be available on site to identify applicable pollution prevention practices while the site is in operation; and
- ABACT BMPs – Compost filter sock will be utilized upslope of special protection waters during construction to minimize the transport of sediment pollution to the special protection waters. Rock construction entrances upslope of special protection waters will be extended an additional 50 feet (100 feet total). Waterbars and pumped water filter bags within the special protection watersheds will include a compost filter sock at the discharge outlets. Disturbed areas will be immediately stabilized with vegetative stabilization, following reaching final grades.

Based on the above summary, ABACT BMPs have been utilized to satisfy the requirements of this antidegradation analysis.

13.0 OFF-SITE DISCHARGE ANALYSIS

The PADEP requires that proposed off-site discharges of stormwater from site restoration areas and PCSM BMPs to areas other than surface waters must demonstrate that the discharge will not cause erosion, damage, or a nuisance to off-site properties.

The proposed M&R and Interconnect Facility and electric power tap site utilize conveyance channels and storm pipes to convey runoff from the pads and access roads in a controlled manner. Conveyance channels and storm pipes (including proposed SCM outfalls) will outlet onto riprap aprons, which have been designed in accordance with the PADEP E&S Manual to reduce the velocity of runoff in order to minimize the potential for erosion. Moreover, the proposed PCSM SCMs will manage the stormwater runoff thereby reducing the overland offsite discharge from the project area. Lastly, the discharges drain to receiving waters located within the properties of the subject project.

14.0 REFERENCES

1. Commonwealth of Pennsylvania, Pennsylvania Code Title 25, Environmental Resources, Department of Environmental Protection, Chapter 93 Water Quality Standards, Harrisburg, PA 1994.
2. Commonwealth of Pennsylvania, Department of Environmental Protection, Office of Water Management, Erosion and Sediment Pollution Control Program Manual, Harrisburg, PA, March 2012.
3. U.S. Department of Agriculture, National Resources Conservation Service, Custom Soil Resource Report for Westmoreland County, Pennsylvania, prepared in July 2025 on the Web Soil Survey website. <http://websoilsurvey.nrcs.usda.gov>
4. Davies, W. E., and Pomeroy, J. S., 1979, Landslides and related features, Pennsylvania [Pittsburgh 1- by 2-degree sheet]: U.S. Geological Survey Open-File Map 79-1314, 128 maps. Via: "PA DCNR - Geology - Landslides Publications." *PA DCNR - Geology - Landslides Publications*. N.p., n.d. Web. July 2025.
5. "Pennsylvania Department of Environmental Protection eMapPA." *eMapPA*. N.p., n.d. Web. July 2025.

APPENDIX A
SUPPORTING CALCULATIONS

SILT BARRIERS

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AA

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	10	SLOPE LENGTH =	109	250	250	141	56%	OK
SEGMENT B	SLOPE =	23	SLOPE LENGTH =	51	100	56	5	5%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 160
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AB

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	70	250	250	180	72%	OK
SEGMENT B	SLOPE =	24	SLOPE LENGTH =	104	150	108	4	3%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	174
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AC

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	21	SLOPE LENGTH =	60	100	100	40	40%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	60
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AD

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 14	14	SLOPE LENGTH = 36	36	200	200	164	82%	OK
SEGMENT B	SLOPE = 12	12	SLOPE LENGTH = 32	32	200	164	132	66%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 68

*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AE

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 8	8	SLOPE LENGTH = 110	110	250	250	140	56%	OK
SEGMENT B	SLOPE = 8	8	SLOPE LENGTH = 102	102	250	140	38	15%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 212
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AF

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 7	7	SLOPE LENGTH = 115	115	300	300	185	62%	OK
SEGMENT B	SLOPE = 6	6	SLOPE LENGTH = 37	37	300	185	148	49%	OK
SEGMENT C	SLOPE = 11	11	SLOPE LENGTH = 81	81	250	123	42	17%	OK
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	233
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AG

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 8	8	SLOPE LENGTH = 215	215	300	300	85	28%	OK
SEGMENT B	SLOPE = 14	14	SLOPE LENGTH = 68	68	250	71	3	1%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	283
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AH

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 9	9	SLOPE LENGTH = 143	143	250	250	107	43%	OK
SEGMENT B	SLOPE = 12	12	SLOPE LENGTH = 68	68	200	86	18	9%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 211
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AI

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	3	SLOPE LENGTH =	157	500	500	343	69%	OK
SEGMENT B	SLOPE =	7	SLOPE LENGTH =	190	300	206	16	5%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	347
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AJ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 8	8	SLOPE LENGTH = 150	150	250	250	100	40%	OK
SEGMENT B	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 150
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AK

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 7	7	SLOPE LENGTH = 101	101	250	250	149	60%	OK
SEGMENT B	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	101
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AL

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 8	8	SLOPE LENGTH = 118	118	250	250	132	53%	OK
SEGMENT B	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	118
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AM

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	198	200	200	2	1%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	198
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AN

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 28**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 16	16	SLOPE LENGTH = 138	138	250	250	112	45%	OK
SEGMENT B	SLOPE = 30	30	SLOPE LENGTH = 34	34	125	56	22	18%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 172

*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AO

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	46	SLOPE LENGTH =	27	50	50	23	46%	OK
SEGMENT B	SLOPE =	32	SLOPE LENGTH =	28	90	41	13	15%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	55
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AP

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 8	8	SLOPE LENGTH = 202	202	250	250	48	19%	OK
SEGMENT B	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	202
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AQ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	14	SLOPE LENGTH =	129	200	200	71	36%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	129
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AR

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	10	SLOPE LENGTH =	100	250	250	150	60%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	100
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AS

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	1	SLOPE LENGTH =	33	700	700	667	95%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	33
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODN Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AT

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 7	7	SLOPE LENGTH = 89	89	250	250	161	64%	OK
SEGMENT B	SLOPE = 6	6	SLOPE LENGTH = 85	85	250	161	76	30%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 174
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AU

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 7	7	SLOPE LENGTH = 64	64	250	250	186	74%	OK
SEGMENT B	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	64
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODN Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AV

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	20	SLOPE LENGTH =	89	150	150	61	41%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	89
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AW

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	21	SLOPE LENGTH =	91	150	150	59	39%	OK
SEGMENT B	SLOPE =	25	SLOPE LENGTH =	32	150	59	27	18%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	123
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AX

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	33	SLOPE LENGTH =	55	65	65	10	15%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	55
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AY

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	99	200	200	101	51%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 99

*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER AZ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	16	SLOPE LENGTH =	82	150	150	68	45%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	82
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BA

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	16	SLOPE LENGTH =	61	150	150	89	59%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	61
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BB

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	19	SLOPE LENGTH =	21	200	200	179	90%	OK
SEGMENT B	SLOPE =	50	SLOPE LENGTH =	21	50	45	24	48%	OK
SEGMENT C	SLOPE =	30	SLOPE LENGTH =	25	100	48	23	23%	OK
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 67

*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BC

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 28**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	28	SLOPE LENGTH =	110	125	125	15	12%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 110
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BD

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 28**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	22	SLOPE LENGTH =	27	180	180	153	85%	OK
SEGMENT B	SLOPE =	30	SLOPE LENGTH =	48	125	106	58	47%	OK
SEGMENT C	SLOPE =	20	SLOPE LENGTH =	73	250	117	44	17%	OK
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	148
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BE

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	4	SLOPE LENGTH =	31	350	350	319	91%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	31
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BF

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	2	SLOPE LENGTH =	94	700	700	606	87%	OK
SEGMENT B	SLOPE =	1	SLOPE LENGTH =	224	700	606	382	55%	OK
SEGMENT C	SLOPE =	1	SLOPE LENGTH =	49	700	382	333	48%	OK
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	367
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BG

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	1	SLOPE LENGTH =	176	700	700	524	75%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	176
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BH

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	1	SLOPE LENGTH =	208	700	700	492	70%	OK
SEGMENT B	SLOPE =	5	SLOPE LENGTH =	85	350	246	161	46%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	293
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BI

SILT FENCE OR COMPOST FILTER SOCK TYPE: SILTRON 28

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 5	5	SLOPE LENGTH = 180	180	650	650	470	72%	OK
SEGMENT B	SLOPE = 3	3	SLOPE LENGTH = 200	200	650	470	270	42%	OK
SEGMENT C	SLOPE = 9	9	SLOPE LENGTH = 160	160	400	166	6	2%	OK
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	540
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BJ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	21	SLOPE LENGTH =	20	100	100	80	80%	OK
SEGMENT B	SLOPE =	11	SLOPE LENGTH =	123	200	160	37	19%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	143
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BK

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	10	SLOPE LENGTH =	247	250	250	3	1%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	247
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BL

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	17	SLOPE LENGTH =	97	150	150	53	35%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	97
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BM

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 28**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	24	SLOPE LENGTH =	54	180	180	126	70%	OK
SEGMENT B	SLOPE =	18	SLOPE LENGTH =	135	250	175	40	16%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	189
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BN

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	22	SLOPE LENGTH =	59	150	150	91	61%	OK
SEGMENT B	SLOPE =	19	SLOPE LENGTH =	82	200	121	39	20%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	141
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BO

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	23	SLOPE LENGTH =	97	100	100	3	3%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	97
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BP

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	10	SLOPE LENGTH =	93	250	250	157	63%	OK
SEGMENT B	SLOPE =	15	SLOPE LENGTH =	57	200	126	69	34%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	150
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BQ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	8	SLOPE LENGTH =	194	250	250	56	22%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	194
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BR

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 8	8	SLOPE LENGTH = 111	111	250	250	139	56%	OK
SEGMENT B	SLOPE = 3	3	SLOPE LENGTH = 111	111	350	195	84	24%	OK
SEGMENT C	SLOPE = 5	5	SLOPE LENGTH = 40	40	350	84	44	12%	OK
SEGMENT D	SLOPE = 6	6	SLOPE LENGTH = 21	21	250	31	10	4%	OK
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	283
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BS

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 18	18	SLOPE LENGTH = 40	40	150	150	110	73%	OK
SEGMENT B	SLOPE = 21	21	SLOPE LENGTH = 72	72	100	73	1	1%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	112
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BT

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	14	SLOPE LENGTH =	141	200	200	59	30%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	141
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BU

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	15	SLOPE LENGTH =	164	200	200	36	18%	OK
SEGMENT B	SLOPE =	4	SLOPE LENGTH =	46	350	63	17	5%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 210
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BV

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 3	3	SLOPE LENGTH = 143	143	350	350	207	59%	OK
SEGMENT B	SLOPE = 4	4	SLOPE LENGTH = 119	119	350	207	88	25%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	262
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BW

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 8	8	SLOPE LENGTH = 99	99	250	250	151	60%	OK
SEGMENT B	SLOPE = 9	9	SLOPE LENGTH = 89	89	250	151	62	25%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 188
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BX

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	8	SLOPE LENGTH =	210	250	250	40	16%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	210
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BY

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	10	SLOPE LENGTH =	46	250	250	204	82%	OK
SEGMENT B	SLOPE =	7	SLOPE LENGTH =	49	250	204	155	62%	OK
SEGMENT C	SLOPE =	6	SLOPE LENGTH =	13	250	155	142	57%	OK
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	108
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER BZ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	26	200	200	174	87%	OK
SEGMENT B	SLOPE =	13	SLOPE LENGTH =	120	200	174	54	27%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	146
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODN Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CA

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	13	SLOPE LENGTH =	69	200	200	131	66%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	69
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CB

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	16	SLOPE LENGTH =	30	150	150	120	80%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	30
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CC

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	13	SLOPE LENGTH =	51	200	200	149	75%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	51
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CD

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	17	SLOPE LENGTH =	40	150	150	110	73%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	40
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CE

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	29	SLOPE LENGTH =	24	75	75	51	68%	OK
SEGMENT B	SLOPE =	27	SLOPE LENGTH =	18	75	51	33	44%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	42
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 9/17/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CF

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	17	SLOPE LENGTH =	132	150	150	18	12%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	132
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 9/17/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CG

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 9	9	SLOPE LENGTH = 142	142	250	250	108	43%	OK
SEGMENT B	SLOPE = 7	7	SLOPE LENGTH = 41	41	250	108	67	27%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 183
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CH

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 6	6	SLOPE LENGTH = 33	33	250	250	217	87%	OK
SEGMENT B	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	33
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CI

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	1	SLOPE LENGTH =	49	700	700	651	93%	OK
SEGMENT B	SLOPE =	1	SLOPE LENGTH =	68	700	651	583	83%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	117
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CJ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 6	6	SLOPE LENGTH = 33	33	250	250	217	87%	OK
SEGMENT B	SLOPE = 3	3	SLOPE LENGTH = 75	75	350	304	229	65%	OK
SEGMENT C	SLOPE = 2	2	SLOPE LENGTH = 46	46	700	458	412	59%	OK
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	154
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER CK

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	2	SLOPE LENGTH =	79	700	700	621	89%	OK
SEGMENT B	SLOPE =	3	SLOPE LENGTH =	142	350	311	169	48%	OK
SEGMENT C	SLOPE =	3	SLOPE LENGTH =	87	350	169	82	23%	OK
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	308
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DA

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 4	4	SLOPE LENGTH = 130	130	350	350	220	63%	OK
SEGMENT B	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	130
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DB

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	11	SLOPE LENGTH =	120	200	200	80	40%	OK
SEGMENT B	SLOPE =	7	SLOPE LENGTH =	48	250	100	52	21%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	168
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DC

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 8	8	SLOPE LENGTH = 115	115	250	250	135	54%	OK
SEGMENT B	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	115
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DD

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	50	250	250	200	80%	OK
SEGMENT B	SLOPE =	30	SLOPE LENGTH =	28	100	80	52	52%	OK
SEGMENT C	SLOPE =	14	SLOPE LENGTH =	66	250	130	64	26%	OK
SEGMENT D	SLOPE =	1	SLOPE LENGTH =	95	1000	256	161	16%	OK
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	239
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DE

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	17	SLOPE LENGTH =	95	150	150	55	37%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	95
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DF

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	80	200	200	120	60%	OK
SEGMENT B	SLOPE =	15	SLOPE LENGTH =	95	200	120	25	13%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	175
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DG

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	13	SLOPE LENGTH =	80	250	250	170	68%	OK
SEGMENT B	SLOPE =	11	SLOPE LENGTH =	55	250	170	115	46%	OK
SEGMENT C	SLOPE =	24	SLOPE LENGTH =	40	150	69	29	19%	OK
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	175
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 9/22/2025

CHECKED BY: VLP
 DATE: 9/22/2025

BARRIER DH

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 28**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	27	SLOPE LENGTH =	75	125	125	50	40%	OK
SEGMENT B	SLOPE =	23	SLOPE LENGTH =	67	180	72	5	3%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	142
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DI

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	24	SLOPE LENGTH =	110	150	150	40	27%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	110
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DJ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 16	16	SLOPE LENGTH = 10	10	200	200	190	95%	OK
SEGMENT B	SLOPE = 24	24	SLOPE LENGTH = 120	120	150	143	23	15%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 130
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DK

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	23	SLOPE LENGTH =	48	150	150	102	68%	OK
SEGMENT B	SLOPE =	29	SLOPE LENGTH =	46	100	68	22	22%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	94
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DL

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 9	9	SLOPE LENGTH = 80	80	300	300	220	73%	OK
SEGMENT B	SLOPE = 22	22	SLOPE LENGTH = 100	100	150	110	10	7%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	180
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DM

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	10	SLOPE LENGTH =	65	250	250	185	74%	OK
SEGMENT B	SLOPE =	11	SLOPE LENGTH =	120	200	148	28	14%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	185
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DN

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	15	SLOPE LENGTH =	110	200	200	90	45%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	110
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DO

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	190	200	200	10	5%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	190
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DP

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	3	SLOPE LENGTH =	180	350	350	170	49%	OK
SEGMENT B	SLOPE =	5	SLOPE LENGTH =	70	350	170	100	29%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	250
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DQ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	16	SLOPE LENGTH =	144	150	150	6	4%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	144
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

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**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DR

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 16	16	SLOPE LENGTH = 120	120	200	200	80	40%	OK
SEGMENT B	SLOPE = 18	18	SLOPE LENGTH = 60	60	200	80	20	10%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 180
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

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SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DS

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	35	SLOPE LENGTH =	35	65	65	30	46%	OK
SEGMENT B	SLOPE =	17	SLOPE LENGTH =	45	150	69	24	16%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	80
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DT

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	32	SLOPE LENGTH =	40	90	90	50	56%	OK
SEGMENT B	SLOPE =	22	SLOPE LENGTH =	60	150	83	23	16%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	100
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DU

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 28**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	21	SLOPE LENGTH =	65	180	180	115	64%	OK
SEGMENT B	SLOPE =	44	SLOPE LENGTH =	50	80	51	1	1%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	115
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DV

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	28	SLOPE LENGTH =	25	75	75	50	67%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	25
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DW

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	17	SLOPE LENGTH =	50	200	200	150	75%	OK
SEGMENT B	SLOPE =	37	SLOPE LENGTH =	50	80	60	10	13%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	100
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DX

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	8	SLOPE LENGTH =	190	250	250	60	24%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	190
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DY

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	11	SLOPE LENGTH =	130	200	200	70	35%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	130
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER DZ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	80	200	200	120	60%	OK
SEGMENT B	SLOPE =	17	SLOPE LENGTH =	35	150	90	55	37%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	115
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

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SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
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 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EA

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	11	SLOPE LENGTH =	120	200	200	80	40%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	120
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EB

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 4	4	SLOPE LENGTH = 125	125	350	350	225	64%	OK
SEGMENT B	SLOPE = 3	3	SLOPE LENGTH = 115	115	350	225	110	31%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 240
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EC

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	3	SLOPE LENGTH =	154	350	350	196	56%	OK
SEGMENT B	SLOPE =	11	SLOPE LENGTH =	85	200	112	27	14%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	239
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

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SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER ED

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	3	SLOPE LENGTH =	80	350	350	270	77%	OK
SEGMENT B	SLOPE =	6	SLOPE LENGTH =	80	250	193	113	45%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	160
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EE

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	11	SLOPE LENGTH =	160	200	200	40	20%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	160
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EF

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 28**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	10	SLOPE LENGTH =	75	400	400	325	81%	OK
SEGMENT B	SLOPE =	16	SLOPE LENGTH =	170	250	203	33	13%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	245
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EG

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	18	SLOPE LENGTH =	90	150	150	60	40%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	90
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EH

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	120	200	200	80	40%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	120
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EI

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	22	SLOPE LENGTH =	75	100	100	25	25%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	75
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

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*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

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PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EJ

SILT FENCE OR COMPOST FILTER SOCK TYPE: SILTRON 16

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	5	SLOPE LENGTH =	105	350	350	245	70%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	105
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EK

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	14	SLOPE LENGTH =	110	200	200	90	45%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	110
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EL

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	14	SLOPE LENGTH =	195	200	200	5	3%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	195
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EM

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 9	9	SLOPE LENGTH = 200	200	250	250	50	20%	OK
SEGMENT B	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	200
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

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*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EN

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	16	SLOPE LENGTH =	75	150	150	75	50%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	75
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EO

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 28**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	37	SLOPE LENGTH =	70	90	90	20	22%	OK
SEGMENT B	SLOPE =	50	SLOPE LENGTH =	10	60	13	3	6%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	80
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EP

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	2	SLOPE LENGTH =	50	700	700	650	93%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	50
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EQ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 6	6	SLOPE LENGTH = 195	195	300	300	105	35%	OK
SEGMENT B	SLOPE = 9	9	SLOPE LENGTH = 60	60	300	105	45	15%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	255
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER ER

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 6	6	SLOPE LENGTH = 150	150	250	250	100	40%	OK
SEGMENT B	SLOPE = 4	4	SLOPE LENGTH = 20	20	350	140	120	34%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 170
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER ES

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 8	8	SLOPE LENGTH = 110	110	250	250	140	56%	OK
SEGMENT B	SLOPE = 6	6	SLOPE LENGTH = 115	115	250	140	25	10%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT) 225
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER ET

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	11	SLOPE LENGTH =	90	200	200	110	55%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	90
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EU

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	14	SLOPE LENGTH =	175	200	200	25	13%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	175
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

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*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EV

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 15	15	SLOPE LENGTH = 60	60	200	200	140	70%	OK
SEGMENT B	SLOPE = 25	25	SLOPE LENGTH = 40	40	100	70	30	30%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	100
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*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EW

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	21	SLOPE LENGTH =	65	150	150	85	57%	OK
SEGMENT B	SLOPE =	35	SLOPE LENGTH =	30	90	51	21	23%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	95
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

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**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EX

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 18	18	SLOPE LENGTH = 60	60	150	150	90	60%	OK
SEGMENT B	SLOPE = 28	28	SLOPE LENGTH = 38	38	75	45	7	9%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	98
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

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**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EY

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	21	SLOPE LENGTH =	90	150	150	60	40%	OK
SEGMENT B	SLOPE =	10	SLOPE LENGTH =	55	300	120	65	22%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	145
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER EZ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	13	SLOPE LENGTH =	150	200	200	50	25%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	150
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FA

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	20	SLOPE LENGTH =	105	150	150	45	30%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	105
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FB

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	15	SLOPE LENGTH =	25	200	200	175	88%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	25
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FC

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	3	SLOPE LENGTH =	50	350	350	300	86%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	50
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FD

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	11	SLOPE LENGTH =	80	200	200	120	60%	OK
SEGMENT B	SLOPE =	17	SLOPE LENGTH =	90	150	90	0	0%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	170
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FE

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	15	SLOPE LENGTH =	100	200	200	100	50%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	100
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FF

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	23	SLOPE LENGTH =	30	100	100	70	70%	OK
SEGMENT B	SLOPE =	12	SLOPE LENGTH =	70	200	140	70	35%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	100
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FG

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	22	SLOPE LENGTH =	85	100	100	15	15%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	85
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FH

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	22	SLOPE LENGTH =	60	150	150	90	60%	OK
SEGMENT B	SLOPE =	19	SLOPE LENGTH =	80	200	120	40	20%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	140
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FI

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 16	16	SLOPE LENGTH = 60	60	150	150	90	60%	OK
SEGMENT B	SLOPE = 35	35	SLOPE LENGTH = 25	25	65	39	14	22%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	85
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FJ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 21**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	17	SLOPE LENGTH =	90	200	200	110	55%	OK
SEGMENT B	SLOPE =	35	SLOPE LENGTH =	30	90	50	20	22%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	120
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FK

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 16	16	SLOPE LENGTH = 90	90	150	150	60	40%	OK
SEGMENT B	SLOPE = 14	14	SLOPE LENGTH = 70	70	200	80	10	5%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	160
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FL

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	15	SLOPE LENGTH =	100	200	200	100	50%	OK
SEGMENT B	SLOPE =	17	SLOPE LENGTH =	40	150	75	35	23%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	140
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FM

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	3	SLOPE LENGTH =	150	350	350	200	57%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	150
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FN

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	15	SLOPE LENGTH =	125	200	200	75	38%	OK
SEGMENT B	SLOPE =	35	SLOPE LENGTH =	20	65	24	4	7%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	145
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FO

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 17	17	SLOPE LENGTH = 45	45	150	150	105	70%	OK
SEGMENT B	SLOPE = 50	50	SLOPE LENGTH = 20	20	40	28	8	20%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	65
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FP

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	11	SLOPE LENGTH =	190	200	200	10	5%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	190
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FQ

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	6	SLOPE LENGTH =	225	250	250	25	10%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	225
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODN Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FR

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	3	SLOPE LENGTH =	180	350	350	170	49%	OK
SEGMENT B	SLOPE =	8	SLOPE LENGTH =	25	250	121	96	39%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	205
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FS

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	33	SLOPE LENGTH =	20	65	65	45	69%	OK
SEGMENT B	SLOPE =	3	SLOPE LENGTH =	100	350	242	142	41%	OK
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	120
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FT

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE = 5	5	SLOPE LENGTH = 120	120	350	350	230	66%	OK
SEGMENT B	SLOPE = 18	18	SLOPE LENGTH = 25	25	150	99	74	49%	OK
SEGMENT C	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT D	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT E	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT F	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT G	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT H	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT I	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT J	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT K	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT L	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-
SEGMENT M	SLOPE = 0	0	SLOPE LENGTH = 0	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	145
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: SCT
 DATE: 8/20/2025

CHECKED BY: SCT
 DATE: 8/28/2025

BARRIER FU

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 16**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	3	SLOPE LENGTH =	170	350	350	180	51%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	170
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

SILT FENCE & COMPOST FILTER SOCK DESIGN

PROJECT NAME: HCPP Pipeline
 PROJECT #: 354-010
 PREPARED BY: VLP
 DATE: 9/22/2025

CHECKED BY: VLP
 DATE: 9/22/2025

BARRIER FV

SILT FENCE OR COMPOST FILTER SOCK TYPE: **SILTRON 28**

SLOPE SEGMENT	ACTUAL SLOPE	%	ACTUAL FLOW LENGTH	FEET	MAXIMUM ALLOWABLE FLOW LENGTH* (FT)	ACTUAL ALLOWABLE FLOW LENGTH** (FT)	REMAINING LENGTH (FT)	PERCENT REMAINING	RESULT
SEGMENT A	SLOPE =	12	SLOPE LENGTH =	117	350	350	233	67%	OK
SEGMENT B	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT C	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT D	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT E	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT F	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT G	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT H	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT I	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT J	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT K	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT L	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-
SEGMENT M	SLOPE =	0	SLOPE LENGTH =	0	0	0	0	0%	-

TOTAL ACTUAL FLOW LENGTH (FT)	117
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*Filtrexx® SiltSoxx™ based on maximum slope lengths of Filtrexx® slope interruption based on a 1 in/24 hr rainfall event provided in Filtrexx® Design Manual version 10.0

*Silt Fence from Chapter 6 Page 31 of the ODNR Rainwater and Land Development manual (Third Edition 2006)

*Super Silt Fence based on maximum slope lengths of 18 inch Filtrexx® SiltSoxx™

*Siltron® Advanced Silt Fence based on maximum slope lengths provided by MKB Company, LLC

**Based on the percent remaining from upslope segments

CHANNELS

Channel Calculations - Runoff Coefficient

Project: HCPP Pipeline
 CEC Project #: 354-010
 Prepared By: SCT
 Date: 8/25/2025

Checked By: CRK
 Date: 9/22/2025

Channel	Runoff Coefficient			Total Area	Weighted Runoff Coefficient
	Meadow Area	Gravel	Forest		
	0.36	0.8	0.2		
CFS Diversion Channel No. 1	2.24	0.12	0.00	2.36	0.38
CFS Diversion Channel No. 2	2.96	0.05	0.00	3.01	0.37
Permanent Channel No. 1	0.14	0.04	0.00	0.18	0.46
Permanent Channel No. 2	0.13	0.00	0.00	0.13	0.36

* Runoff Coefficients obtained from PADEP EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM Manual dated March 2012.

Channel Calculations - Flow/Capacity

Project: HCPP Pipeline
 CEC Project #: 354-010
 Prepared By: SCT
 Date: 8/25/2025

Checked By: CRK
 Date: 9/22/2025

Diversion Berm/Channel	Drainage Area (AC)	Temporary(T)* or Permanent (P)**	Storm Duration/Time of Concentration (min)	Design Storm	Intensity (in/hr)	Runoff Coefficient	Flow, Q=CIA (cfs)	Min. Slope (%)	Max. Slope (%)	Bottom Width (FT)	Left Side Slope, x (X:1)	Right Side Slope, x (X:1)	Channel Depth (FT)	Normal Depth - Min. Slope (FT)	Freeboard (FT) ²	Normal Depth- Max. Slope (FT)	Bottom Width to Flow Depth Ratio ³	UNVEGETATIVE STATE						Channel Lining
																		Manning's 'n'	Shear Stress ⁴		Velocity ⁴			
																		For use with Min. Slope	For use with Max. Slope	Calculated (PSF)	Allowable (PSF)	Calculated (FPS)	Allowable (FPS)	
CFS Diversion Channel No. 1	2.36	T	18.0	2-Year	2.69	0.38	2.43	2.5	15.0	1.0	1.0	7.0	1.21	0.51	0.70	0.26	3.8	0.040	0.028	2.11	2.3	5.64	N/A ¹	NAG S200
CFS Diversion Channel No. 2	3.01	T	13.0	2-Year	3.14	0.37	3.47	10.0	16.0	1.0	8.0	1.0	1.21	0.35	0.86	0.29	3.4	0.034	0.031	2.68	3.0	5.85	N/A ¹	NAG SC250
Permanent Channel No. 1	0.18	T	5.0	10-Year	6.22	0.46	0.51	5.5	13.5	1.0	2.0	2.0	1.00	0.17	0.83	0.12	8.3	0.039	0.033	1.00	2.3	3.48	N/A ¹	NAG S200
Permanent Channel No. 2	0.13	T	5.0	10-Year	6.22	0.36	0.29	10.0	13.5	1.0	2.0	2.0	1.00	0.10	0.90	0.09	11.1	0.037	0.035	0.75	2.3	2.76	N/A ¹	NAG S200

¹ North American Green channel lining performance is evaluated solely on the basis of shear stress. Therefore, maximum allowable velocities are not applicable in the lined, unvegetated state or in any state for TRM liners.

² Freeboard conservatively evaluated using normal depth minimum slope.

³ Channel bottom width to flow depth ratio conservatively evaluated using normal depth maximum slope.

⁴ Shear Stress and Velocity conservatively evaluated at maximum channel slope conditions.



North American Green
 5401 St. Wendel-Cynthiana Rd.
 Poseyville, Indiana 47633
 Tel. 800.772.2040
 >Fax 812.867.0247
 www.nagreen.com
 ECMDS v7.0

CHANNEL ANALYSIS

> > CFS Diversion No.1 (Min.)

Name CFS Diversion No.1 (Min.)
 Discharge 2.43
 Channel Slope 0.025
 Channel Bottom Width 1
 Left Side Slope 1
 Right Side Slope 7
 Low Flow Liner
 Retardence Class C 6-12 in
 Vegetation Type Bunch Type
 Vegetation Density Good 65-79%
 Soil Type Silt Loam (SM)

S200

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
S200 Unvegetated	Straight	2.43 cfs	2.26 ft/s	0.41 ft	0.04	2.3 lbs/ft2	0.64 lbs/ft2	3.62	STABLE	E
Underlying Substrate	Straight	2.43 cfs	2.26 ft/s	0.41 ft	0.04	1.68 lbs/ft2	0.38 lbs/ft2	4.49	STABLE	E
S200 Reinforced Vegetation	Straight	2.43 cfs	1.59 ft/s	0.51 ft	0.064	10 lbs/ft2	0.79 lbs/ft2	12.69	STABLE	E
Underlying Substrate	Straight	2.43 cfs	1.59 ft/s	0.51 ft	0.064	3.41 lbs/ft2	0.45 lbs/ft2	7.57	STABLE	E



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CHANNEL ANALYSIS

> > CFS Diversion No. 1 (Max.)

Name CFS Diversion No. 1 (Max.)
 Discharge 2.43
 Channel Slope 0.15
 Channel Bottom Width 1
 Left Side Slope 1
 Right Side Slope 7
 Low Flow Liner
 Retardence Class C 6-12 in
 Vegetation Type Bunch Type
 Vegetation Density Good 65-79%
 Soil Type Silt Loam (SM)

S200

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
S200 Unvegetated	Straight	2.43 cfs	5.64 ft/s	0.23 ft	0.028	2.3 lbs/ft ²	2.11 lbs/ft ²	1.09	STABLE	E
Underlying Substrate	Straight	2.43 cfs	5.64 ft/s	0.23 ft	0.028	1.68 lbs/ft ²	1.38 lbs/ft ²	1.22	STABLE	E
S200 Reinforced Vegetation	Straight	2.43 cfs	4.46 ft/s	0.26 ft	0.039	10 lbs/ft ²	2.47 lbs/ft ²	4.05	STABLE	E
Underlying Substrate	Straight	2.43 cfs	4.46 ft/s	0.26 ft	0.039	2.3 lbs/ft ²	1.57 lbs/ft ²	1.47	STABLE	E



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CHANNEL ANALYSIS

> > CFS Diversion No. 2 (Min.)

Name CFS Diversion No. 2 (Min.)
 Discharge 3.47
 Channel Slope 0.1
 Channel Bottom Width 1
 Left Side Slope 8
 Right Side Slope 1
 Low Flow Liner
 Retardence Class C 6-12 in
 Vegetation Type Bunch Type
 Vegetation Density Good 65-79%
 Soil Type Silt Loam (SM)

SC250

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
SC250 Unvegetated	Straight	3.47 cfs	4.62 ft/s	0.31 ft	0.034	3 lbs/ft ²	1.95 lbs/ft ²	1.54	STABLE	E
Underlying Substrate	Straight	3.47 cfs	4.62 ft/s	0.31 ft	0.034	2.2 lbs/ft ²	1.18 lbs/ft ²	1.86	STABLE	E
SC250 Reinforced Vegetation	Straight	3.47 cfs	3.9 ft/s	0.35 ft	0.042	10 lbs/ft ²	2.17 lbs/ft ²	4.61	STABLE	E
Underlying Substrate	Straight	3.47 cfs	3.9 ft/s	0.35 ft	0.042	3 lbs/ft ²	1.29 lbs/ft ²	2.32	STABLE	E



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CHANNEL ANALYSIS

> > CFS Diversion No. 2 (Max.)

Name CFS Diversion No. 2 (Max.)
 Discharge 3.47
 Channel Slope 0.16
 Channel Bottom Width 1
 Left Side Slope 8
 Right Side Slope 1
 Low Flow Liner
 Retardence Class C 6-12 in
 Vegetation Type Bunch Type
 Vegetation Density Good 65-79%
 Soil Type Silt Loam (SM)

SC250

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
SC250 Unvegetated	Straight	3.47 cfs	5.85 ft/s	0.27 ft	0.031	3 lbs/ft ²	2.68 lbs/ft ²	1.12	STABLE	E
Underlying Substrate	Straight	3.47 cfs	5.85 ft/s	0.27 ft	0.031	2.2 lbs/ft ²	1.67 lbs/ft ²	1.32	STABLE	E
SC250 Reinforced Vegetation	Straight	3.47 cfs	5.1 ft/s	0.29 ft	0.037	10 lbs/ft ²	2.92 lbs/ft ²	3.43	STABLE	E
Underlying Substrate	Straight	3.47 cfs	5.1 ft/s	0.29 ft	0.037	3 lbs/ft ²	1.79 lbs/ft ²	1.67	STABLE	E

CULVERTS

Inlet Calculations - Runoff Coefficient

Project: HCPP Pipeline

CEC Project #: 354-010

Prepared By: SCT

Date: 8/15/2025

Checked By: VLP

Date: 9/23/2025

Channel	Runoff Coefficient*				Total Area (ACRES)	Weighted Runoff Coefficient
	Woods	Meadow	Gravel	Impervious		
	0.20	0.40	0.80	0.90		
INLET 1	0.00	0.00	0.47	0.00	0.47	0.80
INLET 2	0.00	0.00	0.44	0.00	0.44	0.80
Storm Pipe No. 3	0.00	0.13	0.00	0.00	0.13	0.40

* Runoff Coefficients obtained from PADEP ES Manual dated March 2012.

