

## PROFILE LEGEND

---- EXISTING GRADE PROPOSED GRADE CUT AREA COMPACTED FILL

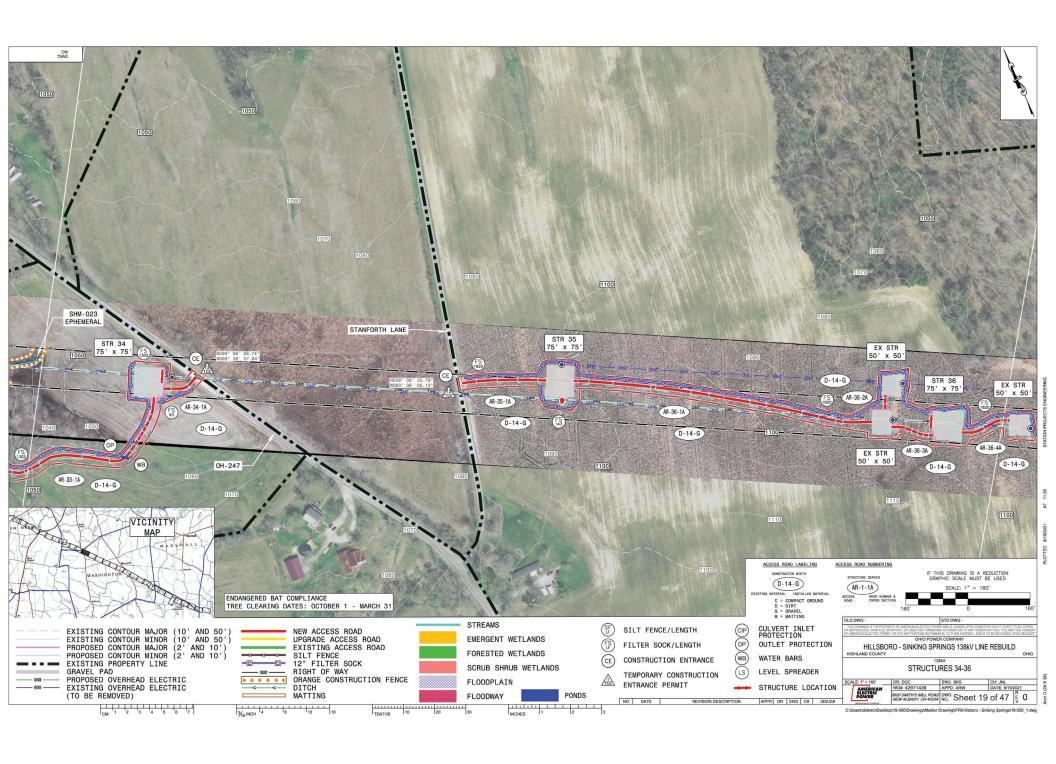
OHIO POWER COMPANY

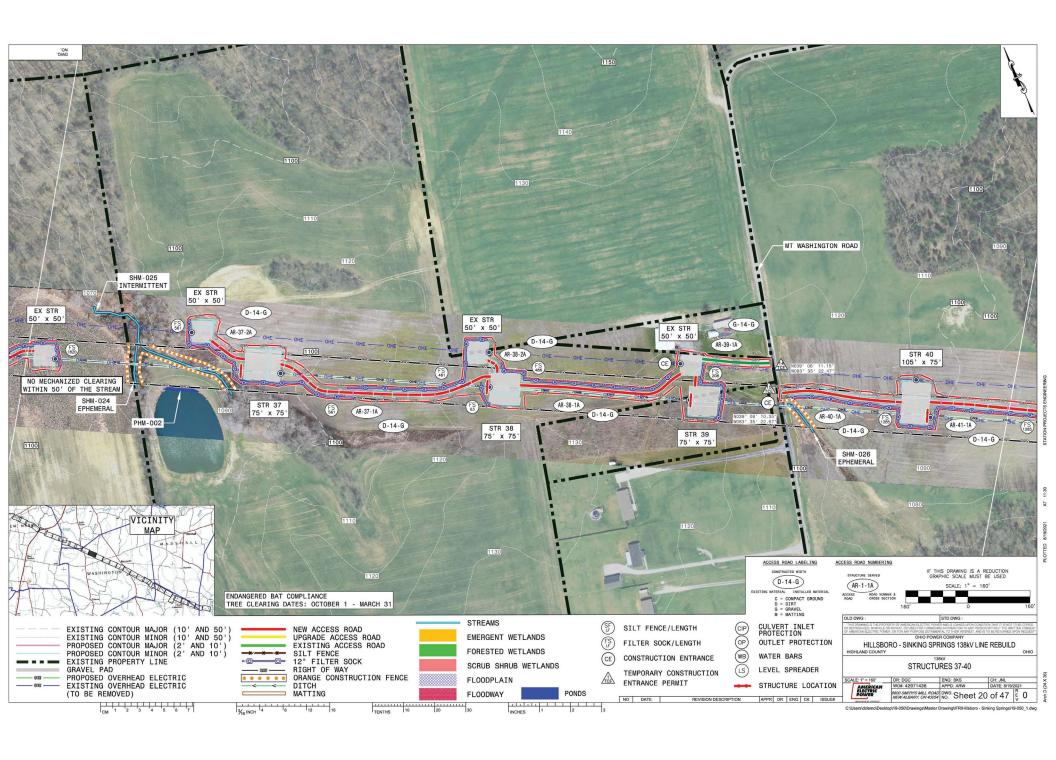
OHIO POWER COMPANY HILLSBORO - SINKING SPRINGS 138kV LINE REBUILD

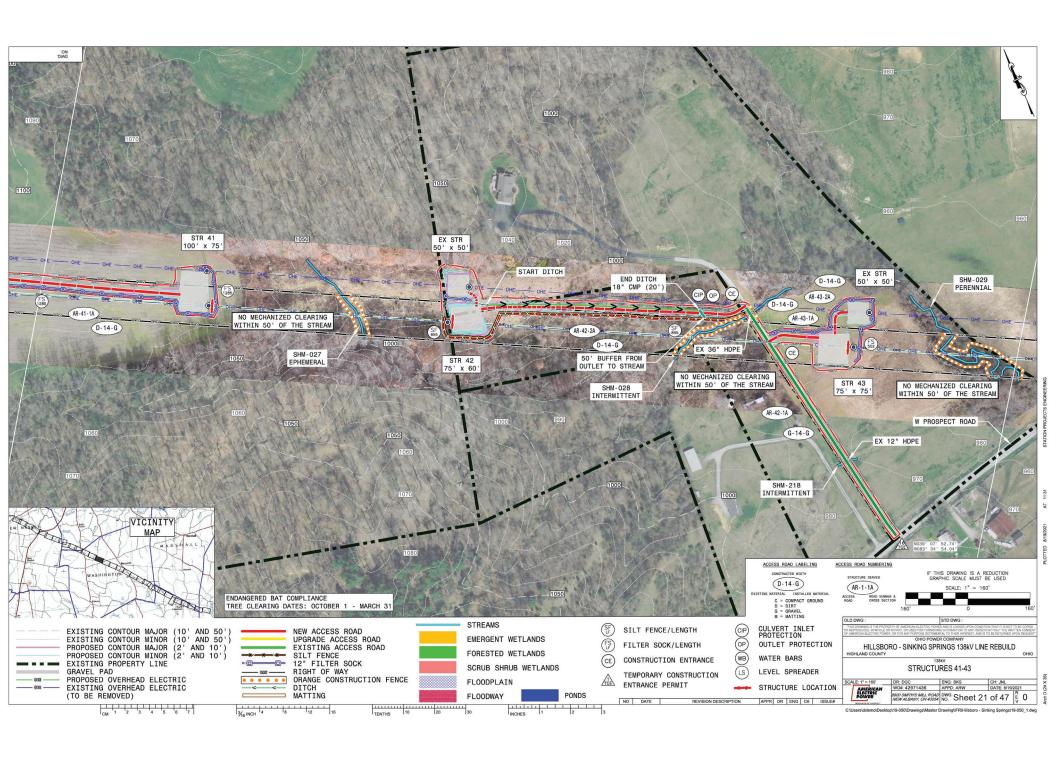
PROFILES FOR STRUCTURE 30-33

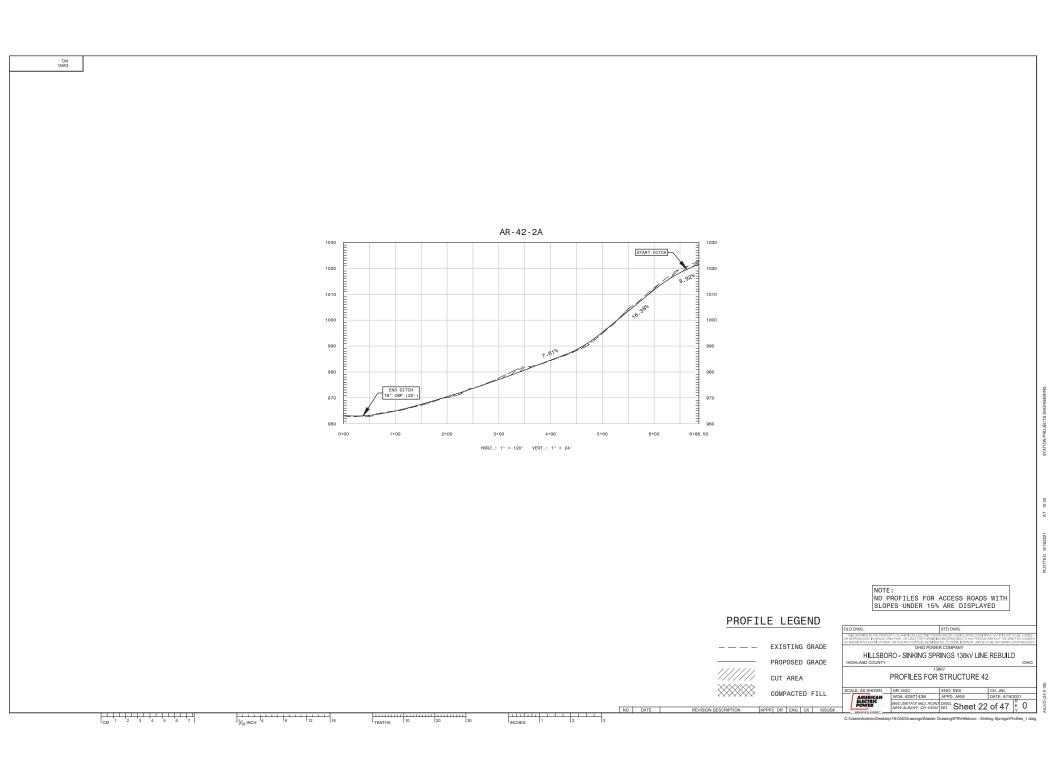
NOTE: NO PROFILES FOR ACCESS ROADS WITH SLOPES UNDER 15% ARE DISPLAYED

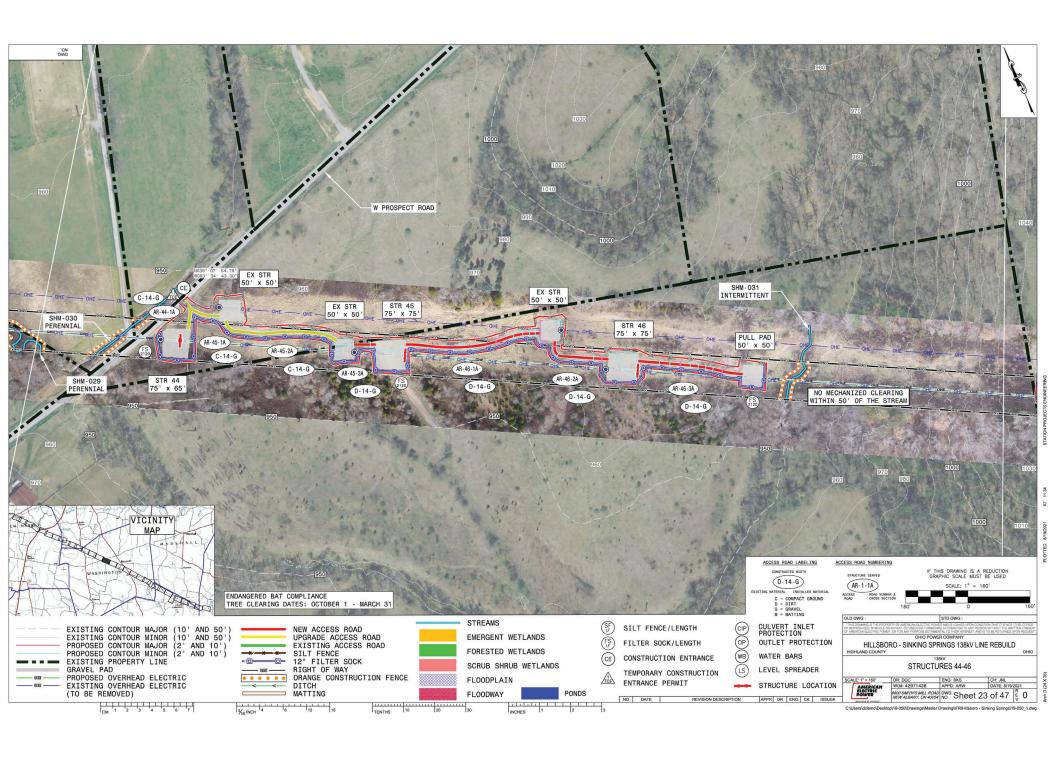
INCHES 1 2 3

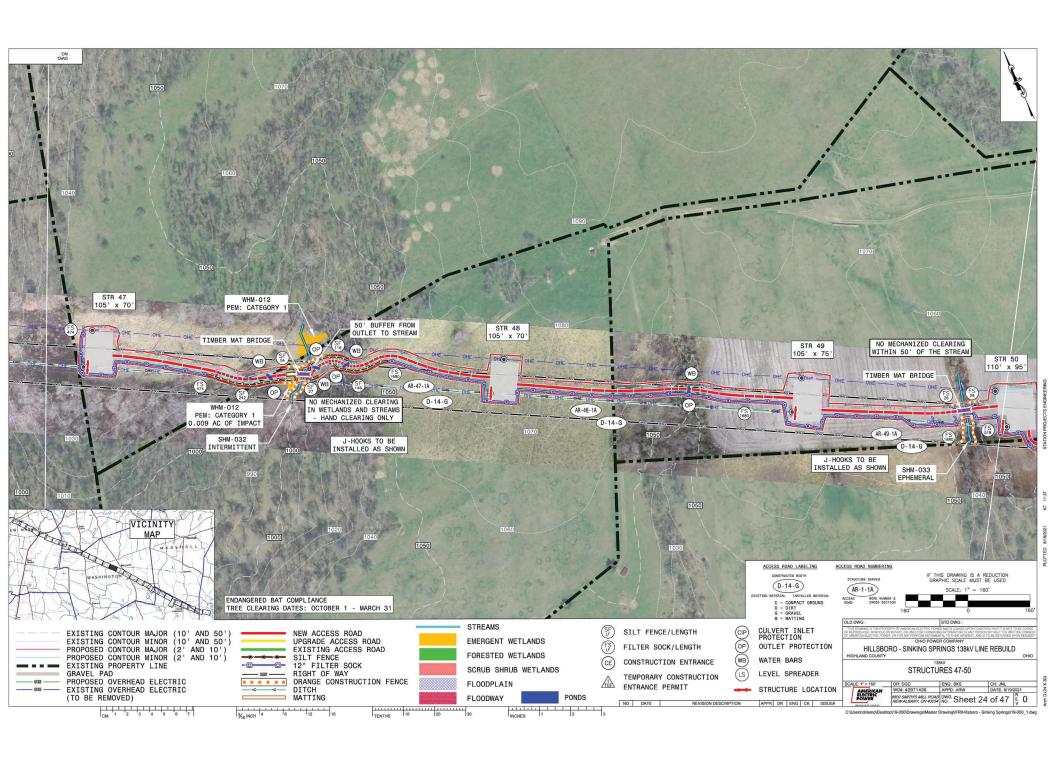


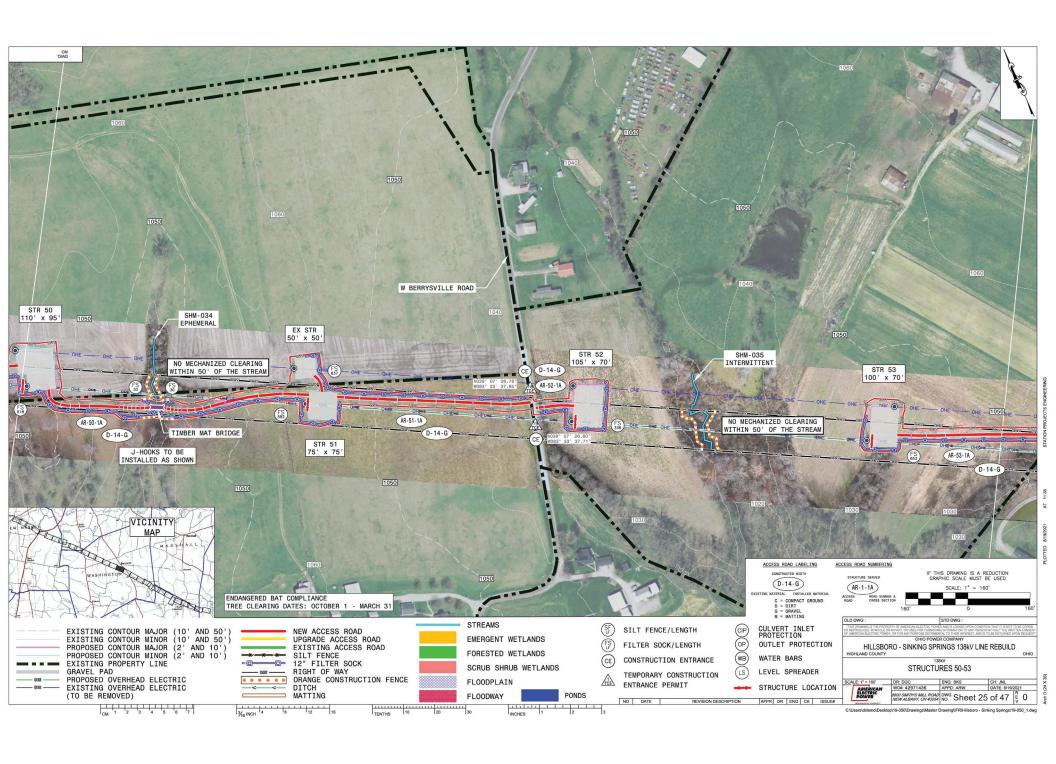




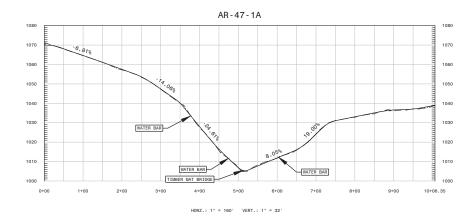


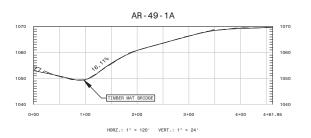


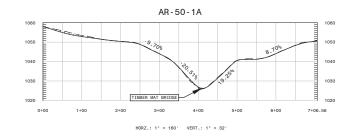












## PROFILE LEGEND

NOTE: NO PROFILES FOR ACCESS ROADS WITH SLOPES UNDER 15% ARE DISPLAYED

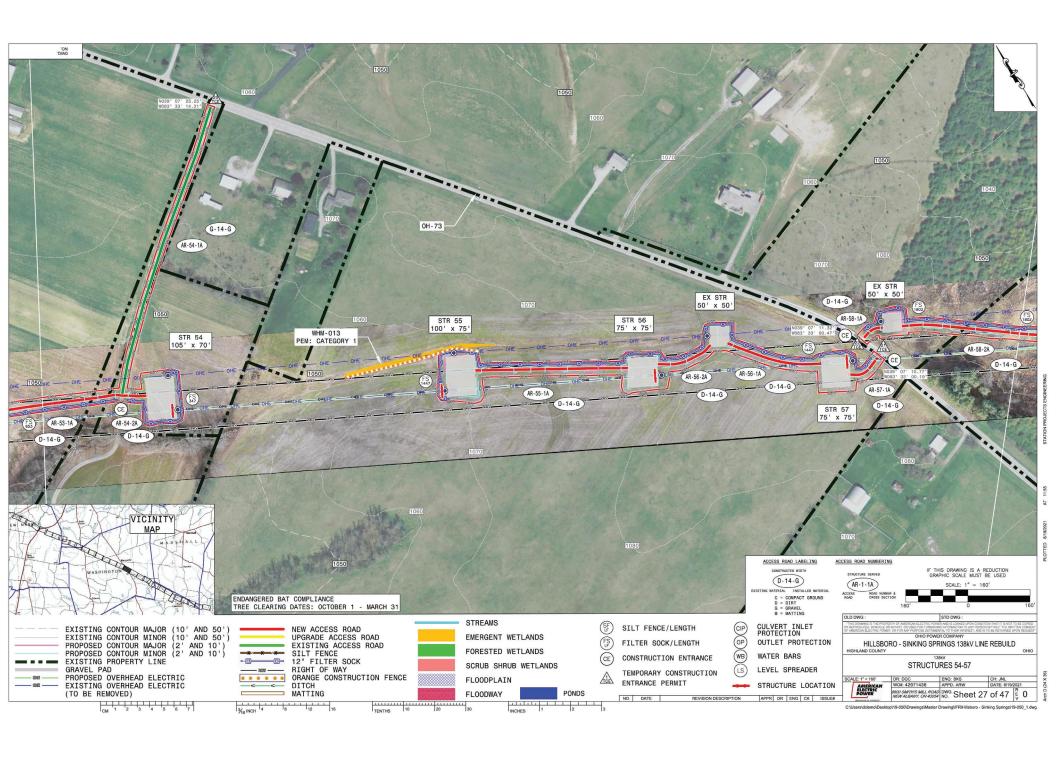
	EXISTING GRADE
	PROPOSED GRADE
	CUT AREA
******	COMPACTED FILL

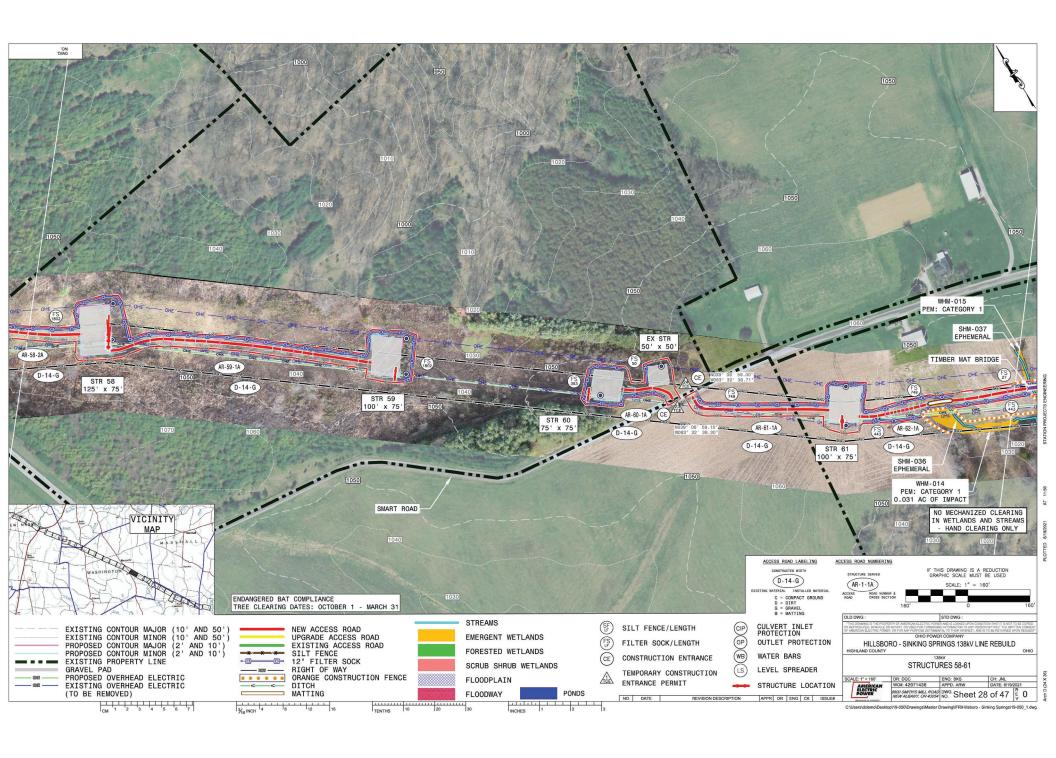
OR REPRODUCED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTE OF AMERICAN ELECTRIC POWER, OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPOR	
OHIO POWER COMPANY	
HILLSBORO - SINKING SPRINGS 138kV LINE REBUILD	
HIGHLAND COUNTY	OHIO
138kV	
PROFILES FOR STRUCTURES 47-50	