Inlet Flow Calculations - 10-Year Design Storm

Project: HCPP Pipeline

CEC Project #: 354-010

Prepared By: SCT

Date: 8/15/2025

Checked By: VLP

Date: 9/23/2025

PERMANENT INLET CONDITION						
Channel No.	Drainage Area (AC)	Time of Concentration (min)	Design Storm	Intensity (in/hr)	Runoff Coefficient	Flow, Q=CiA (cfs)
INLET 1	0.47	5	10 Year	6.22	0.80	2.34
INLET 2	0.44	5	10 Year	6.22	0.80	2.19
Storm Pipe No. 3	0.13	5	10 Year	6.22	0.40	0.32

Culvert Report

SCM-1 (Rain Garden No. 1) Outlet Pipe

Invert Elev Dn (ft)	=	1097.00
Pipe Length (ft)	=	26.20
Slope (%)	=	7.63
Invert Elev Up (ft)	=	1099.00
Rise (in)	=	12.0
Shape	=	Circular
Span (in)	=	12.0
No. Barrels	=	1
n-Value	=	0.012
Culvert Type	=	Circular Culvert
Culvert Entrance	=	Rough tapered inlet throat
Coeff. K,M,c,Y,k	=	0.519, 0.64, 0.021, 0.9, 0.5

Calculations

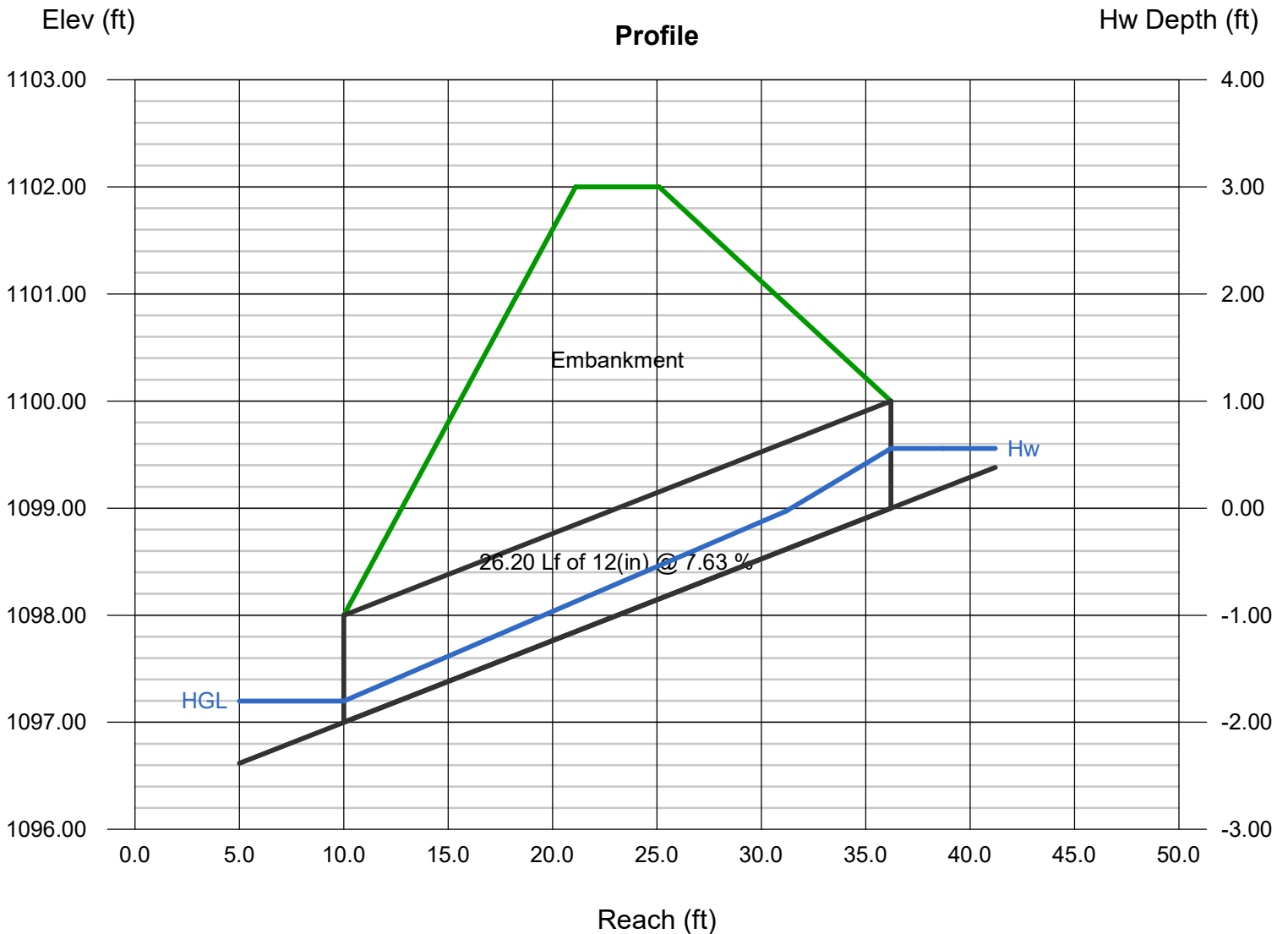
Qmin (cfs)	=	0.88
Qmax (cfs)	=	0.88
Tailwater Elev (ft)	=	Normal

Highlighted

Qtotal (cfs)	=	0.88
Qpipe (cfs)	=	0.88
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	8.04
Veloc Up (ft/s)	=	3.07
HGL Dn (ft)	=	1097.20
HGL Up (ft)	=	1099.39
Hw Elev (ft)	=	1099.56
Hw/D (ft)	=	0.56
Flow Regime	=	Inlet Control

Embankment

Top Elevation (ft)	=	1102.00
Top Width (ft)	=	4.00
Crest Width (ft)	=	20.00



Culvert Report

SCM-2 (Detention Basin No. 1) Outlet Pipe

Invert Elev Dn (ft) = 1095.00
 Pipe Length (ft) = 77.60
 Slope (%) = 2.58
 Invert Elev Up (ft) = 1097.00
 Rise (in) = 15.0
 Shape = Circular
 Span (in) = 15.0
 No. Barrels = 1
 n-Value = 0.012
 Culvert Type = Circular Culvert
 Culvert Entrance = Rough tapered inlet throat
 Coeff. K,M,c,Y,k = 0.519, 0.64, 0.021, 0.9, 0.5

Calculations

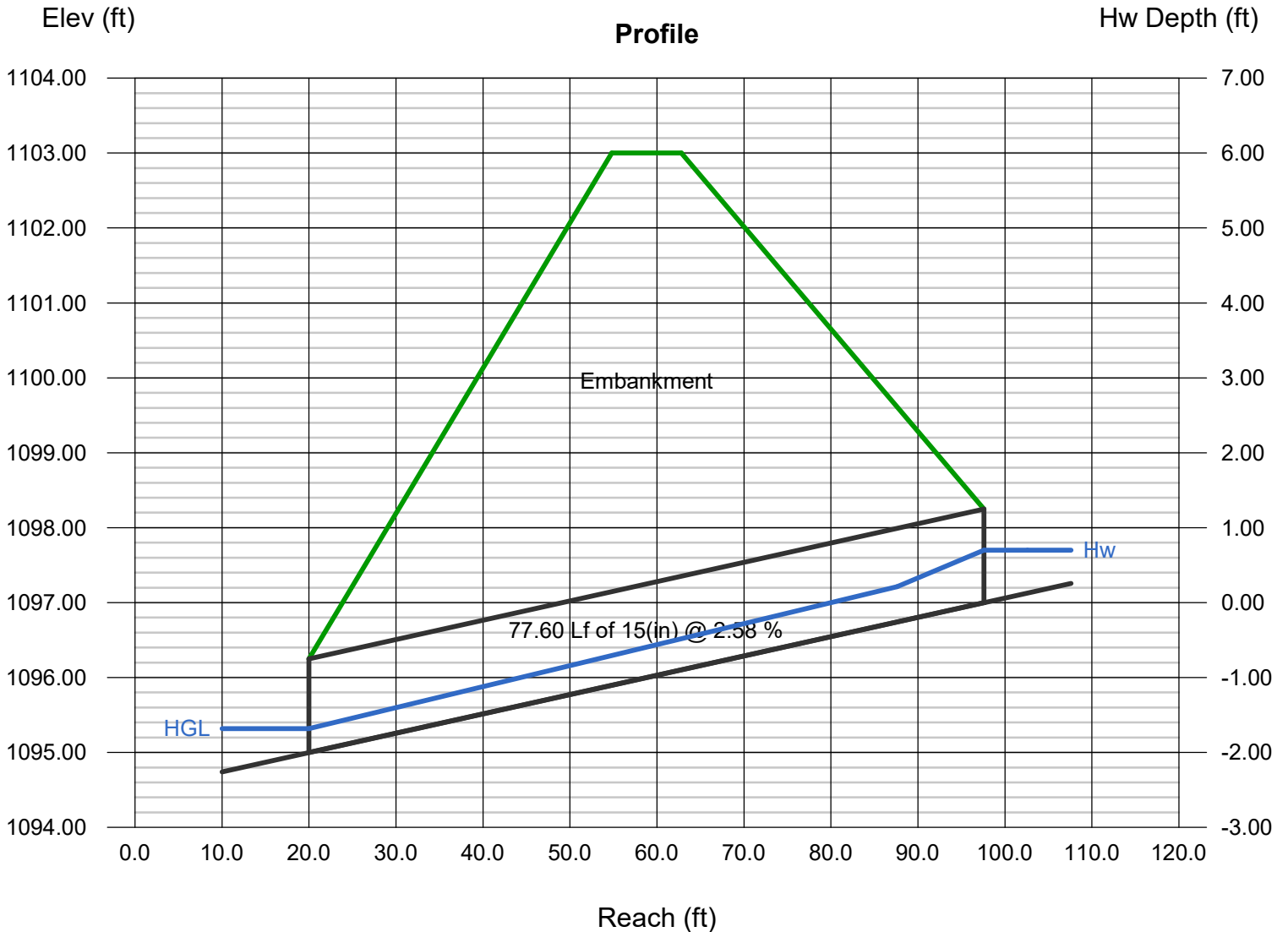
Qmin (cfs) = 1.55
 Qmax (cfs) = 1.55
 Tailwater Elev (ft) = Normal

Highlighted

Qtotal (cfs) = 1.55
 Qpipe (cfs) = 1.55
 Qovertop (cfs) = 0.00
 Veloc Dn (ft/s) = 6.34
 Veloc Up (ft/s) = 3.45
 HGL Dn (ft) = 1095.32
 HGL Up (ft) = 1097.49
 Hw Elev (ft) = 1097.70
 Hw/D (ft) = 0.56
 Flow Regime = Inlet Control

Embankment

Top Elevation (ft) = 1103.00
 Top Width (ft) = 8.00
 Crest Width (ft) = 20.00



Culvert Report

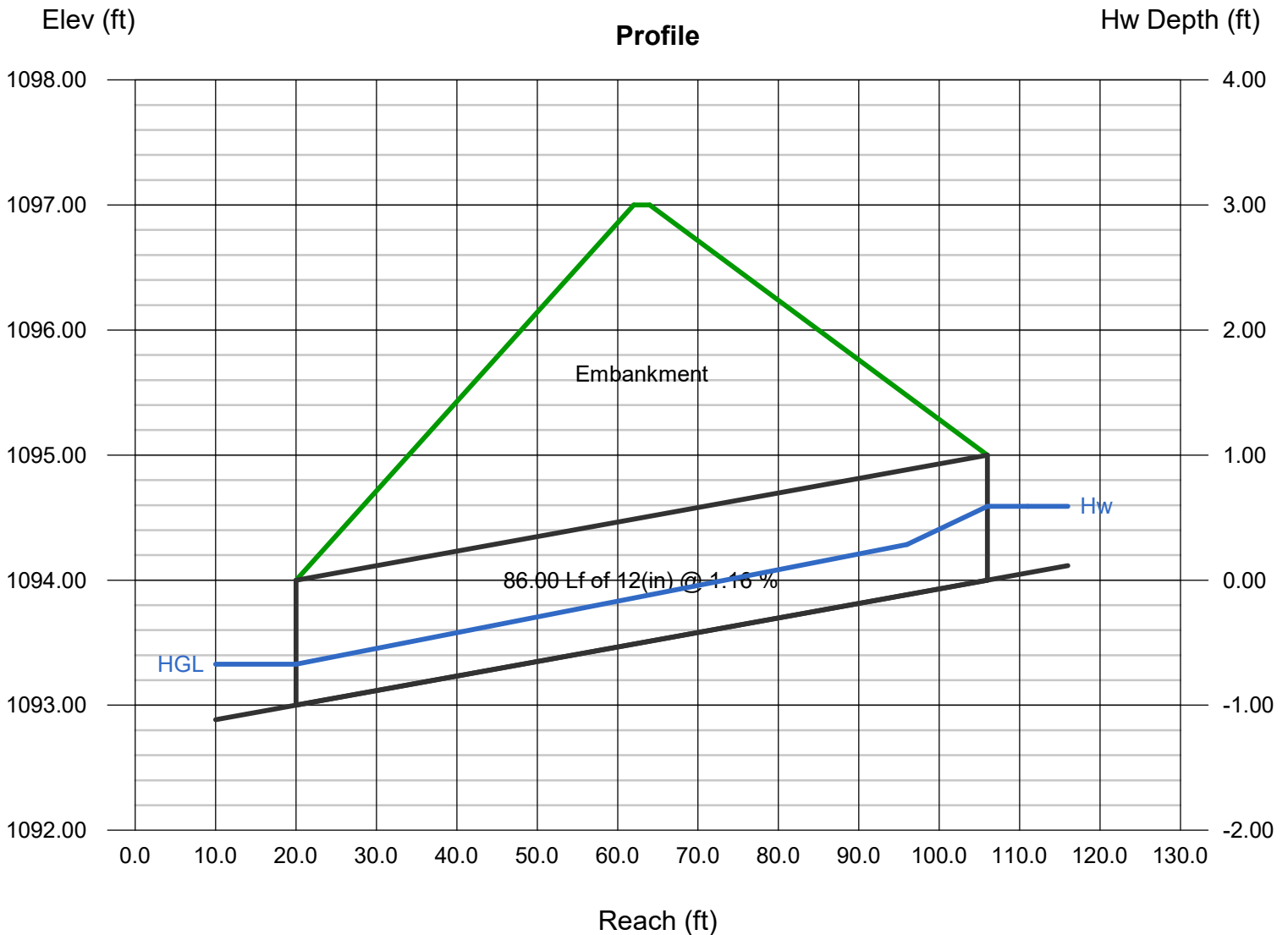
SCM-3 (Rain Garden No. 2) Outlet Pipe

Invert Elev Dn (ft) = 1093.00
Pipe Length (ft) = 86.00
Slope (%) = 1.16
Invert Elev Up (ft) = 1094.00
Rise (in) = 12.0
Shape = Circular
Span (in) = 12.0
No. Barrels = 1
n-Value = 0.012
Culvert Type = Circular Culvert
Culvert Entrance = Rough tapered inlet throat
Coeff. K,M,c,Y,k = 0.519, 0.64, 0.021, 0.9, 0.5

Embankment
Top Elevation (ft) = 1097.00
Top Width (ft) = 2.00
Crest Width (ft) = 20.00

Calculations
Qmin (cfs) = 0.96
Qmax (cfs) = 0.96
Tailwater Elev (ft) = Normal

Highlighted
Qtotal (cfs) = 0.96
Qpipe (cfs) = 0.96
Qovertop (cfs) = 0.00
Veloc Dn (ft/s) = 4.28
Veloc Up (ft/s) = 3.16
HGL Dn (ft) = 1093.33
HGL Up (ft) = 1094.41
Hw Elev (ft) = 1094.59
Hw/D (ft) = 0.59
Flow Regime = Inlet Control



Culvert Report

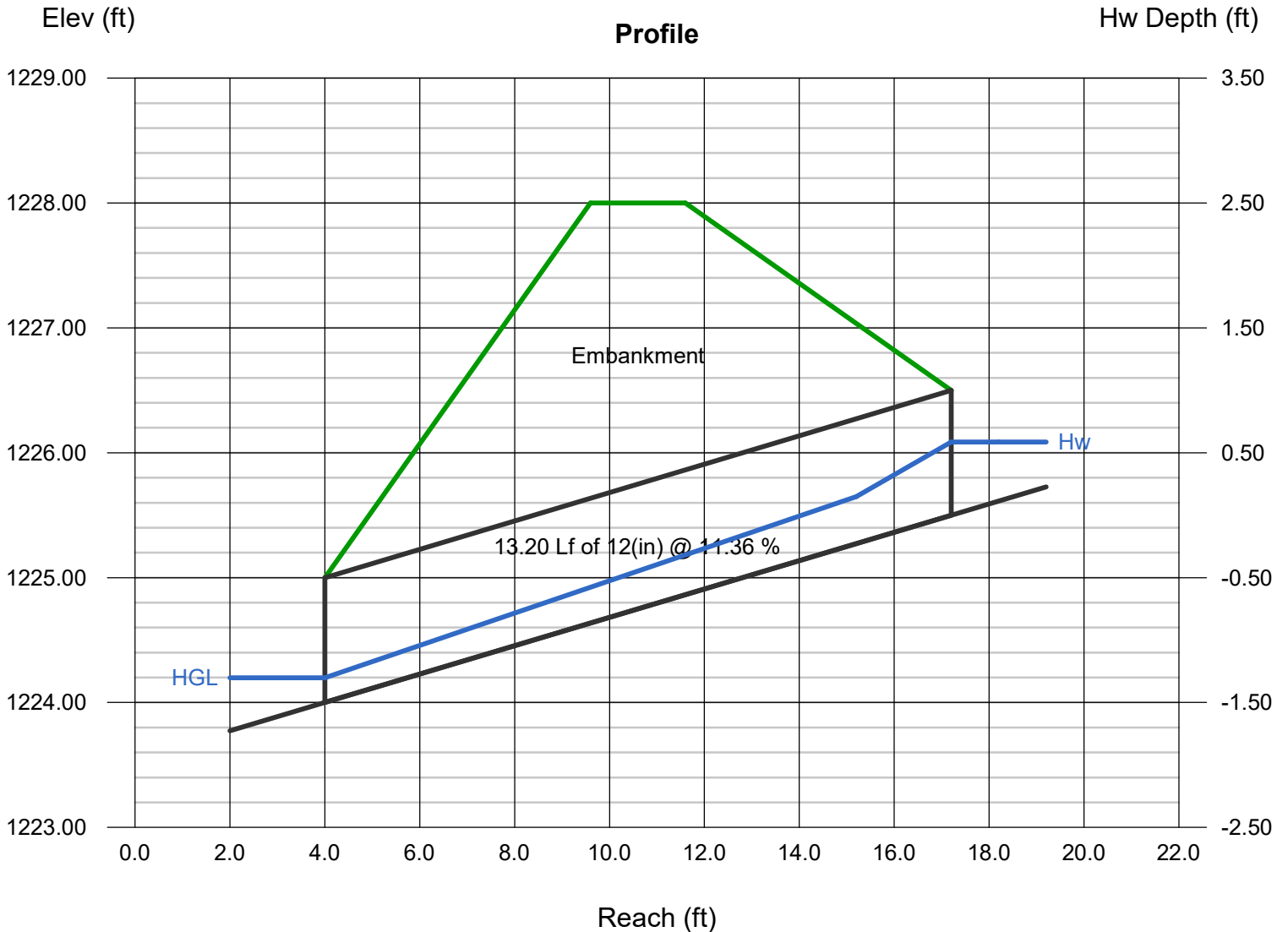
SCM-4 (Rain Garden No. 3) Outlet Pipe

Invert Elev Dn (ft) = 1224.00
Pipe Length (ft) = 13.20
Slope (%) = 11.36
Invert Elev Up (ft) = 1225.50
Rise (in) = 12.0
Shape = Circular
Span (in) = 12.0
No. Barrels = 1
n-Value = 0.012
Culvert Type = Circular Culvert
Culvert Entrance = Rough tapered inlet throat
Coeff. K,M,c,Y,k = 0.519, 0.64, 0.021, 0.9, 0.5

Embankment
Top Elevation (ft) = 1228.00
Top Width (ft) = 2.00
Crest Width (ft) = 20.00

Calculations
Qmin (cfs) = 0.95
Qmax (cfs) = 0.95
Tailwater Elev (ft) = Normal

Highlighted
Qtotal (cfs) = 0.95
Qpipe (cfs) = 0.95
Qovertop (cfs) = 0.00
Veloc Dn (ft/s) = 8.68
Veloc Up (ft/s) = 3.15
HGL Dn (ft) = 1224.20
HGL Up (ft) = 1225.91
Hw Elev (ft) = 1226.09
Hw/D (ft) = 0.59
Flow Regime = Inlet Control



Culvert Report

Storm Pipe No. 1

Invert Elev Dn (ft) = 1100.00
 Pipe Length (ft) = 60.00
 Slope (%) = 3.33
 Invert Elev Up (ft) = 1102.00
 Rise (in) = 15.0
 Shape = Circular
 Span (in) = 15.0
 No. Barrels = 1
 n-Value = 0.012
 Culvert Type = Circular Culvert
 Culvert Entrance = Smooth tapered inlet throat
 Coeff. K,M,c,Y,k = 0.534, 0.555, 0.0196, 0.9, 0.2

Calculations

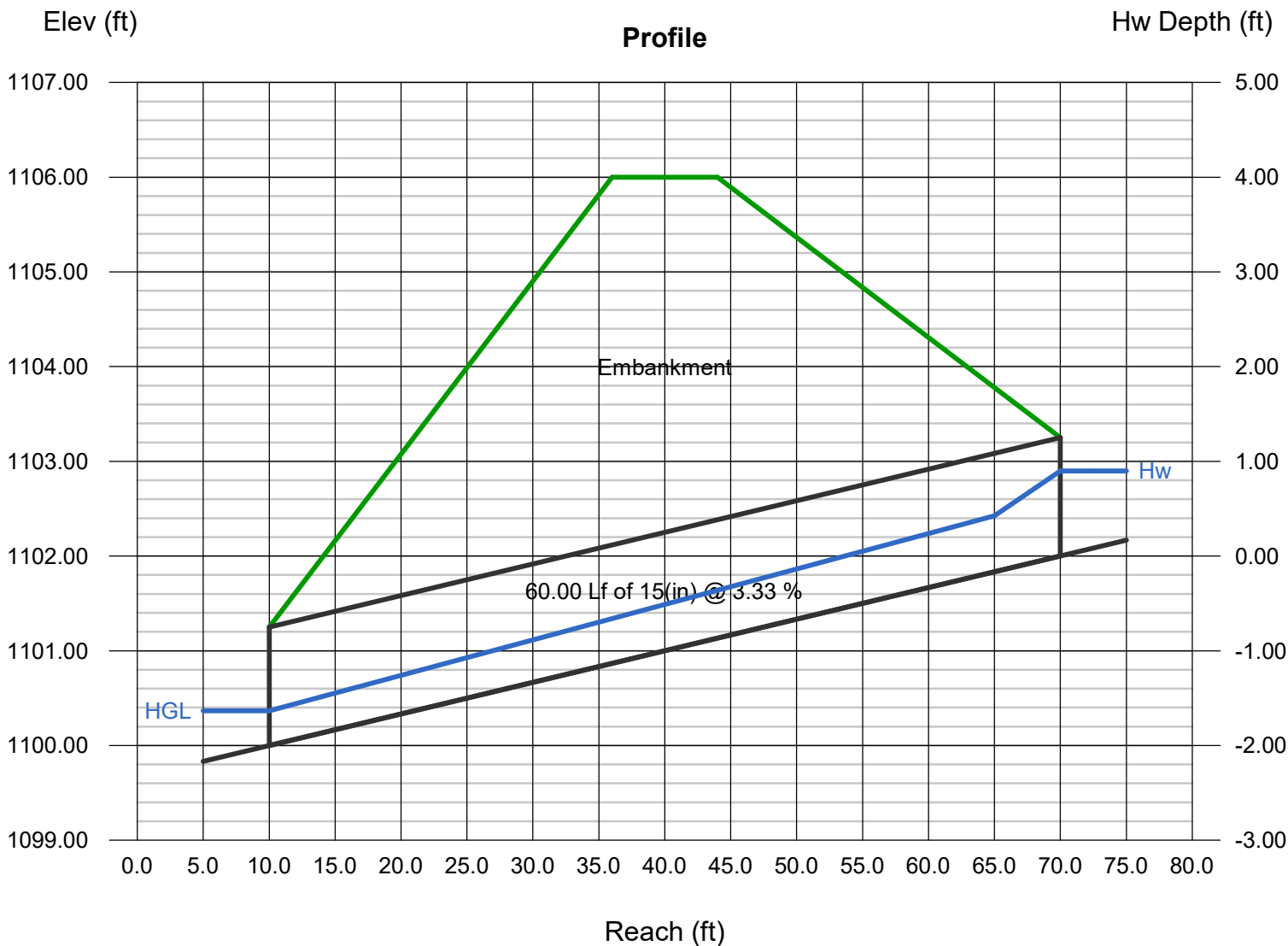
Qmin (cfs) = 2.34
 Qmax (cfs) = 2.34
 Tailwater Elev (ft) = Normal

Highlighted

Qtotal (cfs) = 2.34
 Qpipe (cfs) = 2.34
 Qovertop (cfs) = 0.00
 Veloc Dn (ft/s) = 7.79
 Veloc Up (ft/s) = 3.93
 HGL Dn (ft) = 1100.37
 HGL Up (ft) = 1102.61
 Hw Elev (ft) = 1102.90
 Hw/D (ft) = 0.72
 Flow Regime = Inlet Control

Embankment

Top Elevation (ft) = 1106.00
 Top Width (ft) = 8.00
 Crest Width (ft) = 20.00



Culvert Report

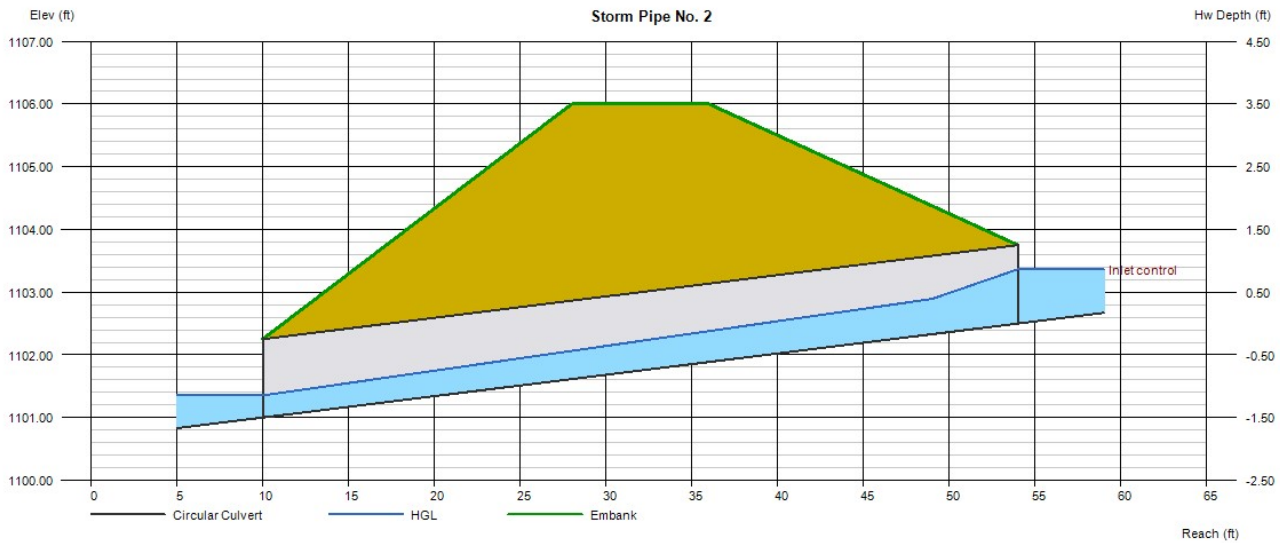
Storm Pipe No. 2

Invert Elev Dn (ft)	= 1101.00
Pipe Length (ft)	= 44.00
Slope (%)	= 3.41
Invert Elev Up (ft)	= 1102.50
Rise (in)	= 15.0
Shape	= Circular
Span (in)	= 15.0
No. Barrels	= 1
n-Value	= 0.012
Culvert Type	= Circular Culvert
Culvert Entrance	= Smooth tapered inlet throat
Coeff. K,M,c,Y,k	= 0.534, 0.555, 0.0196, 0.9, 0.2

Embankment	
Top Elevation (ft)	= 1106.00
Top Width (ft)	= 8.00
Crest Width (ft)	= 20.00

Calculations	
Qmin (cfs)	= 2.19
Qmax (cfs)	= 2.19
Tailwater Elev (ft)	= Normal

Highlighted	
Qtotal (cfs)	= 2.19
Qpipe (cfs)	= 2.19
Qovertop (cfs)	= 0.00
Veloc Dn (ft/s)	= 7.70
Veloc Up (ft/s)	= 3.84
HGL Dn (ft)	= 1101.35
HGL Up (ft)	= 1103.09
Hw Elev (ft)	= 1103.37
Hw/D (ft)	= 0.69
Flow Regime	= Inlet Control



Culvert Report

Storm Pipe No. 3

Invert Elev Dn (ft)	=	1095.00
Pipe Length (ft)	=	72.00
Slope (%)	=	2.78
Invert Elev Up (ft)	=	1097.00
Rise (in)	=	15.0
Shape	=	Circular
Span (in)	=	15.0
No. Barrels	=	1
n-Value	=	0.012
Culvert Type	=	Circular Culvert
Culvert Entrance	=	Smooth tapered inlet throat
Coeff. K,M,c,Y,k	=	0.534, 0.555, 0.0196, 0.9, 0.2

Embankment

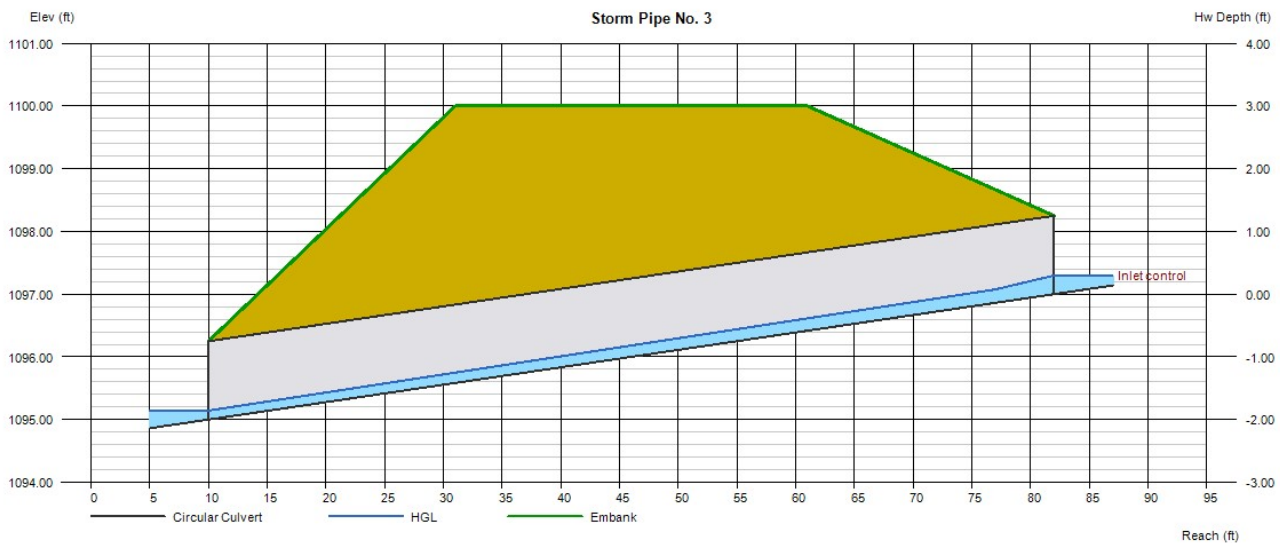
Top Elevation (ft)	=	1100.00
Top Width (ft)	=	30.00
Crest Width (ft)	=	30.00

Calculations

Qmin (cfs)	=	0.32
Qmax (cfs)	=	0.32
Tailwater Elev (ft)	=	Normal

Highlighted

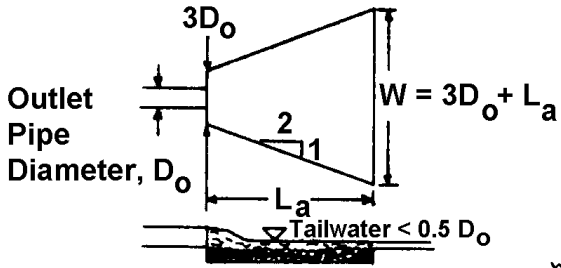
Qtotal (cfs)	=	0.32
Qpipe (cfs)	=	0.32
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	4.12
Veloc Up (ft/s)	=	2.21
HGL Dn (ft)	=	1095.14
HGL Up (ft)	=	1097.22
Hw Elev (ft)	=	1097.30
Hw/D (ft)	=	0.24
Flow Regime	=	Inlet Control



RIPRAP APRONS

**DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)**

Adapted from USDA - NRCS



Not to be used for Box Culverts

NOTE: Do not extrapolate

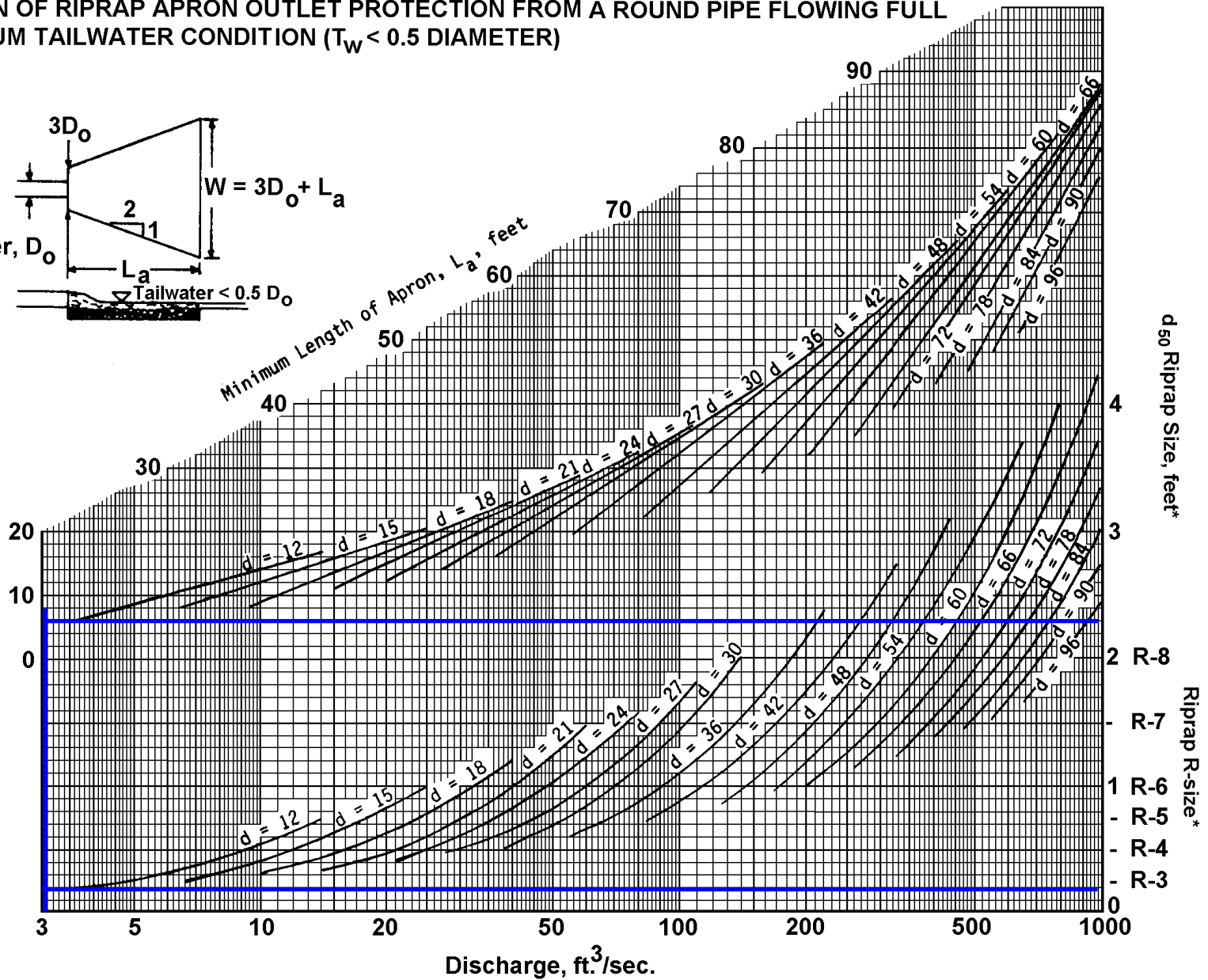


FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition

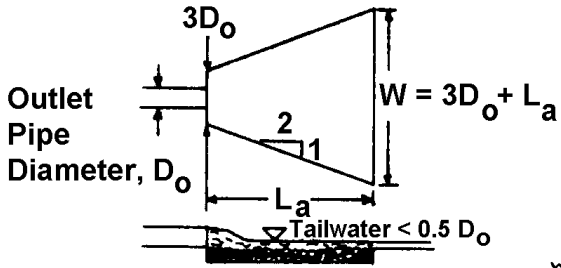
* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.

Temp Riprap Apron No. 1
 $Q = 2.43$ cfs
 $V = 5.64$ ft/sec $L_a = 6$ ft
 $D_o = 12$ -in $W = 9$ ft
 Prepared By: VLP 9/17/2025
 Checked By:

V_{max} for R-4 = 9.0 ft/s
Use R-4 Rip-Rap

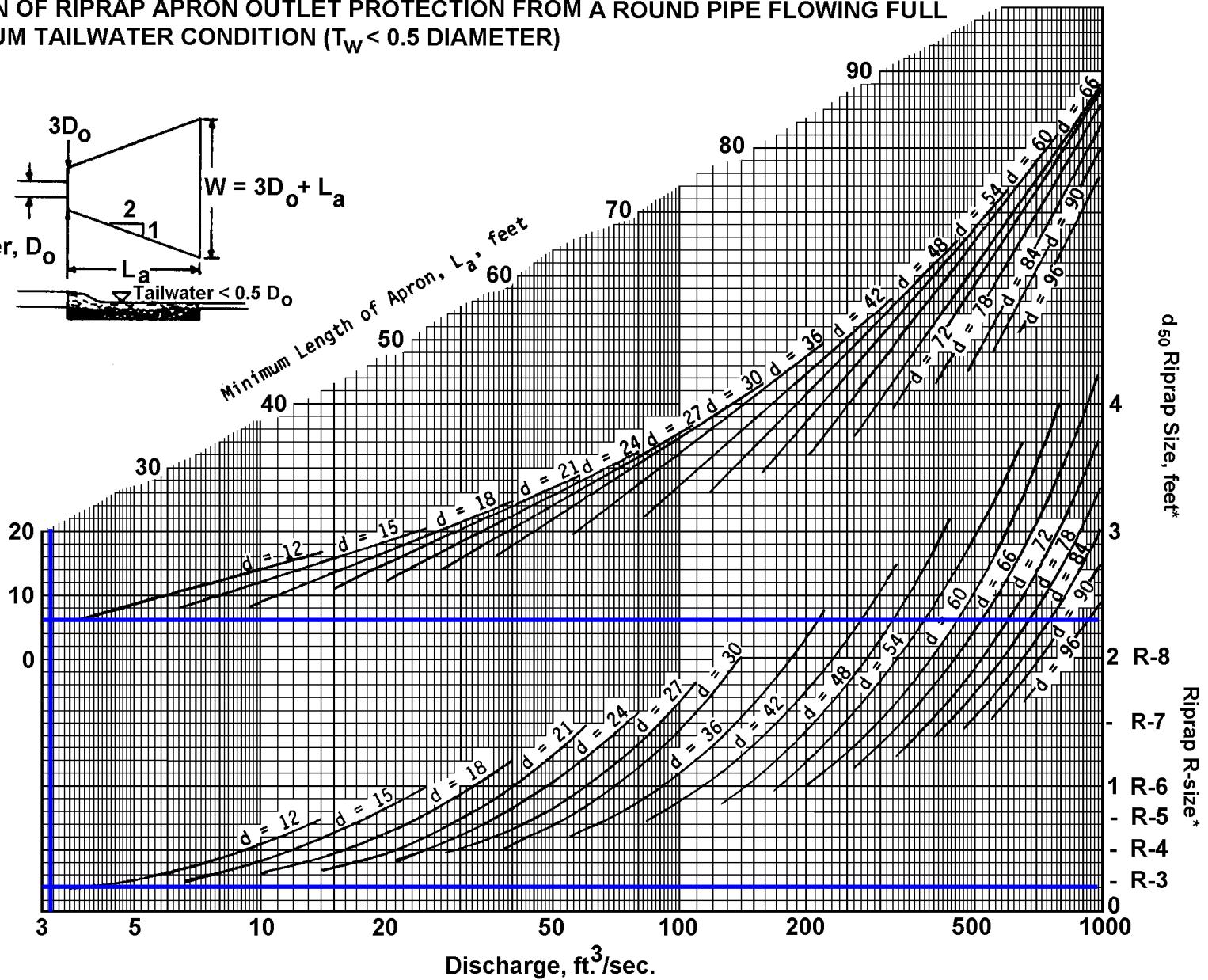
**DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)**

Adapted from USDA - NRCS



Not to be used for Box Culverts

NOTE: Do not extrapolate



**FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition**

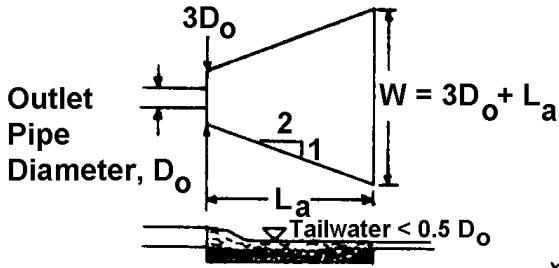
* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.

Temp Riprap Apron No. 2
 $Q = 3.14$ cfs
 $V = 5.85$ ft/sec $L_a = 6$ ft
 $D_o = 12$ -in $W = 9$ ft
 Prepared By: VLP 9/17/2025
 Checked By:

V_{max} for R-4 = 9.0 ft/s
Use R-4 Rip-Rap

**DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)**

Adapted from USDA - NRCS



Not to be used for Box Culverts

NOTE: Do not extrapolate

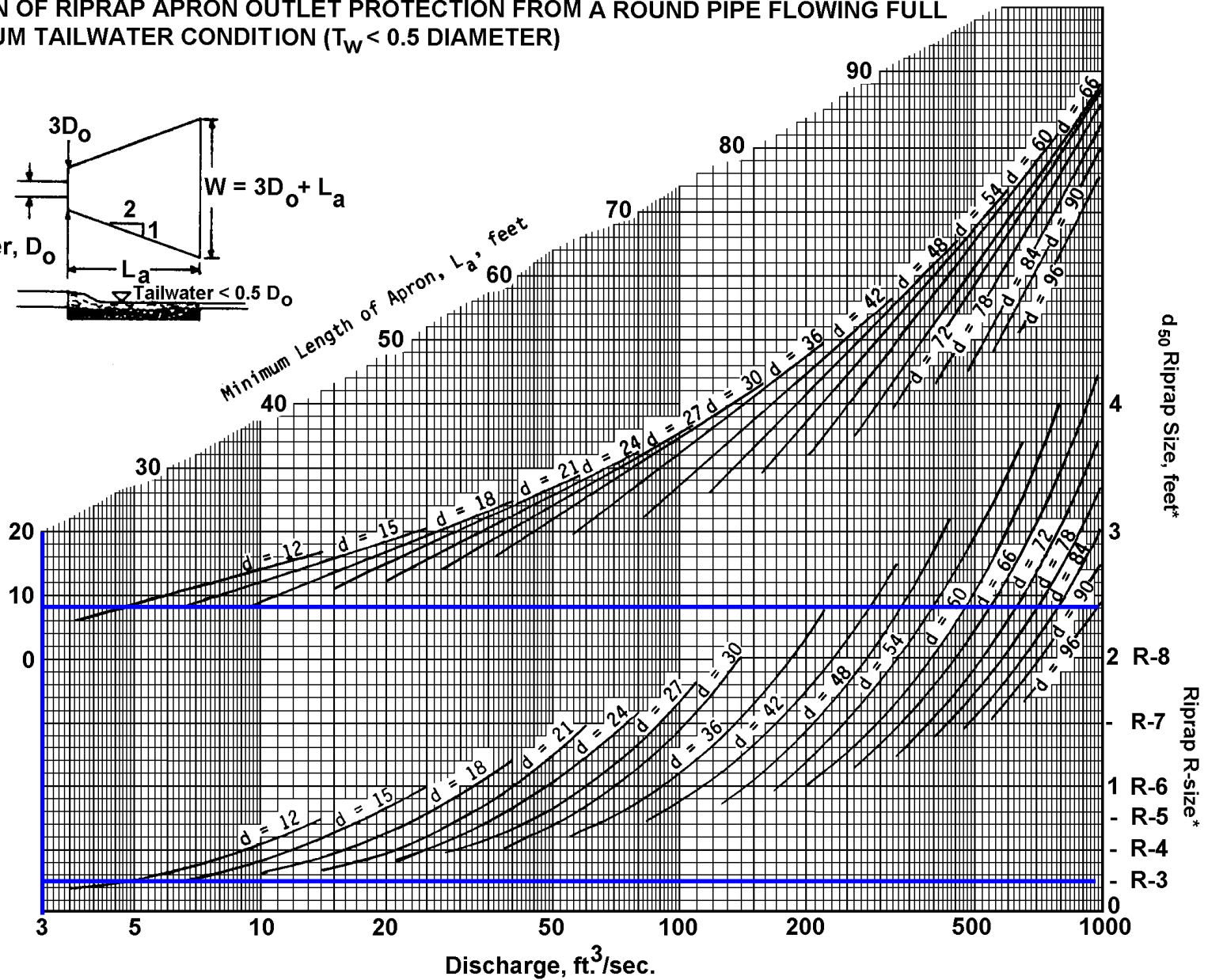


FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition

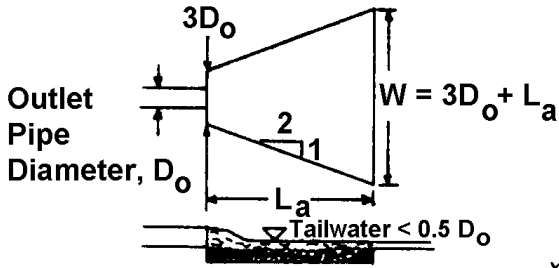
* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.

Riprap Apron No. 1
 $Q = 2.19$ cfs
 $V = 7.70$ ft/sec $L_a = 8$ ft
 $D_o = 15$ -in $W = 12$ ft
 Prepared By: VLP 9/22/2025
 Checked By:

V_{max} for R-4 = 9.0 ft/s
Use R-4 Rip-Rap

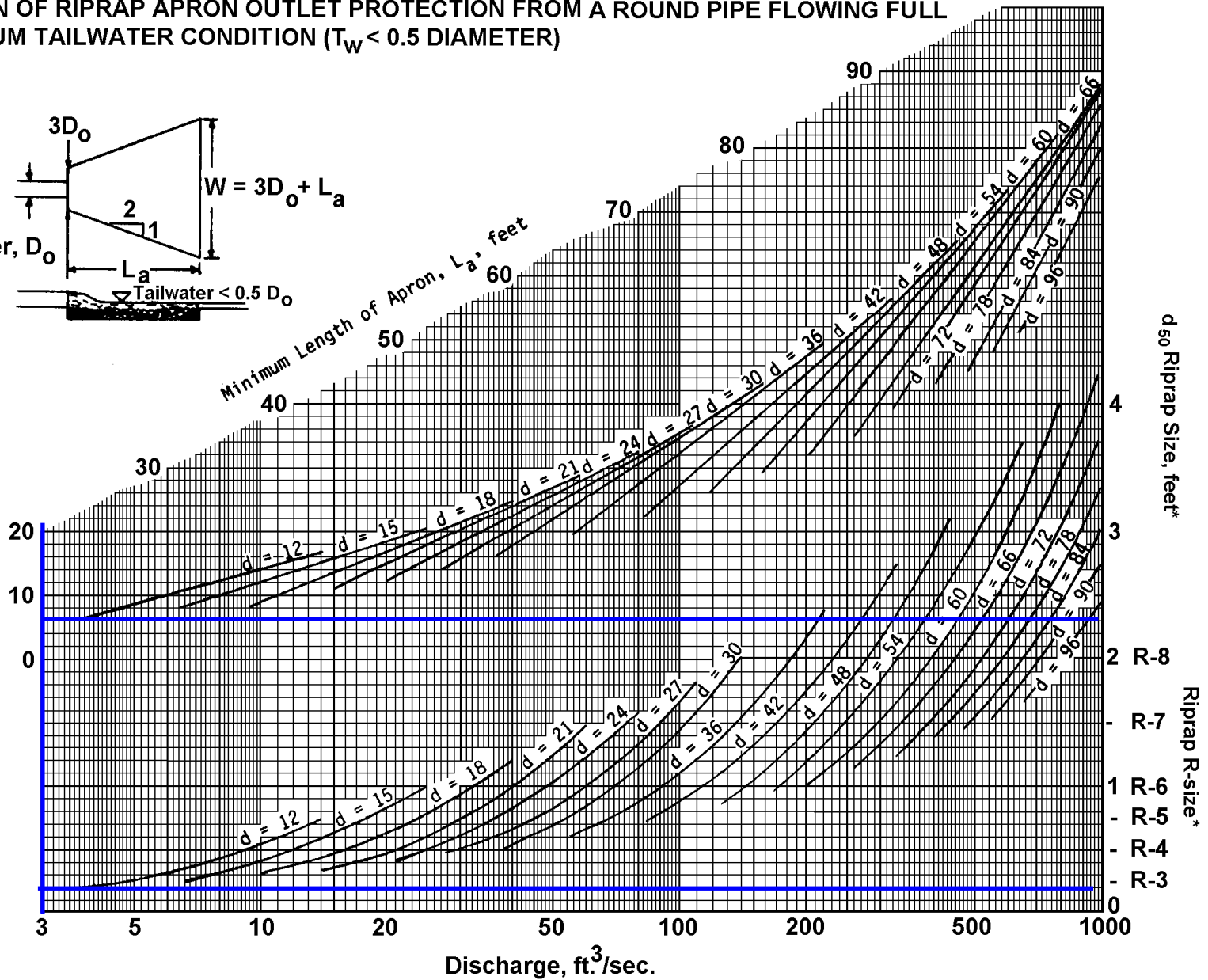
**DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)**

Adapted from USDA - NRCS



Not to be used for Box Culverts

NOTE: Do not extrapolate

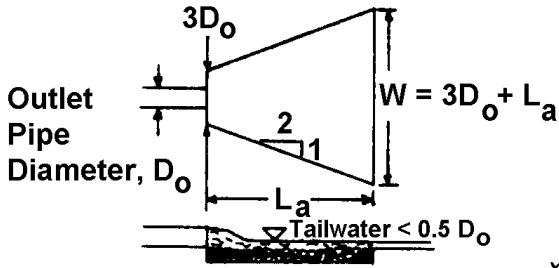


**FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition**

* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.

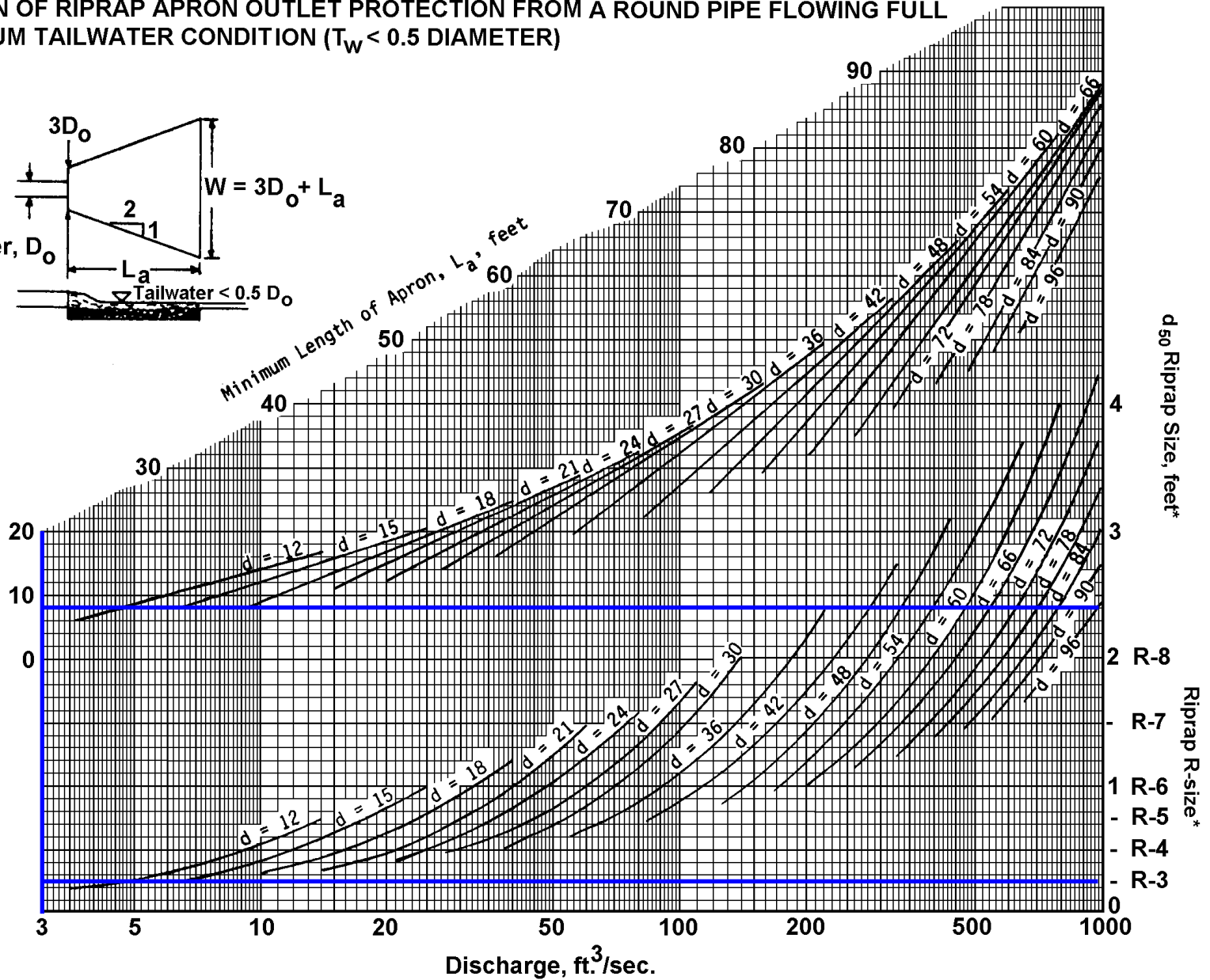
**DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)**

Adapted from USDA - NRCS



Not to be used for Box Culverts

NOTE: Do not extrapolate



**FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition**

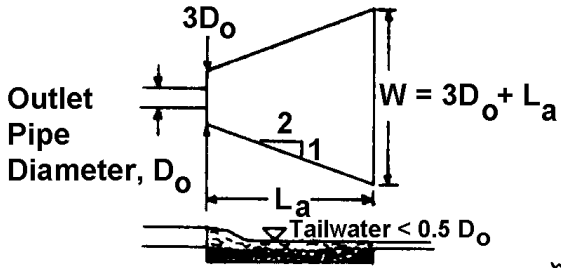
* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.

Riprap Apron No. 3
 $Q = 2.34$ cfs
 $V = 7.79$ ft/sec $L_a = 8$ ft
 $D_o = 15$ -in $W = 12$ ft
 Prepared By: VLP 9/22/2025
 Checked By:

V_{max} for R-4 = 9.0 ft/s
Use R-4 Rip-Rap

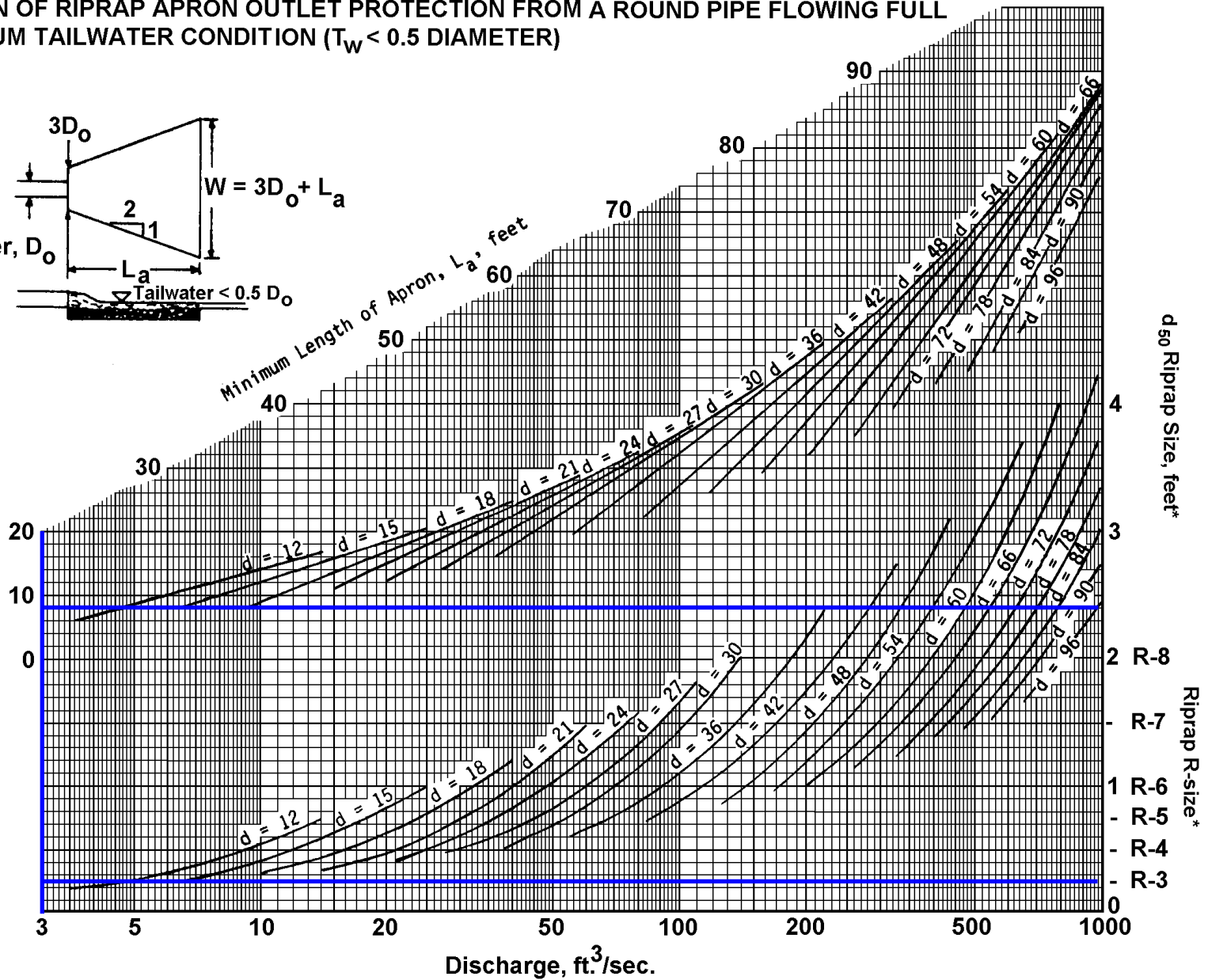
**DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)**

Adapted from USDA - NRCS



Not to be used for Box Culverts

NOTE: Do not extrapolate



**FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition**

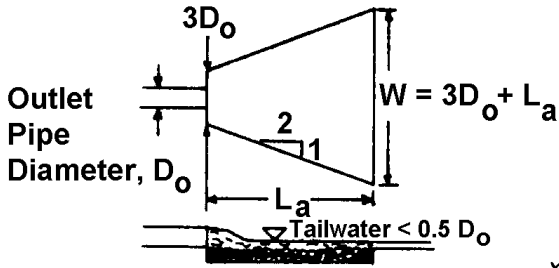
* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.

Riprap Apron No. 4
 $Q = 0.32$ cfs
 $V = 4.12$ ft/sec $L_a = 8$ ft
 $D_o = 15$ -in $W = 12$ ft
 Prepared By: VLP 9/22/2025
 Checked By:

V_{max} for R-4 = 9.0 ft/s
Use R-4 Rip-Rap

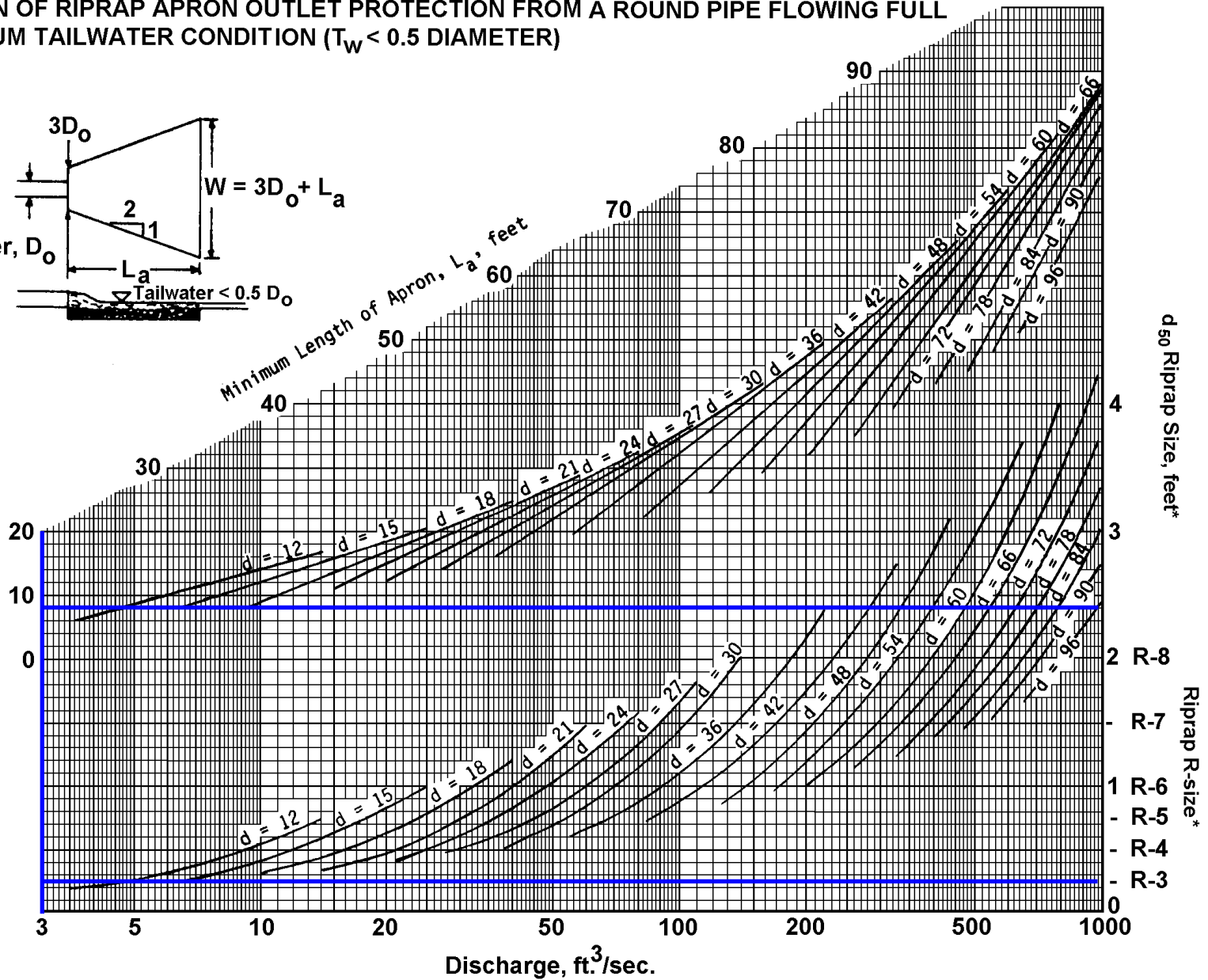
**DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)**

Adapted from USDA - NRCS



Not to be used for Box Culverts

NOTE: Do not extrapolate



**FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition**

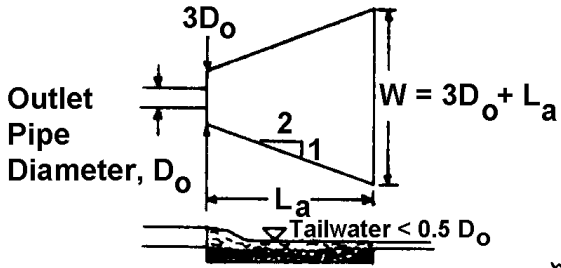
Riprap Apron No. 5
 $Q = 1.55$ cfs
 $V = 6.34$ ft/sec $L_a = 8$ ft
 $D_o = 15$ -in $W = 12$ ft
 Prepared By: VLP 9/22/2025
 Checked By:

* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.

V_{max} for R-4 = 9.0 ft/s
Use R-4 Rip-Rap

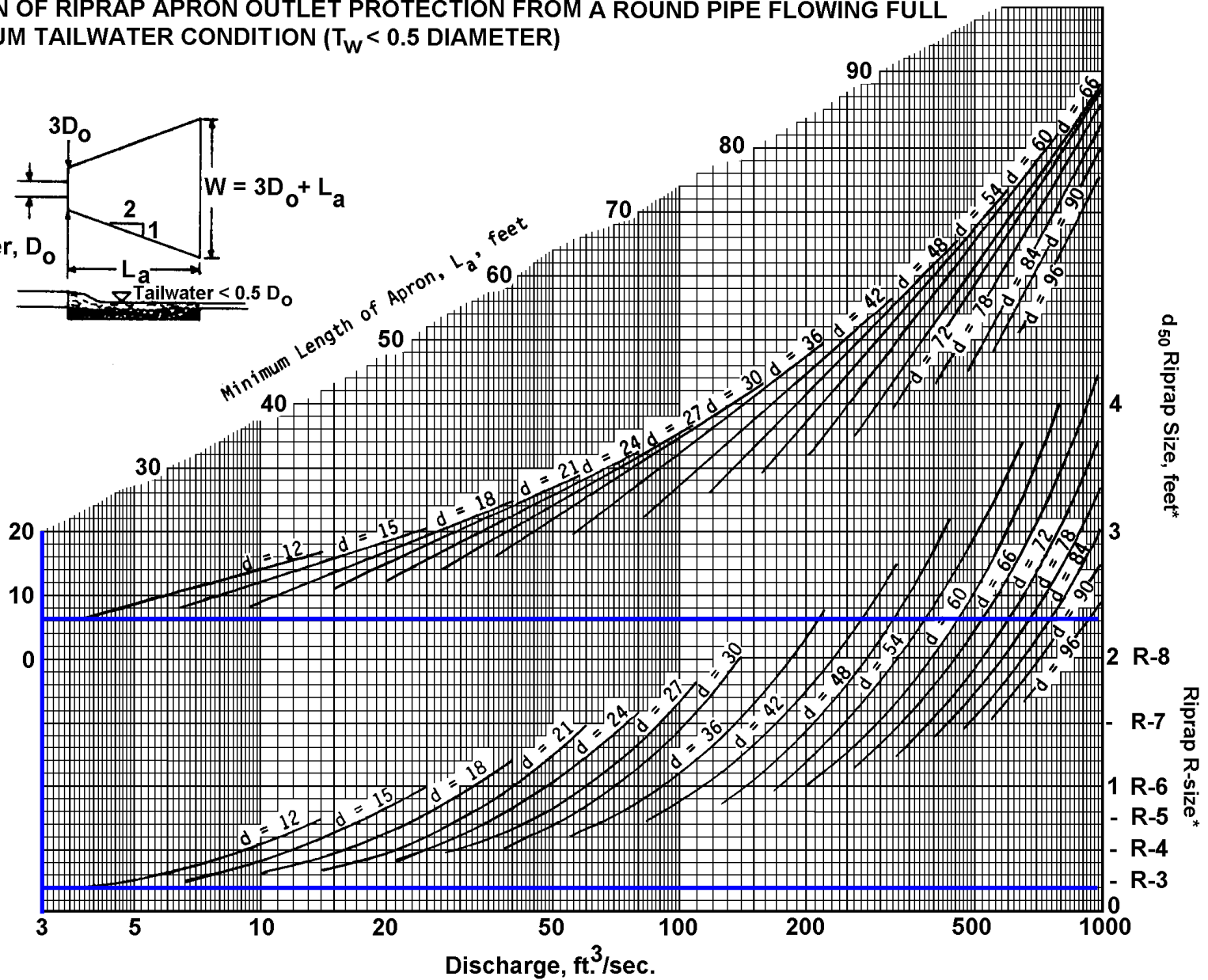
**DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)**

Adapted from USDA - NRCS



Not to be used for Box Culverts

NOTE: Do not extrapolate



**FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition**

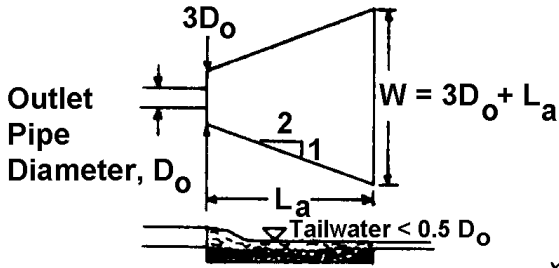
* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.