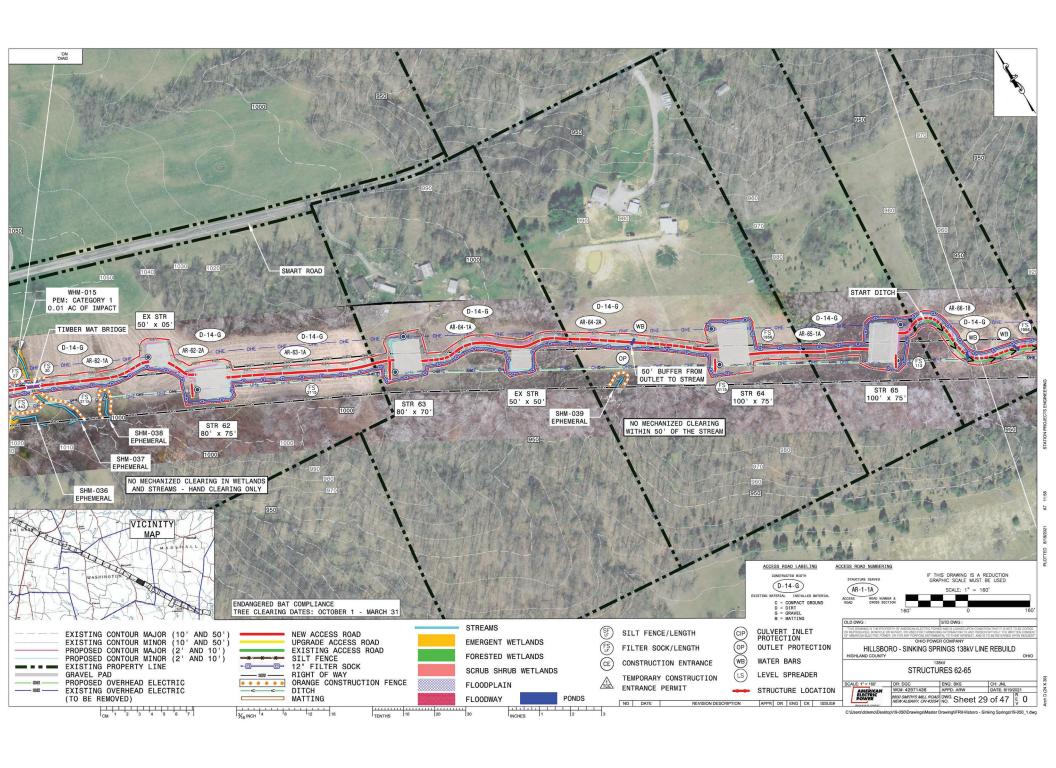
AS SHOWN	DR: DGC	ENG: BKS	CH: JNL
MERICAN	WO#: 42971436	APPD: ARW	DATE: 8/19/2021
ECTRIC OWER	8600 SMITH'S MILL ROAD NEW ALBANY, OH 43054	NO. Sheet 26	of 47   R 0

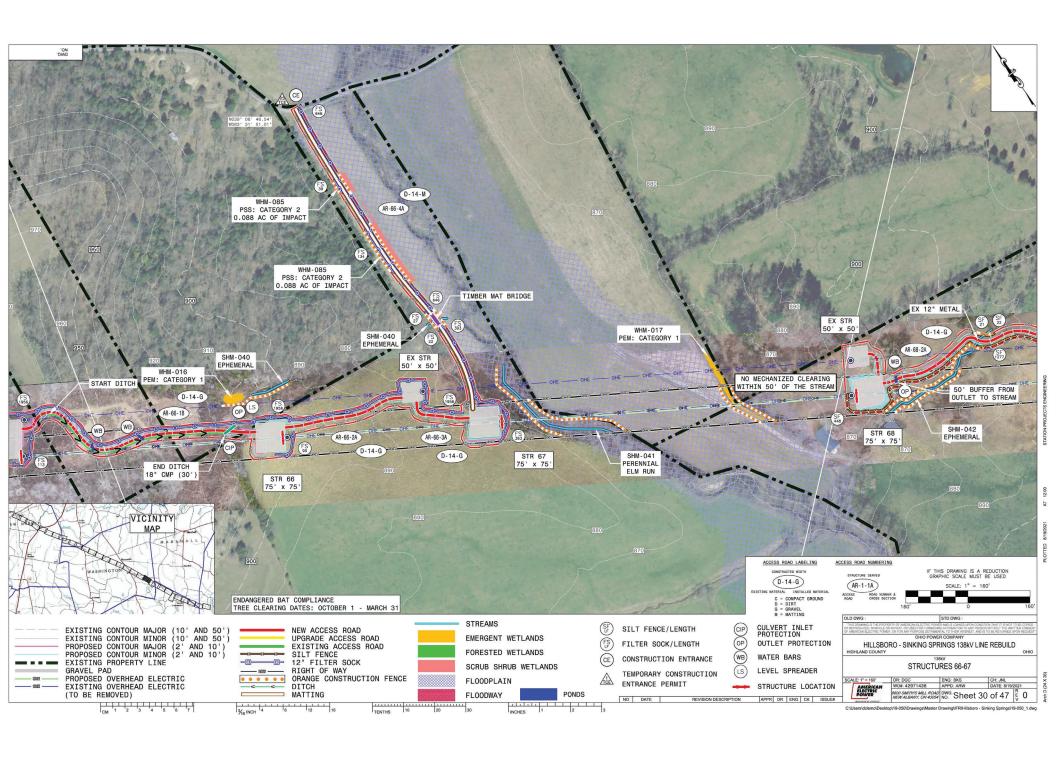
3 10 20 30 INCHES 1 2 3

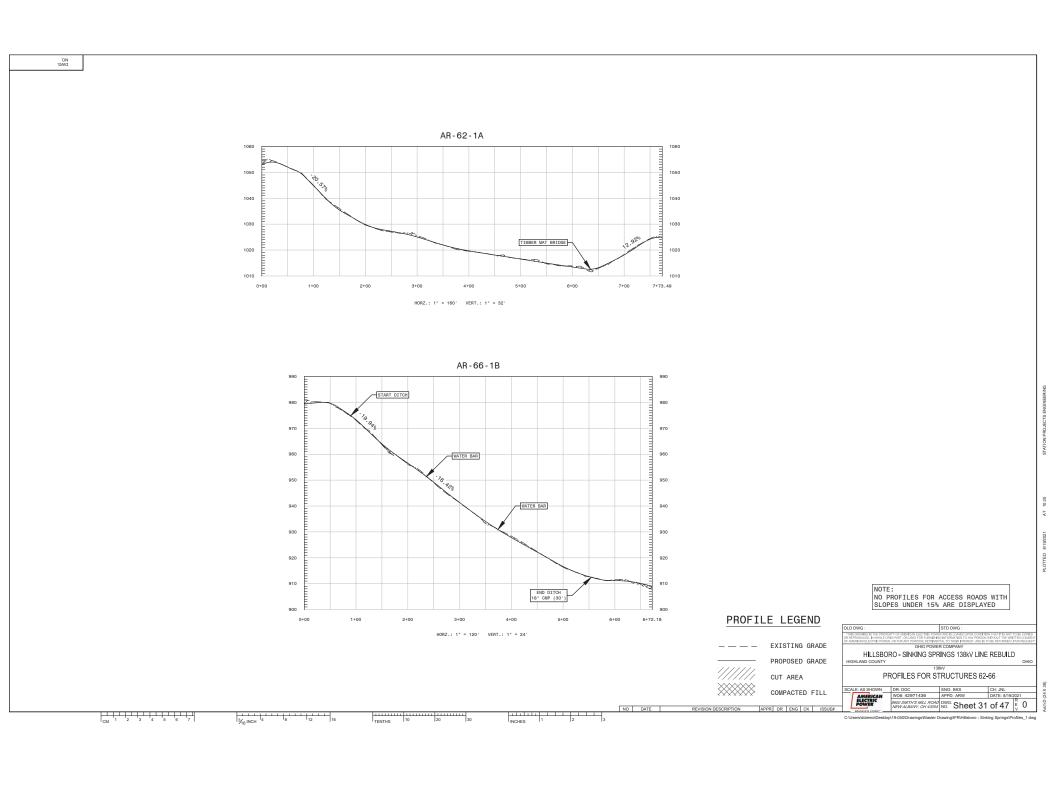
molDesktop\19-050\Drawings\Master Drawing\IFR\Hillsboro - Sinking Springs\Profiles 1.dwg