Riprap Apron No. 6
 $Q = 0.96$ cfs
 $V = 4.28$ ft/sec $L_a = 6$ ft
 $D_o = 12$ -in $W = 9$ ft
 Prepared By: VLP 9/22/2025
 Checked By:

V_{max} for R-4 = 9.0 ft/s
Use R-4 Rip-Rap

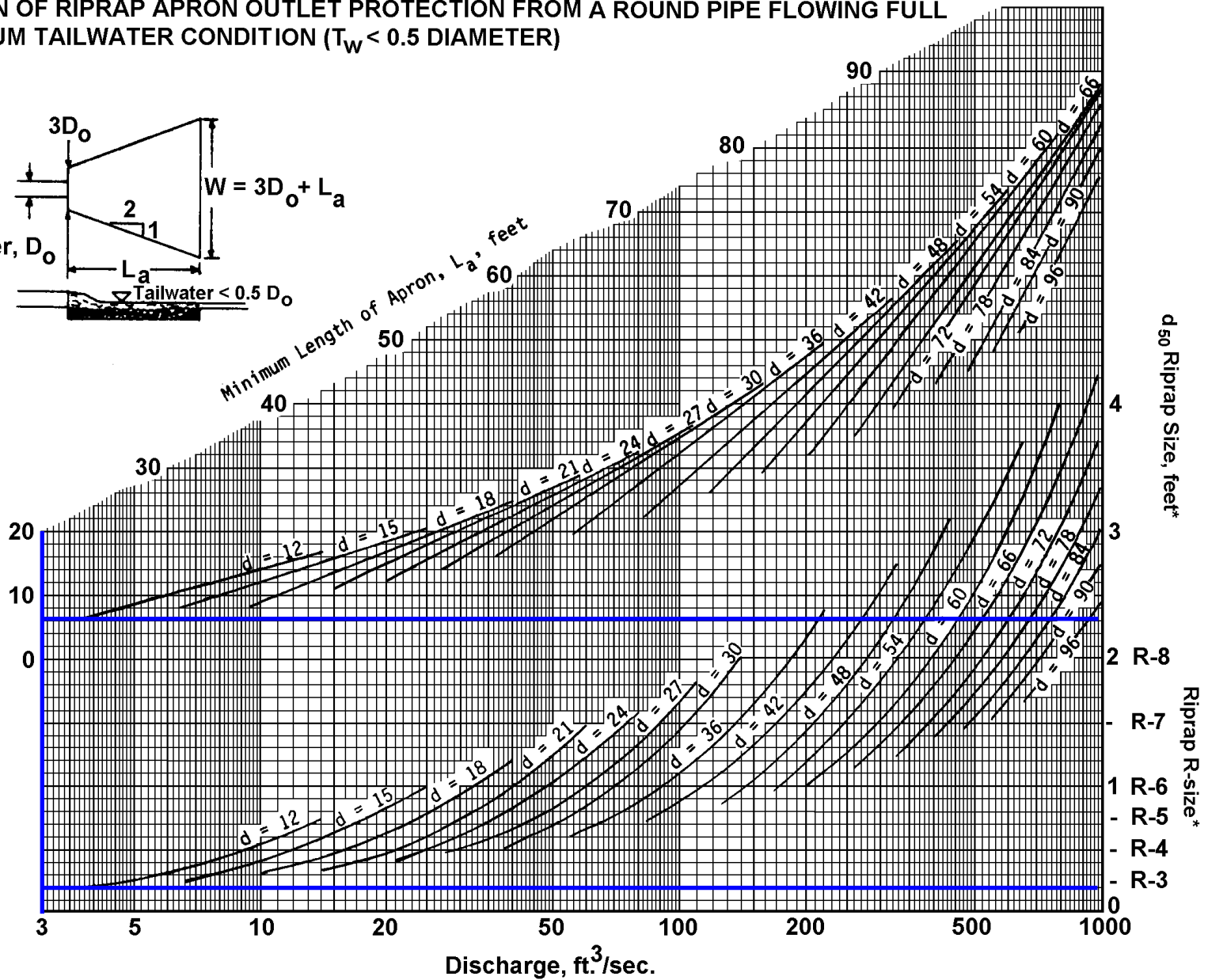
**DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)**

Adapted from USDA - NRCS



Not to be used for Box Culverts

NOTE: Do not extrapolate



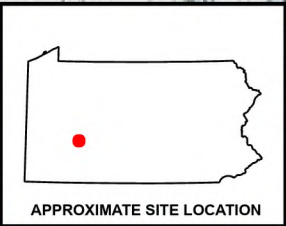
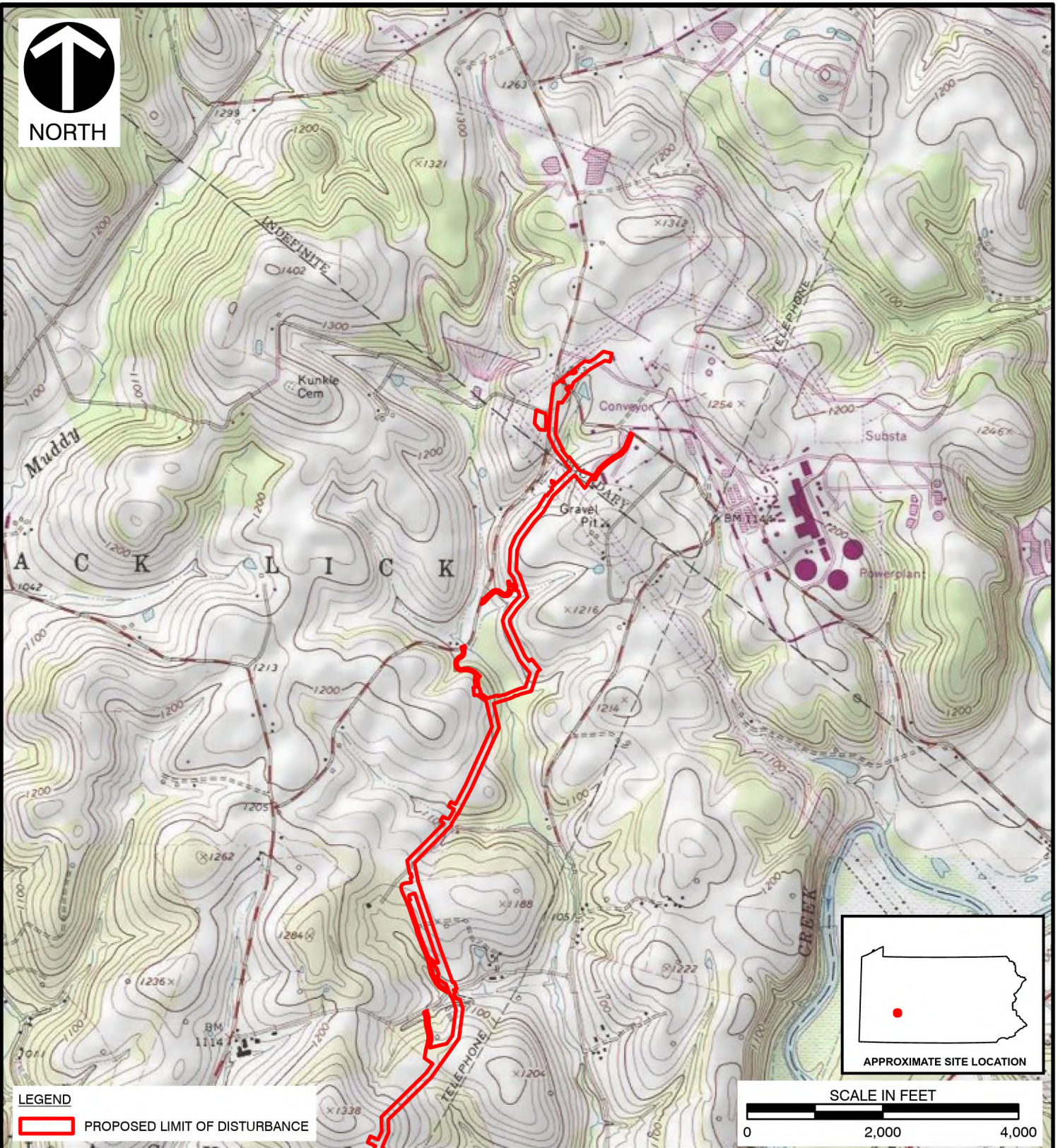
**FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition**

Riprap Apron No. 7
 $Q = 0.95$ cfs
 $V = 8.68$ ft/sec $L_a = 6$ ft
 $D_o = 12$ -in $W = 9$ ft
 Prepared By: VLP 9/22/2025
 Checked By:

* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.

V_{max} for R-4 = 9.0 ft/s
Use R-4 Rip-Rap

APPENDIX B
SITE LOCATION MAP



LEGEND
 PROPOSED LIMIT OF DISTURBANCE



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REFERENCES
 1. USGS TOPOGRAPHIC MAP / ARCGIS MAP SERVICE: ACCESSED 9/19/2025, BOLIVAR AND INDIANA, PENNSYLVANIA QUADRANGLES PUBLISHED 1982.



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 Ph: 724.327.5200 · 800.899.3610
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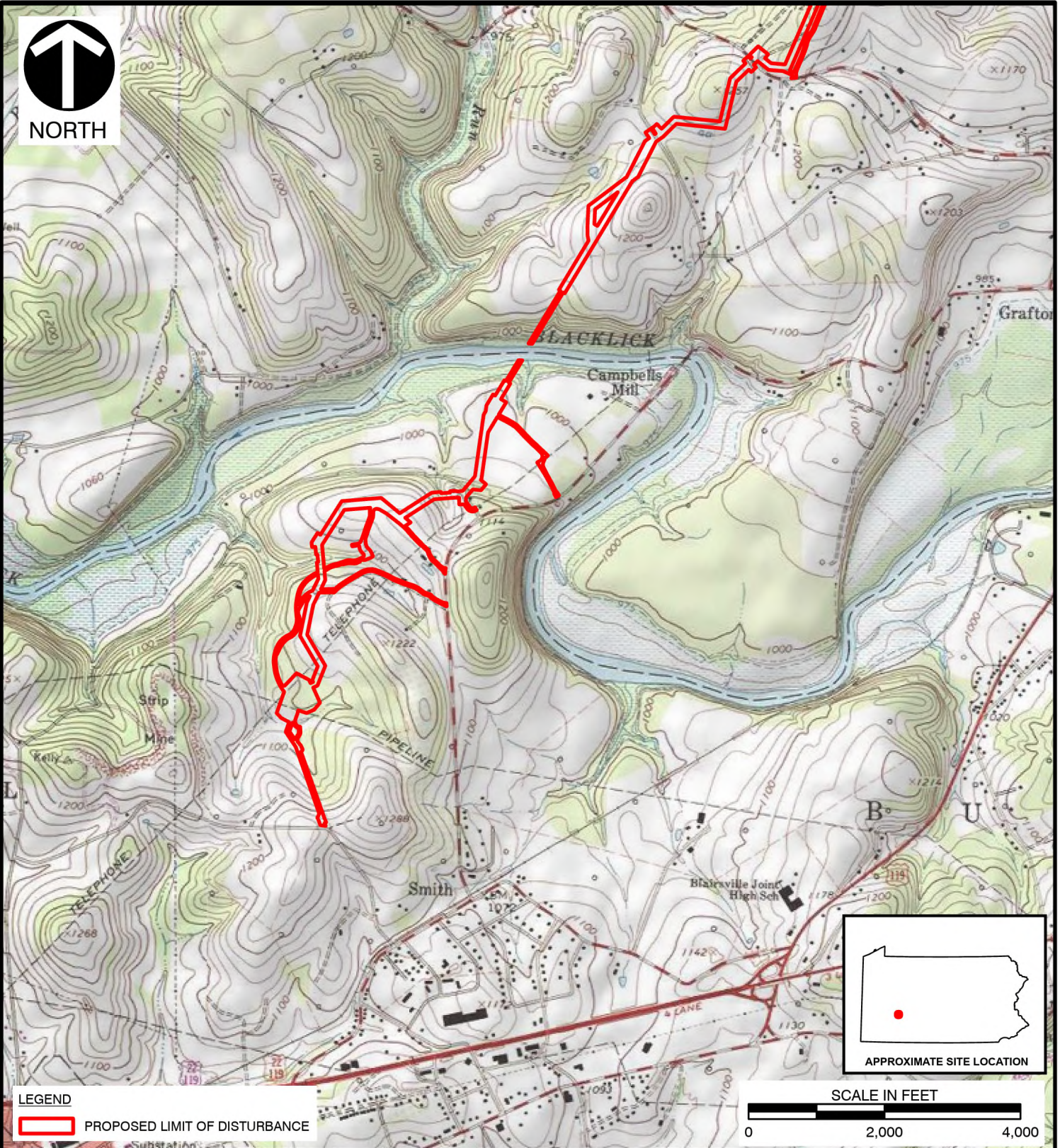
**HOMER CITY GENERATION LP
 HCPP PIPELINE
 BLACK LICK, BURRELL, AND CENTER TOWNSHIPS
 INDIANA COUNTY, PENNSYLVANIA**


SITE LOCATION MAP

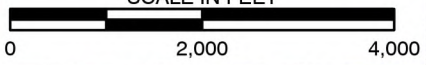
DRAWN BY: JDM	CHECKED BY: SCT	APPROVED BY: CRK*	FIGURE NO: 1A
DATE: 9/19/2025	SCALE: 1" = 2,000'	PROJECT NO: 354-010	

*Hand Signature on file

P:\3540-000\354-010\GIS\Maps\CV01_HCPP_Pipeline.aprx [354010_CV01_HCPPPipeline_Fig1_SiteLoc] 9/19/2025 1:38 AM (jmenadino)



LEGEND
 PROPOSED LIMIT OF DISTURBANCE

SCALE IN FEET


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**HOMER CITY GENERATION LP
 HCPP PIPELINE
 BLACK LICK, BURRELL, AND CENTER TOWNSHIPS
 INDIANA COUNTY, PENNSYLVANIA**

SITE LOCATION MAP

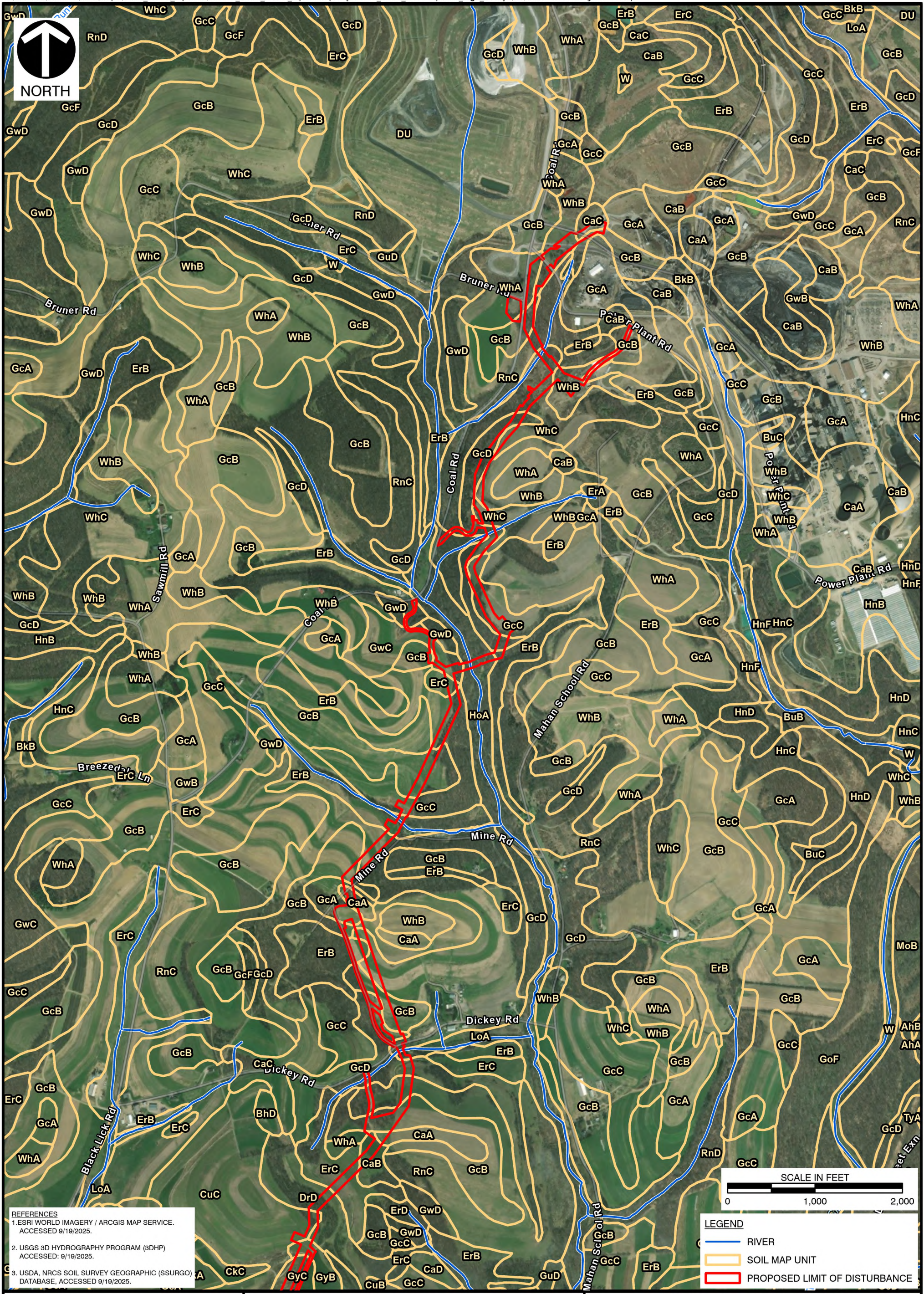
DRAWN BY:	JDM	CHECKED BY:	SCT	APPROVED BY:	CRK*	FIGURE NO:	1B
DATE:	9/19/2025	SCALE:	1" = 2,000'	PROJECT NO:	354-010		

*Hand Signature on file

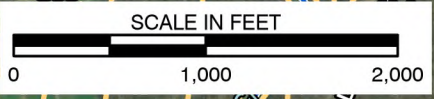
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APPENDIX C

USDA CUSTOM SOIL RESOURCE REPORT



- REFERENCES**
1. ESRI WORLD IMAGERY / ARCGIS MAP SERVICE. ACCESSED 9/19/2025.
 2. USGS 3D HYDROGRAPHY PROGRAM (3DHP) ACCESSED: 9/19/2025.
 3. USDA, NRCS SOIL SURVEY GEOGRAPHIC (SSURGO) DATABASE, ACCESSED 9/19/2025.



- LEGEND**
- RIVER
 - SOIL MAP UNIT
 - PROPOSED LIMIT OF DISTURBANCE

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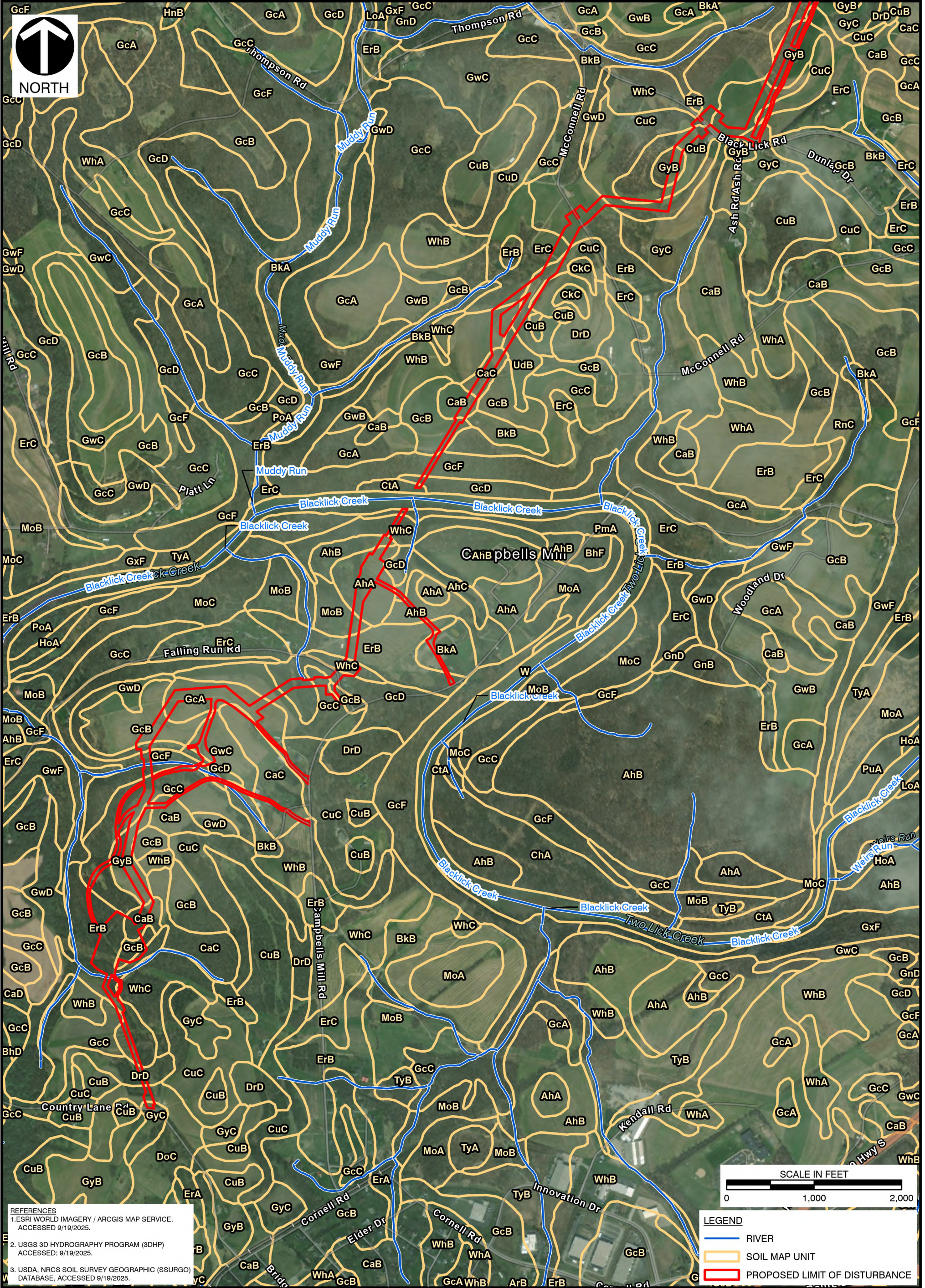
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SOILS MAP

DRAWN BY: JDM	CHECKED BY: SCT	APPROVED BY: CRK*	FIGURE NO: 2A
DATE: 9/19/2025	SCALE: 1" = 1,000'	PROJECT NO: 354-010	

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REFERENCES
 1. ESRI WORLD IMAGERY / ARCGIS MAP SERVICE. ACCESSED 9/19/2025.
 2. USGS 3D HYDROGRAPHY PROGRAM (3DHP) ACCESSED: 9/19/2025.
 3. USDA, NRCS SOIL SURVEY GEOGRAPHIC (SSURGO) DATABASE, ACCESSED 9/19/2025.

SCALE IN FEET
 0 1,000 2,000

LEGEND
 RIVER
 SOIL MAP UNIT
 PROPOSED LIMIT OF DISTURBANCE

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 DATE: 9/19/2025 SCALE: 1" = 1,000' PROJECT NO: 354-010

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 BLACK LICK, BURRELL, AND CENTER TOWNSHIPS
 INDIANA COUNTY, PENNSYLVANIA

SOILS MAP

FIGURE NO: **2B**

*Hand signature on file



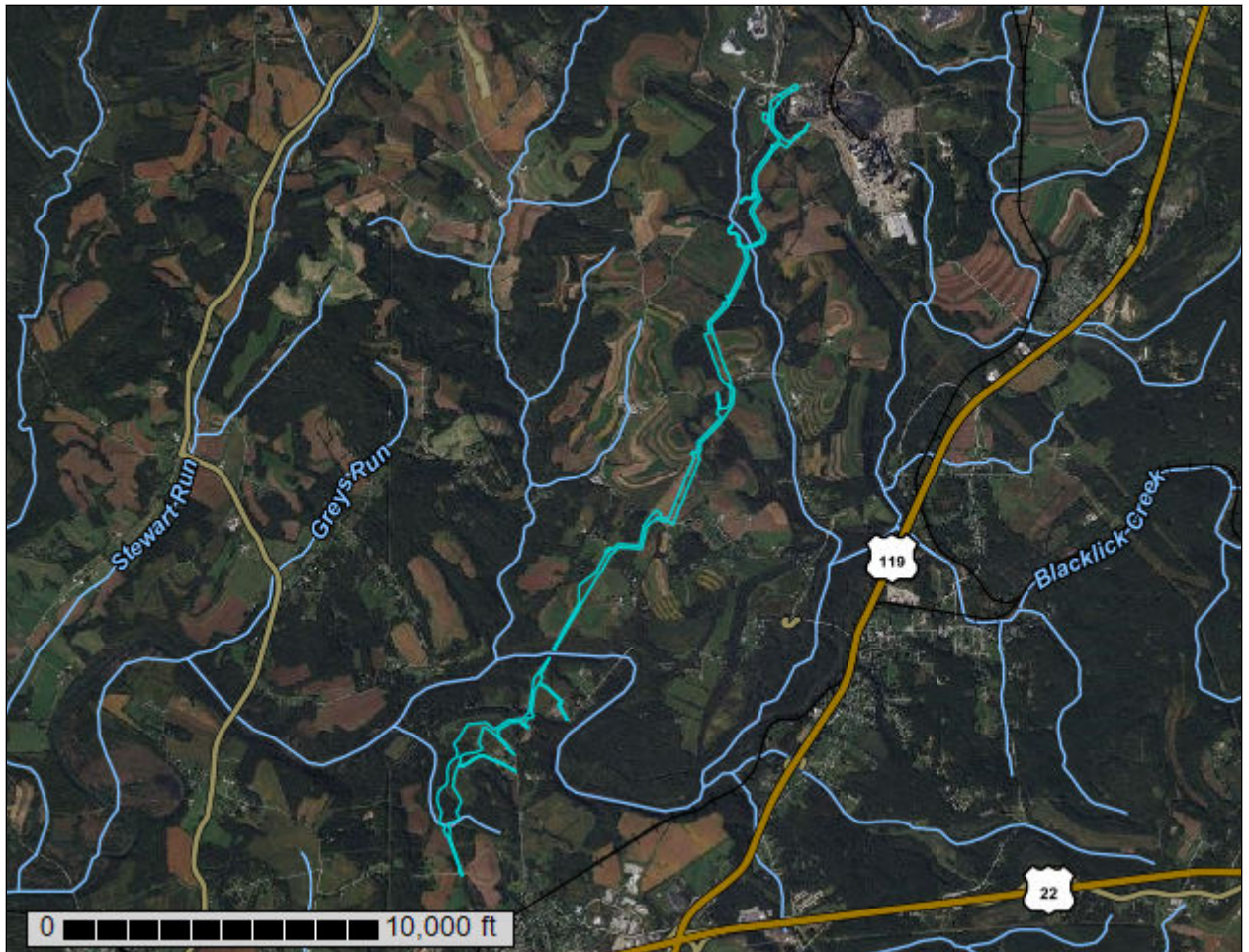
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Indiana County, Pennsylvania



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

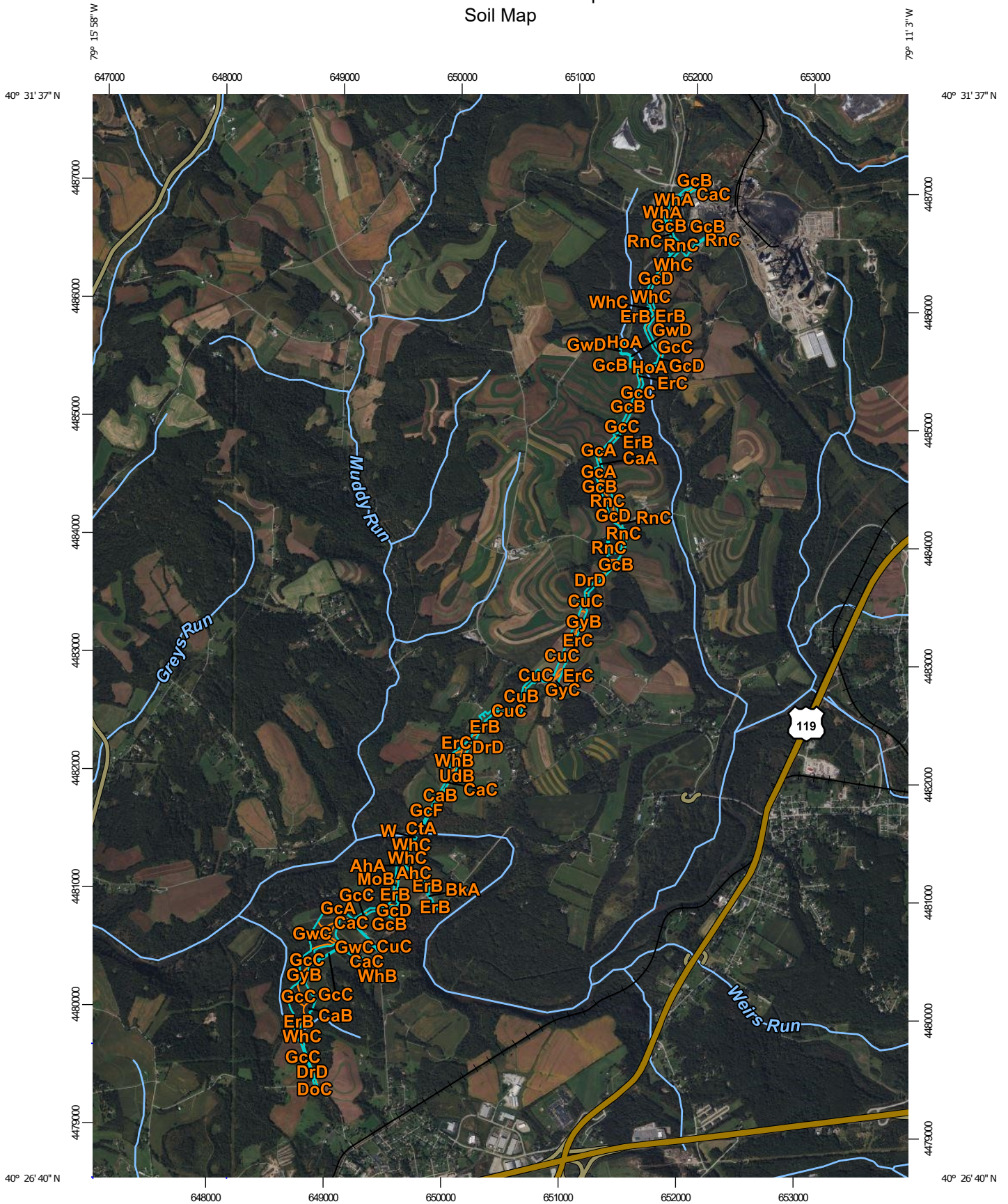
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

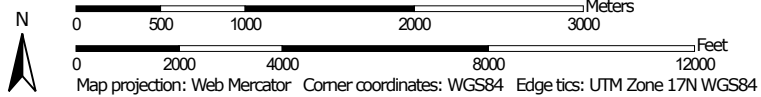
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map




Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.




MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania
 Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AhA	Allegheny silt loam, 0 to 3 percent slopes	3.2	2.5%
AhB	Allegheny silt loam, 3 to 8 percent slopes	0.6	0.5%
AhC	Allegheny silt loam, 8 to 15 percent slopes	0.1	0.1%
BkA	Brinkerton silt loam, 0 to 3 percent slopes	0.5	0.4%
BkB	Brinkerton silt loam, 3 to 8 percent slopes	0.2	0.2%
CaA	Cavode silt loam, 0 to 3 percent slopes	0.9	0.7%
CaB	Cavode silt loam, 3 to 8 percent slopes	3.8	3.0%
CaC	Cavode silt loam, 8 to 15 percent slopes	2.8	2.2%
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	0.1	0.0%
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	4.2	3.3%
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	6.5	5.1%
DoC	Dormont silt loam, 8 to 15 percent slopes	0.3	0.3%
DrD	Dormont-Culleoka complex, 15 to 25 percent slopes	1.5	1.2%
ErB	Ernest silt loam, 3 to 8 percent slopes	13.4	10.6%
ErC	Ernest silt loam, 8 to 15 percent slopes	3.3	2.6%
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	7.9	6.2%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	14.7	11.5%
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	13.9	10.9%
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	8.4	6.6%
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	3.4	2.6%
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	2.9	2.3%
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	1.2	0.9%

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Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GyB	Guernsey silt loam, 3 to 8 percent slopes	9.9	7.8%
GyC	Guernsey silt loam, 8 to 15 percent slopes	3.6	2.8%
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	0.7	0.5%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	0.2	0.1%
MoB	Monongahela silt loam, 3 to 8 percent slopes	0.5	0.4%
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	0.1	0.1%
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	5.1	4.0%
UdB	Udorthents, 0 to 8 percent slopes	0.5	0.4%
W	Water	0.0	0.0%
WhA	Wharton silt loam, 0 to 3 percent slopes	1.9	1.5%
WhB	Wharton silt loam, 3 to 8 percent slopes	6.7	5.2%
WhC	Wharton silt loam, 8 to 15 percent slopes	4.5	3.5%
Totals for Area of Interest		127.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They

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generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Indiana County, Pennsylvania

AhA—Allegheny silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1vrnp
Elevation: 700 to 1,200 feet
Mean annual precipitation: 36 to 50 inches
Mean annual air temperature: 41 to 62 degrees F
Frost-free period: 120 to 200 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Allegheny and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Allegheny

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Old fine-loamy alluvium

Typical profile

Ap - 0 to 10 inches: silt loam
Bt - 10 to 34 inches: loam
C - 34 to 60 inches: gravelly sandy clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Ecological site: F127XY006WV - Terraces, F126XY008OH - Tread,
F147XY007PA - Loamy To Coarse Terrace, F124XY010OH - Fine Terrace and
Plain
Hydric soil rating: No

Minor Components

Monongahela

Percent of map unit: 20 percent

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Landform: Terraces
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

AhB—Allegheny silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t320
Elevation: 650 to 1,380 feet
Mean annual precipitation: 37 to 55 inches
Mean annual air temperature: 48 to 53 degrees F
Frost-free period: 161 to 195 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Allegheny and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Allegheny

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Fine-loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: silt loam
BA - 8 to 12 inches: silt loam
Bt1 - 12 to 22 inches: loam
Bt2 - 22 to 33 inches: loam
BC - 33 to 43 inches: loam
C - 43 to 72 inches: loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e

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Hydrologic Soil Group: B
Ecological site: F126XY008OH - Tread
Hydric soil rating: No

Minor Components

Monongahela

Percent of map unit: 15 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

AhC—Allegheny silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2t321
Elevation: 650 to 1,220 feet
Mean annual precipitation: 37 to 52 inches
Mean annual air temperature: 48 to 53 degrees F
Frost-free period: 158 to 195 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Allegheny and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Allegheny

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Fine-loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: silt loam
BA - 8 to 12 inches: silt loam
Bt1 - 12 to 22 inches: loam
Bt2 - 22 to 33 inches: loam
BC - 33 to 43 inches: loam
C - 43 to 72 inches: loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained

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Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F126XY008OH - Tread

Hydric soil rating: No

Minor Components

Monongahela

Percent of map unit: 15 percent

Landform: Stream terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Linear, convex

Other vegetative classification: Acid Loams (AL3)

Hydric soil rating: No

BkA—Brinkerton silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2zj13

Elevation: 890 to 2,830 feet

Mean annual precipitation: 38 to 57 inches

Mean annual air temperature: 46 to 51 degrees F

Frost-free period: 130 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Brinkerton and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Brinkerton

Setting

Landform: Colluvial aprons, hillslopes

Landform position (two-dimensional): Toeslope, footslope, backslope

Landform position (three-dimensional): Base slope, head slope, side slope

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Parent material: Acid fine-silty colluvium derived from sedimentary rock

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Typical profile

Ap - 0 to 8 inches: silt loam
Btg - 8 to 21 inches: silty clay loam
Btxg - 21 to 42 inches: silty clay loam
BC - 42 to 65 inches: channery silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 29 inches to fragipan
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.33 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F127XY007WV - Wet Uplands, F126XY002OH - Footslope
Hydric soil rating: Yes

Minor Components

Ernest

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Lobdell

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

BkB—Brinkerton silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2zj14
Elevation: 760 to 1,990 feet
Mean annual precipitation: 48 to 52 inches

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Mean annual air temperature: 49 to 52 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Brinkerton and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Brinkerton

Setting

Landform: Colluvial aprons, hillslopes
Landform position (two-dimensional): Toeslope, footslope, backslope
Landform position (three-dimensional): Base slope, head slope, side slope
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Parent material: Acid fine-silty colluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: silt loam
Btg - 8 to 21 inches: silty clay loam
Btxg - 21 to 42 inches: silty clay loam
BC - 42 to 65 inches: channery silty clay loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 29 inches to fragipan
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.33 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F127XY007WV - Wet Uplands, F126XY002OH - Footslope
Other vegetative classification: Wetlands (W3)
Hydric soil rating: Yes

Minor Components

Ernest

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Lobdell

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

CaA—Cavode silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2wdpb
Elevation: 970 to 1,900 feet
Mean annual precipitation: 38 to 50 inches
Mean annual air temperature: 46 to 51 degrees F
Frost-free period: 120 to 195 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Cavode and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cavode

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Acid clayey residuum weathered from clayey shale

Typical profile

Ap - 0 to 10 inches: silt loam
Btg - 10 to 47 inches: silty clay loam
BCg - 47 to 57 inches: channery silt loam
R - 57 to 67 inches: bedrock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 80 inches to lithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland
Hydric soil rating: No

Minor Components

Brinkerton

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Wharton

Percent of map unit: 5 percent
Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Gilpin

Percent of map unit: 5 percent
Landform: Ridges
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

CaB—Cavode silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2wdpc
Elevation: 780 to 2,960 feet
Mean annual precipitation: 38 to 58 inches
Mean annual air temperature: 46 to 51 degrees F
Frost-free period: 110 to 195 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Cavode and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cavode

Setting

Landform: Ridges
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Parent material: Acid clayey residuum weathered from clayey shale

Typical profile

Ap - 0 to 10 inches: silt loam
Btg - 10 to 47 inches: silty clay loam
BCg - 47 to 57 inches: channery silt loam
R - 57 to 67 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 40 to 80 inches to lithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland
Hydric soil rating: No

Minor Components

Gilpin

Percent of map unit: 10 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder, summit, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Brinkerton

Percent of map unit: 5 percent
Landform: Ridges
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

CaC—Cavode silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2wdpd

Elevation: 770 to 1,990 feet

Mean annual precipitation: 38 to 50 inches

Mean annual air temperature: 46 to 51 degrees F

Frost-free period: 110 to 195 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Cavode and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cavode

Setting

Landform: Hillslopes

Landform position (two-dimensional): Backslope, summit, shoulder

Landform position (three-dimensional): Side slope, interfluvium

Down-slope shape: Concave, convex, linear

Across-slope shape: Concave, linear

Parent material: Acid clayey residuum weathered from clayey shale

Typical profile

Ap - 0 to 10 inches: silt loam

Btg - 10 to 47 inches: silty clay loam

BCg - 47 to 57 inches: channery silt loam

R - 57 to 67 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 40 to 80 inches to lithic bedrock

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C/D

Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland

Hydric soil rating: No

Minor Components

Gilpin

Percent of map unit: 10 percent

Landform: Hillslopes

Landform position (two-dimensional): Shoulder, backslope, summit

Landform position (three-dimensional): Side slope, interfluvium

Down-slope shape: Convex

Across-slope shape: Linear, convex

Hydric soil rating: No

Brinkerton

Percent of map unit: 5 percent

Landform: Hillslopes

Landform position (two-dimensional): Toeslope, footslope

Landform position (three-dimensional): Base slope, head slope

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Hydric soil rating: Yes

CtA—Cotaco silt loam, 0 to 3 percent slopes, rarely flooded

Map Unit Setting

National map unit symbol: 2m7d0

Elevation: 700 to 1,800 feet

Mean annual precipitation: 35 to 51 inches

Mean annual air temperature: 41 to 64 degrees F

Frost-free period: 115 to 165 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Cotaco, rarely flooded, and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cotaco, Rarely Flooded

Setting

Landform: Terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Fine-loamy alluvium derived from interbedded sedimentary rock

Typical profile

Ap - 0 to 12 inches: silt loam

Bt - 12 to 42 inches: silty clay loam

C - 42 to 65 inches: silty clay loam

Custom Soil Resource Report

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F126XY008OH - Tread, F124XY010OH - Fine Terrace and Plain
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

Minor Components

Ernest

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Head slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Philo

Percent of map unit: 10 percent
Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

CuB—Culleoka channery silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2s5gm
Elevation: 720 to 1,610 feet
Mean annual precipitation: 37 to 48 inches
Mean annual air temperature: 49 to 53 degrees F
Frost-free period: 173 to 206 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Culleoka and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Culleoka

Setting

Landform: Hills

Landform position (two-dimensional): Backslope, shoulder, summit

Landform position (three-dimensional): Interfluvium

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Fine-loamy residuum weathered from sandstone and shale

Typical profile

Ap - 0 to 10 inches: channery silt loam

Bt - 10 to 19 inches: channery silt loam

BC - 19 to 26 inches: very channery silt loam

C - 26 to 31 inches: very channery silt loam

R - 31 to 41 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 24 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Ecological site: F126XY001OH - Dry Ridge

Hydric soil rating: No

Minor Components

Dormont

Percent of map unit: 10 percent

Landform: Hills

Landform position (two-dimensional): Backslope, summit, shoulder

Landform position (three-dimensional): Side slope, interfluvium

Down-slope shape: Linear

Across-slope shape: Convex, linear

Hydric soil rating: No

Lowell

Percent of map unit: 5 percent

Landform: Hills

Landform position (two-dimensional): Summit, backslope, shoulder

Landform position (three-dimensional): Side slope, interfluvium

Custom Soil Resource Report

Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

CuC—Culleoka channery silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2s5gn
Elevation: 720 to 1,610 feet
Mean annual precipitation: 37 to 48 inches
Mean annual air temperature: 49 to 53 degrees F
Frost-free period: 173 to 206 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Culleoka and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Culleoka

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Interfluvium
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Fine-loamy residuum weathered from sandstone and shale

Typical profile

Ap - 0 to 10 inches: channery silt loam
Bt - 10 to 19 inches: channery silt loam
BC - 19 to 26 inches: very channery silt loam
C - 26 to 31 inches: very channery silt loam
R - 31 to 41 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 24 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B

Custom Soil Resource Report

Ecological site: F126XY001OH - Dry Ridge
Hydric soil rating: No

Minor Components

Dormont

Percent of map unit: 15 percent
Landform: Hills
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Linear
Across-slope shape: Convex, linear
Hydric soil rating: No

Lowell

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Summit, backslope, shoulder
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

DoC—Dormont silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2s5gh
Elevation: 800 to 1,540 feet
Mean annual precipitation: 37 to 47 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 173 to 197 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Dormont and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dormont

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Linear
Across-slope shape: Concave, linear
Parent material: Fine-loamy residuum weathered from limestone, sandstone, and shale

Typical profile

Ap - 0 to 11 inches: silt loam

Custom Soil Resource Report

Bt1 - 11 to 21 inches: silt loam
Bt2 - 21 to 31 inches: silty clay loam
Bt3 - 31 to 46 inches: channery silty clay loam
Bt4 - 46 to 62 inches: channery silty clay loam
BC - 62 to 75 inches: channery silty clay loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high
(0.01 to 0.66 in/hr)
Depth to water table: About 24 to 44 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Ecological site: F126XY003OH - Moist Ridge
Hydric soil rating: No

Minor Components

Culleoka

Percent of map unit: 15 percent
Landform: Hills
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Lowell

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Summit, backslope, shoulder
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Guernsey

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Side slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: No

DrD—Dormont-Culleoka complex, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 2s5gy
Elevation: 200 to 1,300 feet
Mean annual precipitation: 32 to 48 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 120 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Dormont and similar soils: 45 percent
Culleoka and similar soils: 37 percent
Minor components: 18 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dormont

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, head slope
Down-slope shape: Linear
Across-slope shape: Concave, linear
Parent material: Fine-loamy residuum weathered from limestone, sandstone, and shale

Typical profile

Ap - 0 to 11 inches: silt loam
Bt1 - 11 to 21 inches: silt loam
Bt2 - 21 to 31 inches: silty clay loam
Bt3 - 31 to 46 inches: channery silty clay loam
Bt4 - 46 to 62 inches: channery silty clay loam
BC - 62 to 75 inches: channery silty clay loam

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.66 in/hr)
Depth to water table: About 24 to 44 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D

Custom Soil Resource Report

Ecological site: F126XY004OH - Side Slope
Hydric soil rating: No

Description of Culleoka

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, nose slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Fine-loamy residuum weathered from sandstone and shale

Typical profile

Ap - 0 to 10 inches: channery silt loam
Bt - 10 to 19 inches: channery silt loam
BC - 19 to 26 inches: very channery silt loam
C - 26 to 31 inches: very channery silt loam
R - 31 to 41 inches: bedrock

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: 24 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: F126XY004OH - Side Slope
Hydric soil rating: No

Minor Components

Lowell

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Backslope, shoulder
Landform position (three-dimensional): Side slope, head slope, nose slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Guernsey

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: No

Thorndale

Percent of map unit: 3 percent
Landform: Drainageways, depressions
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

ErB—Ernest silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t32b
Elevation: 690 to 2,230 feet
Mean annual precipitation: 37 to 55 inches
Mean annual air temperature: 47 to 52 degrees F
Frost-free period: 155 to 191 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Ernest and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ernest

Setting

Landform: Hillslopes
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave
Parent material: Fine-loamy colluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: silt loam
Bt1 - 8 to 15 inches: silt loam
Bt2 - 15 to 24 inches: silt loam
Btx1 - 24 to 36 inches: channery silt loam
Btx2 - 36 to 50 inches: channery silt loam
C - 50 to 74 inches: channery silt loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 23 to 28 inches to fragipan
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 15 to 22 inches

Custom Soil Resource Report

Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland
Hydric soil rating: No

Minor Components

Gilpin

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Buchanan

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: No

Brinkerton

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Wetlands (W3)
Hydric soil rating: Yes

ErC—Ernest silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2t32c
Elevation: 590 to 2,290 feet
Mean annual precipitation: 37 to 58 inches
Mean annual air temperature: 47 to 53 degrees F
Frost-free period: 155 to 203 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Ernest and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ernest

Setting

Landform: Hillslopes

Landform position (two-dimensional): Toeslope, footslope

Landform position (three-dimensional): Base slope, head slope

Down-slope shape: Concave

Across-slope shape: Concave, linear

Parent material: Fine-loamy colluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: silt loam

Bt1 - 8 to 15 inches: silt loam

Bt2 - 15 to 24 inches: silt loam

Btx1 - 24 to 36 inches: channery silt loam

Btx2 - 36 to 50 inches: channery silt loam

C - 50 to 74 inches: channery silt loam

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 23 to 28 inches to fragipan

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 15 to 22 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C/D

Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland, F126XY002OH
- Footslope

Forage suitability group: Unnamed (G124XYF-3OH)

Other vegetative classification: Unnamed (G124XYF-3OH)

Hydric soil rating: No

Minor Components

Brinkerton

Percent of map unit: 5 percent

Landform: Hillslopes

Landform position (two-dimensional): Toeslope, footslope

Landform position (three-dimensional): Base slope, head slope

Microfeatures of landform position: Closed depressions

Down-slope shape: Concave

Across-slope shape: Concave, linear

Hydric soil rating: Yes

Gilpin

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Buchanan

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave
Across-slope shape: Concave, linear
Hydric soil rating: No

GcA—Gilpin channery silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2lcr0
Elevation: 800 to 1,700 feet
Mean annual precipitation: 36 to 50 inches
Mean annual air temperature: 41 to 62 degrees F
Frost-free period: 120 to 200 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Gilpin and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 8 inches: channery silt loam
Bt - 8 to 24 inches: channery silt loam
C - 24 to 30 inches: very channery loam
R - 30 to 35 inches: bedrock

Custom Soil Resource Report

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland, F127XY013WV
- Divergent Uplands
Hydric soil rating: No

Minor Components

Wharton

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Weikert

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Nose slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

GcB—Gilpin channery silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t1kt
Elevation: 870 to 2,720 feet
Mean annual precipitation: 40 to 53 inches
Mean annual air temperature: 47 to 52 degrees F
Frost-free period: 167 to 179 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Gilpin and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Hills

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear, convex

Parent material: Acid fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 8 inches: channery silt loam

Bt - 8 to 24 inches: channery silt loam

C - 24 to 30 inches: extremely channery loam

R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 30 to 36 inches to lithic bedrock

Drainage class: Well drained

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 2.00 in/hr)*

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: F126XY001OH - Dry Ridge

Hydric soil rating: No

Minor Components

Wharton

Percent of map unit: 10 percent

Landform: Hills

Landform position (two-dimensional): Summit, backslope, shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Weikert

Percent of map unit: 5 percent

Landform: Ridges

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Nose slope

Down-slope shape: Convex

Custom Soil Resource Report

Across-slope shape: Convex
Hydric soil rating: No

GcC—Gilpin channery silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2t1kw
Elevation: 800 to 3,090 feet
Mean annual precipitation: 40 to 62 inches
Mean annual air temperature: 46 to 53 degrees F
Frost-free period: 166 to 181 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Gilpin and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Acid fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 8 inches: channery silt loam
Bt - 8 to 24 inches: channery silt loam
C - 24 to 30 inches: extremely channery loam
R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 30 to 36 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F126XY001OH - Dry Ridge
Hydric soil rating: No

Minor Components

Wharton

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex, linear
Across-slope shape: Linear
Hydric soil rating: No

Weikert

Percent of map unit: 5 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Nose slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

GcD—Gilpin channery silt loam, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 2t1kv
Elevation: 790 to 3,120 feet
Mean annual precipitation: 39 to 61 inches
Mean annual air temperature: 46 to 53 degrees F
Frost-free period: 161 to 181 days
Farmland classification: Not prime farmland

Map Unit Composition

Gilpin and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Acid fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 8 inches: channery silt loam
Bt - 8 to 24 inches: channery silt loam
C - 24 to 30 inches: extremely channery loam
R - 30 to 40 inches: bedrock

Custom Soil Resource Report

Properties and qualities

Slope: 15 to 25 percent

Depth to restrictive feature: 30 to 36 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: F126XY004OH - Side Slope

Hydric soil rating: No

Minor Components

Weikert

Percent of map unit: 10 percent

Landform: Hillslopes

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Nose slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Wharton

Percent of map unit: 5 percent

Landform: Hills

Landform position (two-dimensional): Backslope, shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

GcF—Gilpin channery silt loam, 25 to 60 percent slopes

Map Unit Setting

National map unit symbol: 1vrqf

Elevation: 500 to 2,500 feet

Mean annual precipitation: 36 to 54 inches

Mean annual air temperature: 37 to 62 degrees F

Frost-free period: 120 to 200 days

Farmland classification: Not prime farmland

Map Unit Composition

Gilpin and similar soils: 70 percent

Custom Soil Resource Report

Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Acid fine-loamy residuum weathered from shale and siltstone

Typical profile

A - 0 to 8 inches: channery silt loam
Bt - 8 to 24 inches: channery silt loam
C - 24 to 30 inches: very channery loam
R - 30 to 35 inches: bedrock

Properties and qualities

Slope: 25 to 60 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland
Hydric soil rating: No

Minor Components

Shelocta

Percent of map unit: 15 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex, linear
Hydric soil rating: No

Weikert

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil rating: No

Wharton

Percent of map unit: 5 percent
Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

GwC—Gilpin-Weikert channery silt loams, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2wds1
Elevation: 840 to 2,830 feet
Mean annual precipitation: 39 to 49 inches
Mean annual air temperature: 48 to 51 degrees F
Frost-free period: 163 to 190 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Gilpin and similar soils: 55 percent
Weikert and similar soils: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Hillslopes
Landform position (two-dimensional): Shoulder, backslope, summit
Landform position (three-dimensional): Interfluve, side slope, crest
Down-slope shape: Linear
Across-slope shape: Convex, linear
Parent material: Acid fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 8 inches: channery silt loam
Bt - 8 to 24 inches: channery silt loam
C - 24 to 33 inches: extremely channery loam
R - 33 to 43 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 30 to 36 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Custom Soil Resource Report

Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland

Hydric soil rating: No

Description of Weikert

Setting

Landform: Hillslopes

Landform position (two-dimensional): Backslope, shoulder, summit

Landform position (three-dimensional): Side slope, interfluve, crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy residuum weathered from shale

Typical profile

Ap - 0 to 7 inches: channery silt loam

Bw - 7 to 15 inches: very channery silt loam

C - 15 to 17 inches: extremely channery silt loam

R - 17 to 26 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 14 to 19 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Ecological site: F124XY001OH - Shallow Acid Mixed Sedimentary Upland,

F124XY010OH - Fine Terrace and Plain

Hydric soil rating: No

Minor Components

Hazleton

Percent of map unit: 5 percent

Landform: Hillslopes

Landform position (two-dimensional): Backslope, shoulder, summit

Landform position (three-dimensional): Side slope, interfluve, crest

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Wharton

Percent of map unit: 5 percent

Landform: Hillslopes

Custom Soil Resource Report

Landform position (two-dimensional): Backslope, shoulder, summit

Landform position (three-dimensional): Side slope, interfluve, crest

Down-slope shape: Linear

Across-slope shape: Convex, linear

Hydric soil rating: No

Cavode

Percent of map unit: 5 percent

Landform: Hillslopes

Landform position (two-dimensional): Backslope, shoulder, summit

Landform position (three-dimensional): Side slope, interfluve, crest

Down-slope shape: Linear

Across-slope shape: Convex, linear

Hydric soil rating: No

GwD—Gilpin-Weikert channery silt loams, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 2wds2

Elevation: 710 to 2,800 feet

Mean annual precipitation: 39 to 48 inches

Mean annual air temperature: 47 to 52 degrees F

Frost-free period: 163 to 190 days

Farmland classification: Not prime farmland

Map Unit Composition

Gilpin and similar soils: 45 percent

Weikert and similar soils: 40 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Hillslopes

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Interfluve, nose slope, side slope

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Acid fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 8 inches: channery silt loam

Bt - 8 to 24 inches: channery silt loam

C - 24 to 33 inches: extremely channery loam

R - 33 to 43 inches: bedrock

Properties and qualities

Slope: 15 to 25 percent

Depth to restrictive feature: 30 to 36 inches to lithic bedrock

Custom Soil Resource Report

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland

Forage suitability group: Unnamed (G124XYF-1OH)

Other vegetative classification: Unnamed (G124XYF-1OH)

Hydric soil rating: No

Description of Weikert

Setting

Landform: Hillslopes

Landform position (two-dimensional): Shoulder, backslope, summit

Landform position (three-dimensional): Side slope, interfluvium, nose slope

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Loamy residuum weathered from shale

Typical profile

Ap - 0 to 7 inches: channery silt loam

Bw - 7 to 15 inches: very channery silt loam

C - 15 to 17 inches: extremely channery silt loam

R - 17 to 26 inches: bedrock

Properties and qualities

Slope: 15 to 25 percent

Depth to restrictive feature: 14 to 19 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: D

Ecological site: F124XY001OH - Shallow Acid Mixed Sedimentary Upland,

F124XY010OH - Fine Terrace and Plain

Hydric soil rating: No

Minor Components

Hazleton

Percent of map unit: 10 percent

Landform: Hillslopes

Custom Soil Resource Report

Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Interfluve, nose slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear
Hydric soil rating: No

Wharton

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Interfluve, nose slope, side slope
Down-slope shape: Convex, linear
Across-slope shape: Linear
Hydric soil rating: No

GyB—Guernsey silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2wdrv
Elevation: 670 to 1,860 feet
Mean annual precipitation: 38 to 43 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 175 to 198 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Guernsey and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Guernsey

Setting

Landform: Ridges
Landform position (two-dimensional): Summit, backslope, shoulder
Landform position (three-dimensional): Interfluve, side slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Colluvium derived from limestone and shale over residuum weathered from limestone and shale

Typical profile

Ap - 0 to 8 inches: silt loam
BE - 8 to 15 inches: silt loam
Bt1 - 15 to 22 inches: silty clay loam
Bt2 - 22 to 37 inches: silty clay
Btg - 37 to 54 inches: silty clay loam
2C - 54 to 60 inches: channery silt loam
2Cr - 60 to 70 inches: bedrock

Custom Soil Resource Report

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 59 to 62 inches to paralithic bedrock
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 16 to 23 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: F126XY003OH - Moist Ridge
Forage suitability group: Unnamed (G126XYA-6OH)
Other vegetative classification: Unnamed (G126XYA-6OH)
Hydric soil rating: No

Minor Components

Dormont

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Summit, backslope, shoulder
Landform position (three-dimensional): Crest, interfluve, side slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Culleoka

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Summit, backslope, shoulder
Landform position (three-dimensional): Crest, interfluve, side slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Westmoreland

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Summit, backslope, shoulder
Landform position (three-dimensional): Crest, interfluve, side slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

GyC—Guernsey silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2t32f

Elevation: 600 to 1,880 feet

Mean annual precipitation: 37 to 49 inches

Mean annual air temperature: 47 to 53 degrees F

Frost-free period: 165 to 205 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Guernsey and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Guernsey

Setting

Landform: Hills

Landform position (two-dimensional): Summit, backslope, shoulder

Landform position (three-dimensional): Interfluve, crest, side slope, head slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Colluvium derived from limestone and shale over residuum weathered from limestone and shale

Typical profile

Ap - 0 to 8 inches: silt loam

BE - 8 to 15 inches: silt loam

Bt1 - 15 to 22 inches: silty clay loam

Bt2 - 22 to 37 inches: silty clay

Btg - 37 to 54 inches: silty clay loam

2C - 54 to 60 inches: channery silt loam

2Cr - 60 to 70 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 59 to 62 inches to paralithic bedrock

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 16 to 23 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C/D

Custom Soil Resource Report

Ecological site: F126XY002OH - Footslope
Forage suitability group: Unnamed (G126XYA-6OH)
Other vegetative classification: Unnamed (G126XYA-6OH)
Hydric soil rating: No

Minor Components

Berks

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Summit, backslope, shoulder
Landform position (three-dimensional): Crest, interfluve, side slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Westmoreland

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Summit, backslope, shoulder
Landform position (three-dimensional): Crest, interfluve, side slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Coshocton

Percent of map unit: 5 percent
Landform: Ridges
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

HoA—Holly silt loam, 0 to 2 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: 2m915
Elevation: 480 to 3,000 feet
Mean annual precipitation: 30 to 65 inches
Mean annual air temperature: 41 to 62 degrees F
Frost-free period: 120 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Holly and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Holly

Setting

Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Recent loamy alluvium derived from sandstone and shale

Typical profile

A - 0 to 9 inches: silt loam
Bg1 - 9 to 13 inches: silt loam
Bg2 - 13 to 35 inches: loam
BCg - 35 to 42 inches: clay loam
C - 42 to 65 inches: gravelly loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Ecological site: F126XY005OH - Poorly Drained Floodplain, F124XY008OH - Wet Floodplain and Drainageway
Hydric soil rating: Yes

Minor Components

Lobdell

Percent of map unit: 15 percent
Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Ernest

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Head slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

LoA—Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: 2t326
Elevation: 520 to 1,430 feet
Mean annual precipitation: 39 to 44 inches
Mean annual air temperature: 49 to 53 degrees F
Frost-free period: 167 to 191 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Lobdell and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lobdell

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine-loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 6 inches: silt loam
Bw1 - 6 to 20 inches: loam
Bw2 - 20 to 38 inches: loam
C - 38 to 65 inches: stratified loam to silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: About 16 to 30 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 12.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Ecological site: F126XY006OH - Well Drained Floodplain
Forage suitability group: Unnamed (G126XYA-5OH)
Other vegetative classification: Unnamed (G126XYA-5OH)
Hydric soil rating: No

Minor Components

Holly

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Wetlands (W3)
Hydric soil rating: Yes

Orrville

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Melvin

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

MoB—Monongahela silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2rfbg
Elevation: 580 to 1,300 feet
Mean annual precipitation: 36 to 54 inches
Mean annual air temperature: 41 to 62 degrees F
Frost-free period: 120 to 200 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Monongahela and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monongahela

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Fine-loamy alluvium derived from sandstone and siltstone

Custom Soil Resource Report

Typical profile

Ap - 0 to 8 inches: silt loam
BA - 8 to 12 inches: silt loam
Bt - 12 to 22 inches: silt loam
Btx - 22 to 51 inches: clay loam
BC - 51 to 65 inches: gravelly clay loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 18 to 30 inches to fragipan
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Ecological site: F126XY008OH - Tread
Forage suitability group: Unnamed (G126XYF-3OH)
Other vegetative classification: Unnamed (G126XYF-3OH), Acid Loams (AL3)
Hydric soil rating: No

Minor Components

Allegheny

Percent of map unit: 10 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Purdy

Percent of map unit: 5 percent
Landform: Terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

PmA—Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded

Map Unit Setting

National map unit symbol: 2x9zz
Elevation: 600 to 1,240 feet

Custom Soil Resource Report

Mean annual precipitation: 41 to 48 inches
Mean annual air temperature: 49 to 55 degrees F
Frost-free period: 166 to 204 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Pope and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pope

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw - 8 to 42 inches: fine sandy loam
C - 42 to 85 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: A
Ecological site: F124XY007OH - Upper Floodplain
Forage suitability group: Unnamed (G124XYA-5OH)
Other vegetative classification: Unnamed (G124XYA-5OH)
Hydric soil rating: No

Minor Components

Allegheny

Percent of map unit: 5 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Philo

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear

Custom Soil Resource Report

Across-slope shape: Linear
Hydric soil rating: No

RnC—Rayne-Gilpin channery silt loams, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 1vrr7
Elevation: 800 to 2,500 feet
Mean annual precipitation: 36 to 65 inches
Mean annual air temperature: 41 to 62 degrees F
Frost-free period: 110 to 180 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Rayne and similar soils: 46 percent
Gilpin and similar soils: 44 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rayne

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid fine-loamy residuum weathered from sandstone and siltstone

Typical profile

Ap - 0 to 8 inches: channery silt loam
Bt - 8 to 47 inches: channery silty clay loam
C - 47 to 55 inches: channery sandy loam
R - 55 to 59 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 40 to 72 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high
(0.06 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B

Custom Soil Resource Report

Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland, F126XY003OH
- Moist Ridge
Hydric soil rating: No

Description of Gilpin

Setting

Landform: Hillslopes
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 6 inches: channery silt loam
Bt - 6 to 24 inches: channery silt loam
C - 24 to 28 inches: channery sandy loam
R - 28 to 34 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland
Hydric soil rating: No

Minor Components

Wharton

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Ernest

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave

Custom Soil Resource Report

Hydric soil rating: No

UdB—Udorthents, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 1vrqq
Elevation: 800 to 1,500 feet
Mean annual precipitation: 36 to 46 inches
Mean annual air temperature: 41 to 62 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, unstable fill, and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Unstable Fill

Setting

Landform: Plateaus
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Acid loamy human transported material derived from interbedded sedimentary rock

Typical profile

C - 0 to 65 inches: extremely channery silt loam

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F124XY100OH - Mine Spoil (reserved), F127XY013WV - Divergent Uplands
Hydric soil rating: No

W—Water

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Setting

Landform: Streams

WhA—Wharton silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2t184

Elevation: 930 to 1,950 feet

Mean annual precipitation: 38 to 47 inches

Mean annual air temperature: 47 to 52 degrees F

Frost-free period: 178 to 183 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Wharton and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wharton

Setting

Landform: Hills

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 9 inches: silt loam

Bt1 - 9 to 16 inches: silt loam

Bt2 - 16 to 22 inches: silt loam

Bt3 - 22 to 31 inches: silt loam

BC - 31 to 46 inches: silty clay loam

C - 46 to 69 inches: channery silty clay loam

Cr - 69 to 79 inches: bedrock

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 40 to 71 inches to paralithic bedrock

Custom Soil Resource Report

Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 16 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F127XY013WV - Divergent Uplands
Hydric soil rating: No

Minor Components

Gilpin

Percent of map unit: 10 percent
Landform: Ridges
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Brinkerton

Percent of map unit: 5 percent
Landform: Depressions on hillslopes
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

Cavode

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear

WhB—Wharton silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t185
Elevation: 760 to 2,860 feet
Mean annual precipitation: 37 to 57 inches
Mean annual air temperature: 46 to 53 degrees F
Frost-free period: 158 to 205 days

Custom Soil Resource Report

Farmland classification: All areas are prime farmland

Map Unit Composition

Wharton and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wharton

Setting

Landform: Hills

Landform position (two-dimensional): Summit, backslope, shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 9 inches: silt loam

Bt1 - 9 to 16 inches: silt loam

Bt2 - 16 to 22 inches: silt loam

Bt3 - 22 to 31 inches: silt loam

BC - 31 to 46 inches: silty clay loam

C - 46 to 69 inches: channery silty clay loam

Cr - 69 to 79 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 40 to 71 inches to paralithic bedrock

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: About 16 to 28 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D

Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland

Hydric soil rating: No

Minor Components

Cavode

Percent of map unit: 8 percent

Landform: Hills

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Gilpin

Percent of map unit: 7 percent

Custom Soil Resource Report

Landform: Ridges
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve, side slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Brinkerton

Percent of map unit: 5 percent
Landform: Depressions on hillslopes
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: Yes

WhC—Wharton silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2t5mm
Elevation: 620 to 2,160 feet
Mean annual precipitation: 37 to 51 inches
Mean annual air temperature: 47 to 53 degrees F
Frost-free period: 161 to 205 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Wharton and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wharton

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 9 inches: silt loam
Bt1 - 9 to 16 inches: silt loam
Bt2 - 16 to 22 inches: silt loam
Bt3 - 22 to 31 inches: silt loam
BC - 31 to 46 inches: silty clay loam
C - 46 to 69 inches: channery silty clay loam
Cr - 69 to 79 inches: bedrock

Custom Soil Resource Report

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 40 to 71 inches to paralithic bedrock

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: About 16 to 28 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C/D

Ecological site: F126XY003OH - Moist Ridge

Forage suitability group: Unnamed (G126XYA-6OH)

Other vegetative classification: Unnamed (G126XYA-6OH)

Hydric soil rating: No

Minor Components

Gilpin

Percent of map unit: 10 percent

Landform: Hillslopes

Landform position (two-dimensional): Backslope, shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Linear, convex

Hydric soil rating: No

Ernest

Percent of map unit: 5 percent

Landform: Hillslopes

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: No

Rarden

Percent of map unit: 5 percent

Landform: Hills

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Hydric soil rating: No

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Building Site Development

Building site development interpretations are designed to be used as tools for evaluating soil suitability and identifying soil limitations for various construction purposes. As part of the interpretation process, the rating applies to each soil in its described condition and does not consider present land use. Example interpretations can include corrosion of concrete and steel, shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping.

Corrosion of Concrete

ENG

Engineering

AGR

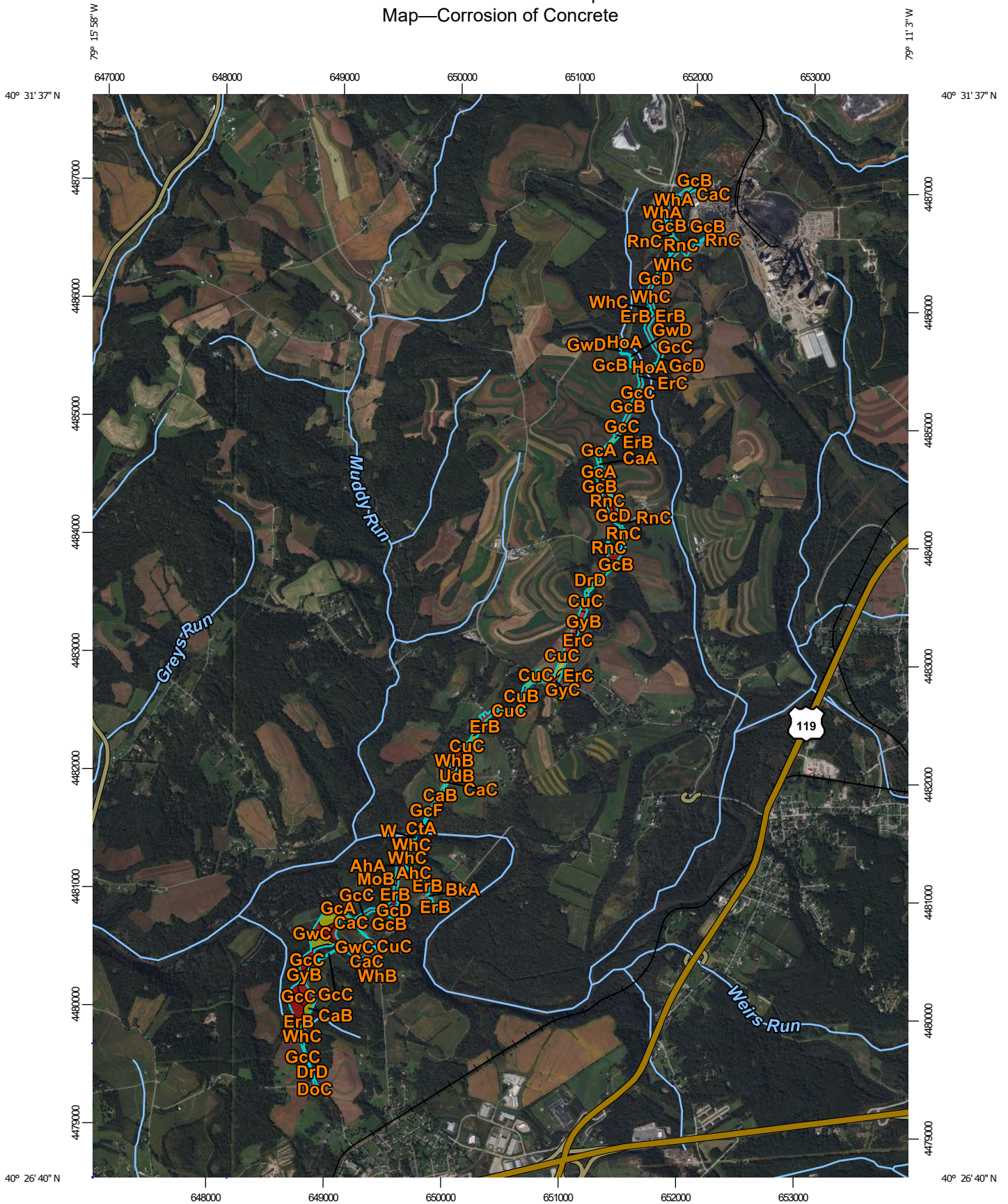
Agronomy

"Risk of corrosion" pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens concrete. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the concrete in installations that are entirely within one kind of soil or within one soil layer.