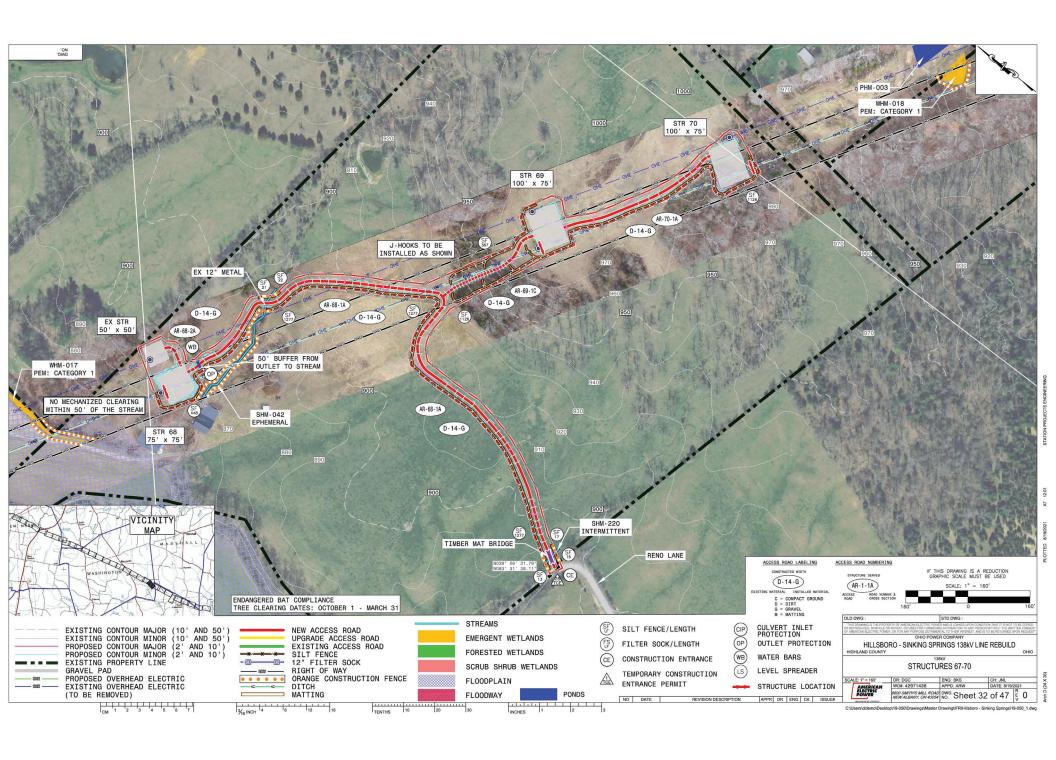


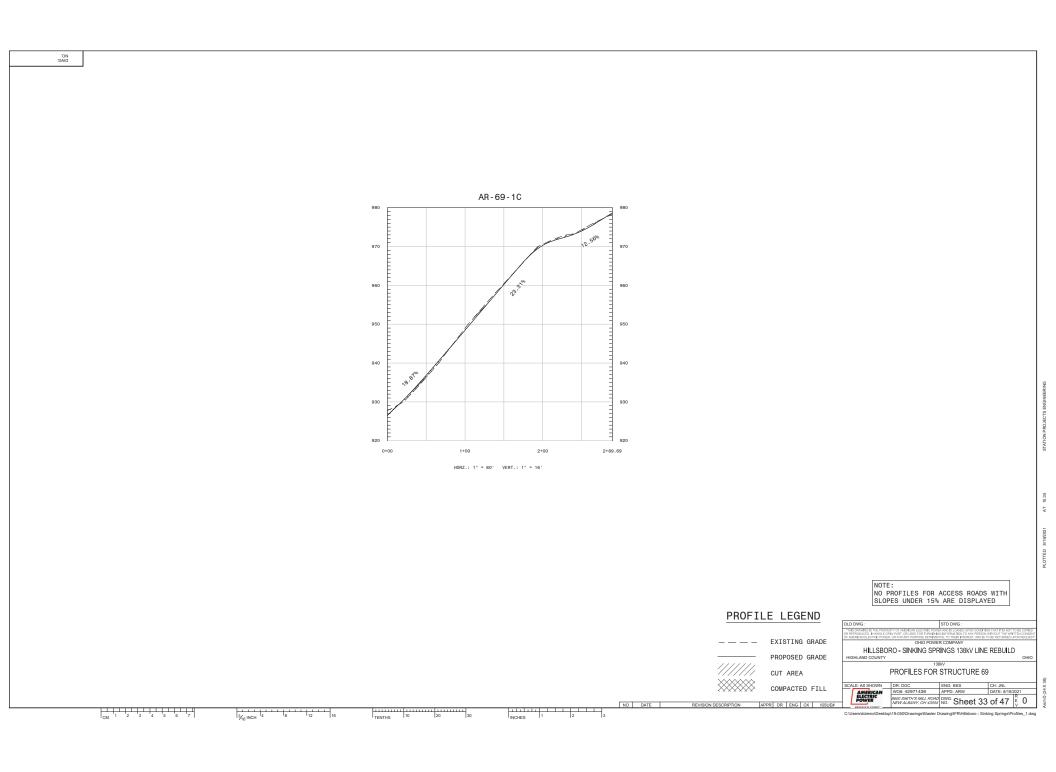


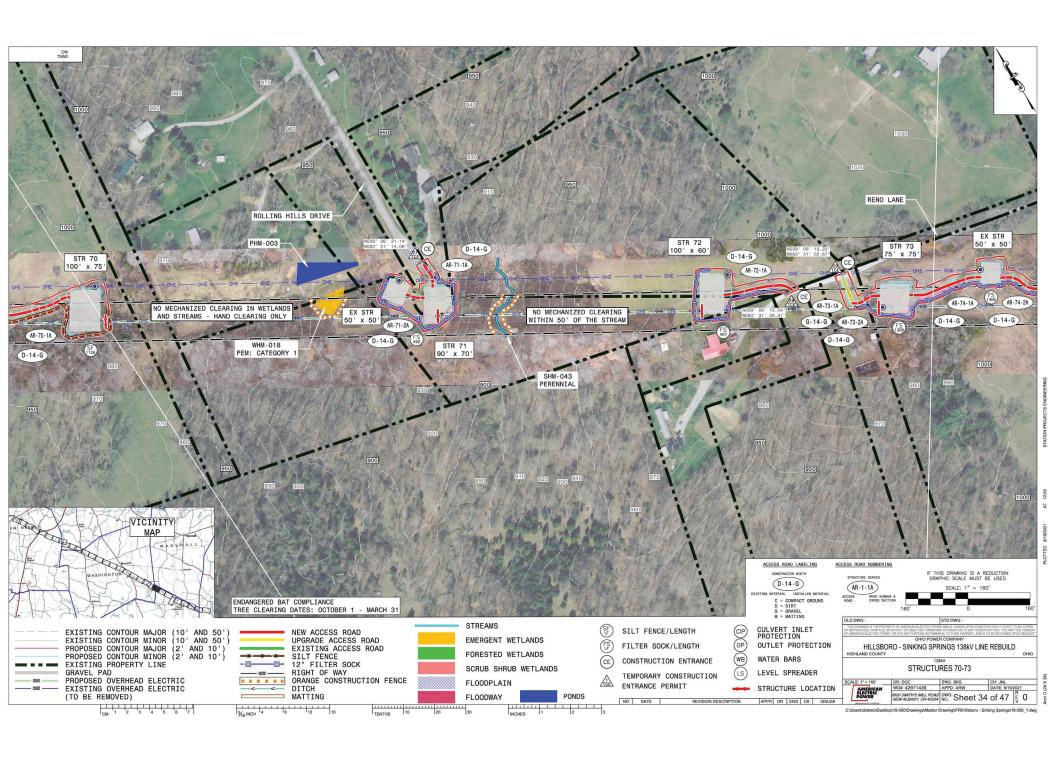


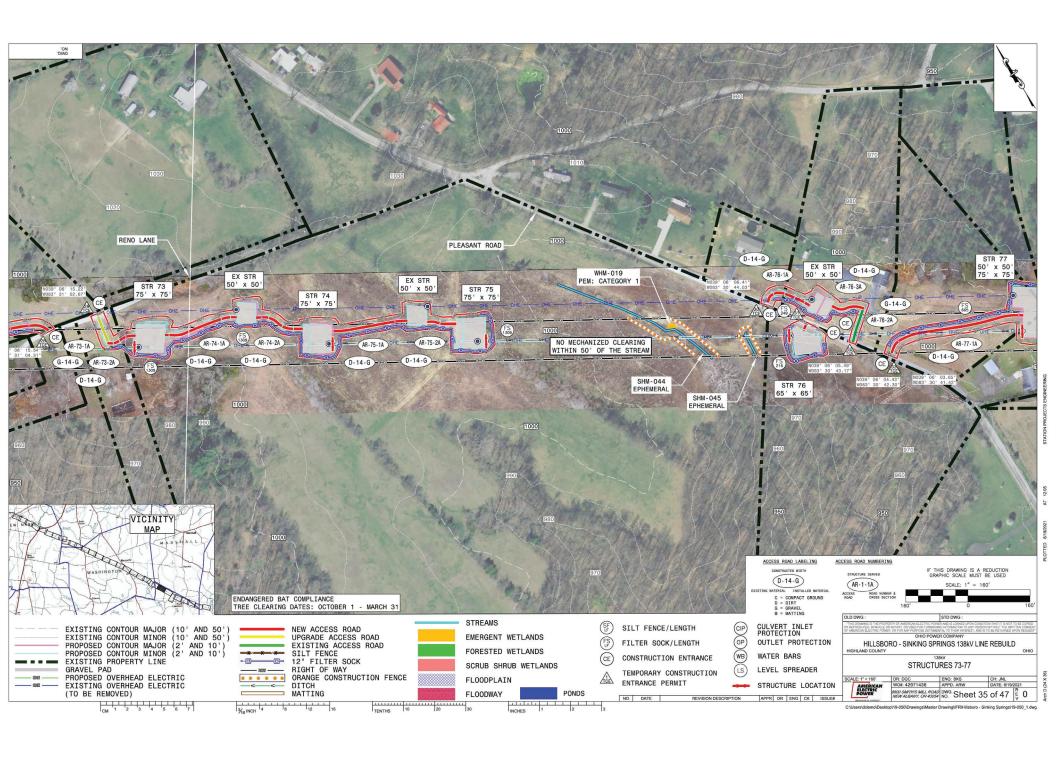


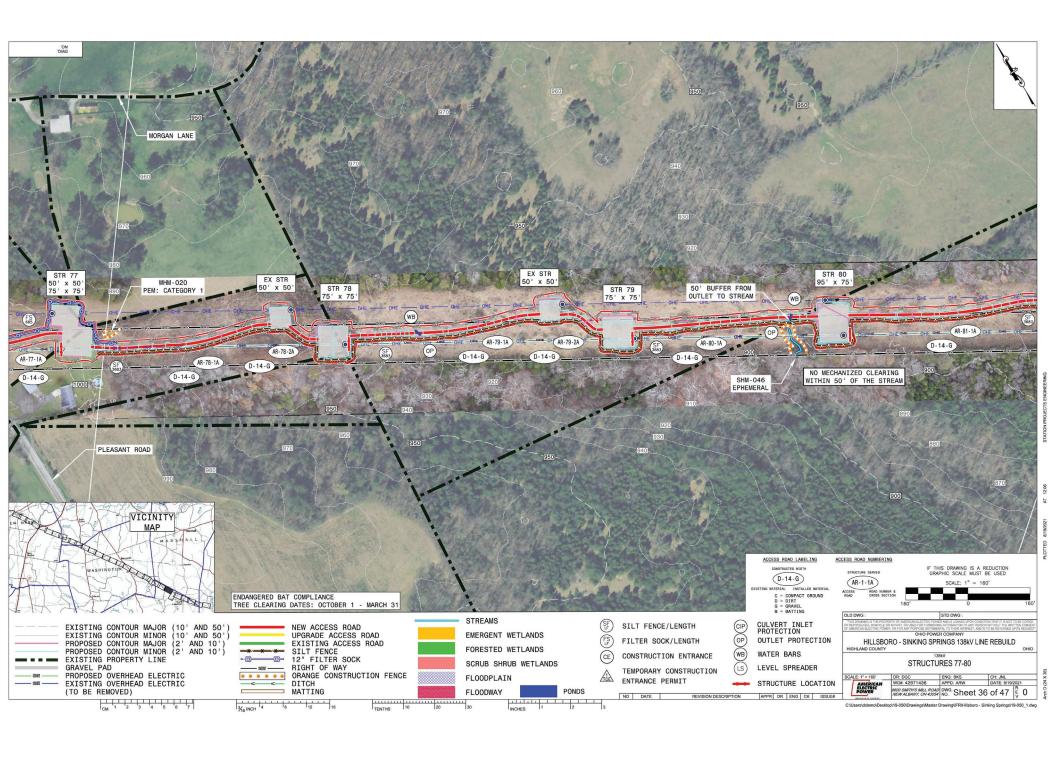


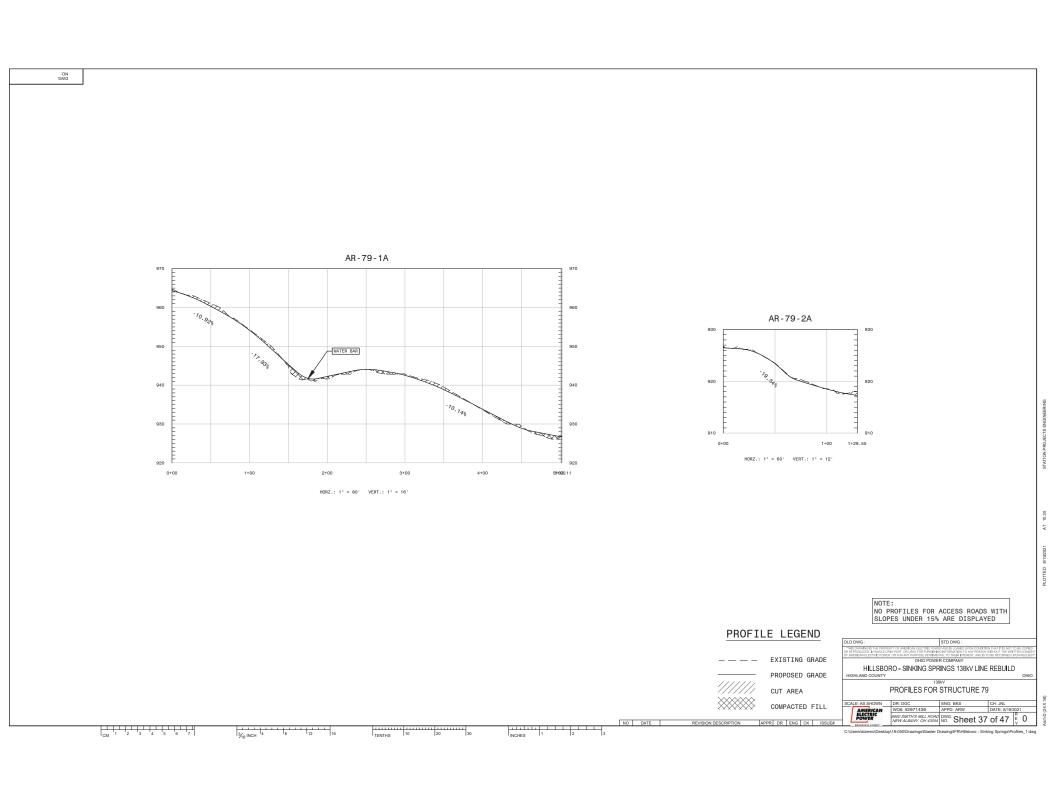


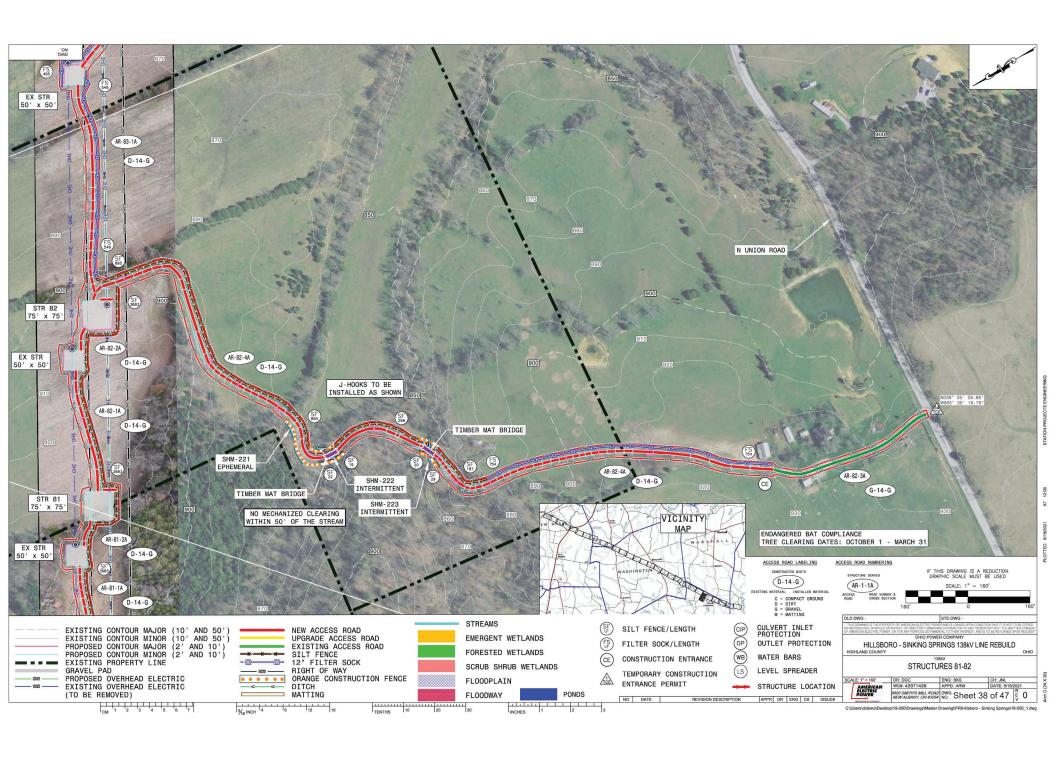


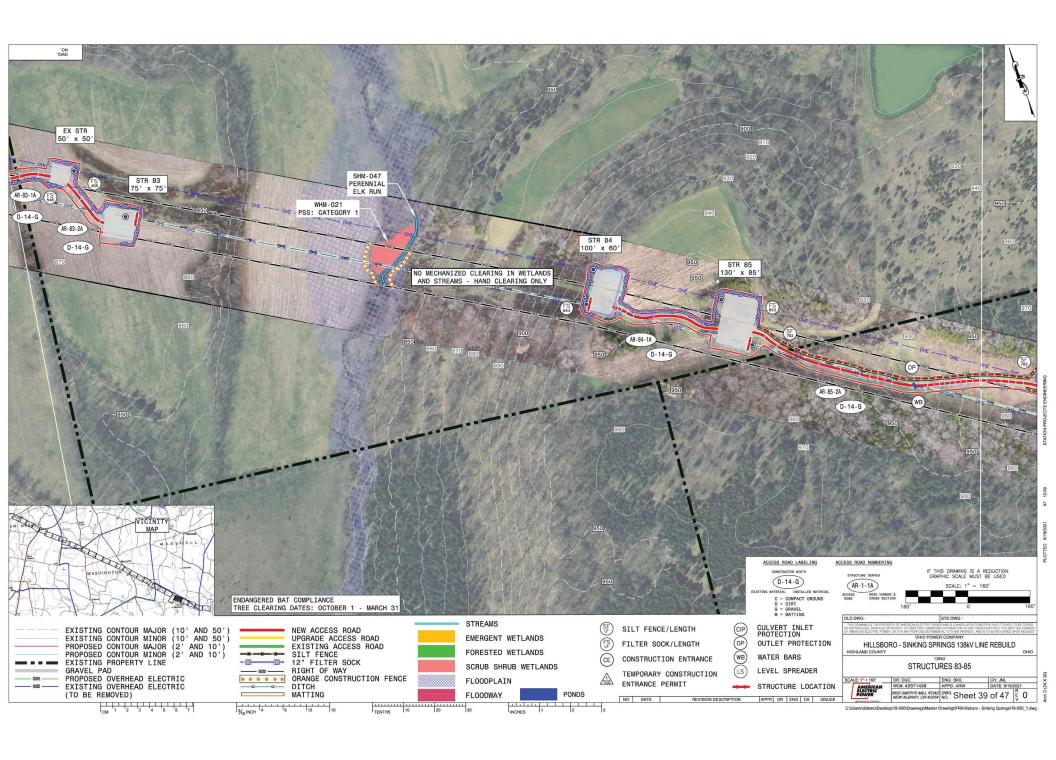


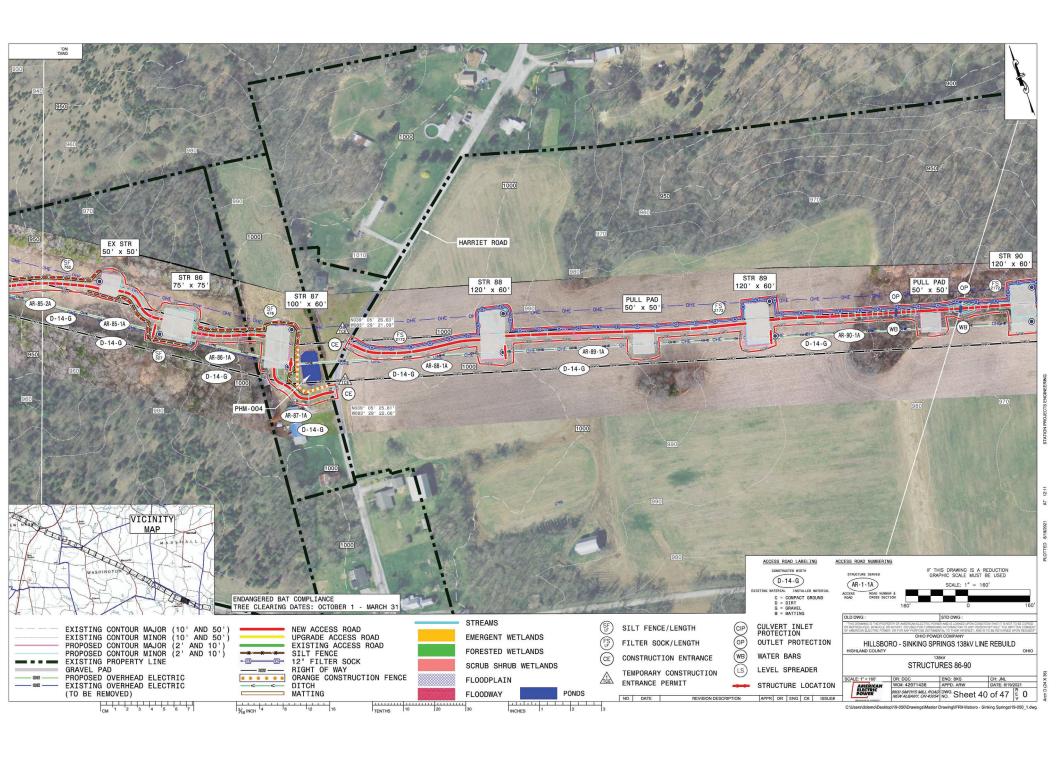


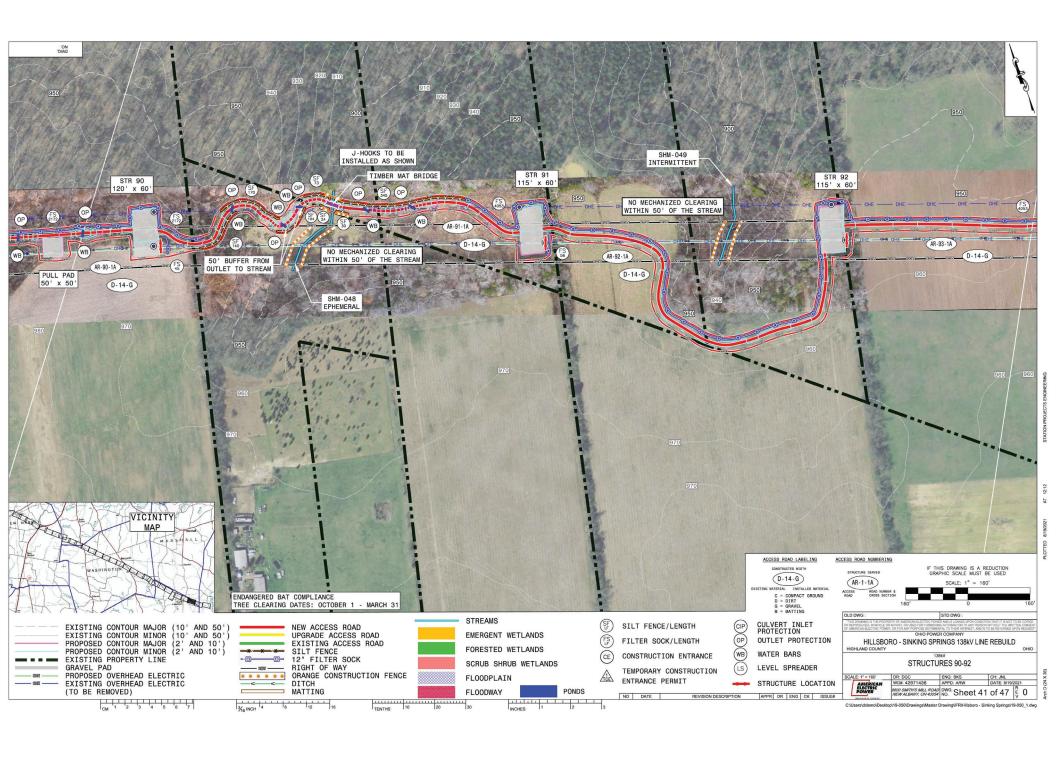


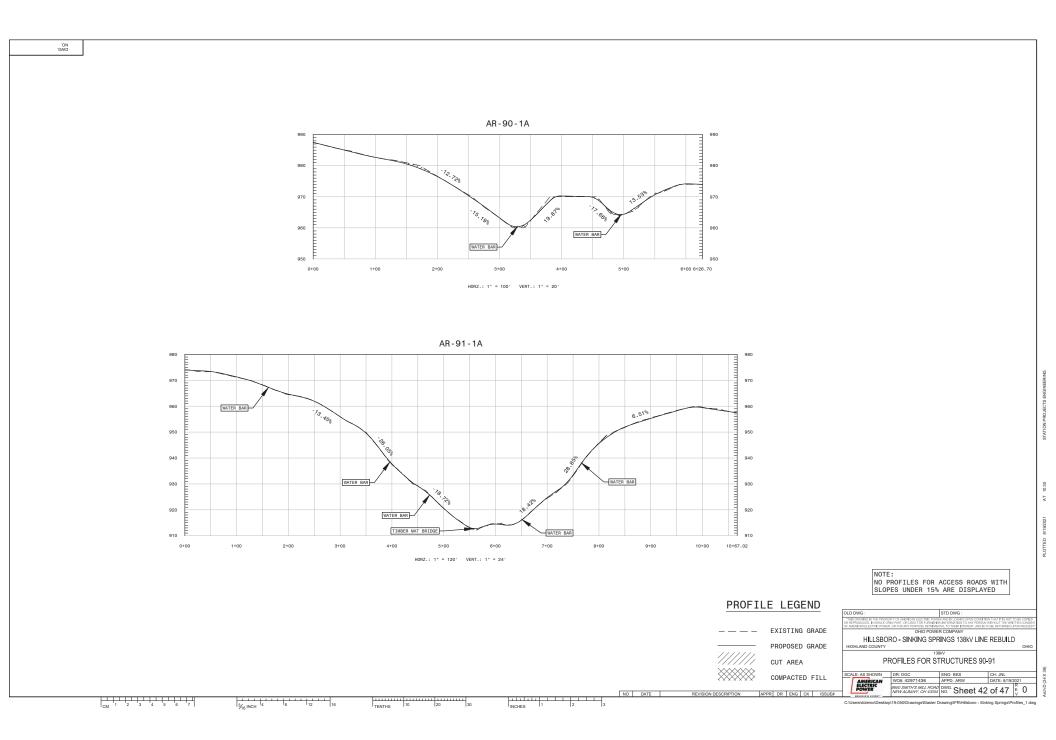


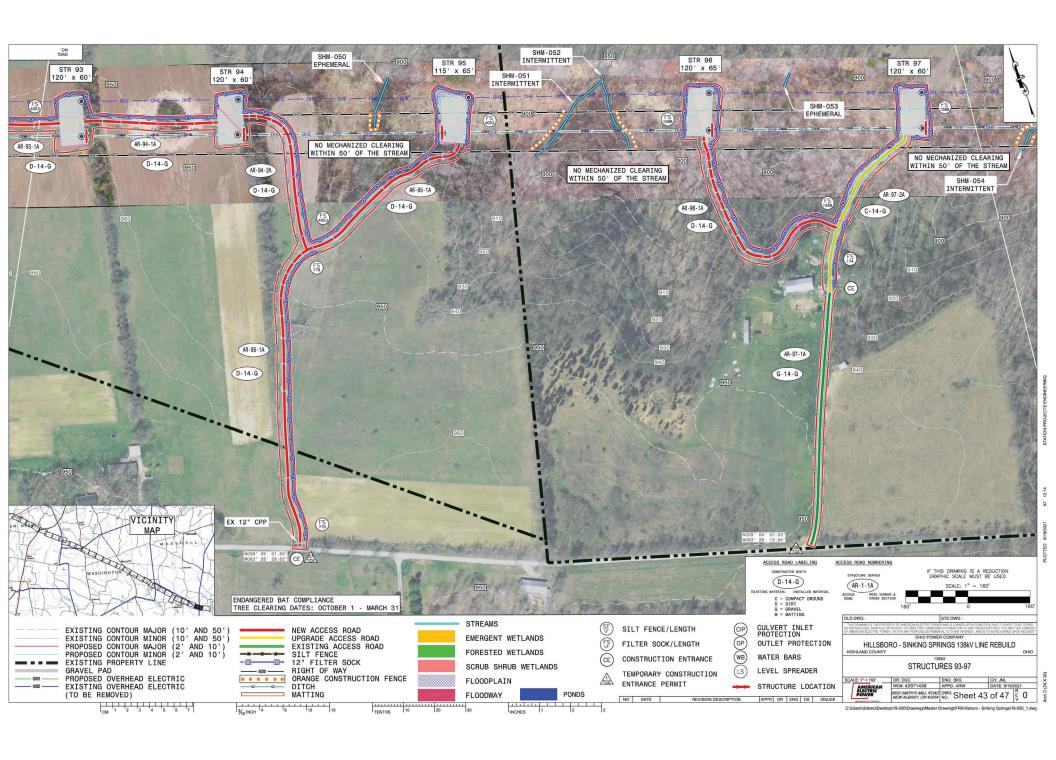


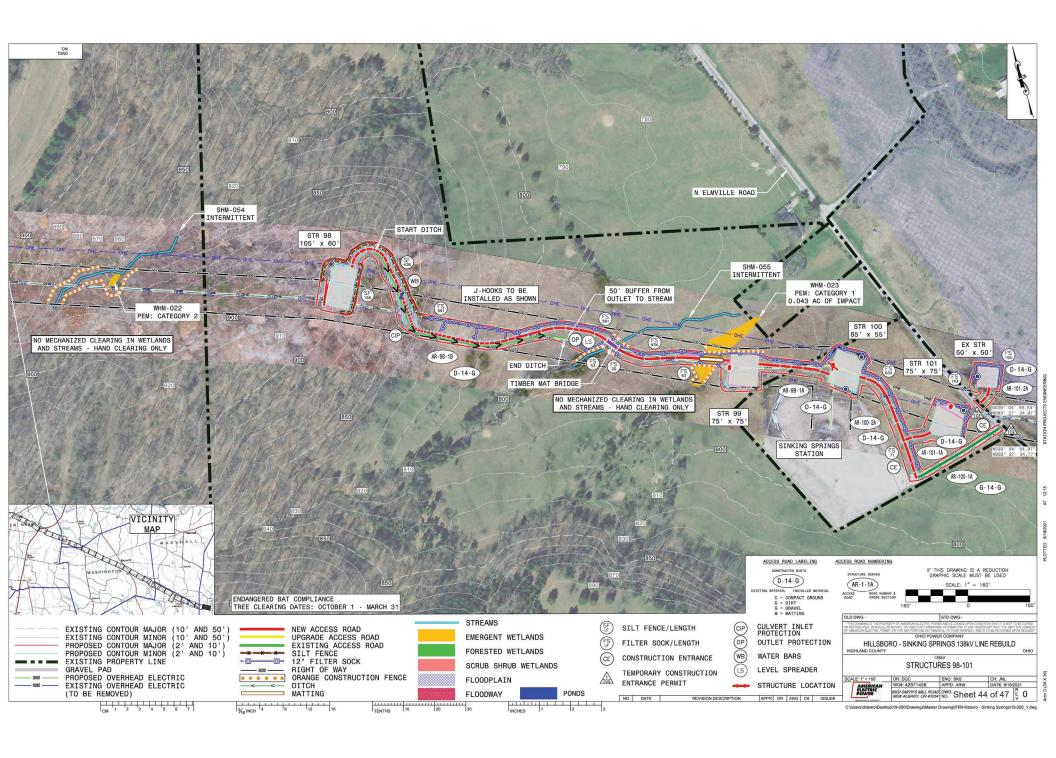


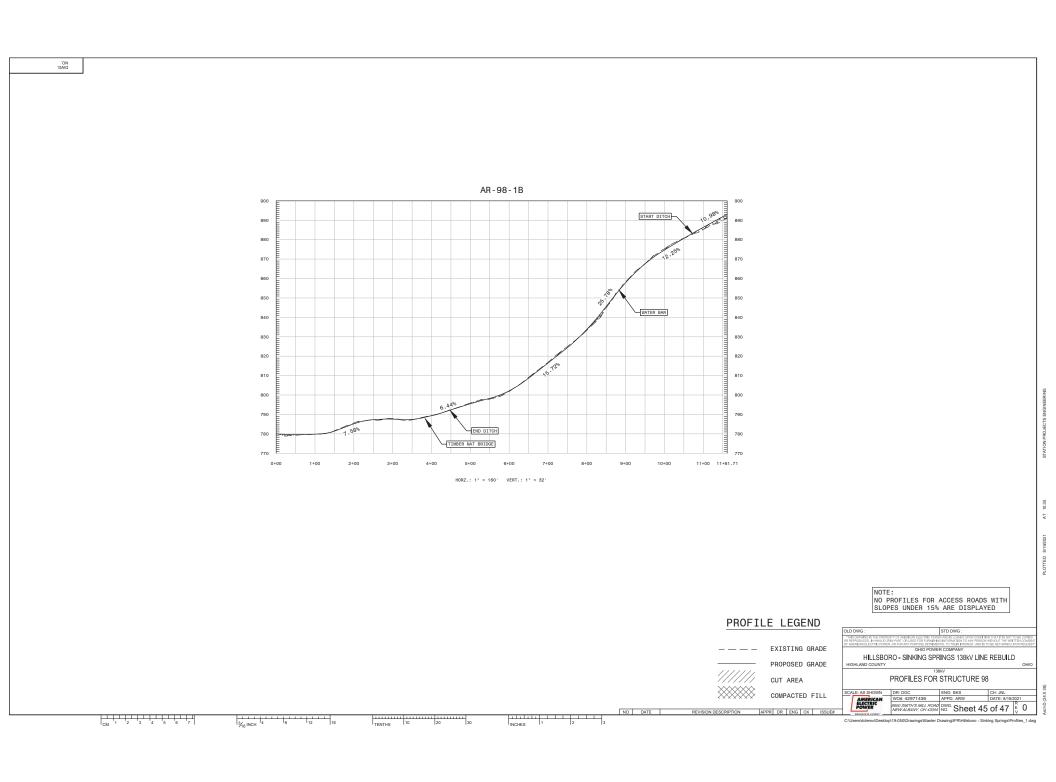


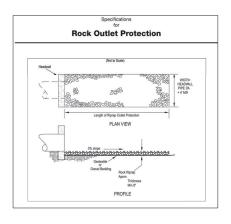


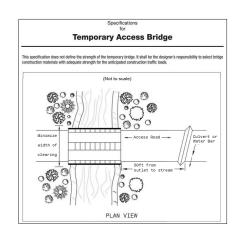


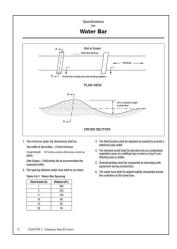






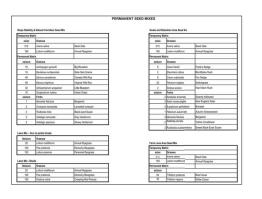






NOTE: SPACING = 400/(PERCENT GRADE) + 75 FEET DO NO EXCEED 300'

	Specificati for		
Temporary Seeding  Table 7.8.1 Temporary Seeding Species Selection			
Seeding Dates	Species	Lb./1000 ft2	Lb/Acre
March 1 to August 15	Oats Tall Feecus Annual Ryegrass	3 1 1	128 (4 Bushel) 40 40
	Perennial Ryegrass Tall Fescue Annual Ryegrass	1 1 1	40 40 40
	Annual Ryegrass Perennial Ryegrass Creeping Red Fescue Kentucky Bluegrass	1.25 3.25 0.4 0.4	55 142 17 17
	Oats Tall Fescue Annual Ryegrass	3 1 1	128 (3 bushel) 40 40
August 16th to November	Rye Tall Fescue Annual Ryegrass	3 1 1	112 (2 bishel) 40 40
	Wheat Tall Fescue Annual Ryograss	3 1 1	120 (2 bushel) 40 40
	Perennial Rye Tall Fescue Annual Ryegrass	1 1 1	40 40 40
	Annual Ryegrass Perennial Ryegrass Creeping Red Fescue Kentucky Bluegrass	1.25 3.25 0.4 0.4	40 40 40
November 1 to Feb. 29	Use mulch only or dormant seeding		



Specifications for

#### Mulching

- Much and other appropriate vegetative practices shall be agplied to disturbed areas within 7 days of grading if the area is to remain demand undisturbed, for more than 21 days or a meas and portions of the site which can be locought to final year for the properties of the site which can be locought to final year.
- . Mulch shall consist of one of the following:
- . Nature has consist of one of the following: Straw Straw shall be unrotted small grains straw applied at the rate of 2 toosiac. or 90 lbr./1,000 sq. ft. (thus o three bales). The straw mutch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread match, divide area into approximately 1,000 sq. ft. sections and place two 45-10. balles of straw in each section.
- Hydroseeders Wood cellulose fiber should be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.
- Other Acceptable mulches include mulch mattings and rolled erosion control products applied according to manufacturer's recommendations or wood mulch/chips applied at 10-20 tons/ac.
- Mechanical Use a disk, crimper, or similar two tool set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but be left generally longer than 6 inches.
- Much Nettings Use according to the manufacturer's recommendations, following all placement and anchorir requirements. Use in areas of water concentration and steep stopes to hold mutch in place.
- Synthetic Binders For staw misch, synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Tera Tack or equal may be used at rates recommended by the manufacturer. All applications of Sythetic Binders must be conducted in such a manner where there is no contact with waters of the state.
  - win waters of the sales.

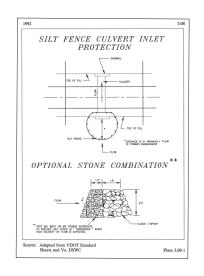
    Wood Cellulose Fiber Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 lb Jacre. The wood cellulose fiber shall be militod with water and the mixture shall contain a maximum of 50 lb J100 gal. of wood cellulose fiber.

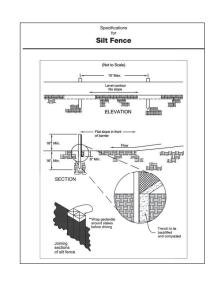
OHIO POWER COMPANY HILLSBORO - SINKING SPRINGS 138kV LINE REBUILD EROSION & SEDIMENT CONTROL DETAILS I

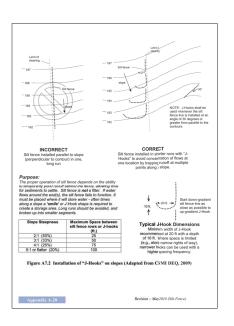
NO DATE REVISION DESCRIPTION APPR DR ENG CK ISSUE#

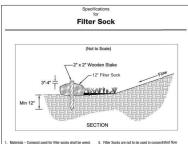
C:\Users\dclemo\Desktop\19-050\Drawings\Master Drawing\IFR\Hillsborg - Sinking Springs\General Sheet 1.dwg

INCHES 1 2 3





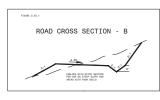




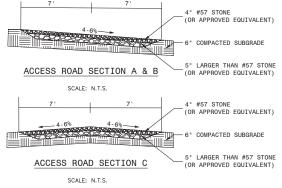
- Filter Socks shall be 3 or 5 mil continuous, tubular, HDPE 3/8" knitted mesh netting material, filled with compost passing the above specifications for compost products.
- Filter socks will be placed on a level line across slopes, generally parallel to the base of the slope or other affected area. On slopes approaching 2-1, additional socks shall be provided at the top and as needed mid-slope.
- Filter socks intended to be left as a permanent filter or part of the natural landscape, shall be seeded at the time of installation for establishment of permanent vegetation.



- WRE OR ZP TIES TO SECUR







NOTE: FINISHED GRADE TO MATCH EXISTING GRADE OF ENTRANCE.