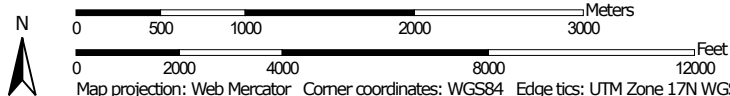
Custom Soil Resource Report

The risk of corrosion is expressed as "low," "moderate," or "high."

Custom Soil Resource Report
Map—Corrosion of Concrete























Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Background**
 -  Aerial Photography
- Soils**
 - Soil Rating Polygons**
 -  High
 -  Moderate
 -  Low
 -  Not rated or not available
 - Soil Rating Lines**
 -  High
 -  Moderate
 -  Low
 -  Not rated or not available
 - Soil Rating Points**
 -  High
 -  Moderate
 -  Low
 -  Not rated or not available
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania
 Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Table—Corrosion of Concrete

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AhA	Allegheny silt loam, 0 to 3 percent slopes	High	3.2	2.5%
AhB	Allegheny silt loam, 3 to 8 percent slopes	Moderate	0.6	0.5%
AhC	Allegheny silt loam, 8 to 15 percent slopes	Moderate	0.1	0.1%
BkA	Brinkerton silt loam, 0 to 3 percent slopes	Moderate	0.5	0.4%
BkB	Brinkerton silt loam, 3 to 8 percent slopes	Moderate	0.2	0.2%
CaA	Cavode silt loam, 0 to 3 percent slopes	Moderate	0.9	0.7%
CaB	Cavode silt loam, 3 to 8 percent slopes	Moderate	3.8	3.0%
CaC	Cavode silt loam, 8 to 15 percent slopes	Moderate	2.8	2.2%
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	Moderate	0.1	0.0%
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	Moderate	4.2	3.3%
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	Moderate	6.5	5.1%
DoC	Dormont silt loam, 8 to 15 percent slopes	Moderate	0.3	0.3%
DrD	Dormont-Culleoka complex, 15 to 25 percent slopes	Moderate	1.5	1.2%
ErB	Ernest silt loam, 3 to 8 percent slopes	High	13.4	10.6%
ErC	Ernest silt loam, 8 to 15 percent slopes	High	3.3	2.6%
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	Moderate	7.9	6.2%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	High	14.7	11.5%
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	High	13.9	10.9%
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	High	8.4	6.6%
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	Moderate	3.4	2.6%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	High	2.9	2.3%
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	High	1.2	0.9%
GyB	Guernsey silt loam, 3 to 8 percent slopes	High	9.9	7.8%
GyC	Guernsey silt loam, 8 to 15 percent slopes	High	3.6	2.8%
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	Low	0.7	0.5%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	Low	0.2	0.1%
MoB	Monongahela silt loam, 3 to 8 percent slopes	High	0.5	0.4%
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	High	0.1	0.1%
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	Moderate	5.1	4.0%
UdB	Udorthents, 0 to 8 percent slopes	High	0.5	0.4%
W	Water		0.0	0.0%
WhA	Wharton silt loam, 0 to 3 percent slopes	High	1.9	1.5%
WhB	Wharton silt loam, 3 to 8 percent slopes	High	6.7	5.2%
WhC	Wharton silt loam, 8 to 15 percent slopes	High	4.5	3.5%
Totals for Area of Interest			127.2	100.0%

Rating Options—Corrosion of Concrete

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Corrosion of Steel

ENG

Engineering

Custom Soil Resource Report

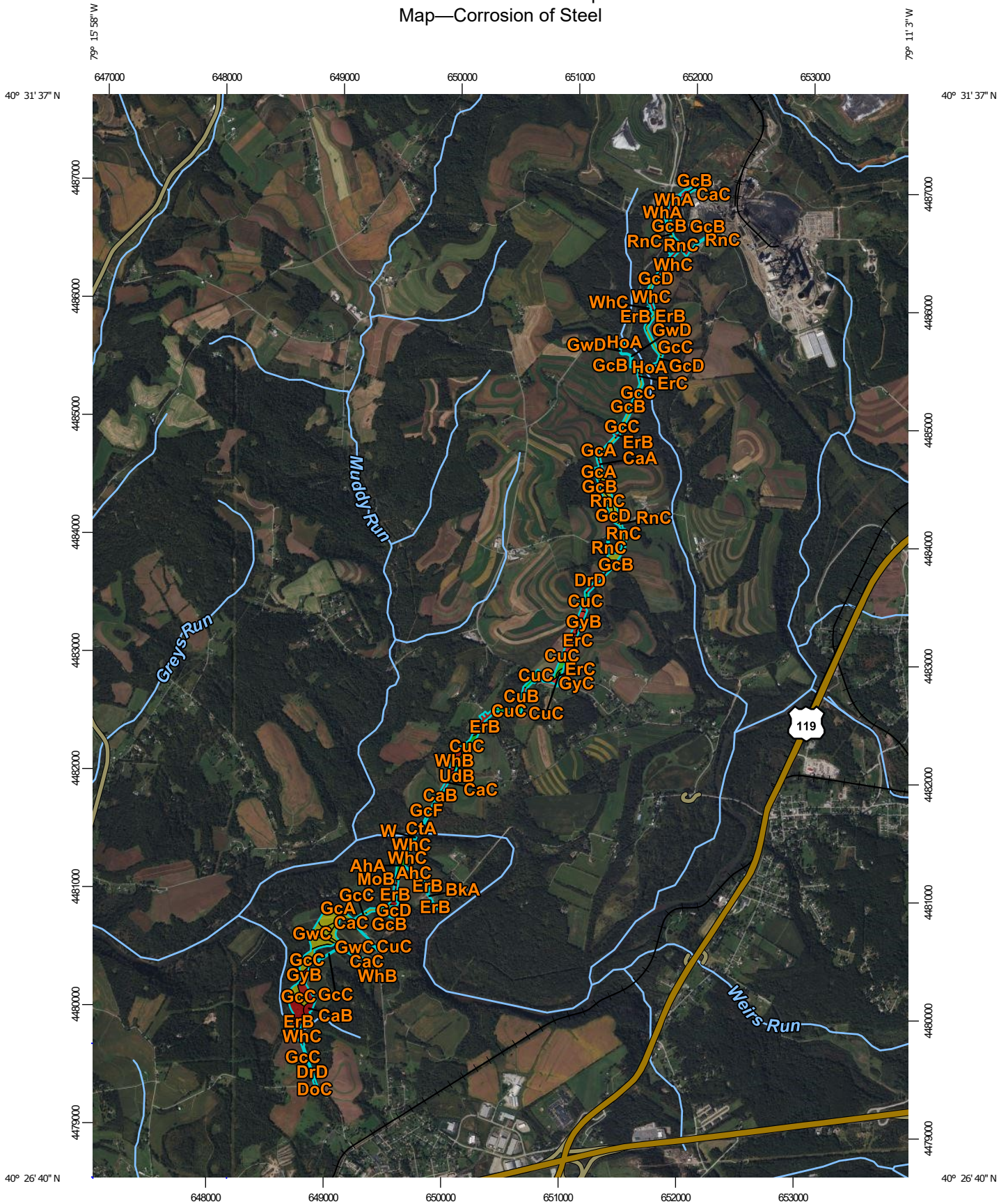
AGR

Agronomy

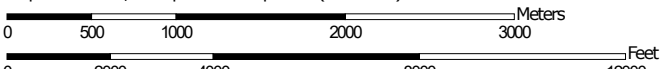
"Risk of corrosion" pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel in installations that are entirely within one kind of soil or within one soil layer.

The risk of corrosion is expressed as "low," "moderate," or "high."

Custom Soil Resource Report Map—Corrosion of Steel



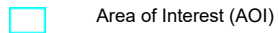
Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)



Area of Interest (AOI)

Background



Aerial Photography

Soils

Soil Rating Polygons



High



Moderate



Low



Not rated or not available

Soil Rating Lines



High



Moderate



Low



Not rated or not available

Soil Rating Points



High



Moderate



Low



Not rated or not available

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania
 Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Table—Corrosion of Steel

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AhA	Allegheny silt loam, 0 to 3 percent slopes	Low	3.2	2.5%
AhB	Allegheny silt loam, 3 to 8 percent slopes	Low	0.6	0.5%
AhC	Allegheny silt loam, 8 to 15 percent slopes	Low	0.1	0.1%
BkA	Brinkerton silt loam, 0 to 3 percent slopes	High	0.5	0.4%
BkB	Brinkerton silt loam, 3 to 8 percent slopes	High	0.2	0.2%
CaA	Cavode silt loam, 0 to 3 percent slopes	High	0.9	0.7%
CaB	Cavode silt loam, 3 to 8 percent slopes	High	3.8	3.0%
CaC	Cavode silt loam, 8 to 15 percent slopes	High	2.8	2.2%
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	High	0.1	0.0%
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	Low	4.2	3.3%
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	Low	6.5	5.1%
DoC	Dormont silt loam, 8 to 15 percent slopes	High	0.3	0.3%
DrD	Dormont-Culleoka complex, 15 to 25 percent slopes	High	1.5	1.2%
ErB	Ernest silt loam, 3 to 8 percent slopes	High	13.4	10.6%
ErC	Ernest silt loam, 8 to 15 percent slopes	High	3.3	2.6%
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	Moderate	7.9	6.2%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	Moderate	14.7	11.5%
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	Moderate	13.9	10.9%
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	Moderate	8.4	6.6%
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	Moderate	3.4	2.6%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	Moderate	2.9	2.3%
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	Moderate	1.2	0.9%
GyB	Guernsey silt loam, 3 to 8 percent slopes	High	9.9	7.8%
GyC	Guernsey silt loam, 8 to 15 percent slopes	High	3.6	2.8%
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	High	0.7	0.5%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	High	0.2	0.1%
MoB	Monongahela silt loam, 3 to 8 percent slopes	High	0.5	0.4%
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	Moderate	0.1	0.1%
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	Moderate	5.1	4.0%
UdB	Udorthents, 0 to 8 percent slopes	Low	0.5	0.4%
W	Water		0.0	0.0%
WhA	Wharton silt loam, 0 to 3 percent slopes	High	1.9	1.5%
WhB	Wharton silt loam, 3 to 8 percent slopes	High	6.7	5.2%
WhC	Wharton silt loam, 8 to 15 percent slopes	High	4.5	3.5%
Totals for Area of Interest			127.2	100.0%

Rating Options—Corrosion of Steel

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Shallow Excavations

ENG - Engineering

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on

Custom Soil Resource Report

the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

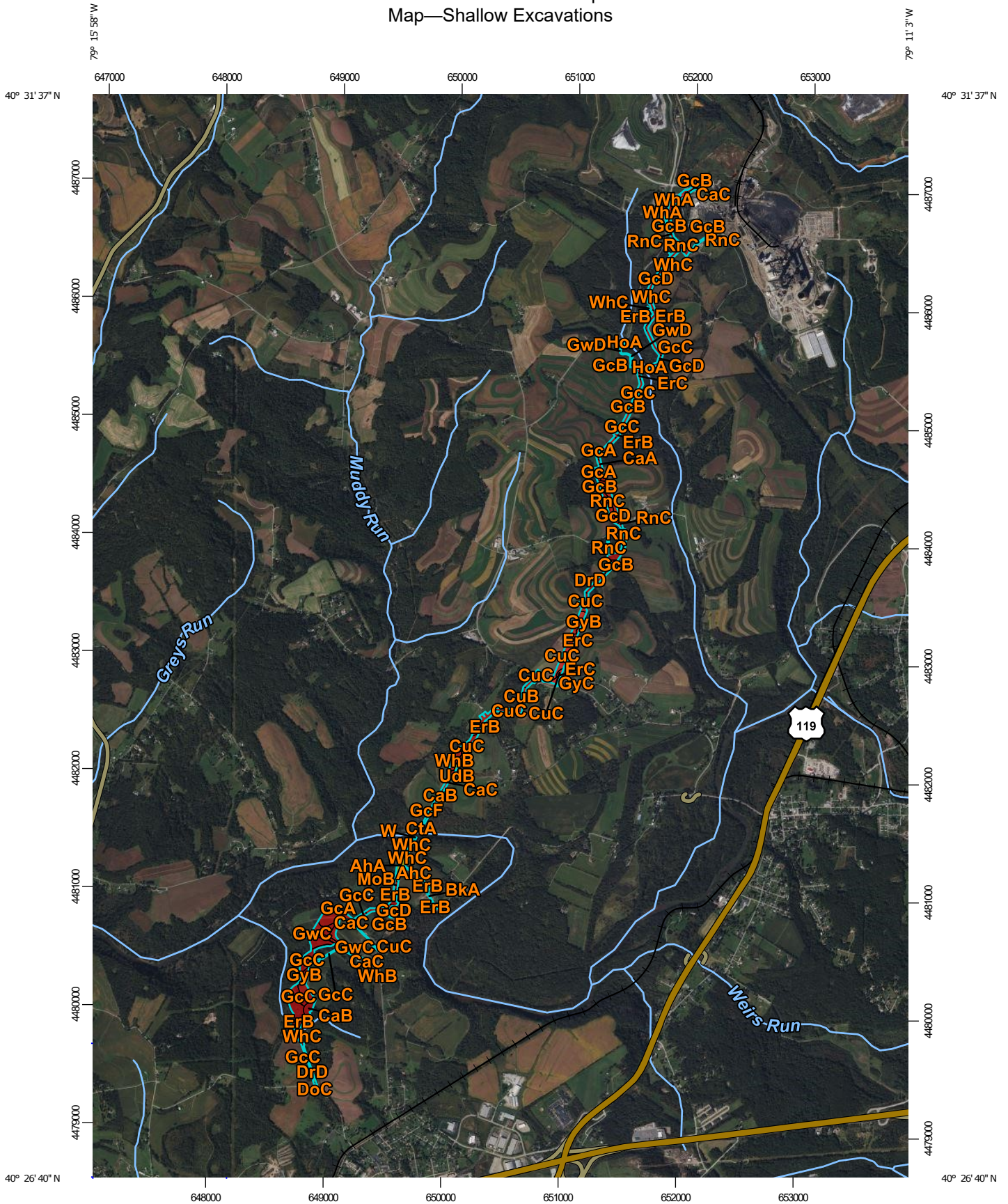
The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

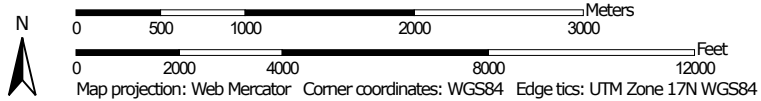
The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Custom Soil Resource Report Map—Shallow Excavations

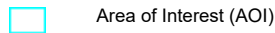


Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.



MAP LEGEND

Area of Interest (AOI)



Area of Interest (AOI)

Background



Aerial Photography

Soils

Soil Rating Polygons



Very limited



Somewhat limited



Not limited



Not rated or not available

Soil Rating Lines



Very limited



Somewhat limited



Not limited



Not rated or not available

Soil Rating Points



Very limited



Somewhat limited



Not limited



Not rated or not available

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania

Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Tables—Shallow Excavations

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI					
AhA	Allegheny silt loam, 0 to 3 percent slopes	Somewhat limited	Allegheny (80%)	Dusty (0.03)	3.2	2.5%					
				Unstable excavation walls (0.01)							
AhB	Allegheny silt loam, 3 to 8 percent slopes	Somewhat limited	Allegheny (85%)	Dusty (0.03)	0.6	0.5%					
				Unstable excavation walls (0.01)							
AhC	Allegheny silt loam, 8 to 15 percent slopes	Somewhat limited	Allegheny (85%)	Slope (0.63)	0.1	0.1%					
				Dusty (0.03)							
				Unstable excavation walls (0.01)							
BkA	Brinkerton silt loam, 0 to 3 percent slopes	Very limited	Brinkerton (85%)	Depth to saturated zone (1.00)	0.5	0.4%					
				Dusty (0.01)							
				Unstable excavation walls (0.01)							
			Ernest (10%)	Depth to saturated zone (1.00)							
				Dusty (0.01)							
				Unstable excavation walls (0.01)							
			Lobdell (5%)	Depth to saturated zone (1.00)							
				Flooding (0.60)							
				Unstable excavation walls (0.01)							
				Dusty (0.01)							
			BkB	Brinkerton silt loam, 3 to 8 percent slopes			Very limited	Brinkerton (85%)	Depth to saturated zone (1.00)	0.2	0.2%
									Dusty (0.02)		
Unstable excavation walls (0.01)											
Ernest (10%)	Depth to saturated zone (1.00)										

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Lobdell (5%)	Depth to saturated zone (1.00)		
				Flooding (0.60)		
				Unstable excavation walls (0.01)		
				Dusty (0.01)		
CaA	Cavode silt loam, 0 to 3 percent slopes	Very limited	Cavode (85%)	Depth to saturated zone (1.00)	0.9	0.7%
				Depth to hard bedrock (0.02)		
				Dusty (0.01)		
				Unstable excavation walls (0.01)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Dusty (0.01)		
				Unstable excavation walls (0.01)		
			Wharton (5%)	Depth to saturated zone (1.00)		
				Dusty (0.01)		
				Unstable excavation walls (0.01)		
CaB	Cavode silt loam, 3 to 8 percent slopes	Very limited	Cavode (85%)	Depth to saturated zone (1.00)	3.8	3.0%
				Depth to hard bedrock (0.02)		
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Dusty (0.02)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Unstable excavation walls (0.01)		
CaC	Cavode silt loam, 8 to 15 percent slopes	Very limited	Cavode (85%)	Depth to saturated zone (1.00)	2.8	2.2%
				Slope (0.63)		
				Dusty (0.02)		
				Depth to hard bedrock (0.02)		
				Unstable excavation walls (0.01)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Slope (0.63)		
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	Very limited	Cotaco, rarely flooded (80%)	Depth to saturated zone (1.00)	0.1	0.0%
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Ernest (10%)	Depth to saturated zone (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Philo (10%)	Depth to saturated zone (1.00)		
				Flooding (0.60)		
				Dusty (0.01)		
				Unstable excavation walls (0.01)		
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	Very limited	Culleoka (85%)	Depth to hard bedrock (1.00)	4.2	3.3%
				Dusty (0.04)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Unstable excavation walls (0.01)		
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	Very limited	Culleoka (80%)	Depth to hard bedrock (1.00)	6.5	5.1%
				Slope (0.63)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
DoC	Dormont silt loam, 8 to 15 percent slopes	Somewhat limited	Dormont (70%)	Depth to saturated zone (1.00)	0.3	0.3%
				Slope (0.63)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Lowell (10%)	Slope (0.63)		
				Too clayey (0.24)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
DrD	Dormont-Culleoka complex, 15 to 25 percent slopes	Very limited	Dormont (45%)	Slope (1.00)	1.5	1.2%
				Depth to saturated zone (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Culleoka (37%)	Slope (1.00)		
				Depth to hard bedrock (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Lowell (10%)	Slope (1.00)		
				Too clayey (0.24)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Guernsey (5%)	Slope (1.00)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Depth to saturated zone (1.00)		
				Too clayey (0.08)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Thorndale (3%)	Depth to saturated zone (1.00)		
				Dusty (0.05)		
				Unstable excavation walls (0.01)		
ErB	Ernest silt loam, 3 to 8 percent slopes	Very limited	Ernest (85%)	Depth to saturated zone (1.00)	13.4	10.6%
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Buchanan (5%)	Depth to saturated zone (1.00)		
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
ErC	Ernest silt loam, 8 to 15 percent slopes	Very limited	Ernest (85%)	Depth to saturated zone (1.00)	3.3	2.6%
				Slope (0.63)		
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Slope (0.63)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Buchanan (5%)	Depth to saturated zone (1.00)		
				Slope (0.63)		
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	Very limited	Gilpin (85%)	Depth to hard bedrock (1.00)	7.9	6.2%
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Wharton (10%)	Depth to saturated zone (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Weikert (5%)	Depth to hard bedrock (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	Very limited	Gilpin (85%)	Depth to hard bedrock (1.00)	14.7	11.5%
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Wharton (10%)	Depth to saturated zone (1.00)		
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Weikert (5%)	Depth to hard bedrock (1.00)		
				Dusty (0.02)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Unstable excavation walls (0.01)		
				Large stones (0.01)		
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	Very limited	Gilpin (85%)	Depth to hard bedrock (1.00)	13.9	10.9%
				Slope (0.63)		
				Dusty (0.01)		
				Unstable excavation walls (0.01)		
			Wharton (10%)	Depth to saturated zone (1.00)		
				Slope (0.63)		
				Dusty (0.01)		
				Unstable excavation walls (0.01)		
			Weikert (5%)	Depth to hard bedrock (1.00)		
				Slope (0.63)		
				Unstable excavation walls (0.01)		
				Dusty (0.01)		
				Large stones (0.01)		
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	Very limited	Gilpin (85%)	Depth to hard bedrock (1.00)	8.4	6.6%
				Slope (1.00)		
				Dusty (0.01)		
				Unstable excavation walls (0.01)		
			Weikert (10%)	Depth to hard bedrock (1.00)		
				Slope (1.00)		
				Dusty (0.01)		
				Unstable excavation walls (0.01)		
				Large stones (0.01)		
			Wharton (5%)	Slope (1.00)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Depth to saturated zone (1.00)		
				Dusty (0.01)		
				Unstable excavation walls (0.01)		
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	Very limited	Gilpin (70%)	Slope (1.00)	3.4	2.6%
				Depth to hard bedrock (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Shelocta (15%)	Slope (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Weikert (10%)	Depth to hard bedrock (1.00)		
				Slope (1.00)		
				Organic matter content (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Wharton (5%)	Depth to saturated zone (1.00)		
				Slope (1.00)		
				Unstable excavation walls (0.01)		
				Dusty (0.01)		
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	Very limited	Gilpin (55%)	Depth to hard bedrock (1.00)	2.9	2.3%
				Slope (0.63)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Weikert (30%)	Depth to hard bedrock (1.00)		
				Slope (0.63)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Cavode (5%)	Depth to saturated zone (1.00)		
				Slope (0.63)		
				Dusty (0.03)		
				Depth to hard bedrock (0.02)		
				Unstable excavation walls (0.01)		
			Wharton (5%)	Depth to saturated zone (1.00)		
				Slope (0.63)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	Very limited	Gilpin (45%)	Depth to hard bedrock (1.00)	1.2	0.9%
				Slope (1.00)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Weikert (40%)	Depth to hard bedrock (1.00)		
				Slope (1.00)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Hazleton (10%)	Slope (1.00)		
				Depth to hard bedrock (0.08)		
				Unstable excavation walls (0.01)		
				Dusty (0.01)		
				Large stones (0.00)		
			Wharton (5%)	Slope (1.00)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Depth to saturated zone (1.00)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
GyB	Guernsey silt loam, 3 to 8 percent slopes	Very limited	Guernsey (85%)	Depth to saturated zone (1.00)	9.9	7.8%
				Too clayey (0.08)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
GyC	Guernsey silt loam, 8 to 15 percent slopes	Very limited	Guernsey (85%)	Depth to saturated zone (1.00)	3.6	2.8%
				Slope (0.63)		
				Too clayey (0.08)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Coshocton (5%)	Depth to saturated zone (1.00)		
				Slope (0.63)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
				Depth to hard bedrock (0.01)		
			Berks (5%)	Depth to hard bedrock (1.00)		
				Slope (0.63)		
				Large stones (0.09)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	Very limited	Holly (75%)	Depth to saturated zone (1.00)	0.7	0.5%
				Flooding (0.80)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Lobdell (15%)	Depth to saturated zone (1.00)		
				Flooding (0.60)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Ernest (10%)	Depth to saturated zone (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	Very limited	Lobdell (85%)	Depth to saturated zone (1.00)	0.2	0.1%
				Flooding (0.60)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Holly (5%)	Depth to saturated zone (1.00)		
				Flooding (0.60)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Orrville (5%)	Depth to saturated zone (1.00)		
				Flooding (0.60)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Melvin (5%)	Depth to saturated zone (1.00)		
				Flooding (0.60)		
				Dusty (0.04)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Unstable excavation walls (0.01)		
MoB	Monongahela silt loam, 3 to 8 percent slopes	Very limited	Monongahela (85%)	Depth to saturated zone (1.00)	0.5	0.4%
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Purdy (5%)	Ponding (1.00)		
				Depth to saturated zone (1.00)		
				Dusty (0.02)		
				Too clayey (0.02)		
				Unstable excavation walls (0.01)		
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	Somewhat limited	Pope (90%)	Unstable excavation walls (0.01)	0.1	0.1%
			Allegheny (5%)	Depth to saturated zone (0.73)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	Very limited	Gilpin (44%)	Depth to hard bedrock (1.00)	5.1	4.0%
				Slope (0.63)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Wharton (5%)	Depth to saturated zone (1.00)		
				Slope (0.63)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Ernest (5%)	Depth to saturated zone (1.00)		
				Slope (0.63)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
UdB	Udorthents, 0 to 8 percent slopes	Somewhat limited	Udorthents, unstable fill (100%)	Unstable excavation walls (0.09)	0.5	0.4%
				Large stones (0.08)		
				Dusty (0.04)		
W	Water	Not rated	Water (100%)		0.0	0.0%
WhA	Wharton silt loam, 0 to 3 percent slopes	Very limited	Wharton (80%)	Depth to saturated zone (1.00)	1.9	1.5%
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Dusty (0.02)		
				Unstable excavation walls (0.01)		
			Cavode (5%)	Depth to saturated zone (1.00)		
				Dusty (0.02)		
				Depth to hard bedrock (0.02)		
				Unstable excavation walls (0.01)		
WhB	Wharton silt loam, 3 to 8 percent slopes	Very limited	Wharton (80%)	Depth to saturated zone (1.00)	6.7	5.2%
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
			Cavode (8%)	Depth to saturated zone (1.00)		
				Dusty (0.04)		
				Depth to hard bedrock (0.02)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Unstable excavation walls (0.01)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
WhC	Wharton silt loam, 8 to 15 percent slopes	Very limited	Wharton (80%)	Depth to saturated zone (1.00)	4.5	3.5%
				Slope (0.63)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Ernest (5%)	Depth to saturated zone (1.00)		
				Slope (0.63)		
				Dusty (0.03)		
				Unstable excavation walls (0.01)		
			Rarden (5%)	Depth to saturated zone (1.00)		
				Depth to soft bedrock (0.79)		
				Slope (0.63)		
				Unstable excavation walls (0.51)		
				Too clayey (0.28)		
Totals for Area of Interest					127.2	100.0%

Rating	Acres in AOI	Percent of AOI
Very limited	122.4	96.2%
Somewhat limited	4.9	3.8%
Null or Not Rated	0.0	0.0%
Totals for Area of Interest	127.2	100.0%

Rating Options—Shallow Excavations

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Water Management

Water Management interpretations are tools for evaluating the potential of the soil in the application of various water management practices. Example interpretations include pond reservoir area, embankments, dikes, levees, and excavated ponds.

Embankments, Dikes, and Levees

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. The soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the suitability of the undisturbed soil for supporting the embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

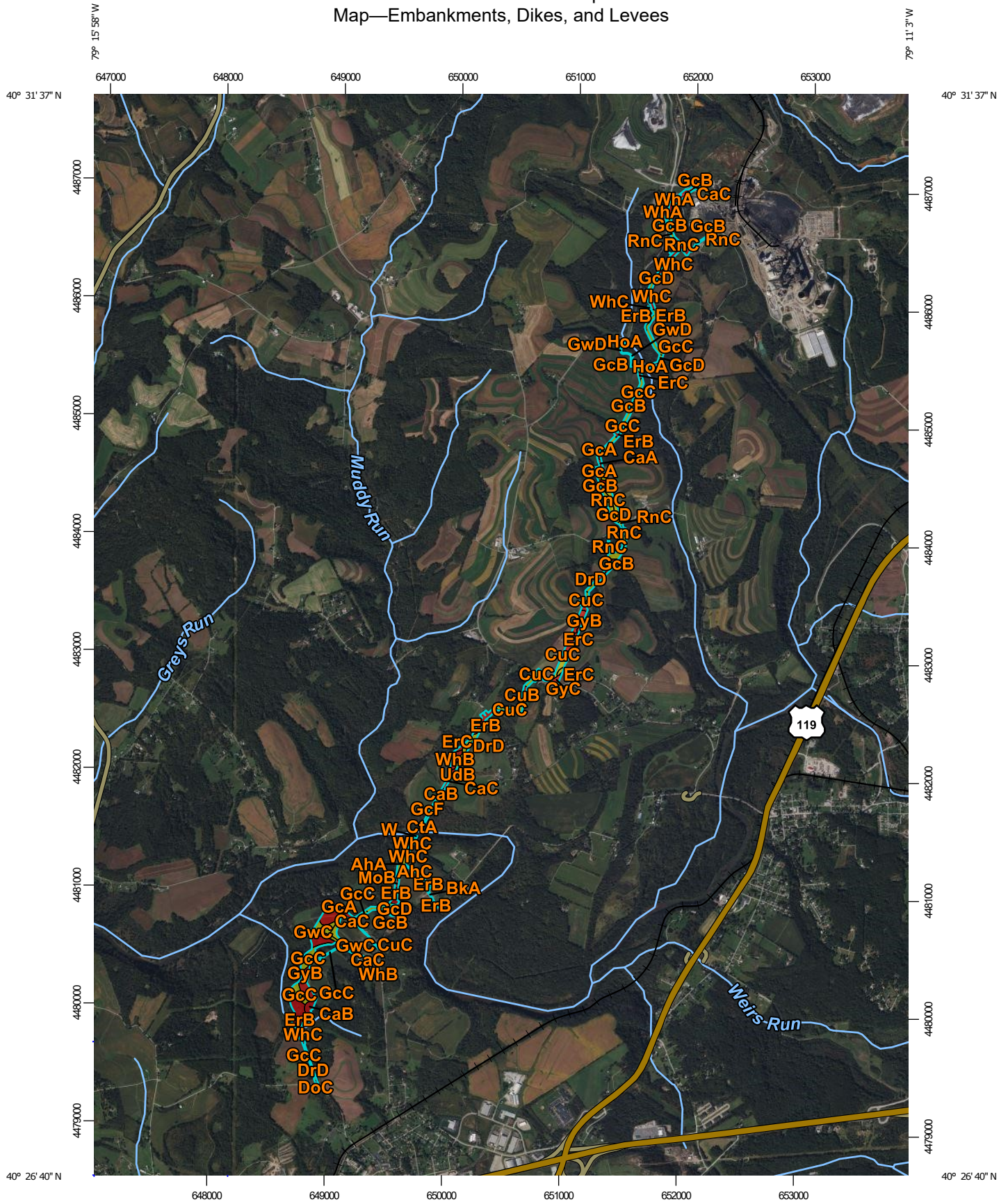
Custom Soil Resource Report

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

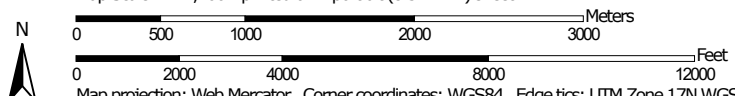
The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Custom Soil Resource Report Map—Embankments, Dikes, and Levees



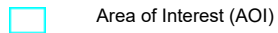
Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)



Area of Interest (AOI)

Background



Aerial Photography

Soils

Soil Rating Polygons



Very limited



Somewhat limited



Not limited



Not rated or not available

Soil Rating Lines



Very limited



Somewhat limited



Not limited



Not rated or not available

Soil Rating Points



Very limited



Somewhat limited



Not limited



Not rated or not available

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania

Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Tables—Embankments, Dikes, and Levees

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
AhA	Allegheny silt loam, 0 to 3 percent slopes	Somewhat limited	Allegheny (80%)	Piping (0.50)	3.2	2.5%
				Dusty (0.03)		
AhB	Allegheny silt loam, 3 to 8 percent slopes	Somewhat limited	Allegheny (85%)	Piping (0.50)	0.6	0.5%
				Dusty (0.03)		
AhC	Allegheny silt loam, 8 to 15 percent slopes	Somewhat limited	Allegheny (85%)	Piping (0.50)	0.1	0.1%
				Dusty (0.03)		
BkA	Brinkerton silt loam, 0 to 3 percent slopes	Very limited	Brinkerton (85%)	Depth to saturated zone (1.00)	0.5	0.4%
				Dusty (0.01)		
				Ernest (10%)		
			Ernest (10%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.01)		
			Lobdell (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.01)		
BkB	Brinkerton silt loam, 3 to 8 percent slopes	Very limited	Brinkerton (85%)	Depth to saturated zone (1.00)	0.2	0.2%
				Dusty (0.02)		
				Ernest (10%)		
			Ernest (10%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.02)		
			Lobdell (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.01)		
CaA	Cavode silt loam, 0 to 3 percent slopes	Very limited	Cavode (85%)	Depth to saturated zone (1.00)	0.9	0.7%
				Dusty (0.01)		
				Thin layer (0.01)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.01)		
			Wharton (5%)	Depth to saturated zone (1.00)		
				Dusty (0.01)		
CaB	Cavode silt loam, 3 to 8 percent slopes	Very limited	Cavode (85%)	Depth to saturated zone (1.00)	3.8	3.0%
				Dusty (0.02)		
				Thin layer (0.01)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.02)		
CaC	Cavode silt loam, 8 to 15 percent slopes	Very limited	Cavode (85%)	Depth to saturated zone (1.00)	2.8	2.2%
				Dusty (0.02)		
				Thin layer (0.01)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.02)		
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	Somewhat limited	Cotaco, rarely flooded (80%)	Depth to saturated zone (1.00)	0.1	0.0%
				Piping (0.50)		
				Dusty (0.04)		
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	Somewhat limited	Culleoka (85%)	Thin layer (0.83)	4.2	3.3%
				Piping (0.50)		
				Dusty (0.04)		
			Dormont (10%)	Depth to saturated zone (0.80)		
				Dusty (0.04)		
			Lowell (5%)	Hard to pack (0.79)		
				Dusty (0.04)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI					
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	Somewhat limited	Culleoka (80%)	Thin layer (0.83)	6.5	5.1%					
				Piping (0.50)							
				Dusty (0.04)							
			Dormont (15%)	Depth to saturated zone (0.80)							
				Dusty (0.04)							
			Lowell (5%)	Hard to pack (0.79)							
Dusty (0.04)											
DoC	Dormont silt loam, 8 to 15 percent slopes	Somewhat limited	Dormont (70%)	Depth to saturated zone (0.80)	0.3	0.3%					
				Dusty (0.04)							
			Culleoka (15%)	Thin layer (0.83)							
				Piping (0.50)							
				Dusty (0.04)							
			Lowell (10%)	Hard to pack (0.79)							
				Dusty (0.04)							
			DrD	Dormont-Culleoka complex, 15 to 25 percent slopes			Somewhat limited	Dormont (45%)	Depth to saturated zone (0.80)	1.5	1.2%
									Dusty (0.04)		
Culleoka (37%)	Thin layer (0.83)										
	Piping (0.50)										
	Dusty (0.04)										
Lowell (10%)	Hard to pack (0.79)										
	Dusty (0.04)										
ErB	Ernest silt loam, 3 to 8 percent slopes	Very limited			Ernest (85%)	Depth to saturated zone (1.00)		13.4	10.6%		
			Piping (0.50)								
			Dusty (0.02)								
			Buchanan (5%)	Piping (1.00)							
				Depth to saturated zone (0.95)							
				Dusty (0.02)							
			Brinkerton (5%)	Depth to saturated zone (1.00)							
				Dusty (0.02)							

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
ErC	Ernest silt loam, 8 to 15 percent slopes	Very limited	Ernest (85%)	Depth to saturated zone (1.00)	3.3	2.6%
				Piping (0.50)		
				Dusty (0.02)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.02)		
			Buchanan (5%)	Piping (1.00)		
				Depth to saturated zone (0.95)		
				Dusty (0.02)		
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	Very limited	Gilpin (85%)	Piping (1.00)	7.9	6.2%
				Thin layer (0.85)		
				Dusty (0.04)		
			Weikert (5%)	Seepage (1.00)		
				Thin layer (1.00)		
				Piping (0.50)		
				Dusty (0.04)		
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	Somewhat limited	Gilpin (85%)	Thin layer (0.87)	14.7	11.5%
				Piping (0.50)		
				Dusty (0.02)		
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	Somewhat limited	Gilpin (85%)	Thin layer (0.87)	13.9	10.9%
				Piping (0.50)		
				Dusty (0.01)		
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	Somewhat limited	Gilpin (85%)	Thin layer (0.87)	8.4	6.6%
				Piping (0.50)		
				Dusty (0.01)		
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	Very limited	Gilpin (70%)	Piping (1.00)	3.4	2.6%
				Thin layer (0.87)		
				Dusty (0.04)		
			Shelocta (15%)	Piping (1.00)		
				Dusty (0.04)		
			Weikert (10%)	Seepage (1.00)		
				Thin layer (1.00)		
				Piping (0.50)		
				Dusty (0.04)		

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	Somewhat limited	Gilpin (55%)	Thin layer (0.77)	2.9	2.3%
				Piping (0.50)		
				Dusty (0.03)		
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	Very limited	Weikert (40%)	Thin layer (1.00)	1.2	0.9%
				Dusty (0.03)		
			Hazleton (10%)	Seepage (1.00)		
				Thin layer (0.02)		
				Dusty (0.01)		
			Wharton (5%)	Depth to saturated zone (1.00)		
				Dusty (0.03)		
GyB	Guernsey silt loam, 3 to 8 percent slopes	Very limited	Guernsey (85%)	Depth to saturated zone (1.00)	9.9	7.8%
				Dusty (0.04)		
GyC	Guernsey silt loam, 8 to 15 percent slopes	Very limited	Guernsey (85%)	Depth to saturated zone (1.00)	3.6	2.8%
				Dusty (0.04)		
			Coshocton (5%)	Depth to saturated zone (1.00)		
				Dusty (0.04)		
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	Very limited	Holly (75%)	Depth to saturated zone (1.00)	0.7	0.5%
				Piping (1.00)		
				Dusty (0.03)		
			Lobdell (15%)	Depth to saturated zone (1.00)		
				Piping (1.00)		
				Dusty (0.04)		
			Ernest (10%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.04)		
LoA	Lobdell silt loam, 0 to 3 percent slopes,	Very limited	Lobdell (85%)	Depth to saturated zone (1.00)	0.2	0.1%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
	occasionally flooded			Piping (0.50)		
				Dusty (0.03)		
			Melvin (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.04)		
			Orrville (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.04)		
			Holly (5%)	Depth to saturated zone (1.00)		
				Piping (1.00)		
				Dusty (0.04)		
MoB	Monongahela silt loam, 3 to 8 percent slopes	Very limited	Monongahela (85%)	Depth to saturated zone (1.00)	0.5	0.4%
				Dusty (0.03)		
			Purdy (5%)	Ponding (1.00)		
				Depth to saturated zone (1.00)		
				Dusty (0.02)		
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	Not limited	Pope (90%)		0.1	0.1%
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	Somewhat limited	Rayne (46%)	Dusty (0.03)	5.1	4.0%
				Thin layer (0.02)		
			Gilpin (44%)	Thin layer (0.91)		
				Piping (0.50)		
				Dusty (0.03)		
			Wharton (5%)	Depth to saturated zone (0.95)		
				Dusty (0.04)		
UdB	Udorthents, 0 to 8 percent slopes	Somewhat limited	Udorthents, unstable fill (100%)	Piping (0.50)	0.5	0.4%
				Large stones (0.08)		
				Dusty (0.04)		
W	Water	Not rated	Water (100%)		0.0	0.0%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
WhA	Wharton silt loam, 0 to 3 percent slopes	Very limited	Wharton (80%)	Depth to saturated zone (1.00)	1.9	1.5%
				Dusty (0.02)		
			Brinkerton (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.02)		
			Cavode (5%)	Depth to saturated zone (1.00)		
				Piping (0.50)		
				Dusty (0.02)		
				Thin layer (0.01)		
			WhB	Wharton silt loam, 3 to 8 percent slopes		
Dusty (0.04)						
Cavode (8%)	Depth to saturated zone (1.00)					
	Piping (0.50)					
	Dusty (0.04)					
	Thin layer (0.01)					
Brinkerton (5%)	Depth to saturated zone (1.00)					
	Piping (0.50)					
	Dusty (0.04)					
WhC	Wharton silt loam, 8 to 15 percent slopes	Very limited			Wharton (80%)	Depth to saturated zone (1.00)
			Dusty (0.03)			
			Ernest (5%)	Depth to saturated zone (1.00)		
				Piping (1.00)		
				Dusty (0.03)		
Totals for Area of Interest					127.2	100.0%

Rating	Acres in AOI	Percent of AOI
Very limited	65.2	51.3%
Somewhat limited	61.9	48.7%

Custom Soil Resource Report

Rating	Acres in AOI	Percent of AOI
Not limited	0.1	0.1%
Null or Not Rated	0.0	0.0%
Totals for Area of Interest	127.2	100.0%

Rating Options—Embankments, Dikes, and Levees

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Erosion Factors

Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

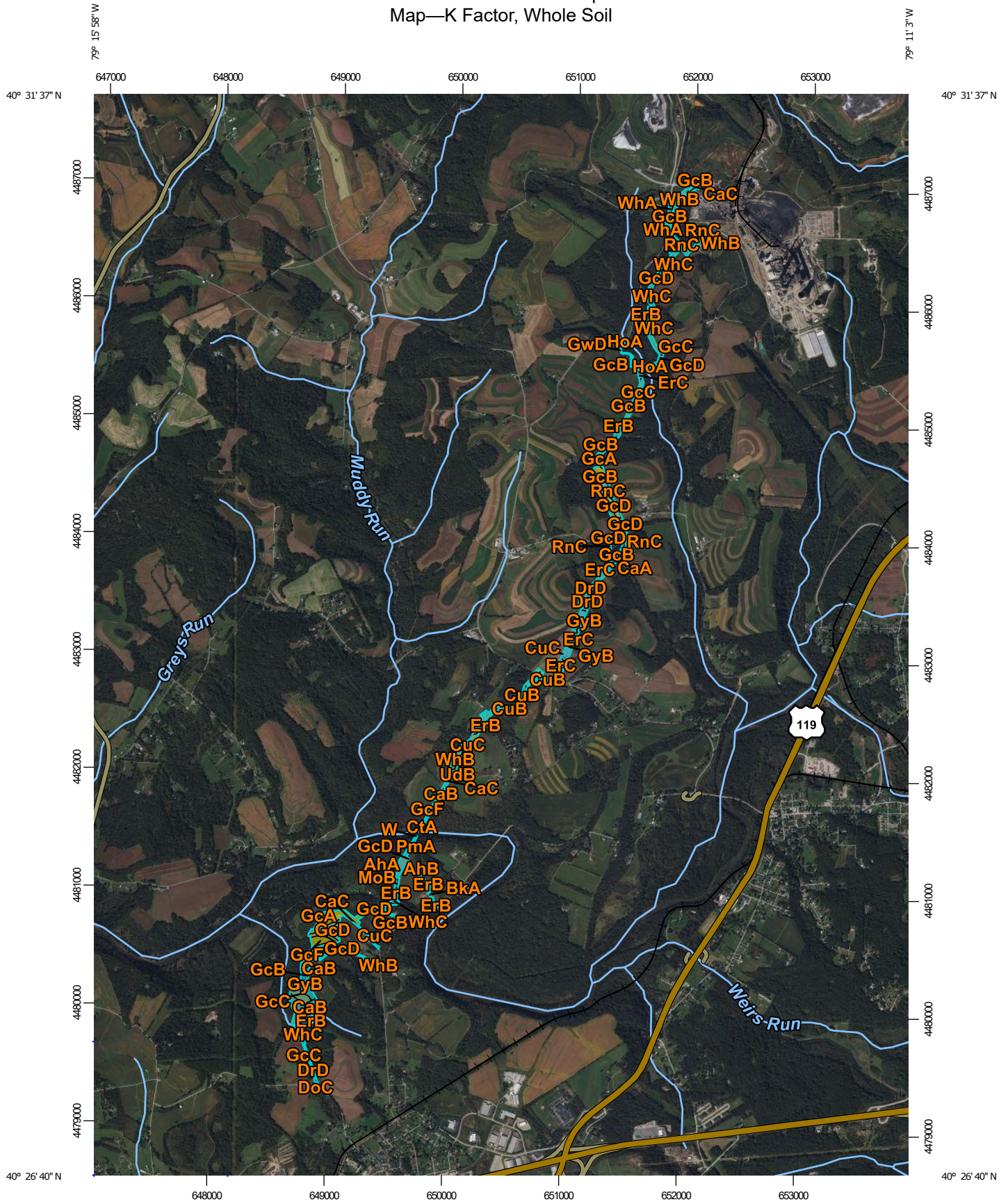
K Factor, Whole Soil

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

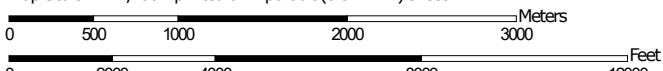
"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

Custom Soil Resource Report
Map—K Factor, Whole Soil



Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 17N WGS84

Custom Soil Resource Report
















MAP LEGEND

Area of Interest (AOI)







 Area of Interest (AOI)










Soils

Soil Rating Polygons
















-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Soil Rating Lines








-  .02
-  .05
-  .10
-  .15
-  .17
-  .20

-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Soil Rating Points

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

Water Features

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania
 Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Table—K Factor, Whole Soil

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AhA	Allegheny silt loam, 0 to 3 percent slopes	.32	3.2	2.5%
AhB	Allegheny silt loam, 3 to 8 percent slopes	.37	0.6	0.5%
AhC	Allegheny silt loam, 8 to 15 percent slopes	.37	0.1	0.1%
BkA	Brinkerton silt loam, 0 to 3 percent slopes	.32	0.5	0.4%
BkB	Brinkerton silt loam, 3 to 8 percent slopes	.32	0.2	0.2%
CaA	Cavode silt loam, 0 to 3 percent slopes	.32	0.9	0.7%
CaB	Cavode silt loam, 3 to 8 percent slopes	.32	3.8	3.0%
CaC	Cavode silt loam, 8 to 15 percent slopes	.32	2.8	2.2%
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	.37	0.1	0.0%
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	.24	4.2	3.3%
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	.24	6.5	5.1%
DoC	Dormont silt loam, 8 to 15 percent slopes	.37	0.3	0.3%
DrD	Dormont-Culleoka complex, 15 to 25 percent slopes	.37	1.5	1.2%
ErB	Ernest silt loam, 3 to 8 percent slopes	.32	13.4	10.6%
ErC	Ernest silt loam, 8 to 15 percent slopes	.32	3.3	2.6%
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	.17	7.9	6.2%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	.28	14.7	11.5%
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	.28	13.9	10.9%
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	.28	8.4	6.6%
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	.17	3.4	2.6%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	.20	2.9	2.3%
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	.20	1.2	0.9%
GyB	Guernsey silt loam, 3 to 8 percent slopes	.37	9.9	7.8%
GyC	Guernsey silt loam, 8 to 15 percent slopes	.37	3.6	2.8%
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	.28	0.7	0.5%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	.37	0.2	0.1%
MoB	Monongahela silt loam, 3 to 8 percent slopes	.43	0.5	0.4%
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	.24	0.1	0.1%
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	.15	5.1	4.0%
UdB	Udorthents, 0 to 8 percent slopes	.10	0.5	0.4%
W	Water		0.0	0.0%
WhA	Wharton silt loam, 0 to 3 percent slopes	.32	1.9	1.5%
WhB	Wharton silt loam, 3 to 8 percent slopes	.32	6.7	5.2%
WhC	Wharton silt loam, 8 to 15 percent slopes	.32	4.5	3.5%
Totals for Area of Interest			127.2	100.0%

Rating Options—K Factor, Whole Soil

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil

properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Depth to Bedrock

The term bedrock in soil survey refers to a continuous root and water restrictive layer of rock that occurs within the soil profile.

There are many types of restrictions that can occur within the soil profile but this theme only includes the three restrictions that use the term bedrock. These are:

- 1) Lithic Bedrock
- 2) Paralithic Bedrock
- 3) Densic Bedrock

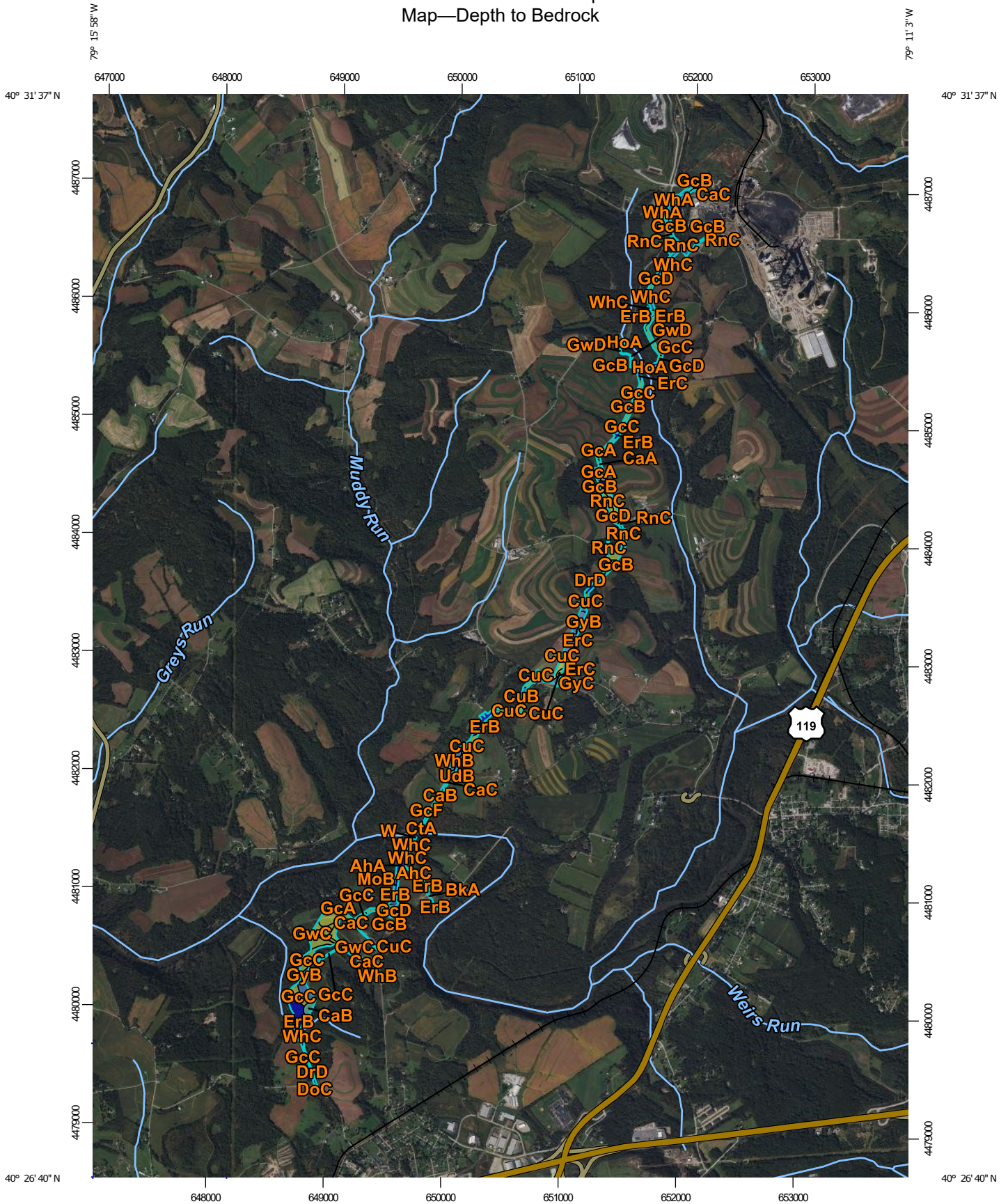
Lithic bedrock and paralithic bedrock are comprised of igneous, metamorphic, and sedimentary rocks, which are coherent and consolidated into rock through pressure, heat, cementation, or fusion. Lithic bedrock represents the hardest type of bedrock, with a hardness of strongly coherent to indurated. Paralithic bedrock has a hardness of extremely weakly coherent to moderately coherent. It can occur as a thin layer of weathered bedrock above harder lithic bedrock. Paralithic bedrock can also be much thicker, extending well below the soil profile.

Densic bedrock represents a unique kind of bedrock recognized within the soil survey. It is non-coherent and consolidated, dense root restrictive material, formed by pressure, heat, and dewatering of earth materials or sediments. Densic bedrock differs from densic materials, which formed under the compaction of glaciers, mudflows, and or human-caused compaction.

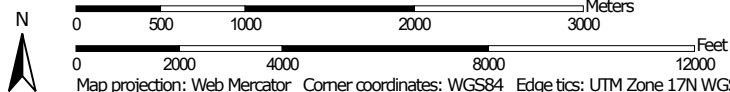
If more than one type of bedrock is described for an individual soil type, the depth to the shallowest one is given. If no bedrock is described in a map unit, it is represented by the "greater than 200" depth class.

Depth to bedrock is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report
Map—Depth to Bedrock
































Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
 -  Not rated or not available
 - Soil Rating Lines**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
 -  Not rated or not available
 - Soil Rating Points**
 -  0 - 25
 -  25 - 50
 -  50 - 100
 -  100 - 150
 -  150 - 200
 -  > 200
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads
- Background**
 -  Aerial Photography
-  Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania
 Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Table—Depth to Bedrock

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
AhA	Allegheny silt loam, 0 to 3 percent slopes	>200	3.2	2.5%
AhB	Allegheny silt loam, 3 to 8 percent slopes	>200	0.6	0.5%
AhC	Allegheny silt loam, 8 to 15 percent slopes	>200	0.1	0.1%
BkA	Brinkerton silt loam, 0 to 3 percent slopes	>200	0.5	0.4%
BkB	Brinkerton silt loam, 3 to 8 percent slopes	>200	0.2	0.2%
CaA	Cavode silt loam, 0 to 3 percent slopes	145	0.9	0.7%
CaB	Cavode silt loam, 3 to 8 percent slopes	145	3.8	3.0%
CaC	Cavode silt loam, 8 to 15 percent slopes	145	2.8	2.2%
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	>200	0.1	0.0%
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	79	4.2	3.3%
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	79	6.5	5.1%
DoC	Dormont silt loam, 8 to 15 percent slopes	>200	0.3	0.3%
DrD	Dormont-Culleoka complex, 15 to 25 percent slopes	>200	1.5	1.2%
ErB	Ernest silt loam, 3 to 8 percent slopes	>200	13.4	10.6%
ErC	Ernest silt loam, 8 to 15 percent slopes	>200	3.3	2.6%
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	77	7.9	6.2%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	76	14.7	11.5%
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	76	13.9	10.9%
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	76	8.4	6.6%
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	76	3.4	2.6%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	84	2.9	2.3%
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	84	1.2	0.9%
GyB	Guernsey silt loam, 3 to 8 percent slopes	152	9.9	7.8%
GyC	Guernsey silt loam, 8 to 15 percent slopes	152	3.6	2.8%
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	>200	0.7	0.5%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	>200	0.2	0.1%
MoB	Monongahela silt loam, 3 to 8 percent slopes	>200	0.5	0.4%
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	>200	0.1	0.1%
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	140	5.1	4.0%
UdB	Udorthents, 0 to 8 percent slopes	>200	0.5	0.4%
W	Water	>200	0.0	0.0%
WhA	Wharton silt loam, 0 to 3 percent slopes	175	1.9	1.5%
WhB	Wharton silt loam, 3 to 8 percent slopes	175	6.7	5.2%
WhC	Wharton silt loam, 8 to 15 percent slopes	175	4.5	3.5%
Totals for Area of Interest			127.2	100.0%

Rating Options—Depth to Bedrock

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

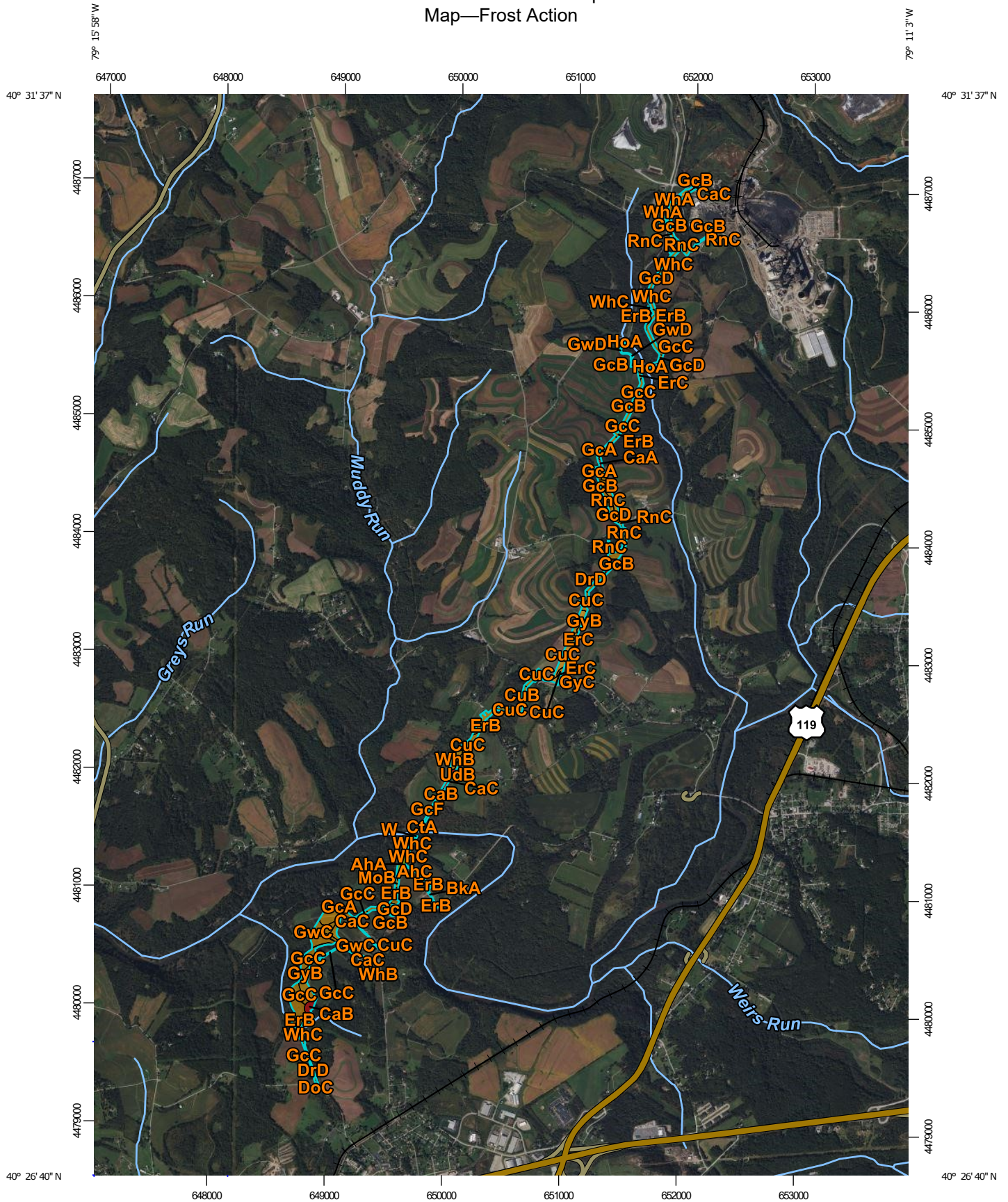
Tie-break Rule: Lower

Interpret Nulls as Zero: No

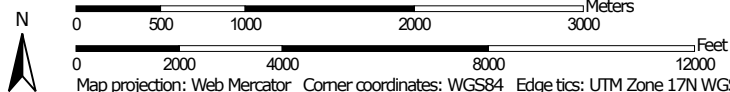
Frost Action

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (K_{sat}), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Custom Soil Resource Report Map—Frost Action




Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84






MAP LEGEND

Area of Interest (AOI)






 Area of Interest (AOI)

Soils






Soil Rating Polygons

-  High
-  Moderate
-  Low
-  None
-  Not rated or not available


Soil Rating Lines

-  High
-  Moderate
-  Low
-  None
-  Not rated or not available

Soil Rating Points




-  High
-  Moderate
-  Low
-  None
-  Not rated or not available

Water Features


 Streams and Canals

Transportation

-  Rails
-  Interstate Highways

-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania
 Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Table—Frost Action

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AhA	Allegheny silt loam, 0 to 3 percent slopes	Low	3.2	2.5%
AhB	Allegheny silt loam, 3 to 8 percent slopes	Moderate	0.6	0.5%
AhC	Allegheny silt loam, 8 to 15 percent slopes	Moderate	0.1	0.1%
BkA	Brinkerton silt loam, 0 to 3 percent slopes	High	0.5	0.4%
BkB	Brinkerton silt loam, 3 to 8 percent slopes	High	0.2	0.2%
CaA	Cavode silt loam, 0 to 3 percent slopes	High	0.9	0.7%
CaB	Cavode silt loam, 3 to 8 percent slopes	High	3.8	3.0%
CaC	Cavode silt loam, 8 to 15 percent slopes	High	2.8	2.2%
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	Moderate	0.1	0.0%
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	Moderate	4.2	3.3%
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	Moderate	6.5	5.1%
DoC	Dormont silt loam, 8 to 15 percent slopes	Moderate	0.3	0.3%
DrD	Dormont-Culleoka complex, 15 to 25 percent slopes	Moderate	1.5	1.2%
ErB	Ernest silt loam, 3 to 8 percent slopes	Moderate	13.4	10.6%
ErC	Ernest silt loam, 8 to 15 percent slopes	Moderate	3.3	2.6%
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	Moderate	7.9	6.2%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	Moderate	14.7	11.5%
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	Moderate	13.9	10.9%
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	Moderate	8.4	6.6%
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	Moderate	3.4	2.6%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	Moderate	2.9	2.3%
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	Moderate	1.2	0.9%
GyB	Guernsey silt loam, 3 to 8 percent slopes	Moderate	9.9	7.8%
GyC	Guernsey silt loam, 8 to 15 percent slopes	Moderate	3.6	2.8%
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	High	0.7	0.5%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	Moderate	0.2	0.1%
MoB	Monongahela silt loam, 3 to 8 percent slopes	Moderate	0.5	0.4%
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	Moderate	0.1	0.1%
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	Moderate	5.1	4.0%
UdB	Udorthents, 0 to 8 percent slopes	Moderate	0.5	0.4%
W	Water		0.0	0.0%
WhA	Wharton silt loam, 0 to 3 percent slopes	Moderate	1.9	1.5%
WhB	Wharton silt loam, 3 to 8 percent slopes	Moderate	6.7	5.2%
WhC	Wharton silt loam, 8 to 15 percent slopes	Moderate	4.5	3.5%
Totals for Area of Interest			127.2	100.0%

Rating Options—Frost Action

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

Custom Soil Resource Report

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

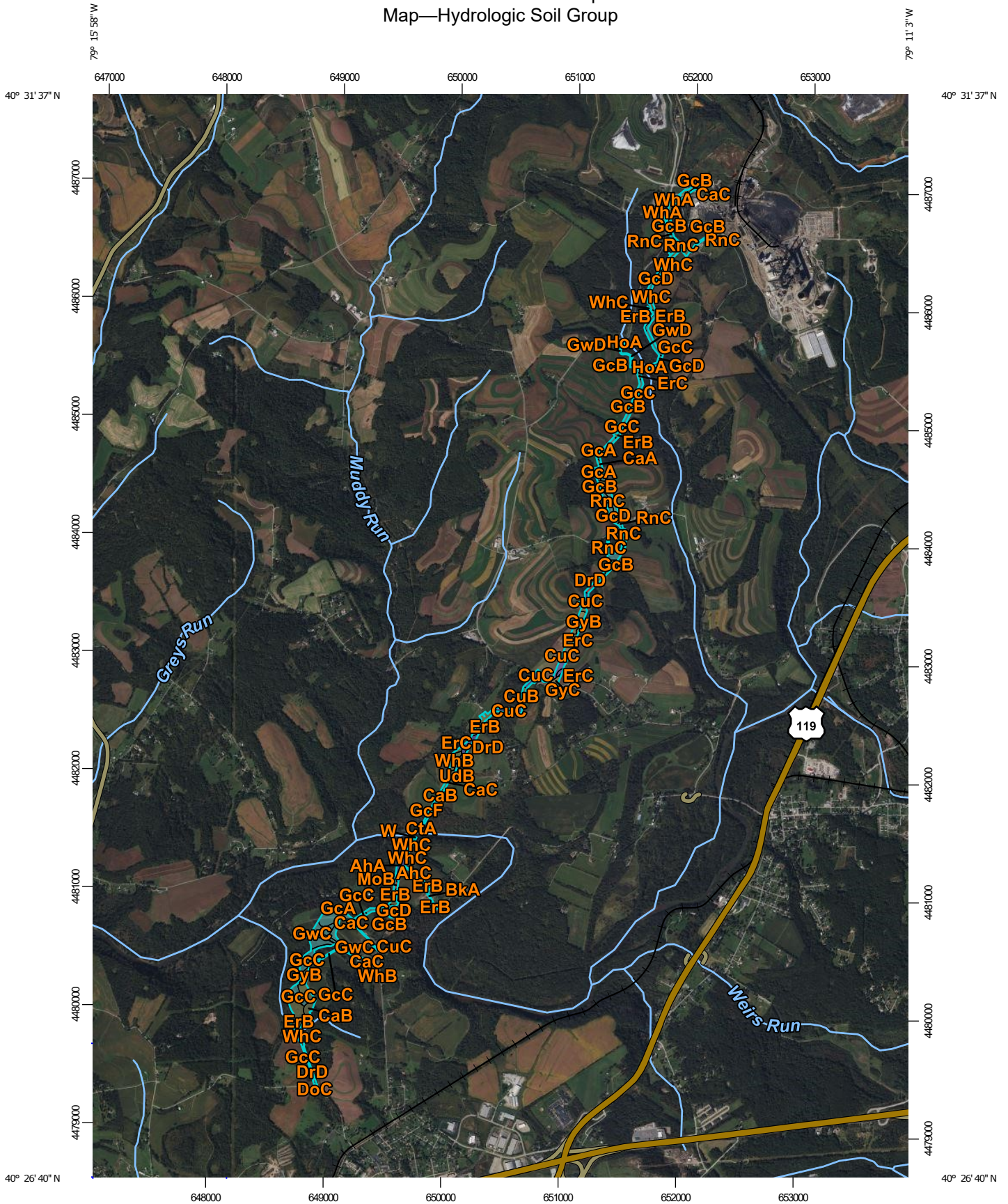
Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

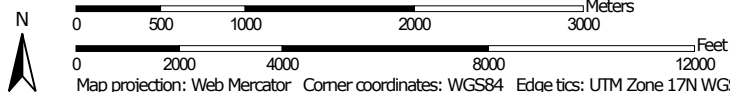
Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report
Map—Hydrologic Soil Group




Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

Soil Rating Lines


-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

Soil Rating Points






-  A
-  A/D
-  B
-  B/D

-  C
-  C/D
-  D
-  Not rated or not available


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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 Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

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Custom Soil Resource Report

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AhA	Allegheny silt loam, 0 to 3 percent slopes	B	3.2	2.5%
AhB	Allegheny silt loam, 3 to 8 percent slopes	B	0.6	0.5%
AhC	Allegheny silt loam, 8 to 15 percent slopes	B	0.1	0.1%
BkA	Brinkerton silt loam, 0 to 3 percent slopes	C/D	0.5	0.4%
BkB	Brinkerton silt loam, 3 to 8 percent slopes	C/D	0.2	0.2%
CaA	Cavode silt loam, 0 to 3 percent slopes	C/D	0.9	0.7%
CaB	Cavode silt loam, 3 to 8 percent slopes	C/D	3.8	3.0%
CaC	Cavode silt loam, 8 to 15 percent slopes	C/D	2.8	2.2%
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	C	0.1	0.0%
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	B	4.2	3.3%
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	B	6.5	5.1%
DoC	Dormont silt loam, 8 to 15 percent slopes	D	0.3	0.3%
DrD	Dormont-Culleoka complex, 15 to 25 percent slopes	D	1.5	1.2%
ErB	Ernest silt loam, 3 to 8 percent slopes	C/D	13.4	10.6%
ErC	Ernest silt loam, 8 to 15 percent slopes	C/D	3.3	2.6%
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	C	7.9	6.2%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	C	14.7	11.5%
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	C	13.9	10.9%
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	C	8.4	6.6%
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	C	3.4	2.6%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	C	2.9	2.3%
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	C	1.2	0.9%
GyB	Guernsey silt loam, 3 to 8 percent slopes	C/D	9.9	7.8%
GyC	Guernsey silt loam, 8 to 15 percent slopes	C/D	3.6	2.8%
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	B/D	0.7	0.5%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	B/D	0.2	0.1%
MoB	Monongahela silt loam, 3 to 8 percent slopes	D	0.5	0.4%
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	A	0.1	0.1%
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	C	5.1	4.0%
UdB	Udorthents, 0 to 8 percent slopes	C	0.5	0.4%
W	Water		0.0	0.0%
WhA	Wharton silt loam, 0 to 3 percent slopes	C/D	1.9	1.5%
WhB	Wharton silt loam, 3 to 8 percent slopes	C/D	6.7	5.2%
WhC	Wharton silt loam, 8 to 15 percent slopes	C/D	4.5	3.5%
Totals for Area of Interest			127.2	100.0%

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Water Features

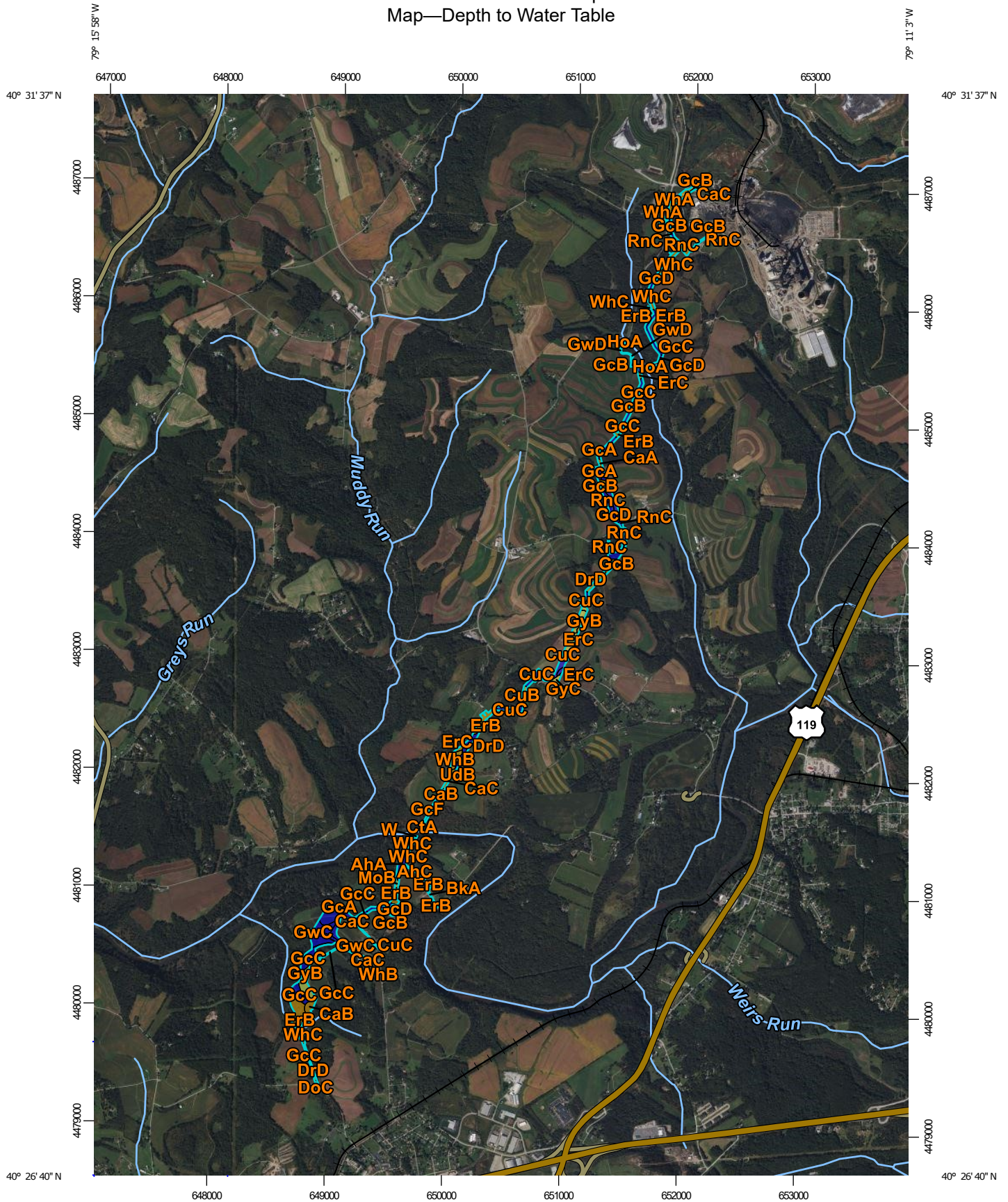
Water Features include ponding frequency, flooding frequency, and depth to water table.