OHIO POWER COMPANY HILLSBORO - SINKING SPRINGS 138kV LINE REBUILD EROSION & SEDIMENT CONTROL DETAILS II

RIPRAP VEE DITCH SCALE: N.T.S. NO DATE

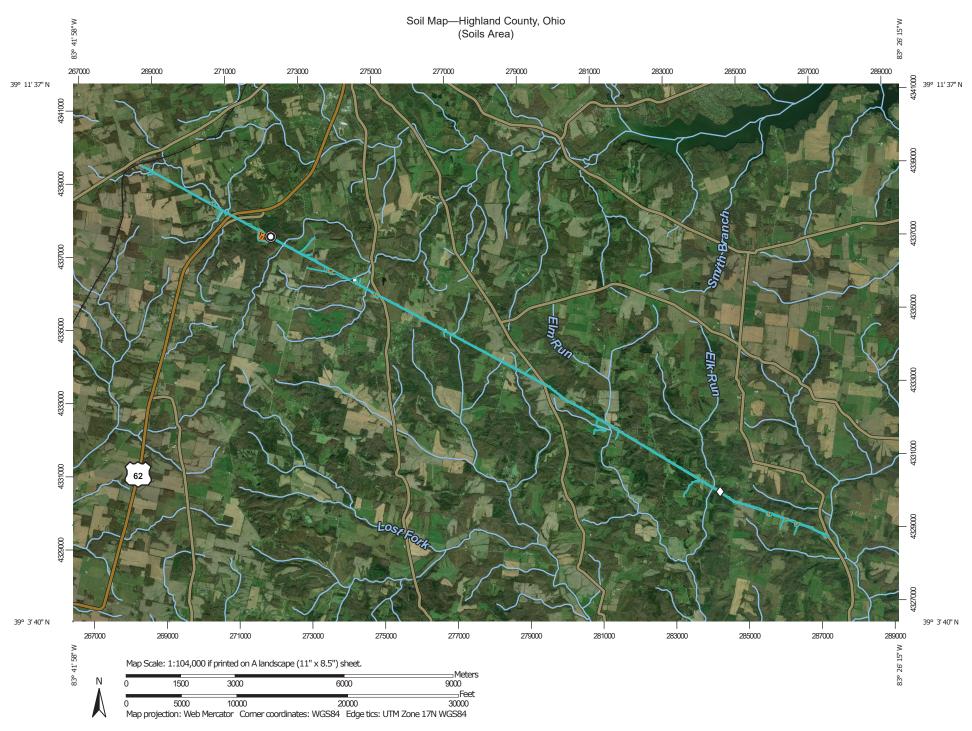
1. ALL STANTINE AREA SHALL BY PROTECTION AS FIR FIRM.

ALL TREADS HAVE ACCORDING TOOLS HAVE OFF DEFINITION OF THE REMOVAL SHALL BE
PRESSINGD AND REPORTED WITH HIS HOT SHATCH FROM A FIRE FLAN
A WHEN PRACTICAL, RISTALL HAVE VARBUITY A FEET DUSING OF THE DRIVE HAVE OF THE REEL.

4. SMITT FIRST. SHOULD BY ARTENING SECURITY TO HET 1-HOSTS.

4. SMITT FIRST. SHOULD BY ARTENING SECURITY TO HET 1-HOSTS.

4. SMITT FIRST. SHOULD BY ARTENING SECURITY TO HET 1-HOSTS.



# MAP LEGEND

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**Water Features** 

Transportation

Background

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Spoil Area

Stony Spot

Wet Spot

Other

Rails

**US Routes** 

Major Roads

Local Roads

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



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

# MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15.800.

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: Highland County, Ohio Survey Area Data: Version 20, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 20, 2012—Mar 4, 2017

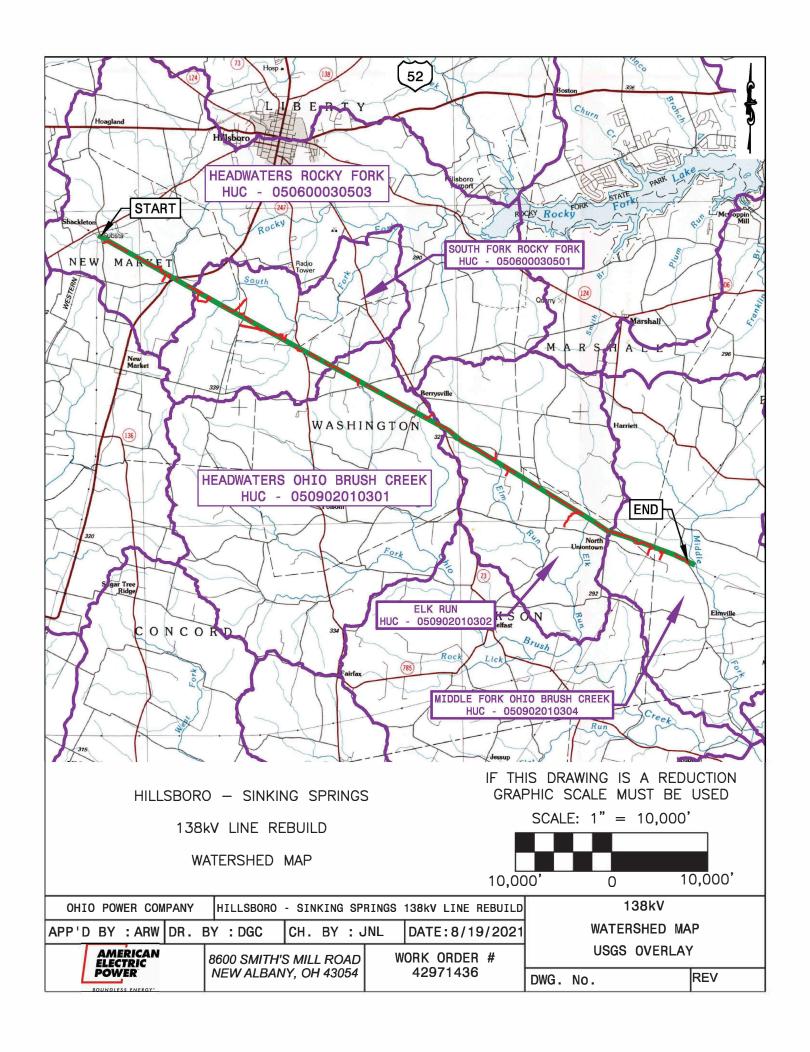
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ag	Algiers silt loam	2.4	1.1%
BeC2	Beasley silt loam, 6 to 12 percent slopes, moderately eroded	0.8	0.3%
BeD2	Beasley silt loam, 12 to 18 percent slopes, moderately eroded	0.0	0.0%
BmC2	Boston-Bratton complex, 6 to 12 percent slopes, moderately eroded	23.2	10.0%
BmC3	Boston-Bratton complex, 6 to 12 percent slopes, severely eroded	1.3	0.6%
BmD2	Boston-Bratton complex, 12 to 18 percent slopes, moderately eroded	12.0	5.2%
BmE2	Boston-Bratton complex, 18 to 25 percent slopes, moderately eroded	0.4	0.2%
BnB	Boston-Grayford silt loams, 2 to 6 percent slopes	1.2	0.5%
BnB2	Boston-Grayford silt loams, 2 to 6 percent slopes, moderately eroded	2.8	1.2%
BpB2	Bratton silt loam, 2 to 6 percent slopes, moderately eroded	3.2	1.4%
BpC2	Bratton silt loam, 6 to 12 percent slopes, moderately eroded	5.2	2.2%
BpD2	Bratton silt loam, 12 to 18 percent slopes, moderately eroded	1.6	0.7%
ChB	Cincinnati silt loam, 2 to 6 percent slopes	3.3	1.4%
ChC2	Cincinnati silt loam, 6 to 12 percent slopes, eroded	0.1	0.0%
DuA	Dubois silt loam, 0 to 2 percent slopes	2.7	1.2%
Ee	Eel silt loam, 0 to 2 percent slopes, occasionally flooded	2.7	1.2%
Gn	Genesee silt loam, 0 to 2 percent slopes, occasionally flooded	4.7	2.0%
HbB	Haubstadt silt loam, 2 to 6 percent slopes	12.1	5.2%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HbC2	Haubstadt silt loam, 6 to 12 percent slopes, moderately eroded	4.5	1.9%
HbD2	Haubstadt silt loam, 12 to 18 percent slopes, moderately eroded	0.5	0.2%
HkC2	Hickory silt loam, 6 to 12 percent slopes, moderately eroded	1.2	0.5%
HkD2	Hickory silt loam, Illinoian Till Plain, 12 to 18 percent slopes, eroded	8.9	3.8%
HkE2	Hickory silt loam, 18 to 25 percent slopes, moderately eroded	5.6	2.4%
HkF2	Hickory silt loam, 25 to 35 percent slopes, moderately eroded	1.3	0.6%
HyD3	Hickory clay loam, 12 to 18 percent slopes, severely eroded	8.7	3.8%
HyE3	Hickory clay loam, 18 to 25 percent slopes, severely eroded	0.7	0.3%
JeD	Jessup silt loam, 12 to 18 percent slopes	0.9	0.4%
JoR1A1	Jonesboro-Rossmoyne silt loams, 0 to 2 percent slopes	0.5	0.2%
JoR1B1	Jonesboro-Rossmoyne silt loams, 2 to 6 percent slopes	26.6	11.4%
JoR1B2	Jonesboro-Rossmoyne silt loams, 2 to 6 percent slopes, eroded	4.1	1.7%
LhB	Lawshe silty clay loam, 2 to 6 percent slopes	2.3	1.0%
LhC2	Lawshe silty clay loam, 6 to 12 percent slopes, moderately eroded	0.8	0.4%
LID3	Lawshe silty clay, 12 to 18 percent slopes, severely eroded	0.7	0.3%
LoC2	Loudon silt loam, 6 to 12 percent slopes, moderately eroded	4.0	1.7%
NdC	Negley loam, 6 to 12 percent slopes	8.7	3.7%
NdD	Negley loam, 12 to 18 percent slopes	1.9	0.8%
NdE	Negley loam, 18 to 25 percent slopes	14.3	6.2%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
NfD3	Negley clay loam, 12 to 18 percent slopes, severely eroded	3.1	1.3%
NnB	Nicholson silt loam, 2 to 6 percent slopes	1.7	0.7%
OpD2	Opequon silt loam, 6 to 18 percent slopes, moderately eroded	1.5	0.6%
OpE2	Opequon silt loam, 18 to 25 percent slopes, moderately eroded	5.8	2.5%
OsF2	Opequon stony silt loam, 18 to 35 percent slopes, moderately eroded	5.4	2.3%
OsG	Opequon stony silt loam, 35 to 50 percent slopes	2.7	1.1%
OtD3	Opequon clay, 6 to 18 percent slopes, severely eroded	0.0	0.0%
OwB	Otwell silt loam, 2 to 6 percent slopes	0.4	0.2%
OwC2	Otwell silt loam, 6 to 12 percent slopes, moderately eroded	2.0	0.9%
OwD2	Otwell silt loam, 12 to 18 percent slopes, moderately eroded	0.4	0.2%
OwE2	Otwell silt loam, 18 to 25 percent slopes, moderately eroded	3.4	1.5%
OwF	Otwell silt loam, 25 to 35 percent slopes	1.7	0.7%
Rn	Ross silt loam, 0 to 2 percent slopes, occasionally flooded	0.4	0.2%
RpC2	Rossmoyne silt loam, 6 to 12 percent slopes, eroded	17.4	7.5%
RpD2	Rossmoyne silt loam, 12 to 18 percent slopes, moderately eroded	0.3	0.1%
SaB	Sardinia silt loam, 2 to 6 percent slopes	0.3	0.1%
Sh	Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	3.0	1.3%
Sn	Sloan silt loam	6.5	2.8%
WsS1B1	Westboro-Schaffer silt loams, 2 to 4 percent slopes	0.1	0.0%
Totals for Area of Interest		232.0	100.0%



### **APPENDIX 3**

SWP3 Inspection Forms and SWP3 Amendments, Grading, and Stabilization Log

## AEP OHIO TRANSMISSION COMPANY, INC. HILLSBORO - SINKING SPRINGS 138kV LINE REBUILD PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWP3) INSPECTION FORM

Date:	Inspector	s Name/Title:			
Inspector's Compa	nny:				
Inspector Qualified	I in accordance with	Part VII.BB of Permit:	Yes 🗆 No (Docu	ment Qualifications in Ap	pendix 3 of SWP3)
nspection Type:   Weekly (once every seven calendar days)					
	$\square$ Storm Event	(0.5 inch or greater) Date:	An	nount: Du	ration:
Rain Event(s) Since	e Last Inspection:				
Date:	Amount:	Duration:	_ Date:	Amount:	Duration:
Date:	Amount:	Duration:	_ Date:	Amount:	Duration:
Did any discharges	s occur during these	e events? $\square$ No $\square$ Yes,	Location:		
Current Weather:	☐ Clear ☐ Cloud	dy 🗆 Fog 🗆 Rain 🗆 Sn	ow □ Sleet □ H	igh Winds   Other:	Temp:
Current Discharge	s: $\square$ No $\square$ Yes,	Location:			
Evidence of Sedim	ent/Pollutants Leav	ring the Site? $\square$ No $\square$ Y	es, Location:		
Has Seeding Take	n Place?   No [	☐ Yes, Location/Seed tag p	photo included:		
Erosion and Sedi	ment Control Feat	ures / BMPs Inspected:			
☐ Silt Fence / Fil	ter Sock (Mark wh	ich one applies)			
Location(s) (Struct	ure # (STR#)):				
Properly anchored	/installed:   Yes	□ No Repa	irs Needed: 🗆 Ye	es 🗆 No	
Sediment Remova	I Required (Sedime	nt one-half height for fence	& one-third height	for sock):	0
Action Required/Ta	aken/Location(s): _				
<ul><li>☐ Orange Barrie</li></ul>	r Fence				
_		STR#):			
Properly anchored	/installed: ☐ Yes	□ No Repa	irs Needed: 🗆 Ye	es 🗆 No	
Action Required/Ta	aken/Location(s): _				
□ Construction I	Entrance				
Location(s) (Refere	ence intersection of	road and nearest STR#): _			
		Evidence of mud tracked			
Action Required/Ta	aken/Location(s): _				
	ge Areas (Includin	g waste containers, fuel a	areas)		
	•	e and shown on the SWP3:	•		
•		led: □ Yes □ No		oills or releases:   Yes	□ No
			•		

□ Concrete Washouts
Location(s) (Access Road / STR#):
Properly installed and located at least 50 feet from wetlands/streams/ditches/storm drains: $\ \square$ Yes $\ \square$ No
Replacement needed (concrete reaches 50 percent of the system):   Yes  No
Action Required/Taken/Location(s):
□ Roadside Ditches
Location(s) (Access Road / STR#):
Properly installed and functioning appropriately: $\ \square$ Yes $\ \square$ No
Riprap still in place: ☐ Yes ☐ No Riprap needs immediate replacement: ☐ Yes ☐ No
Action Required/Taken/Location(s):
□ Culverts
Location(s) (Access Road / STR#):
Properly installed and functioning appropriately: $\ \square$ Yes $\ \square$ No
Debris or sediment within culvert): ☐ Yes ☐ No
Action Required/Taken/Location(s):
□ Water Bars
Location(s) (Access Road / STR#):
Properly installed and functioning appropriately: $\ \square$ Yes $\ \square$ No
Debris or sediment within water bar ☐ Yes ☐ No
Action Required/Taken/Location(s):
□ Inlet/Outlet Protection
Location(s) (Access Road / STR#):
Properly installed and functioning appropriately: $\ \square$ Yes $\ \square$ No
Debris or sediment within inlet or outlet protection ☐ Yes ☐ No
Action Required/Taken/Location(s):
Comments / Additional Control Measures Recommended:
If BMP modifications are made, you must update the SWP3 drawings and document changes on the SWP3 amendment log.
Inspector's Signature: Date:

## AEP OHIO TRANSMISSION COMPANY, INC. HILLSBORO - SINKING SPRINGS 138kV LINE REBUILD PROJECT

## STORM WATER POLLUTION PREVENTION PLAN AMENDMENTS, GRADING, AND STABILIZATION LOG

Date:	Inspector's Name/Title:
	ading and Stabilization Activities
Amendments to SWP3:	
Date:	Inspector's Name/Title:
Location and Description of Grant	ading and Stabilization Activities
Amendments to SWP3:	
Date:	Inspector's Name/Title:
Location and Description of Gra	ading and Stabilization Activities
Amendments to SWP3:	

## AEP OHIO TRANSMISSION COMPANY, INC. HILLSBORO - SINKING SPRINGS 138kV LINE REBUILD PROJECT SUMMARY SWP3 INSPECTION RECORDS – FOR TCRs

## I have completed a review of the SWP3 inspections completed on the project for the period of \_\_\_\_\_\_ to The following major observations were made relating to the implementation of the SWP3 and review of the inspection log. **Inspector Qualifications:** ☐ The inspections were performed by "qualified inspection personnel" knowledgeable in the principles of erosion and sediment control and skilled in assessing the effectiveness of control measures. ☐ The inspections were NOT performed by "qualified inspection personnel" knowledgeable in the principles of erosion and sediment control and skilled in assessing the effectiveness of control measures. ☐ Corrective Measures were taken on \_\_\_\_\_\_\_ to provide "qualified inspection personnel" at the site. **Permit Compliance Observations:** ☐ The project was in compliance with the SWP3 and permit during the review period. ☐ The project was NOT in compliance with the SWP3 and permit during the review period as noted below: ☐ Non-compliance issues included: ☐ Corrective Measures were taken on \_\_\_\_\_\_ to correct the above non-compliance issues. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Name: Title: Signature: Date: \_\_\_\_\_

### **APPENDIX 4**

Duty to Inform Contractors and Subcontractors Signature Form

## AEP OHIO TRANSMISSION COMPANY, INC. HILLSBORO - SINKING SPRINGS 138kV LINE REBUILD PROJECT

#### DUTY TO INFORM CONTRACTORS AND SUBCONTRACTORS SIGNATURE FORM

By signing below, I acknowledge that I have been informed of the terms and conditions of the Ohio Environmental Protection Agency's General NPDES Permit for Storm Water Associated with Construction Activity, and have reviewed and understand the conditions and responsibilities of the Storm Water Pollution Prevention Plan for the AEP Ohio Transmission Company, Inc. Hillsboro - Sinking Springs 138kV Line Rebuild Project. I understand that Inspectors shall meet the qualifications outlined in Part VII.BB. of Ohio EPA Permit No.: OHC000005.

Printed Name	Company	Signature	Date



Mike DeWine, Governor Jon Husted, Lt. Governor Laurie A. Stevenson, Director

Sep 08, 2021

AEP Ohio Transmission Company, Inc. Aimee Toole 8600 Smith's Mill Road New Albany, OH 43054

Re: Approval Under Ohio EPA National Pollutant Discharge Elimination System (NPDES) - Construction Site Stormwater General Permit - OHC000005

Dear Applicant,

Your NPDES Notice of Intent (NOI) application is approved for the following facility/site. Please use your Ohio EPA Facility Permit Number in all future correspondence.

Facility Name: Sinking Springs-South Lucasville 138kV Line

Facility Location: North Elmville Road

City:HillsboroCounty:HighlandTownship:Brush CreekOhio EPA Facility Permit Number:1GC08325\*AGPermit Effective Date:Sep 08, 2021

Please read and review the permit carefully. The permit contains requirements and prohibitions with which you must comply. Coverage under this permit will remain in effect until a renewal of the permit is issued by the Ohio EPA.

If more than one operator (defined in the permit) will be engaged at the site, each operator shall seek coverage under the general permit. Additional operator(s) shall submit a Co-Permittee NOI to be covered under this permit. There is no fee associated with the Co-Permittee NOI form.

Please be aware that this letter only authorizes discharges in accordance with the above referenced NPDES CGP. The placement to fill into regulated waters of the state may require a 401 Water Quality Certification and/or Isolated Wetlands Permit from Ohio EPA. Also, a Permit-To-Install (PTI) is required for the construction of sanitary or industrial wastewater collection, conveyance, storage, treatment, or disposal facility; unless a specific exemption by rule exists. Failure to obtain the required permits in advance is a violation of Ohio Revised Code 6111 and potentially subjects you to enforcement and civil penalties.

To view your electronic submissions and permits please Logon in to the Ohio EPA's eBusiness Center at http://ebiz.epa.ohio.gov.

If you need assistance or have questions please call (614) 644-2001 and ask for Construction Site Stormwater General Permit support or visit our website at http://www.epa.ohio.gov.

Sincerely, Laurie a Levenson

Laurie A. Stevenson

Director



I. Applicant Information/Mailing Address

#### Division of Surface Water - Notice of Intent (NOI) For Coverage Under Ohio Environmental Protection Agency General NPDES Permit

(Read accompanying instructions carefully before completing this form.)

Submission of this NOI constitutes notice that the party identified in Section I of this form intends to be authorized to discharge into state surface waters under Ohio EPA's NPDES general permit program. Becoming a permittee obligates a discharger to comply with the terms and conditions of the permit. Complete all required information as indicated by the instructions. Do not use correction fluid on this form. Forms transmitted by fax will not be accepted. A check for the proper amount must accompany this form and be made payable to "Treasurer, State of Ohio." (See the fee table in Attachment C of the NOI instructions for the appropriate processing fee.)

Mailing (Applicant) Address: 8600 Smith's Mill Road							
City: New Albany State : O			OH	OH <b>Zip</b>		Code: 43054	
Country: USA							
Contact Person: Aimee Toole	: (614) 309-9582	2	Fax	:			
Contact E-mail Address: arto	•						
II. Facility/Site Location Info							
Facility/Site Name: Sinking Sp	rings-South Luc	asville 138kV Line					
Facility Address: North Elmville Road							
City: Hillsboro		State: OH		Zip	Code:	45133	
County: Pike				Township: N	∕lifflin		
County: Highland				Township: E	Brush C	reek	
County: Pike				Township: S	Sunfish		
County: Pike				Township: (	Camp C	reek	
County: Adams				Township: F	ranklin		
County: Scioto				Township: F	Rarden		
County: Scioto				Township: N	Morgan		
County: Scioto				Township: Rush			
County: Scioto		<u> </u>		Township: Valley			
Facility Contact Person: Tyru	s Walke	Phone: (614) 569-925	51	Fax:			
Facility Contact E-mail Addr	ess: twalke@a	ep.com					
<b>Latitude:</b> 39.081319		Longitude: -83.457839	9	Facility/Map Attachment SiteMap_Sink Springs-South Lucasville 138kV Line 20210830.pdf			
Receiving Stream or MS4: Middl Fork, Bull Run, Rarden Creek, Ca Scioto River, Candy Run			•	ooked Creek, B	ettys Cr	eek, Scioto Brush	
III. General Permit Information			1				
General Permit Number: OHC0		Company Domesit		Initial Coverage: Y Renewal Coverage: N			
Type of Activity: Construction Site Stormwater General Permit				SIC Code(s):			
Evicting NDDES Excility Pormi	If Household Sewage Treatment System, is system for:		ODIVIC COAL	ODNR Coal Mining Application Number:  New Home Construction: Replacement of failed of system:			
Existing NPDES Facility Permi If Household Sewage Treatmen	nt System, is sy	stem for:	New Home C	Construction:			failed existing
		rstem for: I Permit Effluent Table				Replacement of system:  Latitude	Longitude
If Household Sewage Treatmer  Outfall Design Flow						system:	
If Household Sewage Treatmer  Outfall Design Flow						system:	
If Household Sewage Treatmer  Outfall Design Flow			Receiving Wa		tv Certii	system: Latitude	

Proposed Project Start Date(if applicable): October 04, 2021		Estimated Completion Date(if applicable): March 31, 2026		
Total Land Disturbance (Acres): 225	MS4	Drainage Area (Sq. Miles):		
SWP3 Attachment(s): <none></none>				
IV. Payment Information				
Check #:		For Ohio EPA Use Only		
Check Amount:	Check ID(OFA):_	ORG #:		
Date of Check:	Rev ID:	DOC #:		
I certify under penalty of law that this document and all attachments were p qualified personnel properly gather and evaluate the information submitted responsible for gathering the information, the information submitted is, to the significant penalties for submitting false information, including the possibility	. Based on my inqu ne best of my knowl			
Applicant Name: Aimee Toole		<b>Title:</b> Transmission Project Environmental Support Manager		
Signature:		Date:		
Flectronically submitted by p000106		Electronically submitted on 08/31/2021		

# SINKING SPRINGS – SOUTH LUCASVILLE 138kV LINE REBUILD PROJECT

HIGHLAND, PIKE, ADAMS & SCIOTO COUNTY LAT/LONG: N39° 04' 52.75" W83° 27' 28.22"

# STORM WATER POLLUTION PREVENTION PLAN (SWP3)



#### Prepared for:

AEP Ohio Transmission Company, Inc. 8600 Smith's Mill Road New Albany, OH 43054

#### Prepared by:

Earth Environmental and Civil, Inc. 235 Claiborne Ave. Rocky Mount, VA 24151

Site Contact: Tyrus Walke Phone: 614-569-9251 E-mail: twalke@aep.com

8/24/2021

Project Start Date: OCTOBER 2021
Project End Date: MARCH 2026

## SINKING SPRINGS – SOUTH LUCASVILLE 138kV LINE REBUILD PROJECT

#### CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name:	Aimee Toole
T:41	M D : 15 : 10
ı itie:	Mngr-Project Environmental Support
Signature:	Node
Date:	8/31/2021

#### **TABLE OF CONTENTS**

I.	Sit	e D	escription	1
	H. I. J. K. L.	Dissipation Dissipation Dissipation Store Exister On 1. 2. Implication Declaration Declaration Store Store Dissipation Dissipa	scription of Construction Activity turbed Area pervious Area rm Water Calculations sting Soil Data program Streams and Receiving Streams and Surface Waters On-Site Waterbodies Receiving Waters Receiving Waters Defementation Schedule Dedivided Development Drawing dicated Asphalt and Concrete Plant Discharges g of Grading and Stabilization Activities This program is a	.1 .1 .2 .6 .6 .11 11 12 12
II.	Sto	orm	Water Pollution Prevention Plan1	12
	A. B. C. D.	SW Am Du Coo 1. 2. 3. 4.	/P3 Availability	12 13 13 13 14 14 15 15 15 16 16 16
			ved State or Local Plans1	
IV.	Ex	сер	tions1	17

APPENDIX 1 – Ohio EPA General Permit No. OHC000005

APPENDIX 2 – Project Location Map, Soil Erosion and Sediment Control Plan, USDA Soils Map, Watershed (HUC-12) Map, and ODNR Rainwater and Land Development Manual Details

APPENDIX 3 – SWP3 Inspection Form and SWP3 Amendments, Grading, and Stabilization Log

**APPENDIX 4 –** Duty to Inform Contractors and Subcontractors Signature Form

#### I. Site Description

#### A. Description of Construction Activity

The Sinking Springs – South Lucasville 138kv Line Rebuild Project involves the demolition and rebuild of existing parallel transmission lines between the existing Sinking Springs Switch and South Lucasville Station. The 502-acre Project is located in Brush Creek Township within Highland County; Mifflin, Sunfish, and Camp Creek Townships within Pike County; Franklin Township within Adams County; and Rarden, Morgan, Rush and Valley Townships within Scioto County, Ohio. Construction of the Project will involve the rebuild of several lattice towers, H-frame, and monopole structures over approximately 30 miles of transmission line. There are two existing transmission lines along this current route and one line is being rebuilt and the other is being removed. Approximately 29.40 miles of proposed temporary access roads will also be established to facilitate construction activities. The total Project area is estimated at 502 acres and the maximum area of disturbed soil is approximately 223.7 acres.