Depth to Water Table

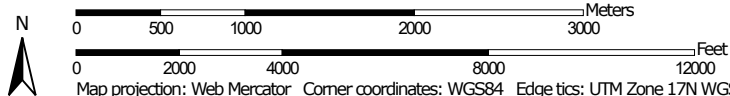
"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—Depth to Water Table




Map Scale: 1:44,700 if printed on A portrait (8.5" x 11") sheet.










Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND








Area of Interest (AOI)
 Area of Interest (AOI)

Soils







Soil Rating Polygons


-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Lines






-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available


Soil Rating Points


-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200

Water Features
 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background
 Aerial Photography

 Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania
 Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Table—Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
AhA	Allegheny silt loam, 0 to 3 percent slopes	>200	3.2	2.5%
AhB	Allegheny silt loam, 3 to 8 percent slopes	>200	0.6	0.5%
AhC	Allegheny silt loam, 8 to 15 percent slopes	>200	0.1	0.1%
BkA	Brinkerton silt loam, 0 to 3 percent slopes	8	0.5	0.4%
BkB	Brinkerton silt loam, 3 to 8 percent slopes	8	0.2	0.2%
CaA	Cavode silt loam, 0 to 3 percent slopes	35	0.9	0.7%
CaB	Cavode silt loam, 3 to 8 percent slopes	35	3.8	3.0%
CaC	Cavode silt loam, 8 to 15 percent slopes	35	2.8	2.2%
CtA	Cotaco silt loam, 0 to 3 percent slopes, rarely flooded	61	0.1	0.0%
CuB	Culleoka channery silt loam, 3 to 8 percent slopes	>200	4.2	3.3%
CuC	Culleoka channery silt loam, 8 to 15 percent slopes	>200	6.5	5.1%
DoC	Dormont silt loam, 8 to 15 percent slopes	79	0.3	0.3%
DrD	Dormont-Culleoka complex, 15 to 25 percent slopes	79	1.5	1.2%
ErB	Ernest silt loam, 3 to 8 percent slopes	38	13.4	10.6%
ErC	Ernest silt loam, 8 to 15 percent slopes	38	3.3	2.6%
GcA	Gilpin channery silt loam, 0 to 3 percent slopes	>200	7.9	6.2%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	>200	14.7	11.5%
GcC	Gilpin channery silt loam, 8 to 15 percent slopes	>200	13.9	10.9%
GcD	Gilpin channery silt loam, 15 to 25 percent slopes	>200	8.4	6.6%
GcF	Gilpin channery silt loam, 25 to 60 percent slopes	>200	3.4	2.6%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
GwC	Gilpin-Weikert channery silt loams, 8 to 15 percent slopes	>200	2.9	2.3%
GwD	Gilpin-Weikert channery silt loams, 15 to 25 percent slopes	>200	1.2	0.9%
GyB	Guernsey silt loam, 3 to 8 percent slopes	56	9.9	7.8%
GyC	Guernsey silt loam, 8 to 15 percent slopes	56	3.6	2.8%
HoA	Holly silt loam, 0 to 2 percent slopes, frequently flooded	15	0.7	0.5%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	51	0.2	0.1%
MoB	Monongahela silt loam, 3 to 8 percent slopes	56	0.5	0.4%
PmA	Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded	>200	0.1	0.1%
RnC	Rayne-Gilpin channery silt loams, 8 to 15 percent slopes	>200	5.1	4.0%
UdB	Udorthents, 0 to 8 percent slopes	>200	0.5	0.4%
W	Water	>200	0.0	0.0%
WhA	Wharton silt loam, 0 to 3 percent slopes	41	1.9	1.5%
WhB	Wharton silt loam, 3 to 8 percent slopes	41	6.7	5.2%
WhC	Wharton silt loam, 8 to 15 percent slopes	41	4.5	3.5%
Totals for Area of Interest			127.2	100.0%

Rating Options—Depth to Water Table

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Construction Materials

This folder contains a collection of tabular reports that present soil interpretations related to sources of construction materials. The reports (tables) include all selected map units and components for each map unit, limiting features and interpretive ratings. Construction materials interpretations are tools designed to provide guidance to users in selecting a site for potential source of various materials. Individual soils or groups of soils may be selected as a potential source because they are close at hand, are the only source available, or they meets some or all of the physical or chemical properties required for the intended application. Example interpretations include roadfill, sand and gravel, topsoil and reclamation material.

Source of Reclamation Material, Roadfill, and Topsoil

This table gives information about the soils as potential sources of reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

The soils are rated *good*, *fair*, or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the table. Numerical ratings between 0.00 and 0.99 are given after the specified features. These numbers indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments. The ratings are for the whole soil, from the

surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Information in this table is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this table. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Report—Source of Reclamation Material, Roadfill, and Topsoil

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation]

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AhA—Allegheny silt loam, 0 to 3 percent slopes							
Allegheny	80	Fair		Poor		Fair	
		Low content of organic matter	0.13	Low strength	0.00	Exchange capacity	0.81
		Too acid	0.50	Dusty	0.91	Too acid	0.89
						Rock fragments	0.99
AhB—Allegheny silt loam, 3 to 8 percent slopes							
Allegheny	85	Fair		Fair		Fair	
		Low content of organic matter	0.32	Dusty	0.93	Exchange capacity	0.78
		Too acid	0.54			Too acid	0.99
		Water erosion	0.90				
AhC—Allegheny silt loam, 8 to 15 percent slopes							
Allegheny	85	Fair		Fair		Fair	
		Low content of organic matter	0.32	Dusty	0.93	Slope	0.37
		Too acid	0.54			Exchange capacity	0.78
		Water erosion	0.90			Too acid	0.99
BkA—Brinkerton silt loam, 0 to 3 percent slopes							
Brinkerton	85	Fair		Poor		Poor	
		Too acid	0.32	Wetness	0.00	Wetness	0.00
		Droughty	0.40	Low strength	0.00	Hard to reclaim (rock fragments)	0.58
		Water erosion	0.90	Dusty	0.80	Exchange capacity	0.97
		Low content of organic matter	0.98	Shrink-swell	0.99	Too acid	0.99

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BkB—Brinkerton silt loam, 3 to 8 percent slopes							
Brinkerton	85	Fair		Poor		Poor	
		Too acid	0.32	Wetness	0.00	Wetness	0.00
		Droughty	0.40	Low strength	0.00	Hard to reclaim (rock fragments)	0.58
		Water erosion	0.90	Dusty	0.80	Exchange capacity	0.97
		Low content of organic matter	0.98	Shrink-swell	0.99	Too acid	0.99
CaA—Cavode silt loam, 0 to 3 percent slopes							
Cavode	85	Fair		Poor		Fair	
		Too acid	0.32	Low strength	0.00	Wetness	0.01
		Low content of organic matter	0.50	Wetness	0.01	Too clayey	0.55
		Too clayey	0.68	Dusty	0.80	Hard to reclaim (rock fragments)	0.72
		Water erosion	0.99	Depth to bedrock	0.98	Too acid	0.94
						Rock fragments	0.99
CaB—Cavode silt loam, 3 to 8 percent slopes							
Cavode	85	Fair		Poor		Fair	
		Too acid	0.32	Low strength	0.00	Wetness	0.01
		Low content of organic matter	0.50	Wetness	0.01	Too clayey	0.55
		Too clayey	0.68	Dusty	0.80	Hard to reclaim (rock fragments)	0.72
		Water erosion	0.99	Depth to bedrock	0.98	Too acid	0.94
						Rock fragments	0.99
CaC—Cavode silt loam, 8 to 15 percent slopes							
Cavode	85	Fair		Poor		Fair	
		Too acid	0.32	Low strength	0.00	Wetness	0.01
		Low content of organic matter	0.50	Wetness	0.01	Slope	0.37
		Too clayey	0.68	Dusty	0.80	Too clayey	0.55
		Water erosion	0.99	Depth to bedrock	0.98	Hard to reclaim (rock fragments)	0.72
						Too acid	0.94

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CtA—Cotaco silt loam, 0 to 3 percent slopes, rarely flooded							
Cotaco, rarely flooded	80	Fair		Poor		Fair	
		Low content of organic matter	0.32	Low strength	0.00	Wetness	0.53
		Too acid	0.68	Wetness	0.53	Exchange capacity	0.88
		Water erosion	0.99	Dusty	0.85	Rock fragments	0.98
CuB—Culleoka channery silt loam, 3 to 8 percent slopes							
Culleoka	85	Fair		Poor		Fair	
		Droughty	0.08	Depth to bedrock	0.00	Rock fragments	0.11
		Depth to bedrock	0.65	Low strength	0.00	Depth to bedrock	0.65
		Too acid	0.68	Dusty	0.80	Exchange capacity	0.83
CuC—Culleoka channery silt loam, 8 to 15 percent slopes							
Culleoka	80	Fair		Poor		Fair	
		Droughty	0.08	Depth to bedrock	0.00	Rock fragments	0.11
		Depth to bedrock	0.65	Low strength	0.00	Slope	0.37
		Too acid	0.68	Dusty	0.80	Depth to bedrock	0.65
						Exchange capacity	0.83
DoC—Dormont silt loam, 8 to 15 percent slopes							
Dormont	70	Fair		Poor		Fair	
		Low content of organic matter	0.08	Low strength	0.00	Hard to reclaim (rock fragments)	0.22
		Water erosion	0.68	Dusty	0.80	Slope	0.37
		Too acid	0.84	Wetness	0.93	Wetness	0.93
				Shrink-swell	0.99	Rock fragments	0.96

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DrD—Dormont-Culleoka complex, 15 to 25 percent slopes							
Dormont	45	Fair		Poor		Poor	
		Low content of organic matter	0.08	Low strength	0.00	Slope	0.00
		Water erosion	0.68	Slope	0.50	Hard to reclaim (rock fragments)	0.22
		Too acid	0.84	Dusty	0.80	Wetness	0.93
				Wetness	0.93	Rock fragments	0.96
				Shrink-swell	0.99		
Culleoka	37	Fair		Poor		Poor	
		Droughty	0.08	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.65	Low strength	0.00	Rock fragments	0.11
		Too acid	0.68	Slope	0.50	Depth to bedrock	0.65
				Dusty	0.80	Exchange capacity	0.83
ErB—Ernest silt loam, 3 to 8 percent slopes							
Ernest	85	Fair		Poor		Fair	
		Too acid	0.16	Low strength	0.00	Wetness	0.04
		Water erosion	0.68	Wetness	0.04	Hard to reclaim (rock fragments)	0.15
		Droughty	0.79	Dusty	0.83	Too acid	0.73
		Low content of organic matter	0.98			Rock fragments	0.96
						Exchange capacity	0.96
ErC—Ernest silt loam, 8 to 15 percent slopes							
Ernest	85	Fair		Poor		Fair	
		Too acid	0.16	Low strength	0.00	Wetness	0.04
		Water erosion	0.68	Wetness	0.04	Hard to reclaim (rock fragments)	0.15
		Droughty	0.79	Dusty	0.83	Slope	0.37
		Low content of organic matter	0.98			Too acid	0.73
						Rock fragments	0.96

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
GcA—Gilpin channery silt loam, 0 to 3 percent slopes							
Gilpin	85	Fair		Poor		Poor	
		Too acid	0.50	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.50	Dusty	0.84	Depth to bedrock	0.58
		Droughty	0.57			Exchange capacity	0.80
		Depth to bedrock	0.58			Too acid	0.94
GcB—Gilpin channery silt loam, 3 to 8 percent slopes							
Gilpin	85	Fair		Poor		Poor	
		Droughty	0.41	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Low strength	0.00	Depth to bedrock	0.54
		Depth to bedrock	0.54	Dusty	0.86	Exchange capacity	0.70
		Low content of organic matter	0.89			Too acid	0.77
GcC—Gilpin channery silt loam, 8 to 15 percent slopes							
Gilpin	85	Fair		Poor		Poor	
		Droughty	0.41	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Low strength	0.00	Slope	0.37
		Depth to bedrock	0.54	Dusty	0.86	Depth to bedrock	0.54
		Low content of organic matter	0.89			Exchange capacity	0.70
						Too acid	0.77
GcD—Gilpin channery silt loam, 15 to 25 percent slopes							
Gilpin	85	Fair		Poor		Poor	
		Droughty	0.41	Depth to bedrock	0.00	Slope	0.00
		Too acid	0.50	Low strength	0.00	Rock fragments	0.00
		Depth to bedrock	0.54	Slope	0.50	Depth to bedrock	0.54
		Low content of organic matter	0.89	Dusty	0.86	Exchange capacity	0.70
						Too acid	0.77

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
GcF—Gilpin channery silt loam, 25 to 60 percent slopes							
Gilpin	70	Fair		Poor		Poor	
		Droughty	0.22	Slope	0.00	Slope	0.00
		Too acid	0.50	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.50	Dusty	0.84	Depth to bedrock	0.54
		Depth to bedrock	0.54			Exchange capacity	0.79
						Too acid	0.96
GwC—Gilpin-Weikert channery silt loams, 8 to 15 percent slopes							
Gilpin	55	Fair		Poor		Poor	
		Too acid	0.50	Depth to bedrock	0.00	Rock fragments	0.00
		Droughty	0.64	Low strength	0.00	Slope	0.37
		Depth to bedrock	0.79	Dusty	0.86	Exchange capacity	0.76
		Low content of organic matter	0.82	Cobble content	0.97	Too acid	0.77
						Depth to bedrock	0.79
Weikert	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Dusty	0.88	Rock fragments	0.00
		Too acid	0.50	Cobble content	0.99	Exchange capacity	0.27
						Slope	0.37
						Too acid	0.86

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
GwD—Gilpin-Weikert channery silt loams, 15 to 25 percent slopes							
Gilpin	45	Fair		Poor		Poor	
		Too acid	0.50	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.64	Low strength	0.00	Rock fragments	0.00
		Depth to bedrock	0.79	Slope	0.50	Exchange capacity	0.76
		Low content of organic matter	0.82	Dusty	0.86	Too acid	0.77
				Cobble content	0.97	Depth to bedrock	0.79
Weikert	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.50	Slope	0.00
		Too acid	0.50	Dusty	0.88	Rock fragments	0.00
				Cobble content	0.99	Exchange capacity	0.27
						Too acid	0.86
GyB—Guernsey silt loam, 3 to 8 percent slopes							
Guernsey	85	Fair		Poor		Fair	
		Low content of organic matter	0.08	Low strength	0.00	Wetness	0.38
		Too acid	0.26	Wetness	0.38	Too clayey	0.54
		Water erosion	0.68	Dusty	0.80	Too acid	0.92
		Too clayey	0.78	Shrink-swell	0.95	Hard to reclaim (rock fragments)	0.95
GyC—Guernsey silt loam, 8 to 15 percent slopes							
Guernsey	85	Fair		Poor		Fair	
		Low content of organic matter	0.08	Low strength	0.00	Slope	0.37
		Too acid	0.26	Wetness	0.38	Wetness	0.38
		Water erosion	0.68	Dusty	0.80	Too clayey	0.54
		Too clayey	0.78	Shrink-swell	0.95	Too acid	0.92
						Hard to reclaim (rock fragments)	0.95

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
HoA—Holly silt loam, 0 to 2 percent slopes, frequently flooded							
Holly	75	Fair		Poor		Poor	
		Low content of organic matter	0.13	Wetness	0.00	Wetness	0.00
		Water erosion	0.90	Dusty	0.90	Exchange capacity	0.95
						Rock fragments	0.98
LoA—Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded							
Lobdell	85	Fair		Fair		Fair	
		Low content of organic matter	0.08	Wetness	0.25	Wetness	0.25
		Water erosion	0.68	Dusty	0.94	Exchange capacity	0.93
		Too acid	0.99				
MoB—Monongahela silt loam, 3 to 8 percent slopes							
Monongahela	85	Fair		Poor		Fair	
		Too acid	0.21	Low strength	0.00	Wetness	0.38
		Droughty	0.22	Wetness	0.38	Exchange capacity	0.64
		Low content of organic matter	0.32	Dusty	0.80	Too acid	0.99
		Water erosion	0.37				
PmA—Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded							
Pope	90	Fair		Good		Fair	
		Too acid	0.08			Exchange capacity	0.38
		Low content of organic matter	0.50			Too acid	0.50
		Too sandy	0.87			Too sandy	0.87
		Water erosion	0.99				

Custom Soil Resource Report

Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
RnC—Rayne-Gilpin channery silt loams, 8 to 15 percent slopes							
Rayne	46	Fair		Fair		Poor	
		Low content of organic matter	0.13	Dusty	0.80	Rock fragments	0.00
		Too acid	0.32	Depth to bedrock	0.92	Hard to reclaim (rock fragments)	0.22
						Slope	0.37
						Too acid	0.93
						Exchange capacity	0.97
Gilpin	44	Fair		Poor		Poor	
		Low content of organic matter	0.13	Depth to bedrock	0.00	Rock fragments	0.00
		Droughty	0.15	Dusty	0.83	Depth to bedrock	0.35
		Depth to bedrock	0.35			Slope	0.37
		Too acid	0.50			Exchange capacity	0.76
						Too acid	0.76
UdB—Udorthents, 0 to 8 percent slopes							
Udorthents, unstable fill	100	Fair		Fair		Poor	
		Low content of organic matter	0.02	Cobble content	0.13	Hard to reclaim (dense layer)	0.00
		Too acid	0.50	Dusty	0.85	Hard to reclaim (rock fragments)	0.00
		Droughty	0.58			Rock fragments	0.00
		Cobble content	0.92			Too acid	0.60
						Exchange capacity	0.76
W—Water							
Water	100	Not rated		Not rated		Not rated	
WhA—Wharton silt loam, 0 to 3 percent slopes							
Wharton	80	Fair		Poor		Fair	
		Low content of organic matter	0.08	Low strength	0.00	Wetness	0.07
		Too acid	0.32	Wetness	0.07	Hard to reclaim (rock fragments)	0.73
		Water erosion	0.68	Dusty	0.82	Too acid	0.96

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Source of Reclamation Material, Roadfill, and Topsoil—Indiana County, Pennsylvania							
Map symbol and soil name	Pct. of map unit	Potential as a source of reclamation material		Potential as a source of roadfill		Potential as a source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
WhB—Wharton silt loam, 3 to 8 percent slopes							
Wharton	80	Fair		Poor		Fair	
		Low content of organic matter	0.08	Low strength	0.00	Wetness	0.07
		Too acid	0.32	Wetness	0.07	Hard to reclaim (rock fragments)	0.73
		Water erosion	0.68	Dusty	0.81	Too acid	0.96
WhC—Wharton silt loam, 8 to 15 percent slopes							
Wharton	80	Fair		Poor		Fair	
		Low content of organic matter	0.08	Low strength	0.00	Wetness	0.07
		Too acid	0.32	Wetness	0.07	Slope	0.37
		Water erosion	0.68	Dusty	0.82	Hard to reclaim (rock fragments)	0.73
						Too acid	0.96

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Hydric Soils

This table lists the map unit components that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of

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ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
3. Soils that are frequently ponded for long or very long duration during the growing season.
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;

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4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;

Hydric Condition: Food Security Act information regarding the ability to grow a commodity crop without removing woody vegetation or manipulating hydrology.

References:

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

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Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

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Report—Hydric Soils

Hydric Soils—Indiana County, Pennsylvania				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
BkA—Brinkerton silt loam, 0 to 3 percent slopes				
	Brinkerton	85	Colluvial aprons, hillslopes	2
BkB—Brinkerton silt loam, 3 to 8 percent slopes				
	Brinkerton	85	Colluvial aprons, hillslopes	2
CaA—Cavode silt loam, 0 to 3 percent slopes				
	Brinkerton	5	Hills	2
CaB—Cavode silt loam, 3 to 8 percent slopes				
	Brinkerton	5	Ridges	2

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Hydric Soils—Indiana County, Pennsylvania				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
CaC—Cavode silt loam, 8 to 15 percent slopes				
	Brinkerton	5	Hillslopes	2
DrD—Dormont-Culleoka complex, 15 to 25 percent slopes				
	Thorndale	3	Drainageways, depressions	2
ErB—Ernest silt loam, 3 to 8 percent slopes				
	Brinkerton	5	Hillslopes	2
ErC—Ernest silt loam, 8 to 15 percent slopes				
	Brinkerton	5	Hillslopes	2
HoA—Holly silt loam, 0 to 2 percent slopes, frequently flooded				
	Holly	75	Flood plains	2
LoA—Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded				
	Holly	5	Flood plains	2
	Melvin	5	Flood plains	2
MoB—Monongahela silt loam, 3 to 8 percent slopes				
	Purdy	5	Terraces	2, 3
WhA—Wharton silt loam, 0 to 3 percent slopes				
	Brinkerton	5	Depressions on hillslopes	2
WhB—Wharton silt loam, 3 to 8 percent slopes				
	Brinkerton	5	Depressions on hillslopes	2

Water Features

This folder contains tabular reports that present soil hydrology information. The reports (tables) include all selected map units and components for each map unit. Water Features include ponding frequency, flooding frequency, and depth to water table.

Water Features

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the

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soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

The *months* in the table indicate the portion of the year in which a water table, ponding, and/or flooding is most likely to be a concern.

Water table refers to a saturated zone in the soil. The water features table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table. The kind of water table, apparent or perched, is given if a seasonal high water table exists in the soil. A water table is perched if free water is restricted from moving downward in the soil by a restrictive feature, in most cases a hardpan; there is a dry layer of soil underneath a wet layer. A water table is apparent if free water is present in all horizons from its upper boundary to below 2 meters or to the depth of observation. The water table kind listed is for the first major component in the map unit.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is

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nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

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Map unit symbol and soil name	Hydrologic group	Surface runoff	Most likely months	Water table			Ponding			Flooding	
				Upper limit	Lower limit	Kind	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
AhA—Allegheny silt loam, 0 to 3 percent slopes											
Allegheny	B	Low	Jan-Dec	—	—	—	—	—	None	—	None
AhB—Allegheny silt loam, 3 to 8 percent slopes											
Allegheny	B		Jan-Dec	—	—	—	—	—	None	—	None
AhC—Allegheny silt loam, 8 to 15 percent slopes											
Allegheny	B		Jan-Dec	—	—	—	—	—	None	—	None
BkA—Brinkerton silt loam, 0 to 3 percent slopes											
Brinkerton	C/D	Very high	Jan-May	0.0-0.5	1.7-2.4	Perched	—	—	None	—	None
			Jun-Sep	—	—	—	—	—	None	—	None
			Oct-Dec	0.0-0.5	1.7-2.4	Perched	—	—	None	—	None
BkB—Brinkerton silt loam, 3 to 8 percent slopes											
Brinkerton	C/D	Very high	Jan-May	0.0-0.5	1.7-2.4	Perched	—	—	None	—	None
			Jun-Sep	—	—	—	—	—	None	—	None
			Oct-Dec	0.0-0.5	1.7-2.4	Perched	—	—	None	—	None
CaA—Cavode silt loam, 0 to 3 percent slopes											
Cavode	C/D		Jan-Apr	0.5-1.5	3.3-6.0	Apparent	—	—	None	—	None
			May-Jun	1.9-4.1	3.3-6.0	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov-Dec	1.9-4.1	3.3-6.0	Apparent	—	—	None	—	None
CaB—Cavode silt loam, 3 to 8 percent slopes											
Cavode	C/D		Jan-Apr	0.5-1.5	3.3-6.0	Apparent	—	—	None	—	None
			May-Jun	1.9-4.1	3.3-6.0	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov-Dec	1.9-4.1	3.3-6.0	Apparent	—	—	None	—	None

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Map unit symbol and soil name	Hydrologic group	Surface runoff	Most likely months	Water table			Ponding			Flooding	
				Upper limit	Lower limit	Kind	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
CaC—Cavode silt loam, 8 to 15 percent slopes											
Cavode	C/D		Jan-Apr	0.5-1.5	3.3-6.0	Apparent	—	—	None	—	None
			May-Jun	1.9-4.1	3.3-6.0	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov-Dec	1.9-4.1	3.3-6.0	Apparent	—	—	None	—	None
CtA—Cotaco silt loam, 0 to 3 percent slopes, rarely flooded											
Cotaco, rarely flooded	C	Very high	Jan-May	1.5-2.5	6.0	Apparent	—	—	None	Very brief (4 to 48 hours)	Rare
			Jun-Oct	—	—	—	—	—	—	—	
			Nov	1.5-2.5	6.0	Apparent	—	—	—	—	
			Dec	1.5-2.5	6.0	Apparent	—	—	None	Very brief (4 to 48 hours)	Rare
CuB—Culleoka channery silt loam, 3 to 8 percent slopes											
Culleoka	B		Jan-Dec	—	—	—	—	—	None	—	None
CuC—Culleoka channery silt loam, 8 to 15 percent slopes											
Culleoka	B		Jan-Dec	—	—	—	—	—	None	—	None
DoC—Dormont silt loam, 8 to 15 percent slopes											
Dormont	D		Jan-Apr	2.0-3.7	4.5-6.0	Apparent	—	—	None	—	None
			May	2.6-4.2	4.5-6.0	Apparent	—	—	None	—	None
			Jun	3.4-5.5	4.5-6.0	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov	3.4-5.5	4.5-6.0	Apparent	—	—	None	—	None
			Dec	2.6-4.2	4.5-6.0	Apparent	—	—	None	—	None

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Map unit symbol and soil name	Hydrologic group	Surface runoff	Most likely months	Water table			Ponding			Flooding	
				Upper limit	Lower limit	Kind	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
DrD—Dormont-Culleoka complex, 15 to 25 percent slopes											
Dormont	D		Jan-Apr	2.0-3.7	4.5-6.0	Apparent	—	—	None	—	None
			May	2.6-4.2	4.5-6.0	Apparent	—	—	None	—	None
			Jun	3.4-5.5	4.5-6.0	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov	3.4-5.5	4.5-6.0	Apparent	—	—	None	—	None
			Dec	2.6-4.2	4.5-6.0	Apparent	—	—	None	—	None
Culleoka	B		Jan-Dec	—	—	—	—	—	None	—	None
ErB—Ernest silt loam, 3 to 8 percent slopes											
Ernest	C/D		Jan-Apr	1.2-1.8	1.9-2.3	Apparent	—	—	None	—	None
			May-Jun	1.2-1.8	2.6-3.2	Perched	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov-Dec	1.2-1.8	2.6-3.2	Perched	—	—	None	—	None
ErC—Ernest silt loam, 8 to 15 percent slopes											
Ernest	C/D		Jan-Apr	1.2-1.8	1.9-2.3	Apparent	—	—	None	—	None
			May-Jun	1.2-1.8	2.6-3.2	Perched	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov-Dec	1.2-1.8	2.6-3.2	Perched	—	—	None	—	None
GcA—Gilpin channery silt loam, 0 to 3 percent slopes											
Gilpin	C	Low	Jan-Dec	—	—	—	—	—	None	—	None
GcB—Gilpin channery silt loam, 3 to 8 percent slopes											
Gilpin	C		Jan-Dec	—	—	—	—	—	None	—	None
GcC—Gilpin channery silt loam, 8 to 15 percent slopes											
Gilpin	C		Jan-Dec	—	—	—	—	—	None	—	None

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Map unit symbol and soil name	Hydrologic group	Surface runoff	Most likely months	Water table			Ponding			Flooding	
				Upper limit	Lower limit	Kind	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
GcD—Gilpin channery silt loam, 15 to 25 percent slopes											
Gilpin	C		Jan-Dec	—	—	—	—	—	None	—	None
GcF—Gilpin channery silt loam, 25 to 60 percent slopes											
Gilpin	C	High	Jan-Dec	—	—	—	—	—	None	—	None
GwC—Gilpin-Weikert channery silt loams, 8 to 15 percent slopes											
Gilpin	C		Jan-Dec	—	—	—	—	—	None	—	None
Weikert	D		Jan-Dec	—	—	—	—	—	None	—	None
GwD—Gilpin-Weikert channery silt loams, 15 to 25 percent slopes											
Gilpin	C		Jan-Dec	—	—	—	—	—	None	—	None
Weikert	D		Jan-Dec	—	—	—	—	—	None	—	None
GyB—Guernsey silt loam, 3 to 8 percent slopes											
Guernsey	C/D		Jan-Apr	1.3-1.9	4.9-5.2	Apparent	—	—	None	—	None
			May	2.1-3.1	4.9-5.2	Apparent	—	—	None	—	None
			Jun	3.7-4.5	4.9-5.2	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov	3.7-4.5	4.9-5.2	Apparent	—	—	None	—	None
			Dec	2.1-3.1	4.9-5.2	Apparent	—	—	None	—	None
GyC—Guernsey silt loam, 8 to 15 percent slopes											
Guernsey	C/D		Jan-Apr	1.3-1.9	4.9-5.2	Apparent	—	—	None	—	None
			May	2.1-3.1	4.9-5.2	Apparent	—	—	None	—	None
			Jun	3.7-4.5	4.9-5.2	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov	3.7-4.5	4.9-5.2	Apparent	—	—	None	—	None
			Dec	2.1-3.1	4.9-5.2	Apparent	—	—	None	—	None

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Map unit symbol and soil name	Hydrologic group	Surface runoff	Most likely months	Water table			Ponding			Flooding	
				Upper limit	Lower limit	Kind	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
HoA—Holly silt loam, 0 to 2 percent slopes, frequently flooded											
Holly	B/D	Negligible	Jan-May	0.0-1.0	6.0	Apparent	—	—	None	Brief (2 to 7 days)	Frequent
			Jun-Sep	—	—	—	—	—	None	—	
			Oct	0.0-1.0	6.0	Apparent	—	—	None	—	
			Nov-Dec	0.0-1.0	6.0	Apparent	—	—	None	Brief (2 to 7 days)	Frequent
LoA—Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded											
Lobdell	B/D		Jan-Apr	1.3-2.5	5.0-6.0	Apparent	—	—	None	Brief (2 to 7 days)	Occasional
			May-Jun	2.2-4.0	5.0-6.0	Apparent	—	—	None	—	
			Jul-Oct	—	—	—	—	—	None	—	
			Nov-Dec	2.2-4.0	5.0-6.0	Apparent	—	—	None	—	
MoB—Monongahela silt loam, 3 to 8 percent slopes											
Monongahela	D		Jan-Apr	1.5-2.5	5.0-6.0	Apparent	—	—	None	—	None
			May-Jun	1.5-2.5	3.3-5.4	Perched	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov-Dec	3.3-5.4	5.0-6.0	Apparent	—	—	None	—	None
PmA—Pope fine sandy loam, 0 to 2 percent slopes, rarely flooded											
Pope	A		Jan-May	—	—	—	—	—	None	—	Rare
			Jun-Oct	—	—	—	—	—	None	—	
			Nov-Dec	—	—	—	—	—	None	—	Rare
RnC—Rayne-Gilpin channery silt loams, 8 to 15 percent slopes											
Rayne	B	Medium	Jan-Dec	—	—	—	—	—	None	—	None
Gilpin	C	Medium	Jan-Dec	—	—	—	—	—	None	—	None

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Map unit symbol and soil name	Hydrologic group	Surface runoff	Most likely months	Water table			Ponding			Flooding	
				Upper limit	Lower limit	Kind	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>		<i>Ft</i>				
UdB—Udorthents, 0 to 8 percent slopes											
Udorthents, unstable fill	C	Medium	Jan-Dec	—	—	—	—	—	None	—	None
W—Water											
Water			Jan-Dec	—	—	—	—	—	None	—	
WhA—Wharton silt loam, 0 to 3 percent slopes											
Wharton	C/D		Jan-Apr	1.3-2.3	3.3-5.9	Apparent	—	—	None	—	None
			May-Jun	2.2-4.1	3.3-5.9	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov-Dec	2.2-4.1	3.3-5.9	Apparent	—	—	None	—	None
WhB—Wharton silt loam, 3 to 8 percent slopes											
Wharton	C/D		Jan-Apr	1.3-2.3	3.3-5.9	Apparent	—	—	None	—	None
			May-Jun	2.2-4.1	3.3-5.9	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov-Dec	2.2-4.1	3.3-5.9	Apparent	—	—	None	—	None
WhC—Wharton silt loam, 8 to 15 percent slopes											
Wharton	C/D		Jan-Apr	1.3-2.3	3.3-5.9	Apparent	—	—	None	—	None
			May-Jun	2.2-4.1	3.3-5.9	Apparent	—	—	None	—	None
			Jul-Oct	—	—	—	—	—	None	—	None
			Nov-Dec	2.2-4.1	3.3-5.9	Apparent	—	—	None	—	None

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