#### B. Disturbed Area

Total Area of the Site - 502 acres

Total Disturbed Area - 223.7 acres

Table 1: Disturbed Area

County	Township/Village/City	Disturbance Acreage
Highland	Brush Creek Township	29.45
	Mifflin Township	1.47
Pike	Sunfish Township	0.74
	Camp Creek Township	38.45
Adams	Franklin Township	48.45
	Rarden Township	12.24
Scioto	Morgan Township	65.22
Sciolo	Rush Township	19.02
	Valley Township	8.66

#### C. Impervious Area

The proposed project is a linear project that will rebuild two existing transmission lines as a single line with the same number or fewer structures. Therefore, there will be no increase in impervious surface as a result of the proposed project.

#### D. Storm Water Calculations

Because this is a linear Project with temporary access roads and work pads, there will be no post-construction increase in runoff. The pre-construction and post-construction runoff coefficient is approximately 0.10

#### E. Existing Soil Data

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey was used to determine soil types within the Project area. A copy of the web-based soil map is included in Appendix 2. Soils in the Project area are shown in Table 2.

Table 2: Soil Types

Map Unit Symbol	Map Unit Description	Drainage Class	Hydric Soil?
BkD	Berks silt loam, 15 to 25percent slopes	Well drained	No
BrC2	Bratton-Opequon complex, 8 to 15 percent slopes, eroded	Well drained	No
Ge	Gessie loam, frequentlyflooded	Well drained	No
LbC	Latham silt loam, 8 to 15percent slopes	Moderately well drained	No
LbD2	Latham silt loam, 15 to 25percent slopes, eroded	Moderately well drained	No
No	Nolin silt loam, 0 to 3 percent slopes, occasionally flooded	Well drained	Yes
OmB	Omulga silt loam, 1 to 6percent slopes	Moderately well drained	No
OpD2	Opequon silty clay loam, 15 to25 percent slopes, eroded	Well drained	No
OwB	Otwell silt loam, 1 to 6 percentslopes	Moderately well drained	No
ShE	Shelocta-Berks association,steep	Well drained	No
ShF	Shelocta-Berks association, very steep	Well drained	No
SkF	Shelocta-Brownsville association, very steep	Well drained	No
SmD	Shelocta-Muse association,hilly	Well drained	No
SoE	Shelocta-Muse-Colyerassociation, steep	Well drained	No
Sp	Skidmore gravelly loam,occasionally flooded	Well drained	Yes
TkA	Tilsit silt loam, 0 to 3 percentslopes	Moderately well drained	No
TrC	Trappist silt loam, 8 to 15percent slopes	Well drained	No
TsF	Trappist-Shelocta association,steep	Well drained	No
WgC	Wernock silt loam, 8 to 15percent slopes	Well drained	No
Ag	Algiers silt loam	Somewhat poorlydrained	Yes
BeD2	Beasley silt loam, 12 to 18 percent slopes, moderatelyeroded	Well drained	No
BgF	Berks-Muskingum channery silt loams, 18 to 35 percentslopes	Well drained	No
BhD	Berks-Muskingum-Neotoma channery silt loams, 6 to 18percent slopes	Well drained	No
BhF	Berks-Muskingum-Neotoma channery silt loams, 18 to 35percent slopes	Well drained	No
BhG	Berks-Muskingum-Neotoma channery silt loams, 35 to 50percent slopes	Well drained	No
ВрВ	Bratton silt loam, 2 to 6 percentslopes	Well drained	No
BpB2	Bratton silt loam, 2 to 6 percentslopes, moderately eroded	Well drained	No
BpC2	Bratton silt loam, 6 to 12 percent slopes, moderatelyeroded	Well drained	No
BpD2	Bratton silt loam, 12 to 18 percent slopes, moderatelyeroded	Well drained	No
CoF	Colyer-Trappist complex, 18 to35 percent slopes	Well drained	No

CoG	Colyer-Trappist complex, 35 to50 percent slopes	Well drained	No
GaD2	Gasconade silty clay loam, 12to 18 percent slopes, moderately eroded	Somewhat excessively drained	No
GbG	Gasconade flaggy silty clayloam, 35 to 50 percent slopes	Somewhat excessively drained	No
Gn	Genesee silt loam, 0 to 2 percent slopes, occasionallyflooded	Well drained	Yes
HbB	Haubstadt silt loam, 2 to 6percent slopes	Moderately well drained	No
LhB	Lawshe silty clay loam, 2 to 6percent slopes	Moderately well drained	No
LhD2	Lawshe silty clay loam, 12 to18 percent slopes, moderately eroded	Moderately well drained	No
NnB	Nicholson silt loam, 2 to 6percent slopes	Moderately well drained	No
NnB2	Nicholson silt loam, 2 to 6percent slopes, eroded	Moderately well drained	No
NnC2	Nicholson silt loam, 6 to 12percent slopes, eroded	Moderately well drained	No
No	Nolin silt loam, 0 to 3 percent slopes, occasionally flooded	Well drained	Yes
OpD2	Opequon silt loam, 6 to 18 percent slopes, moderatelyeroded	Well drained	No
OpE2	Opequon silt loam, 18 to 25 percent slopes, moderatelyeroded	Well drained	No
OsF2	Opequon stony silt loam, 18 to35 percent slopes, moderately eroded	Well drained	No
OsG	Opequon stony silt loam, 35 to50 percent slopes	Well drained	No
OtD3	Opequon clay, 6 to 18 percentslopes, severely eroded	Well drained	No
SeF	Shelocta-Berks association,very steep	Well drained	No
Sh	Shoals silt loam, 0 to 2 percentslopes, frequently flooded, brief duration	Somewhat poorlydrained	Yes
TrE	Trappist silt loam, 18 to 25percent slopes	Well drained	No
TsC2	Trappist-Muse silt loams, 6 to 12 percent slopes, moderately eroded	Well drained	No
TsD2	Trappist-Muse silt loams, 12 to18 percent slopes, moderately eroded	Well drained	No
TuD	Tuscarawas channery silt loam, 6 to 18 percent slopes	Moderately well drained	No
TwE	Trappist-Shelocta association,steep	Well drained	No
WID	Wellston silt loam, 12 to 18percent slopes	Well drained	No
Cf	Clifty silt loam, occasionallyflooded	Well drained	No
СоВ	Coolville silt loam, 1 to 8percent slopes	Moderately well drained	No
CoC	Coolville silt loam, 8 to 15percent slopes	Moderately well drained	No
СрС	Coolville-Blairton association,rolling	Moderately well drained	No
CtC	Coolville-Rarden silt loams, 8to 15 percent slopes	Moderately well drained	No
GpC	Gilpin silt loam, 8 to 15 percentslopes	Well drained	No
GpD	Gilpin silt loam, 15 to 25percent slopes	Well drained	No
Lah1C1	Latham silt loam, 8 to 15percent slopes	Moderately well drained	No

LhW1D1	Latham-Wharton silt loams, 15to 25 percent slopes	Moderately well drained	No
RdC	Rarden silt loam, 8 to 15percent slopes	Moderately well drained	No
SnF	Shelocta-Brownsvilleassociation, steep	Well drained	No
SpF	Shelocta-Latham association, steep	Well drained	No
TkA	Tilsit silt loam, 0 to 3 percentslopes	Moderately well drained	No
TsF	Trappist-Shelocta association,steep	Well drained	No
WeB	Wernock Variant silt loam, 3 to8 percent slopes	Moderately well drained	No
AfD	Alford silt loam, 10 to 25percent slopes	Well drained	No
BeC	Berks channery silt loam, 8 to15 percent slopes	Well drained	No
СоВ	Coolville silt loam, 1 to 8percent slopes	Moderately well drained	No
СрС	Coolville-Rarden silt loams, 8 to 15 percent slopes	Moderately well drained	No
EkE	Elkinsville silt loam, 25to 40 percent slopes	Well drained	No
FcA	Fitchville silt loam, 0 to 3percent slopes	Somewhat poorlydrained	Yes
Ge	Genesee silt loam, occasionally flooded	Well drained	No
Hu	Huntington silt loam, occasionally flooded	Well drained	No
La	Landes fine sandy loam,occasionally flooded	Well drained	No
Lah1C1	Latham silt loam, 8 to 15percent slopes	Moderately well drained	No
Lah1D1	Latham silt loam, 15 to25 percent slopes	Moderately well drained	No
LBSZE1	Latham-Brownsville- Shelocta association,steep	Well drained	No
LhW1D1	Latham-Wharton siltloams, 15 to 25 percent slopes	Moderately well drained	No
MoC2	Monongahela silt loam, 8 to 15percent slopes, eroded	Moderately well drained	No
No	Nolin silt loam, 0 to 3 percent slopes, occasionally flooded	Moderately well drained	Yes
OcB	Ockley loam, 1 to 8 percentslopes	Well drained	No
Omu1B1	Omulga silt loam, 2 to 6percent slopes	Well drained	No
Omu1C1	Omulga silt loam, 6 to 12percent slopes	Moderately well drained	No
Pe	Peoga silt loam, rarely flooded	Moderately well drained	Yes
Ro	Rossburg silty clay loam,occasionally flooded	Well drained	No
SbB	Shelocta silt loam, 3 to 8percent slopes	Well drained	No
ScE	Shelocta-Brownsvilleassociation, steep	Well drained	No
ScF	Shelocta-Brownsville association, very steep	Well drained	No
Sk	Skidmore silt loam, occasionally flooded	Well drained	No
SWLZE1	Shelocta-Wharton-Lathamassociation, steep	Well drained	No
ТсВ	Tilsit-Coolville association,undulating	Moderately well drained	No
W	Water		No

#### F. Prior Land Uses

The Project corridor contains the existing Sinking Springs – South Lucasville 138kV transmission line right-of-way (ROW) which consists of residential communities, agricultural lands, and areas of undeveloped woody vegetation.

#### G. On-site Streams and Receiving Streams and Surface Waters

#### 1. On-Site Waterbodies

**Table 3: Delineated Streams** 

Stream ID	Stream Name	Flow Regime	Ohio EPA 401 Permitting Eligibility	Stream Stability
Stream HM-056	Middle Fork Ohio Brush Creek	Perennial	Possibly Eligible	Stable
Stream HM-057	UNT Middle Fork Ohio Brush Creek	Intermittent	Possibly Eligible	Unstable
Stream HM-058	UNT Middle Fork Ohio Brush Creek	Perennial	Possibly Eligible	Stable
Stream HM-059	UNT Middle Fork Ohio Brush Creek	Ephemeral	Possibly Eligible	Unstable
Stream HM-060	UNT Middle Fork Ohio Brush Creek	Ephemeral	Possibly Eligible	Unstable
Stream HM-061	UNT Middle Fork Ohio Brush Creek	Ephemeral	Possibly Eligible	Unstable
Stream HM-062	UNT Baker Fork	Intermittent	Ineligible	Unstable
Stream HM-063	UNT Baker Fork	Intermittent	Ineligible	Unstable
Stream HM-064	UNT Baker Fork	Ephemeral	Ineligible	Unstable
Stream HM-065	UNT Baker Fork	Intermittent	Ineligible	Stable
Stream HM-066	UNT Baker Fork	Intermittent	Ineligible	Stable
Stream HM-067	UNT Baker Fork	Ephemeral	Ineligible	Moderately Stable
Stream HM-068	UNT Baker Fork	Intermittent	Ineligible	Moderately Stable
Stream HM-069	UNT Baker Fork	Intermittent	Ineligible	Moderately Stable
Stream HM-070	UNT Baker Fork	Intermittent	Ineligible	Moderately Stable
Stream HM-071	UNT Baker Fork	Ephemeral	Ineligible	Stable
Stream HM-072	Baker Fork	Perennial	Ineligible	Stable
Stream HM-073	Straight Creek	Perennial	Ineligible	Moderately Stable
Stream HM-074	UNT Straight Creek	Intermittent	Ineligible	Unstable
Stream HM-075	UNT Straight Creek	Ephemeral	Ineligible	Unstable
Stream HM-076	UNT Straight Creek	Intermittent	Ineligible	Unstable
Stream HM-077	UNT Straight Creek	Ephemeral	Ineligible	Unstable
Stream HM-078	UNT Crooked Creek	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-079	UNT Crooked Creek	Intermittent	Possibly Eligible	Moderately Stable
Stream HM-080	UNT Crooked Creek	Intermittent	Possibly Eligible	Moderately Unstable
Stream HM-081	UNT Crooked Creek	Ephemeral	Possibly Eligible	Moderately Stable

Stream HM-082	UNT Crooked Creek	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-083	UNT Bettys Creek	Intermittent	Possibly Eligible	Moderately Stable
Stream HM-084	UNT Bettys Creek	Ephemeral	Possibly Eligible	Unstable
Stream HM-086	UNT Bettys Creek	Ephemeral	Possibly Eligible	Unstable
Stream HM-087	Bettys Creek	Perennial	Possibly Eligible	Moderately Unstable
Stream HM-088	UNT Bettys Creek	Intermittent	Possibly Eligible	Stable
Stream HM-089	UNT Bettys Creek	Ephemeral	Possibly Eligible	Moderately Stable
Stream HM-090	UNT Scioto Brush Creek	Ephemeral	Ineligible	Moderately Stable
Stream HM-091	UNT Scioto Brush Creek	Ephemeral	Ineligible	Moderately Unstable
Stream HM-092	Scioto Brush Creek	Intermittent	Ineligible	Stable
Stream HM-093	UNT Scioto Brush Creek	Intermittent	Ineligible	Stable
Stream HM-094	UNT Scioto Brush Creek	Ephemeral	Ineligible	Stable
Stream HM-095	UNT Scioto Brush Creek	Intermittent	Ineligible	Stable
Stream HM-096	UNT Scioto Brush Creek	Intermittent	Ineligible	Stable
Stream HM-097	UNT Scioto Brush Creek	Intermittent	Ineligible	Moderately Stable
Stream HM-098	UNT Scioto Brush Creek	Ephemeral	Ineligible	Unstable
Stream HM-099	UNT Straight Fork	Ephemeral	Possibly Eligible	Moderately Stable
Stream HM-100	Straight Fork	Intermittent	Possibly Eligible	Stable
Stream HM-101	UNT Straight Fork	Ephemeral	Possibly Eligible	Unstable
Stream HM-102	UNT Straight Fork	Ephemeral	Possibly Eligible	Unstable
Stream HM-103	UNT Straight Fork	Intermittent	Possibly Eligible	Moderately Stable
Stream HM-104	UNT Straight Fork	Ephemeral	Possibly Eligible	Unstable
Stream HM-105	UNT Straight Fork	Ephemeral	Possibly Eligible	Stable
Stream HM-106	UNT Straight Fork	Intermittent	Possibly Eligible	Stable
Stream HM-107	UNT Straight Fork	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-108	UNT Straight Fork	Ephemeral	Possibly Eligible	Unstable
Stream HM-109	Bull Run	Intermittent	Possibly Eligible	Stable
Stream HM-110	UNT Bull Run	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-111	UNT Rarden Creek	Ephemeral	Possibly Eligible	Stable
Stream HM-112	UNT Rarden Creek	Ephemeral	Possibly Eligible	Stable
Stream HM-113	UNT Rarden Creek	Ephemeral	Possibly Eligible	Moderately Stable
Stream HM-114	UNT Rarden Creek	Intermittent	Possibly Eligible	Stable
Stream HM-115	UNT Rarden Creek	Intermittent	Possibly Eligible	Stable
Stream HM-116	UNT Camp Creek	Intermittent	Eligible	Moderately Stable
Stream HM-117	Camp Creek	Intermittent	Eligible	Stable
Stream HM-118	UNT Camp Creek	Intermittent	Eligible	Stable
Stream HM-119	UNT Camp Creek	Intermittent	Eligible	Stable

Stream HM-120	UNT Camp Creek	Intermittent	Eligible	Stable
Stream HM-121	UNT Camp Creek	Ephemeral	Eligible	Moderately Unstable
Stream HM-122	UNT Left Fork Camp Creek	Intermittent	Eligible	Stable
Stream HM-123	UNT Left Fork Camp Creek	Intermittent	Eligible	Stable
Stream HM-124a	UNT Left Fork Camp Creek	Ephemeral	Eligible	Stable
Stream HM-124b	UNT Left Fork Camp Creek	Ephemeral	Eligible	Stable
Stream HM-125	UNT Left Fork Camp Creek	Ephemeral	Eligible	Moderately Stable
Stream HM-126	UNT Left Fork Camp Creek	Intermittent	Eligible	Moderately Stable
Stream HM-127	Drake Run	Intermittent	Eligible	Stable
Stream HM-128	Left Fork Camp Creek	Perennial	Eligible	Stable
Stream HM-129	Rock Run	Intermittent	Eligible	Stable
Stream HM-131	Rocky Fork	Intermittent	Eligible	Stable
Stream HM-132	Bear Creek	Intermittent	Possibly Eligible	Stable
Stream HM-133	UNT Bear Creek	Ephemeral	Possibly Eligible	Stable
Stream HM-134	UNT Bear Creek	Intermittent	Possibly Eligible	Stable
Stream HM-135	UNT Bear Creek	Intermittent	Possibly Eligible	Moderately Stable
Stream HM-136	UNT Bear Creek	Ephemeral	Possibly Eligible	Stable
Stream HM-137	UNT Bear Creek	Ephemeral	Possibly Eligible	Moderately Stable
Stream HM-138	UNT Bear Creek	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-139	UNT Bear Creek	Ephemeral	Possibly Eligible	Unstable
Stream HM-140	UNT Bear Creek	Intermittent	Possibly Eligible	Stable
Stream HM-141	UNT Bear Creek	Intermittent	Possibly Eligible	Stable
Stream HM-142	UNT Bear Creek	Intermittent	Possibly Eligible	Moderately Stable
Stream HM-143	UNT Bear Creek	Intermittent	Possibly Eligible	Unknown
Stream HM-144	UNT Big Run	Ephemeral	Possibly Eligible	Moderately Stable
Stream HM-145	UNT Big Run	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-146	UNT Big Run	Ephemeral	Possibly Eligible	Unstable
Stream HM-147	UNT Big Run	Ephemeral	Possibly Eligible	Unstable
Stream HM-148	UNT Big Run	Ephemeral	Possibly Eligible	Unstable
Stream HM-149	UNT Big Run	Ephemeral	Possibly Eligible	Unstable
Stream HM-150	Big Run	Perennial	Possibly Eligible	Stable
Stream HM-151	UNT Big Run	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-152	UNT Big Run	Intermittent	Possibly Eligible	Moderately Stable
Stream HM-153	UNT Big Run	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-154	UNT Big Run	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-155	UNT Big Run	Intermittent	Possibly Eligible	Stable
Stream HM-156	UNT Slate Run	Ephemeral	Possibly Eligible	Moderately Stable
Stream HM-157	UNT Slate Run	Ephemeral	Possibly Eligible	Unstable

Stream HM-158	UNT Slate Run	Ephemeral	Possibly Eligible	Unstable
Stream HM-159	Slate Run	Intermittent	Possibly Eligible	Stable
Stream HM-160	UNT Slate Run	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-161	UNT Slate Run	Intermittent	Possibly Eligible	Moderately Stable
Stream HM-162	UNT Slate Run	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-163	UNT Slate Run	Intermittent	Possibly Eligible	Stable
Stream HM-164	UNT Devers Run	Ephemeral	Possibly Eligible	Unstable
Stream HM-165	UNT Devers Run	Ephemeral	Possibly Eligible	Moderately Unstable
Stream HM-166	UNT Devers Run	Intermittent	Possibly Eligible	Moderately Stable
Stream HM-167	Devers Run	Intermittent	Possibly Eligible	Moderately Stable
Stream HM-170	Scioto River	Perennial	Ineligible	Moderately Stable
Stream HM-171	UNT Candy Run	Ephemeral	Possibly Eligible	Unstable
Stream HM-171B	UNT Candy Run	Intermittent	Possibly Eligible	Unstable
Stream HM-172	UNT Candy Run	Ephemeral	Possibly Eligible	Unstable
Stream HM-224	UNT Middle Fork Ohio Brush Creek	Ephemeral	Possibly Eligible	Unstable
Stream HM-226	UNT Straight Creek	Intermittent	Ineligible	Moderately Unstable
Stream HM-227	UNT Left Fork Camp Creek	Ephemeral	Eligible	Stable
Stream HM-230	UNT Bear Creek	Perennial	Possibly Eligible	Stable
Stream HM-231	UNT Bear Creek	Ephemeral	Possibly Eligible	Unstable
Stream HM-232	Bear Creek	Perennial	Possibly Eligible	Moderately Stable
Stream HM-233	UNT Bear Creek	Intermittent	Possibly Eligible	Moderately Unstable
Stream HM-234	UNT Bear Creek	Intermittent	Possibly Eligible	Unstable
Stream HM-235	UNT Bear Creek	Intermittent	Possibly Eligible	Stable
Stream HM-236	UNT Bear Creek	Ephemeral	Possibly Eligible	Stable
Stream HM-237	UNT Bear Creek	Ephemeral	Possibly Eligible	Unstable
Stream HM-238	UNT Bear Creek	Intermittent	Possibly Eligible	Stable
Stream HM-243	UNT Devers Run	Ephemeral	Possibly Eligible	Moderately Stable
Stream HM-244	UNT Devers Run	Ephemeral	Possibly Eligible	Moderately Unstable

**Table 4: Delineated Wetlands and Ponds** 

Wetland ID	Cowardin Classification	ORAM Category
Wetland HM-024	PEM	1
Wetland HM-025	PEM	1
Wetland HM-026	PEM	1
Wetland HM-027	PEM	1
Wetland HM-028	PEM	Modified 2
Wetland HM-029	PEM	1
Wetland HM-030	PSS	1
Wetland HM-031	PEM	1
Wetland HM-032	PEM	1

Wetland HM-033	PEM	1
Wetland HM-034	PEM	Modified 2
Wetland HM-035	PEM	2
Wetland HM-036	PEM	1
Wetland HM-037	PSS	Modified 2
Wetland HM-038	PEM	1
Wetland HM-039	PEM	2
Wetland HM-040	PSS	2
Wetland HM-041	PEM	1
Wetland HM-042	PEM	1
Wetland HM-043	PEM	2
Wetland HM-044	PEM	1
Wetland HM-045	PEM	Modified 2
Wetland HM-046	PEM	2
Wetland HM-047	PEM	1
Wetland HM-048	PEM	2
Wetland HM-049	PEM	1
Wetland HM-050	PEM	1
Wetland HM-051	PEM	1
Wetland HM-052	PEM	1
Wetland HM-053	PEM	2
Wetland HM-054	PEM	1
Wetland HM-055	PEM	1
Wetland HM-056	PEM	1
Wetland HM-057	PEM	1
Wetland HM-058	PEM	1
Wetland HM-059	PEM	1
Wetland HM-060	PEM	1
Wetland HM-061	PEM	1
Wetland HM-062	PEM	1
Wetland HM-063	PSS	1
Wetland HM-073	PEM	2
Wetland HM-076	PEM	1
Wetland HM-077	PEM	1
Wetland HM-078	PEM	1
Wetland HM-080	PEM	1
Wetland HM-081	PEM	1
Wetland HM-082E	PEM	1
Wetland HM-082F	PFO	1
Wetland HM-083	PEM	1

#### 2. Receiving Waters

The Project is located in the Middle Fork Ohio Brush Creek (HUC-12: 050902010304), Baker Fork (HUC-12: 050902010303), Little East Fork – Ohio Brush Creek (HUC-12: 050902010501), Headwaters Scioto Brush Creek (HUC-12: 050600021501), Rarden Creek (HUC-12: 050600021502), Chenoweth Fork (HUC-12: 050600021205), Camp Creek (HUC-12: 050600021601), Big Run – Scioto River (HUC-12: 050600021602), and Bear Creek – Scioto River (HUC-12: 050600021603) watersheds which ultimately drain to the Ohio River. The receiving streams may include Middle Fork Ohio Brush Creek, Baker Fork, Straight Creek, Crooked Creek, Bettys Creek, Scioto Brush Creek, Straight Fork, Bull Run, Rarden Creek, Camp Creek, Left Fork Camp Creek, Drake Run, Rock Run, Rocky Fork, Bear Creek, Big Run, Slate Run, Devers Run, Scioto River, and Candy Run.

#### H. Implementation Schedule

A construction log will be kept at the Project site to record major dates of grading and stabilization. The general order of construction is provided in Table 5 below and will begin in October 2021 and is estimated to end in March 2026.

**Table 5: Implementation Schedule** 

Task	Date
Identify environmental avoidance areas in the field [i.e. wetlands, 50' stream buffers, other environmental commitments]	October 2021
Mobilize construction equipment	October 2021
Forestry clearing/grubbing to begin	November 2021
Install filter sock, silt fence, timber matting, and temporary construction entrances, as needed	November 2021 through August 2024
Excavate foundations for new poles, install new poles	April 2022 through December 2024
Install temporary seed and mulch, as needed, during Project activities	April 2022 through December 2024
Grade pole locations to pre-existing conditions	April 2022 through August 2025
Install permanent seed and mulch	April 2024
Remove matting and temporary BMPs	August 2024 through March 2026
Repair/restore all remaining disturbed areas	August 2024 through March 2026
Seed and mulch all remaining disturbed areas	August 2024 through March 2026
Construction demobilization	November 2025
Inspection with AEP and SWP3 contractor	March 2026

#### I. Subdivided Development Drawing

Not applicable.

#### J. <u>Dedicated Asphalt and Concrete Plant Discharges</u>

Not applicable.

#### K. Log of Grading and Stabilization Activities

A log for documenting grading and stabilization activities and amendments to the SWP3 is included in Appendix 3.

#### L. Site Map

A vicinity of the Project area is included in Appendix 2, along with the Soil Erosion Sediment and Sediment Control Plan and details. The Soil Erosion and Sediment Control Plan shows the Project boundaries and contours, the limits of construction, and the locations of the erosion and sediment control features.

#### M. Permit Requirements

The permit requirements can be reviewed in the Ohio EPA General Permit No. OHC000005 which has been included as Appendix 1.

#### II. Storm Water Pollution Prevention Plan

The SWP3 was developed to meet the objectives in Part II. Non-numeric Effluent Limitations and Part III. Storm Water Pollution Prevention Plan (SWP3) of Ohio EPA General Permit No. OHC000005.

#### A. SWP3 Availability

This Plan, a copy of the Notice of Intent (NOI), and the Ohio EPA authorization shall be made available on-site immediately upon request of the director or an authorized representative and MS4 operators or authorized representative during working hours. Per Ohio EPA, an electronic copy is an acceptable format for on-site availability and review.

#### B. Amendments

The SWP3 is a living document that will be updated as needed. The SWP3 shall be amended whenever there is a change in design, construction, operation or maintenance, or if the SWP3 proves to be ineffective in controlling pollutants in storm water discharges associated with construction activity. A log for documenting amendments is included in Appendix 3.

AEP Environmental Services shall be notified prior to any significant modifications to the SWP3, such as changes to the access roads, disturbance acreage, culvert installations, etc., to ensure the Project remains in compliance with Ohio EPA General Permit No. OHC000005.

#### C. Duty to Inform Contractors

All contractors and subcontractors who will be involved in implementation of the SWP3 shall review and understand the conditions and responsibilities of the SWP3 and document their acknowledgement by signing the form included in Appendix 4.

#### D. Controls

<u>Timing:</u> Temporary erosion and sediment control measures shall be installed prior to earth-disturbing activity. Temporary control measures will not be removed until final site stabilization, in the form of permanent gravel cover or perennial vegetative cover with a density of at least 70%, is achieved.

The locations of the control methods are shown on the Soil Erosion and Sediment Control Plans in Appendix 2. Maintenance and inspections requirements for these controls can be found in Section II.D.6 of this SWP3. The control measures for this Project include the following:

#### 1. Preservation Methods

Existing natural conditions shall be preserved as much as feasible. Such practices may include: preserving existing vegetation, vegetative buffer strips, and existing soil profile and topsoil; minimizing soil compaction; minimizing disturbance of steep slopes; phasing of construction operations to minimize the amount of disturbed land at any one time; and protective clearing or grubbing practices. For all construction activity adjacent to surface waters of the state, a 50-foot undisturbed natural buffer will be maintained as measured from the ordinary high water mark (OHWM).

#### 2. Erosion, Sediment, and Runoff Controls

#### a. Stabilization and Seeding

Disturbed areas will be stabilized as specified in tables 6 and 7 below per the Soil Erosion and Sediment Control Plan and BMP detail sheets in Appendix 2. Mulch shall be applied to all exposed soil that has been seeded in an effort to facilitate seed germination and development.

**Table 6: Permanent Stabilization** 

Area Requiring Permanent Stabilization	Time Frame to Apply Erosion Controls
Any areas that will lie dormant for one	Within seven calendar days of the most
year or more.	recent disturbance.
Any areas within 50 feet of a surface	Within two calendar days of reaching
water of the state and at final grade.	final grade.
Other areas at final grade.	Within seven calendar days of reaching
Other areas at illiai grade.	final grade within that area.

**Table 7: Temporary Stabilization** 

Area Requiring Temporary Stabilization	Time Frame to Apply Erosion Controls
Any disturbed areas within 50 feet of a	Within two calendar days of the most
surface water of the state and not at final	recent disturbance if the area will remain
grade.	idle for more than 14 calendar days.
Any disturbed areas that will be dormant for more than 14 calendar days but less than one year, and not within 50 feet of a surface water of the state.	Within seven calendar days of the most recent disturbance within the area. For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of permit coverage for the individual lot(s).
Disturbed areas that will be idle over winter.	Prior to the onset of winter weather.

#### b. Sediment Barriers and Diversions

Silt Fence or filter sock will be installed to encompass the entire site at all appropriate locations to filter sediment from site runoff. Orange barrier fencing will be used as needed and to protect wetland areas and 50-foot natural stream buffers. After Project completion, the posts, fencing, and ties shall be removed from the Project site and transported to an appropriate off-site disposal facility.

#### c. Wetland and Stream Crossings

Stream and wetland crossings shall be avoided where possible by accessing pole locations from either side of the surface waters. Temporary wetland crossings for this Project are limited to Wetlands as shown on the Plans in Appendix 2 and shall consist of geotextile fabric and prefabricated wood matting lined with filter sock and orange barrier fence. Timber mat or span bridge stream crossings are limited to streams shown on the Plans in Appendix 2 and shall not be placed below the OHWM. Timber matting/span bridges shall span the stream(s) from bank to bank. No fording of the stream is permitted.

After construction is completed, the wood mats and geotextile fabric shall be removed and the area seeded with a wetland seed mix.

#### d. Temporary Construction Entrances

Construction entrances consisting of a stabilized pad of aggregate will be installed where construction vehicles leave active construction areas and enter public roadways to reduce the amount of sediment tracked offsite. Temporary construction entrance locations and details are provided in Appendix 2.

#### 3. Surface Water Protection

No direct discharge to surface waters is proposed for this Project. Surface waters will be protected through the erosion and sediment controls outlined in the sections above.

#### 4. Other Controls

#### a. Non-sediment Pollutant Controls

Waste disposal containers shall be provided for proper collection of all waste material including sanitary garbage, petroleum products and any materials to be used onsite (excluding inert waste/materials such as construction debris that would not be expected to contribute pollution to storm water). Containers shall be covered and not leaking. No construction waste materials shall be buried on-site. All waste materials shall be disposed of in the manner specified by local or state regulations or by the manufacturer. No solid or liquid wastes will be discharged in storm water runoff.

#### b. Off-site Traffic and Dust Control

Any paved roads adjacent to the site entrance shall be swept to remove any excess mud, dirt, or rock tracked from the site, as necessary. Dump trucks hauling materials to or from the site shall be covered with a tarpaulin. Dust control shall be observed both on and off the site for the duration of the Project. Dust and sedimentation will be minimized by limiting earth-moving activities, site traffic, and soil and vegetation disturbances throughout the site. Chemical stabilizers and adhesives will not be used unless written permission is received from AEP Environmental Representative. Dust control details can be found in Appendix 2.

#### c. Concrete Washouts

Concrete washouts will be located in upland areas outside of wetlands or flood zones. Under no circumstances will concrete trucks wash out into a drainage channel, storm sewer or surface water.

#### d. Wash Water

Water from vehicle washing, wheel washing, and other wash waters will be treated appropriately prior to discharge to minimize pollutants. Spills and leaks will be prevented and responded to as necessary.

#### e. Compliance with Other Requirements

This SWP3 is consistent with state and/or local waste disposal, sanitary sewer or septic system regulations including provisions prohibiting waste disposal by open burning. Spill response, disposal of suspect contaminated soils and clean-up activities are initiated by calling the AEP Regional Environmental Coordinator (REC).

#### f. Trench and Groundwater Control and Dewatering

Trench dewatering and groundwater control is not likely since this is an overhead line and any necessary trenching will be relatively shallow and short in duration. Dewatering may be needed if surface or subsurface water creates conditions where pole or foundation placement is being prevented or hindered and removing the water has the potential to contribute sediment to surface waters. If dewatering is needed, water shall be pumped directly into a dewatering device such as a tube or bag that has been sized according to the flow rate of the dewatering pump and the predominant sediment size (woven for sand, non-woven for silt and clay). Upon construction completion, accumulated sediment shall be removed from the dewatering device and

either placed in an upland part of the site where it shall then be seeded and mulched or shall be removed to an appropriate off-site disposal facility.

#### g. Contaminated Sediment

Contaminated soils are not expected to be encountered on this Project. However, if they should exist within the limits of construction, they will be disposed of properly per direction of the AEP Regional Environmental Coordinator (REC).

#### 5. Post-Construction Storm Water Management Requirements

There will be no increase in impervious surfaces as a result of the rebuild work on the Sinking Springs – South Lucasville 138kV transmission line. Therefore, there will be no change from pre- to post-construction runoff, and post-construction storm water management is not required per Part III.G.2.e of Ohio EPA General Permit No. OHC000005.

#### 6. Maintenance and Inspections Requirements

\*All temporary and permanent control practices shall be maintained and repaired as needed to ensure continued performance of their intended function. All erosion and sediment control measures shall be inspected:

- Once every seven calendar days; and,
- After any storm event greater than one-half inch of rain per 24-hour period by the end of the next calendar day, excluding weekends and holidays unless work is scheduled.

An inspection report shall be made after each inspection. The SWP3 Inspection Form is included in Appendix 3.

\*The Contractor shall select at least two qualified individuals responsible for inspections, maintenance, and repair activities, and filling out the SWP3 Inspection Form and SWP3 Amendments, Grading, and Stabilization Log in Appendix 3. Personnel selected for these responsibilities shall be knowledgeable and experienced in all inspection and maintenance practices necessary for keeping the erosion and sediment controls in good working order.

\*If an inspection reveals that a control is in need of repair or maintenance, with the exception of a sediment settling pond, it shall be repaired or maintained within three calendar days of the inspection. Sediment ponds will be repaired or maintained within 10 calendar days of the inspection. If an inspection reveals that a control fails to perform its intended function and that another, more appropriate control is required, the SWP3 shall be amended and the new control shall be installed within 10 calendar days of the inspection. If an inspection reveals a control has been installed inappropriately or incorrectly, the control will be replaced or modified for site conditions.

\*When controls are modified, the erosion control drawings associated with the SWP3 will be updated to reflect the modifications, and the changes will be reflected using the SWP3 Amendments, Grading, and Stabilization Log in Appendix 3.

Silt fence and filter sock shall be inspected for depth of sediment, tears, and to ensure
the anchor posts are firmly in the ground. Silt fence and filter sock shall also be
inspected to ensure they are maintained in the appropriate positions per the plans in
Appendix 2. Built up sediment shall be removed from the silt fence when it has reached
one-half the height of the fence. Built up sediment shall be removed from the filter sock
when it has reached one-third the height of the sock.

- Orange barrier fence shall be inspected to ensure the fence is erect and functioning as intended per the plans in Appendix 2.
- Temporary and permanent seeding shall be inspected for bare spots, washouts, and healthy growth. If seed does not germinate in an area on which it was placed, the area will either be re-seeded or an alternate erosion control method will be employed.
- Locations where vehicles and equipment enter or exit the site shall be inspected for evidence of off-site tracking of sediment. Sediment being tracked onto off-site roadways shall be cleaned up promptly.
- Excess concrete should be removed when the washout system reaches 50 percent of the design capacity. Use of the system should be discontinued until appropriate measures can be initiated to clean out the structure. Prefabricated systems should also utilize this criterion unless the manufacturer has alternative specifications.

\*The permittee shall maintain the SWP3 Inspection Forms for three years following the submittal of a notice of termination (NOT) form. The Inspection Forms shall be signed in accordance with Part V.G of Ohio EPA General Permit OHC000005.

#### III. Approved State or Local Plans

The erosion and sediment control plans were prepared in accordance with Ohio EPA Permit No. OHC000005.

#### IV. Exceptions

There are no exceptions to the erosion and sediment control practices contained in the Ohio EPA General Permit No. OHC000005.

### **APPENDIX 1**

Ohio EPA General Permit No. OHC000005

Ohio EPA Permit No.: OHC000005

Issuance Date: April 23, 2018 Effective Date: April 23, 2018 Expiration Date: April 22, 2023

> Ohio EPA APR 23 '18 Entered Directors Journal

#### OHIO ENVIRONMENTAL PROTECTION AGENCY

## GENERAL PERMIT AUTHORIZATION FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the federal Water Pollution Control Act, as amended (33 U.S.C. Section 1251 et. seq. hereafter referred to as "the Act") and the Ohio Water Pollution Control Act [Ohio Revised Code ("ORC") Chapter 6111], dischargers of storm water from sites where construction activity is being conducted, as defined in Part I.B of this permit, are authorized by the Ohio Environmental Protection Agency, hereafter referred to as "Ohio EPA," to discharge from the outfalls at the sites and to the receiving surface waters of the state identified in their Notice of Intent ("NOI") application form on file with Ohio EPA in accordance with the conditions specified in Parts I through VII of this permit.

It has been determined that a lowering of water quality of various waters of the state associated with granting coverage under this permit is necessary to accommodate important social and economic development in the state of Ohio. In accordance with OAC 3745-1-05, this decision was reached only after examining a series of technical alternatives, reviewing social and economic issues related to the degradation, and considering all public and intergovernmental comments received concerning the proposal.

This permit is conditioned upon payment of applicable fees, submittal of a complete NOI application form, development (and submittal, if applicable) of a complete Storm Water Pollution Prevention Plan (SWP3) and written approval of coverage from the director of Ohio EPA in accordance with Ohio Administrative Code ("OAC") Rule 3745-38-02.

Crais-W. Butler

Director

Total Pages: 60

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

Page 2 of 60 Ohio EPA Permit No.: OHC000005

#### **TABLE OF CONTENTS**

	COVERAGE UNDER THIS PERMIT
A.	Permit Area
В.	Eligibility
C.	Requiring an individual NPDES permit or an alternative general NPDES permit
D.	Permit requirements when portions of a site are sold
E.	Authorization
F.	Notice of Intent Requirements
PART II.	NON-NUMERIC EFFLUENT LIMITATIONS
A.	Erosion and Sediment Controls
B.	Soil Stabilization
C.	Dewatering
D.	Pollution Prevention Measures
E.	Prohibited Discharges

#### PART III. STORM WATER POLLUTION PREVENTION PLAN (SWP3)

Post-Construction Storm Water Management Controls

A. Storm Water Pollution Prevention Plans

B. Timing

F.

G.

C. SWP3 Signature and Review

Surface Outlets

D. Amendments

E. Duty to inform contractors and subcontractorsF. Total Maximum Daily Load (TMDL) allocations

G. SWP3 Requirements

#### PART IV. NOTICE OF TERMINATION REQUIREMENTS

A. Failure to notify

B. When to submit an NOTC. How to submit an NOT

#### PART V. STANDARD PERMIT CONDITIONS

A. Duty to comply

B. Continuation of an expired general permitC. Need to halt or reduce activity not a defense

D. Duty to mitigate

E. Duty to provide information

F. Other informationG. Signatory requirements

H. Certification

I. Oil and hazardous substance liability

J. Property rightsK. SeverabilityL. Transfers

M. Environmental laws

N. Proper operation and maintenance

O. Inspection and entryP. Duty to ReapplyQ. Permit Actions

R. Bypass S. Upset

U. Reporting Requirements

#### PART VI. REOPENER CLAUSE

PART VII. DEFINITIONS

**APPENDICES** 

A. Big Darby Creek Watershed

B. Portions of the Olentangy Watershed

C. Intensity for Calculation of Water Quality Flow (WQF)

Page 3 of 60 Ohio EPA Permit No.: OHC000005

#### PART I. COVERAGE UNDER THIS PERMIT

#### A. Permit Area.

This permit covers the entire State of Ohio. Appendices A and B of this permit contain additional watershed specific requirements for construction activities located partially or fully within the Big Darby Creek Watershed and portions of the Olentangy River Watershed. Projects within portions of the Olentangy River watershed shall seek coverage under this permit following the expiration of OHCO00002 (May 31, 2019).

#### B. Eligibility.

1. <u>Construction activities covered</u>. Except for storm water discharges identified under Part I.B.2, this permit may cover all new and existing discharges composed entirely of storm water discharges associated with construction activity that enter surface waters of the state or a storm drain leading to surface waters of the state.

For the purposes of this permit, construction activities include any clearing, grading, excavating, grubbing and/or filling activities that disturb one or more acres. Discharges from trench dewatering are also covered by this permit as long as the dewatering activity is carried out in accordance with the practices outlined in Part III.G.2.g.iv of this permit.

Construction activities disturbing one or more acres of total land, or will disturb less than one acre of land but are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land are eligible for coverage under this permit. The threshold acreage includes the entire area disturbed in the larger common plan of development or sale.

This permit also authorizes storm water discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:

- The support activity is directly related to a construction site that is required to have NPDES permit coverage for discharges of storm water associated with construction activity;
- b. The support activity is not a commercial operation serving multiple unrelated construction projects and does not operate beyond the completion of the construction activity at the site it supports;
- c. Appropriate controls and measures are identified in a storm water pollution prevention plan (SWP3) covering the discharges from the support activity; and
- d. The support activity is on or contiguous with the property defined in the NOI (offsite borrow pits and soil disposal areas, which serve only one project, do not have to be contiguous with the construction site).
- 2. <u>Limitations on coverage</u>. The following storm water discharges associated with construction activity are not covered by this permit:

Page 4 of 60 Ohio EPA Permit No.: OHC000005

a. Storm water discharges that originate from the site after construction activities have ceased, including any temporary support activity, and the site has achieved final stabilization. Industrial post-construction storm water discharges may need to be covered by an NPDES permit;

- b. Storm water discharges associated with construction activity that the director has shown to be or may reasonably expect to be contributing to a violation of a water quality standard; and
- c. Storm water discharges authorized by an individual NPDES permit or another NPDES general permit;
- 3. <u>Waivers</u>. After March 10, 2003, sites whose larger common plan of development or sale have at least one, but less than five acres of land disturbance, which would otherwise require permit coverage for storm water discharges associated with construction activities, may request that the director waive their permit requirement. Entities wishing to request such a waiver must certify in writing that the construction activity meets one of the two waiver conditions:
  - a. Rainfall Erosivity Waiver. For a construction site to qualify for the rainfall erosivity waiver, the cumulative rainfall erosivity over the project duration must be five or less and the site must be stabilized with a least a 70 percent vegetative cover or other permanent, non-erosive cover. The rainfall erosivity must be calculated according to the method in U.S. EPA Fact Sheet 3.1 Construction Rainfall Erosivity Waiver dated January 2001 and be found at: http://epa.ohio.gov/portals/35/permits/USEPAfact3-1\_s.pdf. If it is determined that a construction activity will take place during a time period where the rainfall erosivity factor is less than five, a written waiver certification must be submitted to Ohio EPA at least 21 days before construction activity is scheduled to begin. If the construction activity will extend beyond the dates specified in the waiver certification, the operator must either: (a) recalculate the waiver using the original start date with the new ending date (if the R factor is still less than five, a new waiver certification must be submitted) or (b) submit an NOI application form and fee for coverage under this general permit at least seven days prior to the end of the waiver period; or
  - b. TMDL (Total Maximum Daily Load) Waiver. Storm water controls are not needed based on a TMDL approved or established by U.S. EPA that addresses the pollutant(s) of concern or, for non-impaired waters that do not require TMDLs, and equivalent analysis that determines allocations for small construction sites for the pollutant(s) of concern or that determines that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. The pollutant(s) of concern include sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the director of Ohio EPA that the construction activity will take place, and storm water discharges will occur, within the drainage area addressed by the TMDL or equivalent analysis. A written waiver certification must be submitted to Ohio EPA at least 21 days before the construction activity is scheduled to begin.

Page 5 of 60 Ohio EPA Permit No.: OHC000005

4. Prohibition on non-storm water discharges. All discharges covered by this permit must be composed entirely of storm water with the exception of the following: discharges from firefighting activities; fire hydrant flushings; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water from trench or well point dewatering and foundation or footing drains where flows are not contaminated with process materials such as solvents. Dewatering activities must be done in compliance with Part II.C and Part III.G.2.g.iv of this permit. Discharges of material other than storm water or the authorized non-storm water discharges listed above must comply with an individual NPDES permit or an alternative NPDES general permit issued for the discharge.

Except for flows from firefighting activities, sources of non-storm water listed above that are combined with storm water discharges associated with construction activity must be identified in the SWP3. The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

5. Spills and unintended releases (Releases in excess of Reportable Quantities). This permit does not relieve the permittee of the reporting requirements of Title 40 of the Code of Federal Regulations ("CFR") Part 117 and 40 CFR Part 302. In the event of a spill or other unintended release, the discharge of hazardous substances in the storm water discharge(s) from a construction site must be minimized in accordance with the applicable storm water pollution prevention plan for the construction activity and in no case, during any 24-hour period, may the discharge(s) contain a hazardous substance equal to or in excess of reportable quantities.

40 CFR Part 117 sets forth a determination of the reportable quantity for each substance designated as hazardous in 40 CFR Part 116. The regulation applies to quantities of designated substances equal to or greater than the reportable quantities, when discharged to surface waters of the state. 40 CFR Part 302 designates under section 102(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, those substances in the statutes referred to in section 101(14), identifies reportable quantities for these substances and sets forth the notification requirements for releases of these substances. This regulation also sets forth reportable quantities for hazardous substances designated under section 311(b)(2)(A) of the Clean Water Act (CWA).

### C. Requiring an individual NPDES permit or an alternative NPDES general permit.

1. The director may require an alternative permit. The director may require any operator eligible for this permit to apply for and obtain either an individual NPDES permit or coverage under an alternative NPDES general permit in accordance with OAC Rule 3745-38-02. Any interested person may petition the director to take action under this paragraph.

Page 6 of 60 Ohio EPA Permit No.: OHC000005

The director will send written notification that an alternative NPDES permit is required. This notice shall include a brief statement of the reasons for this decision, an application form and a statement setting a deadline for the operator to file the application. If an operator fails to submit an application in a timely manner as required by the director under this paragraph, then coverage, if in effect, under this permit is automatically terminated at the end of the day specified for application submittal.

- Operators may request an individual NPDES permit. Any owner or operator eligible for this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request to the director in accordance with the requirements of 40 CFR 122.26. If the reasons adequately support the request, the director shall grant it by issuing an individual NPDES permit.
- 3. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit or the owner or operator is approved for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of approval for coverage under the alternative general permit, whichever the case may be.

## D. Permit requirements when portions of a site are sold

If an operator obtains a permit for a development, and then the operator (permittee) sells off lots or parcels within that development, permit coverage must be continued on those lots until a Notice of Termination (NOT) in accordance with Part IV.B is submitted. For developments which require the use of centralized sediment and erosion controls (i.e., controls that address storm water runoff from one or more lots) for which the current permittee intends to terminate responsibilities under this permit for a lot after sale of the lot to a new owner and such termination will either prevent or impair the implementation of the controls and therefore jeopardize compliance with the terms and conditions of this permit, the permittee will be required to maintain responsibility for the implementation of those controls. For developments where this is not the case, it is the permittee's responsibility to temporarily stabilize all lots sold to individual lot owners unless an exception is approved in accordance with Part III.G.4. In cases where permit responsibilities for individual lot(s) will be terminated after sale of the lot, the permittee shall inform the individual lot owner of the obligations under this permit and ensure that the Individual Lot NOI application is submitted to Ohio EPA.

#### E. Authorization

1. Obtaining authorization to discharge. Operators that discharge storm water associated with construction activity must submit an NOI application form and Storm Water Pollution Prevention Plan (SWP3) if located within the Big Darby Creek watershed or portions of the Olentangy watershed in accordance with the requirements of Part I.F of this permit to obtain authorization to discharge under this general permit. As required under OAC Rule 3745-38-06(E), the director, in response to the NOI submission, will notify the applicant in writing that he/she has or has not been granted general permit coverage to discharge storm water associated with construction activity under the terms and conditions of this permit or that the applicant must apply for an individual NPDES permit or coverage under an alternate general NPDES permit as described in Part I.C.1.

Page 7 of 60 Ohio EPA Permit No.: OHC000005

2. No release from other requirements. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations. Other permit requirements commonly associated with construction activities include, but are not limited to, section 401 water quality certifications, isolated wetland permits, permits to install sanitary sewers or other devices that discharge or convey polluted water, permits to install drinking water lines, single lot sanitary system permits and disturbance of land which was used to operate a solid or hazardous waste facility (i.e., coverage under this NPDES general permit does not satisfy the requirements of OAC Rule 3745-27-13 or ORC Section 3734.02(H)). The issuance of this permit is subject to resolution of an antidegradation review. This permit does not relieve the permittee of other responsibilities associated with construction activities such as contacting the Ohio Department of Natural Resources, Division of Water, to ensure proper well installation and abandonment of wells.

# F. Notice of Intent Requirements

- 1. Deadlines for notification.
  - a. <u>Initial coverage</u>: Operators who intend to obtain initial coverage for a storm water discharge associated with construction activity under this general permit must submit a complete and accurate NOI application form, a completed Storm Water Pollution Prevention Plan (SWP3) for projects within the Big Darby Creek and portions of the Olentangy river watersheds and appropriate fee at least 21 days (or 45 days in the Big Darby Creek watershed and portions of the Olentangy watershed) prior to the commencement of construction activity. If more than one operator, as defined in Part VII of this general permit, will be engaged at a site, each operator shall seek coverage under this general permit prior to engaging in construction activities. Coverage under this permit is not effective until an approval letter granting coverage from the director of Ohio EPA is received by the applicant. Where one operator has already submitted an NOI prior to other operator(s) being identified, the additional operator shall request modification of coverage to become a co-permittee. In such instances, the co-permittees shall be covered under the same facility permit number. No additional permit fee is required.
  - b. Individual lot transfer of coverage: Operators must each submit an individual lot notice of intent (Individual Lot NOI) application form (no fee required) to Ohio EPA at least seven days prior to the date that they intend to accept responsibility for permit requirements for their portion of the original permitted development from the previous permittee. Transfer of permit coverage is not granted until an approval letter from the director of Ohio EPA is received by the applicant.
- 2. <u>Failure to notify</u>. Operators who fail to notify the director of their intent to be covered and who discharge pollutants to surface waters of the state without an NPDES permit are in violation of ORC Chapter 6111. In such instances, Ohio EPA may bring an enforcement action for any discharges of storm water associated with construction activity.
- 3. <u>How to submit an NOI</u>. Operators seeking coverage under this permit must submit a complete and accurate Notice of Intent (NOI) application using Ohio EPA's electronic application form which is available through the Ohio EPA eBusiness Center at: <a href="https://ebiz.epa.ohio.gov/">https://ebiz.epa.ohio.gov/</a>. Submission through the Ohio EPA eBusiness Center will

Page 8 of 60 Ohio EPA Permit No.: OHC000005

require establishing an Ohio EPA eBusiness Center account and obtaining a unique Personal Identification Number (PIN) for final submission of the NOI. Existing eBusiness Center account holders can access the NOI form through their existing account and submit using their existing PIN. Please see the following link for guidance: <a href="http://epa.ohio.gov/dsw/ebs.aspx#170669803-streams-guidance">http://epa.ohio.gov/dsw/ebs.aspx#170669803-streams-guidance</a>. Alternatively, if you are unable to access the NOI form through the agency eBusiness Center due to a demonstrated hardship, the NOI may be submitted on a paper NOI form provided by Ohio EPA. NOI information shall be typed on the form. Please contact Ohio EPA, Division of Surface Water at (614) 644-2001 if you wish to receive a paper NOI form.

- 4. <u>Additional notification</u>. NOIs and SWP3s are considered public documents and shall be made available to the public in accordance with Part III.C.2. The permittee shall make NOIs and SWP3s available upon request of the director of Ohio EPA, local agencies approving sediment and erosion control plans, grading plans or storm water management plans, local governmental officials, or operators of municipal separate storm sewer systems (MS4s) receiving drainage from the permitted site. Each operator that discharges to an NPDES permitted MS4 shall provide a copy of its Ohio EPA NOI submission to the MS4 in accordance with the MS4's requirements, if applicable.
- 5. Re-notification. Existing permittees having coverage under the previous generations of this general permit shall have continuing coverage under OHC000005 with the submittal of a timely renewal application. Within 180 days from the effective date of this permit, existing permittees shall submit the completed renewal application expressing their intent for continued coverage. In accordance with Ohio Administrative Code (OAC) 3745-38-02(E)(2)(a)(i), a renewal application fee will only apply to existing permittees having general permit coverage for 5 or more years as of the effective date of this general permit. Permit coverage will be terminated if Ohio EPA does not receive the renewal application within this 180-day period.

#### Part II. NON-NUMERIC EFFLUENT LIMITATIONS

You shall comply with the following non-numeric effluent limitations for discharges from your site and/or from construction support activities. Part III of this permit contains the specific design criteria to meet the objectives of the following non-numeric effluent limitations. You shall develop and implement the SWP3 in accordance with Part III of this permit to satisfy these non-numeric effluent limitations.

- A. Erosion and Sediment Controls. You shall design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls shall be designed, installed and maintained to:
- 1. Control storm water volume and velocity within the site to minimize soil and stream erosion;
- 2. Control storm water discharges, including both peak flowrates and total storm water volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
- 3. Minimize the amount of soil exposed during construction activity;

Page 9 of 60 Ohio EPA Permit No.: OHC000005

4. Minimize the disturbance of steep slopes;

- Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls shall address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
- 6. If feasible, provide and maintain a 50-foot undisturbed natural buffer around surface waters of the state, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration. If it is infeasible to provide and maintain an undisturbed 50-foot natural buffer, you shall comply with the stabilization requirements found in Part II.B for areas within 50 feet of a surface water; and
- 7. Minimize soil compaction and, unless infeasible, preserve topsoil.
- **B. Soil Stabilization**. Stabilization of disturbed areas shall, at a minimum, be initiated in accordance with the time frames specified in the following tables.

Area requiring permanent stabilization

Time frame to apply erosion controls

Within seven days of the most recent disturbance

Any areas within 50 feet of a surface water of the state and at final grade

Other areas at final grade

Within seven days of reaching final grade

Within seven days of reaching final grade within that area

**Table 1: Permanent Stabilization** 

**Table 2: Temporary Stabilization** 

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed areas within 50 feet of a surface water of the state and not at final grade	Within two days of the most recent disturbance if the area will remain idle for more than 14 days
Any disturbed areas that will be dormant for more than 14 days but less than one year, and not within 50 feet of a surface water of	Within seven days of the most recent disturbance within the area
the state	For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of permit coverage for the individual lot(s).
Disturbed areas that will be idle over winter	Prior to the onset of winter weather

Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. Permanent and temporary stabilization are defined in Part VII.

Page 10 of 60 Ohio EPA Permit No.: OHC000005

**C. Dewatering.** Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls.

- **D. Pollution Prevention Measures.** Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:
- 1. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters shall be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- 2. Minimize the exposure of construction materials, products, and wastes; landscape materials, fertilizers, pesticides, and herbicides; detergents, sanitary waste and other materials present on the site to precipitation and to storm water; and
- 3. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.
- **E. Prohibited Discharges.** The following discharges are prohibited:
- 1. Wastewater from washout of concrete, unless managed by an appropriate control;
- 2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
- 3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- 4. Soaps or solvents used in vehicle and equipment washing or all other waste water streams which could be subject to an individual NPDES permit (Part III.G.2.g).
- F. Surface Outlets. When discharging from sediment basins utilize outlet structures that withdraw water from the surface, unless infeasible. (Note: Ohio EPA believes that the circumstances in which it is infeasible to design outlet structures in this manner are rare. Exceptions may include time periods with extended cold weather during winter months. If you have determined that it is infeasible to meet this requirement, you shall provide documentation in your SWP3 to support your determination.)
- **G. Post-Construction Storm Water Management Controls**. So that receiving stream's physical, chemical and biological characteristics are protected, and stream functions are maintained, post-construction storm water practices shall provide long-term management of runoff quality and quantity.

## PART III. STORM WATER POLLUTION PREVENTION PLAN (SWP3)

#### A. Storm Water Pollution Prevention Plans.

A SWP3 shall be developed for each site covered by this permit. For a multi-phase construction project, a separate NOI shall be submitted when a separate SWP3 will be prepared for

Page 11 of 60 Ohio EPA Permit No.: OHC000005

subsequent phases. SWP3s shall be prepared in accordance with sound engineering and/or conservation practices by a professional experienced in the design and implementation of standard erosion and sediment controls and storm water management practices addressing all phases of construction. The SWP3 shall clearly identify all activities which are required to be authorized under Section 401 and subject to an antidegradation review. The SWP3 shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with construction activities. The SWP3 shall be a comprehensive, stand-alone document, which is not complete unless it contains the information required by Part III.G of this permit. In addition, the SWP3 shall describe and ensure the implementation of best management practices (BMPs) that reduce the pollutants and impact of storm water discharges during construction and pollutants associated with the post-construction land use to ensure compliance with ORC Section 6111.04, OAC Chapter 3745-1 and the terms and conditions of this permit.

## B. Timing

An acceptable SWP3 shall be completed and submitted to the applicable regulated MS4 entity (for projects constructed entirely within a regulated MS4 area) prior to the timely submittal of an NOI. Projects within the Big Darby Creek and portions of the Olentangy watersheds must submit a SWP3 with the NOI. The SWP3 shall be updated in accordance with Part III.D. Submission of a SWP3 does not constitute review and approval on the part of Ohio EPA. Upon request and good cause shown, the director may waive the requirement to have a SWP3 completed at the time of NOI submission. If a waiver has been granted, the SWP3 must be completed prior to the initiation of construction activities. The SWP3 must be implemented upon initiation of construction activities.

In order to continue coverage from the previous generations of this permit, the permittee shall review and update the SWP3 to ensure that this permit's requirements are addressed within 180 days after the effective date of this permit. If it is infeasible for you to comply with a specific requirement in this permit because (1) the provision was not part of the permit you were previously covered under, and (2) because you are prevented from compliance due to the nature or location of earth disturbances that commenced prior to the effective date of this permit, you shall include documentation within your SWP3 of the reasons why it is infeasible for you to meet the specific requirement.

Examples of OHC000005 permit conditions that would be infeasible for permittees renewing coverage to comply with include:

- OHC000005 post-construction requirements, for projects that obtained NPDES construction storm water coverage and started construction activities prior to the effective date of this permit;
- OHC000005 post-construction requirements, for multi-phase development projects with an
  existing regional post-construction BMP issued under previous NPDES post-construction
  requirements. This only applies to construction sites authorized under Ohio EPA's
  Construction Storm Water Permits issued after April 20, 2003;
- OHC00005 post-construction requirements, for renewing or initial coverage and you have a SWP3 approved locally and you will start construction within 180 days of the effective date of this permit;

Page 12 of 60 Ohio EPA Permit No.: OHC000005

 Sediment settling pond design requirements, if the general permit coverage was obtained prior to April 21, 2013 and the sediment settling pond has been installed; or

Case-by-case situations approved by the Director.

## C. SWP3 Signature and Review.

1. <u>Plan Signature and Retention On-Site</u>. The SWP3 shall include the certification in Part V.H, be signed in accordance with Part V.G., and be retained on site during working hours.

# 2. Plan Availability

- a. On-site: The plan shall be made available immediately upon request of the director or his authorized representative and MS4 operators or their authorized representative during working hours. A copy of the NOI and letter granting permit coverage under this general permit also shall be made available at the site.
- b. By written request: The permittee must provide the most recent copy of the SWP3 within 7 days upon written request by any of the following:
  - i. The director or the director's authorized representative;
  - ii. A local agency approving sediment and erosion plans, grading plans or storm water management plans; or
  - iii. In the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the operator of the system.
- c. To the public: All NOIs, general permit approval for coverage letters, and SWP3s are considered reports that shall be available to the public in accordance with the Ohio Public Records law. The permittee shall make documents available to the public upon request or provide a copy at public expense, at cost, in a timely manner. However, the permittee may claim to Ohio EPA any portion of an SWP3 as confidential in accordance with Ohio law.
- 3. <u>Plan Revision</u>. The director or authorized representative may notify the permittee at any time that the SWP3 does not meet one or more of the minimum requirements of this part. Within 10 days after such notification from the director or authorized representative (or as otherwise provided in the notification), the permittee shall make the required changes to the SWP3 and shall submit to Ohio EPA the revised SWP3 or a written certification that the requested changes have been made.

#### D. Amendments

The permittee shall amend the SWP3 whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the state or if the SWP3 proves to be ineffective in achieving the

Page 13 of 60 Ohio EPA Permit No.: OHC000005

general objectives of controlling pollutants in storm water discharges associated with construction activity. Amendments to the SWP3 may be reviewed by Ohio EPA in the same manner as Part III.C.

# E. Duty to inform contractors and subcontractors

The permittee shall inform all contractors and subcontractors not otherwise defined as "operators" in Part VII of this general permit who will be involved in the implementation of the SWP3 of the terms and conditions of this general permit. The permittee shall maintain a written document containing the signatures of all contractors and subcontractors involved in the implementation of the SWP3 as proof acknowledging that they reviewed and understand the conditions and responsibilities of the SWP3. The written document shall be created, and signatures shall be obtained prior to commencement of earth disturbing activity on the construction site.

## F. Total Maximum Daily Load (TMDL) allocations

If a TMDL is approved for any waterbody into which the permittee's site discharges and requires specific BMPs for construction sites, the director may require the permittee to revise his/her SWP3. Specific conditions have been provided in Appendix A (for the Big Darby Creek Watershed) and Appendix B (for portions of the Olentangy river watershed).

## G. SWP3 Requirements

Operations that discharge storm water from construction activities are subject to the following requirements and the SWP3 shall include the following items:

- 1. Site description. Each SWP3 shall provide:
  - a. A description of the nature and type of the construction activity (e.g., low density residential, shopping mall, highway, etc.);
  - Total area of the site and the area of the site that is expected to be disturbed (i.e., grubbing, clearing, excavation, filling or grading, including off-site borrow areas);
  - c. A measure of the impervious area and percent imperviousness created by the construction activity (existing, new and total impervious area after construction);
  - d. Storm water calculations, including the volumetric runoff coefficients for both the pre-construction and post- construction site conditions, and resulting water quality volume; design details for post-construction storm water facilities and pretreatment practices such as contributing drainage areas, capacities, elevations, outlet details and drain times shall be included in the SWP3; and if applicable, explanation of the use of existing post-construction facilities. Ohio EPA recommends the use of data sheets (see Ohio's Rainwater and Land Development manual and Ohio EPA resources for examples);
  - e. Existing data describing the soil and, if available, the quality of any discharge from the site;

Page 14 of 60 Ohio EPA Permit No.: OHC000005

f. A description of prior land uses at the site;

- g. A description of the condition of any on-site streams (e.g. prior channelization, bed instability or headcuts, channels on public maintenance, or natural channels):
- h. An implementation schedule which describes the sequence of major construction operations (i.e., designation of vegetative preservation areas, grubbing, excavating, grading, utilities, infrastructure installation and others) and the implementation of erosion, sediment and storm water management practices or facilities to be employed during each operation of the sequence;
- i. The name and/or location of the immediate receiving stream or surface water(s) and the first subsequent named receiving water(s) and the areal extent and description of wetlands or other special aquatic sites at or near the site which will be disturbed, or which will receive discharges from disturbed areas of the project. For discharges to an MS4, the point of discharge to the MS4 and the location where the MS4 ultimately discharges to a stream or surface water of the state shall be indicated;
- j. For subdivided developments, a detail drawing of individual parcels with their erosion, sediment or storm water control practices and/or a typical individual lot showing standard individual lot erosion and sediment control practices.
  - A typical individual lot drawing does not remove the responsibility to designate specific erosion and sediment control practices in the SWP3 for critical areas such as steep slopes, stream banks, drainage ways and riparian zones;
- k. Location and description of any storm water discharges associated with dedicated asphalt and dedicated concrete plants covered by this permit and the best management practices to address pollutants in these storm water discharges;
- A cover page or title identifying the name and location of the site, the name and contact information of all construction site operators, the name and contact information for the person responsible for authorizing and amending the SWP3, preparation date, and the estimated dates that construction will start and be complete;
- m. A log documenting grading and stabilization activities as well as amendments to the SWP3, which occur after construction activities commence; and
- n. Site map showing:
  - Limits of earth-disturbing activity of the site including associated off-site borrow or spoil areas that are not addressed by a separate NOI and associated SWP3;
  - ii. Soils types for all areas of the site, including locations of unstable or highly erodible and/or known contaminated soils;

Page 15 of 60 Ohio EPA Permit No.: OHC000005

iii. Existing and proposed contours. A delineation of drainage watersheds expected during and after major grading activities as well as the size of each drainage watershed, in acres;

- iv. The location of any delineated boundary for required riparian setbacks;
- v. Conservation easements or areas designated as open space, preserved vegetation or otherwise protected from earth disturbing activities. A description of any associated temporary or permanent fencing or signage;
- vi. Surface water locations including springs, wetlands, streams, lakes, water wells, etc., on or within 200 feet of the site, including the boundaries of wetlands or stream channels and first subsequent named receiving water(s) the permittee intends to fill or relocate for which the permittee is seeking approval from the Army Corps of Engineers and/or Ohio EPA;
- vii. Existing and planned locations of buildings, roads, parking facilities and utilities:
- viii. The location of all erosion and sediment control practices, including the location of areas likely to require temporary stabilization during site development;
- ix. Sediment traps and basins noting their sediment storage and dewatering (detention) volume and contributing drainage area. Ohio EPA recommends the use of data sheets (see Ohio EPA's Rainwater and Land Development manual and website for examples) to provide data for all sediment traps and basins noting important inputs to design and resulting parameters such as their contributing drainage area, disturbed area, detention volume, sedimentation volume, practice surface area, dewatering time, outlet type and dimensions;
- x. The location of permanent storm water management practices (new and existing) including pretreatment practices to be used to control pollutants in storm water after construction operations have been completed along with the location of existing and planned drainage features including catch basins, culverts, ditches, swales, surface inlets and outlet structures;
- xi. Areas designated for the storage or disposal of solid, sanitary and toxic wastes, including dumpster areas, areas designated for cement truck washout, and vehicle fueling;
- xii. The location of designated construction entrances where the vehicles will access the construction site; and
- xiii. The location of any areas of proposed floodplain fill, floodplain excavation, stream restoration or known temporary or permanent stream crossings.

Page 16 of 60 Ohio EPA Permit No.: OHC000005

2. Controls. In accordance with Part II.A, the SWP3 shall contain a description of the controls appropriate for each construction operation covered by this permit and the operator(s) shall implement such controls. The SWP3 shall clearly describe for each major construction activity identified in Part III.G.1.h: (a) appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented; and (b) which contractor is responsible for implementation (e.g., contractor A will clear land and install perimeter controls and contractor B will maintain perimeter controls until final stabilization). The SWP3 shall identify the subcontractors engaged in activities that could impact storm water runoff. The SWP3 shall contain signatures from all of the identified subcontractors indicating that they have been informed and understand their roles and responsibilities in complying with the SWP3. Ohio EPA recommends that the primary site operator review the SWP3 with the primary contractor prior to commencement of construction activities and keep a SWP3 training log to demonstrate that this review has occurred.

Ohio EPA recommends that the erosion, sediment, and storm water management practices used to satisfy the conditions of this permit should meet the standards and specifications in the most current edition of Ohio's <u>Rainwater and Land Development</u> (see definitions) manual or other standards acceptable to Ohio EPA. The controls shall include the following minimum components:

- a. <a href="Preservation Methods.">Preservation Methods.</a> The SWP3 shall make use of practices which preserve the existing natural condition as much as feasible. Such practices may include: preserving existing vegetation, vegetative buffer strips, and existing soil profile and topsoil; phasing of construction operations to minimize the amount of disturbed land at any one time; and designation of tree preservation areas or other protective clearing or grubbing practices. For all construction activities immediately adjacent to surface waters of the state, the permittee shall comply with the buffer non-numeric effluent limitation in Part II.A.6, as measured from the ordinary high water mark of the surface water.
- b. <u>Erosion Control Practices.</u> The SWP3 shall make use of erosion controls that provide cover over disturbed soils unless an exception is approved in accordance with Part III.G.4. A description of control practices designed to re-establish vegetation or suitable cover on disturbed areas after grading shall be included in the SWP3. The SWP3 shall provide specifications for stabilization of all disturbed areas of the site and provide guidance as to which method of stabilization will be employed for any time of the year. Such practices may include: temporary seeding, permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing of construction operations, use of construction entrances and the use of alternative ground cover.
  - Stabilization. Disturbed areas shall be stabilized in accordance with Table 1 (Permanent Stabilization) and Table 2 (Temporary Stabilization) in Part II.B of this permit.
  - ii. **Permanent stabilization of conveyance channels**. Operators shall undertake special measures to stabilize channels and outfalls and prevent erosive flows. Measures may include seeding, dormant seeding (as defined in the most current edition of the Rainwater and Land

Page 17 of 60

Ohio EPA Permit No.: OHC000005

<u>Development</u> manual), mulching, erosion control matting, sodding, riprap, natural channel design with bioengineering techniques or rock check dams.

- c. Runoff Control Practices. The SWP3 shall incorporate measures which control the flow of runoff from disturbed areas so as to prevent erosion from occurring. Such practices may include rock check dams, pipe slope drains, diversions to direct flow away from exposed soils and protective grading practices. These practices shall divert runoff away from disturbed areas and steep slopes where practicable. Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected.
- d. <u>Sediment Control Practices.</u> The plan shall include a description of structural practices that shall store runoff allowing sediments to settle and/or divert flows away from exposed soils or otherwise limit runoff from exposed areas. Structural practices shall be used to control erosion and trap sediment from a site remaining disturbed for more than 14 days. Such practices may include, among others: sediment settling ponds, sediment barriers, earth diversion dikes or channels which direct runoff to a sediment settling pond and storm drain inlet protection. All sediment control practices must be capable of ponding runoff in order to be considered functional. Earth diversion dikes or channels alone are not considered a sediment control practice unless those are used in conjunction with a sediment settling pond.

The SWP3 shall contain detail drawings for all structural practices.

- i. **Timing.** Sediment control structures shall be functional throughout the course of earth disturbing activity. Sediment basins and perimeter sediment barriers shall be implemented prior to grading and within seven days from the start of grubbing. They shall continue to function until the upslope development area is stabilized with permanent cover. As construction progresses and the topography is altered, appropriate controls shall be constructed, or existing controls altered to address the changing drainage patterns.
- ii. **Sediment settling ponds.** A sediment settling pond is required for any one of the following conditions:
  - Concentrated or collected storm water runoff (e.g., storm sewer or ditch);
  - Runoff from drainage areas, which exceed the design capacity of silt fence or other sediment barriers; or
  - Runoff from drainage areas that exceed the design capacity of inlet protection;

The permittee may request approval from Ohio EPA to use alternative controls if the permittee can demonstrate the alternative controls are equivalent in effectiveness to a sediment settling pond.

Page 18 of 60 Ohio EPA Permit No.: OHC000005

In accordance with Part II.F, if feasible, sediment settling ponds shall be dewatered at the pond surface using a skimmer or equivalent device. The sediment settling pond volume consists of both a dewatering zone and a sediment storage zone. The volume of the dewatering zone shall be a minimum of 1800 cubic feet (ft³) per acre of drainage (67 yd³/acre) with a minimum 48-hour drain time. The volume of the sediment storage zone shall be calculated by one of the following methods:

Method 1: The volume of the sediment storage zone shall be 1000 ft<sup>3</sup> per disturbed acre within the watershed of the basin. OR

Method 2: The volume of the sediment storage zone shall be the volume necessary to store the sediment as calculated with RUSLE or a similar generally accepted erosion prediction model.

Accumulated sediment shall be removed from the sediment storage zone once it exceeds 50 percent of the minimum required sediment storage design capacity and prior to the conversion to the post-construction practice unless suitable storage is demonstrated based upon over-design. When determining the total contributing drainage area, off-site areas and areas which remain undisturbed by construction activity shall be included unless runoff from these areas is diverted away from the sediment settling pond and is not co-mingled with sediment-laden runoff. The depth of the dewatering zone shall be less than or equal to five feet. The configuration between inlets and the outlet of the basin shall provide at least two units of length for each one unit of width (≥ 2:1 length:width ratio); however, a length to width ratio of 4:1 is recommended. When designing sediment settling ponds, the permittee shall consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls shall be used where site limitations would preclude a safe design. Combining multiple sediment and erosion control measures in order to maximize pollutant removal is encouraged.

iii. **Sediment Barriers and Diversions.** Sheet flow runoff from denuded areas shall be intercepted by sediment barriers or diversions to protect adjacent properties and water resources from sediment transported via sheet flow. Where intended to provide sediment control, silt fence shall be placed on a level contour downslope of the disturbed area. For most applications, standard silt fence may be substituted with a 12-inch diameter sediment barrier. The relationship between the maximum drainage area to sediment barrier for a particular slope range is shown in the following table:

Table 3 Sediment Barrier Maximum Drainage Area Based on Slope

Maximum drainage area (in acres) to 100 linear feet of sediment barrier	Range of slope for a particular drainage area (in percent)
0.5	< 2%
0.25	≥ 2% but < 20%
0.125	≥ 20% but < 50%

Page 19 of 60 Ohio EPA Permit No.: OHC000005

Placing sediment barriers in a parallel series does not extend the size of the drainage area. Storm water diversion practices shall be used to keep runoff away from disturbed areas and steep slopes where practicable. Diversion practices, which include swales, dikes or berms, may receive storm water runoff from areas up to 10 acres.

- iv. **Inlet Protection.** Other erosion and sediment control practices shall minimize sediment laden water entering active storm drain systems. All inlets receiving runoff from drainage areas of one or more acres will require a sediment settling pond.
- v. Surface Waters of the State Protection. If construction activities disturb areas adjacent to surface waters of the state, structural practices shall be designed and implemented on site to protect all adjacent surface waters of the state from the impacts of sediment runoff. No structural sediment controls (e.g., the installation of silt fence or a sediment settling pond) shall be used in a surface water of the state. For all construction activities immediately adjacent to surface waters of the state, the permittee shall comply with the buffer non-numeric effluent limitation in Part II.A.6, as measured from the ordinary high water mark of the surface water. Where impacts within this buffer area are unavoidable, due to the nature of the construction (e.g., stream crossings for roads or utilities), the project shall be designed such that the number of stream crossings and the width of the disturbance within the buffer area are minimized.
- vi. **Modifying Controls**. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee shall replace or modify the control for site conditions.
- e. Post-Construction Storm Water Management Requirements. So that receiving stream's physical, chemical and biological characteristics are protected, and stream functions are maintained, post-construction storm water practices shall provide long-term management of runoff quality and quantity. To meet the post-construction requirements of this permit, the SWP3 shall contain a description of the post-construction BMPs that will be installed during construction for the site and the rationale for their selection. The rationale shall address the anticipated impacts on the channel and floodplain morphology, hydrology, and water quality. Post-construction BMPs cannot be installed within a surface water of the state (e.g., wetland or stream) unless it is authorized by a CWA 401 water quality certification, CWA 404 permit, or Ohio EPA non-jurisdictional wetland/stream program approval. Note: local jurisdictions may have more stringent post-construction requirements.

Detail drawings and maintenance plans shall be provided for all post-construction BMPs in the SWP3. Maintenance plans shall be provided by the permittee to the post-construction operator of the site (including homeowner associations) upon completion of construction activities (prior to termination of permit coverage). Maintenance plans shall ensure that pollutants collected within structural post-construction practices are disposed of in accordance with local, state, and federal regulations. To ensure that storm water management systems function as

Page 20 of 60 Ohio EPA Permit No.: OHC000005

designed and constructed, the post-construction operation and maintenance plan shall be a stand-alone document which contains: (1) a designated entity for storm water inspection and maintenance responsibilities; (2) the routine and nonroutine maintenance tasks to be undertaken; (3) a schedule for inspection and maintenance; (4) any necessary legally binding maintenance easements and agreements; (5) construction drawings or excerpts showing the plan view, profile and details of the outlet(s); and (6) a map showing all access and maintenance easements (7) for table 4a practices, provide relevant elevations and associated volumes that dictate when removal of accumulated sediments must occur. Permittees are responsible for assuring all post-construction practices meet plan specifications and intended post-construction conditions have been met (e.g., sediment removed from, and sediment storage restored to, permanent pools, sediment control outlets removed and replaced with permanent post-construction discharge structures, and all slopes and drainageways permanently stabilized), but are not responsible under this permit for operation and maintenance of postconstruction practices once coverage under this permit is terminated.

Post-construction storm water BMPs that discharge pollutants from point sources once construction is completed, may in themselves, need authorization under a separate NPDES permit (one example is storm water discharges from regulated industrial sites).

Construction activities that do not include the installation of any impervious surface (e.g., park lands), abandoned mine land reclamation activities regulated by the Ohio Department of Natural Resources, stream and wetland restoration activities, and wetland mitigation activities are not required to comply with the conditions of Part III.G.2.e of this permit. Linear construction projects, (e.g., pipeline or utility line installation), which do not result in the installation of additional impervious surface, are not required to comply with the conditions of Part III.G.2.e of this permit. However, linear construction projects shall be designed to minimize the number of stream crossings and the width of disturbance and achieve final stabilization of the disturbed area as defined in Part VII.M.1.

For all construction activities that will disturb two or more acres of land, or will disturb less than two acres, that are a part of a larger common plan of development or sale which will disturb two or more acres of land, the post construction BMP(s) chosen shall be able to manage storm water runoff for protection of stream channels, stream stability, and water quality. The BMP(s) chosen must be compatible with site and soil conditions. Structural post-construction storm water treatment practices shall be incorporated into the permanent drainage system for the site. The BMP(s) chosen must be sized to treat the water quality volume (WQ $_{\rm v}$ ) and ensure compliance with Ohio's Water Quality Standards in OAC Chapter 3745-1. The WQ $_{\rm v}$  shall be equivalent to the volume of runoff from a 0.90-inch rainfall and shall be determined using the following equations:

Page 21 of 60

Ohio EPA Permit No.: OHC000005

$$WQ_v = Rv * P * A / 12$$
 (Equation 1)

where:

 $WQ_v$  = water quality volume in acre-feet

Rv = the volumetric runoff coefficient calculated using equation 2

P = 0.90 inch precipitation depth

A = area draining into the BMP in acres

$$Rv = 0.05 + 0.9i$$
 (Equation 2)

where i = fraction of post-construction impervious surface)

An additional volume equal to 20 percent of the  $WQ_v$  shall be incorporated into the BMP for sediment storage. Ohio EPA recommends BMPs be designed according to the methodology described in the most current edition of the Rainwater and Land Development manual or in another design manual acceptable for use by Ohio EPA.

The BMPs listed in Tables 4a and 4b below are considered standard BMPs approved for general use. However, communities with a regulated MS4 may limit the use of some of these BMPs. BMPs shall be designed such that the drain time is long enough to provide treatment, but short enough to provide storage for successive rainfall events and avoid the creation of nuisance conditions. The outlet structure for the post-construction BMP shall not discharge more than the first half of the WQv in less than one-third of the drain time. The WQv is the volume of storm water runoff that must be detained by a post-construction practice as specified by the most recent edition of the Rainwater and Land Development manual.

Post-construction practices shall be sized to treat 100% of the WQv associated with their contributing drainage area. If there is an existing post-construction BMP that treats runoff from the disturbed area, and the BMP meets the post-construction requirements of this permit, no additional post-construction BMP will be required. A regional storm water BMP may be used to meet the post-construction requirement if 1) the BMP meets the design requirements for treating the WQv, and 2) a legal agreement is established through which the regional BMP owner or operator agrees to provide this service in the long term. Design information for such facilities such as contributing drainage areas, capacities, elevations, outlet details and drain times shall be included in the SWP3.

Table 4a Extended Detention Post-Construction Practices with Minimum Drain Times

Extended Detention Practices	Minimum Drain Time of WQv
Wet Extended Detention Basin <sup>1,2</sup>	24 hours
Constructed Extended Detention Wetland <sup>1,2</sup>	24 hours
Dry Extended Detention Basin <sup>1,3</sup>	48 hours
Permeable Pavement – Extended Detention <sup>1</sup>	24 hours
Underground Storage – Extended Detention <sup>1,4</sup>	24 hours
Sand & Other Media Filtration - Extended Detention <sup>1,</sup>	24 hours

Page 22 of 60

Ohio EPA Permit No.: OHC000005

#### Notes:

- 1. The outlet structure shall not discharge more than the first half of the WQv in less than one-third of the drain time.
- 2. Provide a permanent pool with a minimum volume equal to the WQv and an extended detention volume above the permanent pool equal to 1.0 x WQv.
- 3. Dry basins must include a forebay and a micropool each sized at a minimum of 0.1 x WQv and a protected outlet, or include acceptable pretreatment and a protected outlet.
- 4. Underground storage must have pretreatment for removal of suspended sediments included in the design and documented in the SWP3. This pretreatment shall concentrate sediment in a location where it can be readily removed. For non-infiltrating, underground extended detention systems, pretreatment shall be 50% effective at capturing total suspended solids according to the testing protocol established in the Alternative Post-Construction BMP Testing Protocol.
- 5. The WQv ponding area shall completely empty between 24 and 72 hours.

Table 4b Infiltration Post-Construction Practices with Maximum Drain Times

Infiltration Practices	Maximum Drain Time of WQv
Bioretention Area/Cell <sup>1,2</sup>	24 hours
Infiltration Basin	24 hours
Infiltration Trench <sup>2</sup>	48 hours
Permeable Pavement – Infiltration <sup>3</sup>	48 hours
Underground Storage – Infiltration <sup>3,4</sup>	48 hours

#### Notes:

- 1. Bioretention soil media shall have a permeability of approximately 1-4 in/hr. Meeting the soil media specifications in the Rainwater and Land Development manual is considered compliant with this requirement. Bioretention cells must have underdrains unless in-situ conditions allow for the WQv (surface ponding) plus the bioretention soil (to a depth of 24 inches) to drain completely within 48 hours.
- 2. Infiltrating practices with the WQv stored aboveground (bioretention, infiltration basin) shall fully drain the WQv within 24 hours to minimize nuisance effects of standing water and to promote vigorous communities of appropriate vegetation.
- 3. Subsurface practices designed to fully infiltrate the WQv (infiltration trench, permeable pavement with infiltration, underground storage with infiltration) shall empty within 48 hours to recover storage for subsequent storm events.
- 4. Underground storage systems with infiltration must have adequate pretreatment of suspended sediments included in the design and documented in the SWP3 in order to minimize clogging of the infiltrating surface. Pretreatment shall concentrate sediment in a location where it can be readily removed. Examples include media filters situated upstream of the storage or other suitable alternative approved by Ohio EPA. For infiltrating underground systems, pretreatment shall be 80% effective at capturing total suspended solids according to the testing protocol established in the Alternative Post-Construction BMP Testing Protocol.

<u>Small Construction Activities.</u> For all construction activities authorized under this permit which result in a disturbance less than 2 acres, a post-construction practice shall be used to treat storm water runoff for pollutants and to reduce adverse impacts on receiving waters. The applicant must provide a justification in the SWP3 why the use of table 4a and 4b practices are not feasible. The justification must address limiting factors which would prohibit the project going forward should table 4a and 4b practices be required. Please note that additional practices selected will require approval from the regulated MS4. The use of green infrastructure BMPs such as runoff reducing practices is also encouraged.

Page 23 of 60

Ohio EPA Permit No.: OHC000005

<u>Transportation Projects</u>. The construction of new roads and roadway improvement projects by public entities (i.e., the state, counties, townships, cities, or villages) may implement post-construction BMPs in compliance with the current version (as of the effective date of this permit) of the Ohio Department of Transportation's "Location and Design Manual, Volume Two Drainage Design" that has been accepted by Ohio EPA as an alternative to the conditions of this permit.

Offsite Mitigation of Post-Construction. Ohio EPA may authorize the offsite mitigation of the post-construction requirements of Part III.G.2.e of this permit on a case by case basis provided the permittee clearly demonstrates the BMPs listed in Tables 4a and 4b are not feasible and the following criteria are met: (1) a maintenance agreement or policy is established to ensure operations and treatment long-term; (2) the offsite location discharges to the same HUC-12 watershed unit; and (3) the mitigation ratio of the WQv is 1.5 to 1 or the WQv at the point of retrofit, whichever is greater. Requests for offsite mitigation must be received prior to receipt of the NOI application.

<u>Previously Developed Areas</u> - Ohio EPA encourages the redevelopment of previously graded, paved or built upon sites through a reduction of the WQv treatment requirement. For a previously developed area, one or a combination of the following two conditions shall be met:

- A 20 percent net reduction of the site's volumetric runoff coefficient through impervious area reduction with soil restoration or replacing impervious roof area with green roof area (for these purposes green roofs shall be considered pervious surface) or
- Treatment of 20 percent of the WQv for the previously developed area using a practice meeting Table 4a/5b criteria.

Where there is a combination of redeveloped areas and new development, a weighted approached shall be used with the following equation:

$$WQv = P * A * [(Rv*0.2) + (Rv2 - Rv1)] / 12$$
 (Equation 3)

Where

P = 0.90 inches

A = Area draining into the BMP in acres

Rv1 = volumetric runoff coefficient for existing conditions (current site impervious area)

Rv2 = volumetric runoff coefficient for proposed conditions (postconstruction site impervious area)

Post-construction practices shall be located to treat impervious areas most likely to generate the highest pollutant load, such as parking lots or roadways, rather than areas predicted to be cleaner such as rooftops.

Runoff Reduction Practices. The size of structural post-construction practices used to capture and treat the WQv can be reduced by incorporating runoff

Page 24 of 60

Ohio EPA Permit No.: OHC000005

reducing practices into the design of the site's drainage system. The approach to calculate and document runoff reduction is detailed in the Rainwater and Land Development Manual. BMP-specific runoff reduction volumes are set by specifications in the Rainwater and Land Development Manual for the following practices:

- Impervious surface disconnection
- Rainwater harvesting
- Bioretention
- Infiltration basin
- Infiltration trench
- Permeable pavement with infiltration
- Underground storage with infiltration
- Grass swale
- Sheet flow to filter strip
- Sheet flow to conservation area

A runoff reduction approach may be used to meet the groundwater recharge requirements in the Big Darby Creek Watershed; the runoff reduction practices used for groundwater recharge may be used to reduce the WQv requirement, see appendix A for details on groundwater recharge requirements.

In order to promote the implementation of green infrastructure, the Director may consider the use of runoff reducing practices to demonstrate compliance with Part III.G.2.e of this permit for areas of the site not draining into a common drainage system of the site, e.g., sheet flow from perimeter areas such as the rear yards of residential lots, low density development scenarios, or where the permittee can demonstrate that the intent of pollutant removal and stream protection, as required in Part III.G.2.e of this permit is being addressed through non-structural post-construction BMPs based upon review and approval by Ohio EPA.

<u>Use of Alternative Post-Construction BMPs.</u> This permit does not preclude the use of innovative or experimental post-construction storm water management technologies. Alternative post-construction BMPs shall previously have been tested to confirm storm water treatment efficacy equivalent to those BMPs listed in Tables 4a and 4b using the protocol described in this section. BMP testing may include laboratory testing, field testing, or both.

Permittees shall request approval from Ohio EPA to use alternative post-construction BMPs on a case-by-case basis. To use an alternative post-construction BMP, the permittee must demonstrate that a BMP listed in Tables 4a and 4b is not feasible and the proposed alternative post-construction BMP meets the minimum treatment criteria as described in this section. The permittee shall submit an application to Ohio EPA for any proposed alternative post-construction BMP. Where the development project is located within a regulated municipal separate storm sewer system (MS4) community, the use of an alternative practice requires pre-approval by the MS4 before submittal of the Ohio EPA permit application. Ohio EPA requires that approvals for alternative

Page 25 of 60

Ohio EPA Permit No.: OHC000005

post-construction BMPs are finalized before permittees submit an NOI for permit coverage.

In addition to meeting sediment removal criteria, the discharge rate from the proposed alternative practice shall be reduced to prevent stream bed erosion and protect the physical and biological stream integrity unless there will be negligible hydrological impact to the receiving surface water of the state. Discharge rate is considered to have a negligible impact if the permittee can demonstrate that one of the following three conditions exist:

- The entire WQv is recharged to groundwater;
- ii. The larger common plan of development or sale will create less than one acre of impervious surface;
- iii. The storm water drainage system of the development discharges directly into a large river with drainage area equal to 100 square miles or larger upstream of the development site or to a lake where the development area is less than 5 percent of the watershed area, unless a TMDL has identified water quality problems into the receiving surface waters of the state.

If the conditions above that minimize the potential for hydrological impact to the receiving surface water of the state do not exist, then the alternative post-construction BMP must prevent stream erosion by reducing the flow rate from the  $WQ_V$ . In such cases, discharge of the  $WQ_V$  must be controlled. A second storm water BMP that provides extended detention of the  $WQ_V$  may be needed to meet the post-construction criteria.

Alternative Post-Construction BMP Testing Protocol. For laboratory testing, the alternative BMP shall be tested using sediment with a specific gravity of 2.65, a particle size distribution closely matching the distribution shown in Table 5, and total suspended sediment (TSS) concentrations within 10% of 200 mg/L (180 mg/L – 220 mg/L TSS). For an alternative BMP to be acceptable, the test results must demonstrate that the minimum treatment rate is 80% TSS removal at the design flow rate for the tested BMP.

Table 5 Particle Size Distribution for Testing Alternative Post-Construction BMPs

Particle Size (microns)	Percent Finer (%)
1,000	100
500	95
250	90
150	75
100	60
75	50
50	45
20	35
8	20
5	10
2	5

 For field testing, the alternative BMP shall be tested using storm water runoff from the field, not altered by adding aggregate, or subjecting to unusually high

Page 26 of 60 Ohio EPA Permit No.: OHC000005

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sediment loads such as those from unstabilized construction disturbance. The storm water runoff used for field testing shall be representative of runoff from the proposed installation site for the alternative BMP after all construction activities have ceased and the ground has been stabilized. The influent and effluent TSS concentrations of storm water runoff must be collected in the field. For an alternative BMP to be acceptable, the test results must demonstrate the minimum treatment rate is 80% TSS removal for influent concentrations equal to or greater than 100 mg/L TSS. If the influent concentration to the proposed alternative BMP is less than 100 mg/L TSS in the field, then the BMP must achieve an average effluent concentration less than or equal to 20 mg/L TSS.

- Testing of alternative post-construction BMPs shall be performed or overseen by a qualified independent, third-party testing organization.
- Testing shall demonstrate the maximum flow rate at which the alternative post-construction BMP can achieve the necessary treatment efficacy, including consideration for the potential of sediment resuspension.
- Testing shall demonstrate the maximum volume of sediment and floatables that can be collected in the alternative post-construction BMP before pollutants must be removed to maintain 80% treatment efficacy.
- Testing shall indicate the recommended maintenance frequency and maintenance protocol to ensure ongoing performance of the alternative post-construction BMP.

The alternative post-construction BMP testing protocol described in this section is similar to testing requirements specified by the New Jersey Department of Environmental Protection (NJDEP) for storm water Manufactured Treatment Devices (MTD) and therefore testing results certified by NJDEP shall be accepted by Ohio EPA. For examples of BMPs that have been tested using New Jersey Department of Environmental Protection's procedures, see the website: <a href="https://www.njstormwater.org">www.njstormwater.org</a>.

Another nationally recognized storm water product testing procedure is the Technology Assessment Protocol – Ecology (TAPE) administered by the State of Washington, Department of Ecology. The TAPE testing procedure describes testing to achieve 80% TSS removal using a sediment mix with a particle size distribution with approximately 75% of the mass of the aggregate with particle diameters less than 45 microns. Overall, this particle size distribution is finer than the distribution in Table 6. Therefore, if TAPE testing results are available for a proposed alternative post-construction BMP, those results shall be accepted by Ohio EPA. The State of Washington, Department of Ecology website is www.ecy.wa.gov.

Alternative BMPs that utilize treatment processes such as filtering or centrifugal separation, rather than a detention and settling volume, must be designed to ensure treatment of 90 percent of the average annual runoff volume. For the design of these BMPs, the water quality flow rate (WQF)

Page 27 of 60 Ohio EPA Permit No.: OHC000005

considered equivalent to the Water Quality Volume (WQv) shall be determined utilizing the Rational Method (Equation 4) with an intensity (i) appropriate for the water quality precipitation event. This intensity shall be calculated using the table given in Appendix C.

$$WQF = C * i * A$$
 (Equation 4)

Where

WQF = Water Quality Flow Rate in cubic feet per second (cfs)

C = Rational Method Coefficient of Runoff

i = Intensity (in/hr)

A = Area draining to the BMP (acres)

Alternative post-construction BMPs may include, but are not limited to: vegetated swales, vegetated filter strips, hydrodynamic separators, high-flow media filters, cartridge filters, membrane filters, subsurface flow wetlands, multi-chamber treatment trains, road shoulder media filter drains, wetland channels, rain barrels, green roofs, and rain gardens. The Director may also consider non-structural post-construction approaches.

- f. Surface Water Protection. If the project site contains any streams, rivers, lakes, wetlands or other surface waters, certain construction activities at the site may be regulated under the CWA and/or state isolated wetland permit requirements. Sections 404 and 401 of the Act regulate the discharge of dredged or fill material into surface waters and the impacts of such activities on water quality, respectively. Construction activities in surface waters which may be subject to CWA regulation and/or state isolated wetland permit requirements include, but are not limited to: sewer line crossings, grading, backfilling or culverting streams, filling wetlands, road and utility line construction, bridge installation and installation of flow control structures. If the project contains streams, rivers, lakes or wetlands or possible wetlands, the permittee shall contact the appropriate U.S. Army Corps of Engineers District Office. (CAUTION: Any area of seasonally wet hydric soil is a potential wetland - please consult the Soil Survey and list of hydric soils for your County, available at your county's Soil and Water Conservation District. If you have any questions about Section 401 water quality certification, please contact the Ohio Environmental Protection Agency, Section 401 Coordinator.)
  - U.S. Army Corps of Engineers (Section 404 regulation):
    - Huntington, WV District (304) 399-5210 (Muskingum River, Hocking River, Scioto River, Little Miami River, and Great Miami River Basins)
    - Buffalo, NY District (716) 879-4330 (Lake Erie Basin)
    - Pittsburgh, PA District (412) 395-7155 (Mahoning River Basin)
    - Louisville, KY District (502) 315-6686 (Ohio River)

Ohio EPA 401/404 and non-jurisdictional stream/wetland coordinator can be contacted at (614) 644-2001 (all of Ohio)

Page 28 of 60 Ohio EPA Permit No.: OHC000005

Concentrated storm water runoff from BMPs to natural wetlands shall be converted to diffuse flow before the runoff enters the wetlands. The flow should be released such that no erosion occurs downslope. Level spreaders may need to be placed in series, particularly on steep sloped sites, to ensure non-erosive velocities. Other structural BMPs may be used between storm water features and natural wetlands, in order to protect the natural hydrology, hydroperiod, and wetland flora. If the applicant proposes to discharge to natural wetlands, a hydrologic analysis shall be performed. The applicant shall attempt to match the pre-development hydroperiods and hydrodynamics that support the wetland. The applicant shall assess whether their construction activity will adversely impact the hydrologic flora and fauna of the wetland. Practices such as vegetative buffers, infiltration basins, conservation of forest cover, and the preservation of intermittent streams, depressions, and drainage corridors may be used to maintain wetland hydrology.

## g. Other controls.

- i. Non-Sediment Pollutant Controls. In accordance with Part II.E. no solid (other than sediment) or liquid waste, including building materials. shall be discharged in storm water runoff. The permittee must implement all necessary BMPs to prevent the discharge of non-sediment pollutants to the drainage system of the site or surface waters of the state or an MS4. Under no circumstance shall wastewater from the washout of concrete trucks, stucco, paint, form release oils, curing compounds, and other construction materials be discharged directly into a drainage channel, storm sewer or surface waters of the state. Also, no pollutants from vehicle fuel, oils, or other vehicle fluids can be discharged to surface waters of the state. No exposure of storm water to waste materials is recommended. The SWP3 must include methods to minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, and sanitary waste to precipitation, storm water runoff, and snow melt. In accordance with Part II.D.3, the SWP3 shall include measures to prevent and respond to chemical spills and leaks. You may also reference the existence of other plans (i.e., Spill Prevention Control and Countermeasure (SPCC) plans, spill control programs, Safety Response Plans, etc.) provided that such plan addresses conditions of this permit condition and a copy of such plan is maintained on site.
- ii. **Off-site traffic.** Off-site vehicle tracking of sediments and dust generation shall be minimized. In accordance with Part II.D.1, the SWP3 shall include methods to minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. No detergents may be used to wash vehicles. Wash waters shall be treated in a sediment basin or alternative control that provides equivalent treatment prior to discharge.
- iii. **Compliance with other requirements.** The SWP3 shall be consistent with applicable State and/or local waste disposal, sanitary sewer or septic system regulations, including provisions prohibiting waste disposal by

Page 29 of 60

Ohio EPA Permit No.: OHC000005

open burning and shall provide for the proper disposal of contaminated soils to the extent these are located within the permitted area.

- iv. **Trench and ground water control**. In accordance with Part II.C, there shall be no turbid discharges to surface waters of the state resulting from dewatering activities. If trench or ground water contains sediment, it shall pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag or comparable practice. Ground water which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care must be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.
- v. **Contaminated Sediment.** Where construction activities are to occur on sites with contamination from previous activities, operators shall be aware that concentrations of materials that meet other criteria (is not considered a Hazardous Waste, meeting VAP standards, etc.) may still result in storm water discharges in excess of Ohio Water Quality Standards. Such discharges are not authorized by this permit. Appropriate BMPs include, but are not limited to:
  - The use of berms, trenches, and pits to collect contaminated runoff and prevent discharges;
  - Pumping runoff into a sanitary sewer (with prior approval of the sanitary sewer operator) or into a container for transport to an appropriate treatment/disposal facility; and
  - Covering areas of contamination with tarps or other methods that prevent storm water from coming into contact with the material.

Operators should consult with Ohio EPA Division of Surface Water prior to seeking permit coverage.

- h. Maintenance. All temporary and permanent control practices shall be maintained and repaired as needed to ensure continued performance of their intended function. All sediment control practices must be maintained in a functional condition until all up-slope areas they control are permanently stabilized. The SWP3 shall be designed to minimize maintenance requirements. The applicant shall provide a description of maintenance procedures needed to ensure the continued performance of control practices.
- i. <u>Inspections.</u> The permittee shall assign "qualified inspection personnel" to conduct inspections to ensure that the control practices are functional and to evaluate whether the SWP3 is adequate and properly implemented in accordance with the schedule proposed in Part III.G.1.g of this permit or whether additional control measures are required. At a minimum, procedures in a SWP3 shall provide that all controls on the site are inspected:

Page 30 of 60

Ohio EPA Permit No.: OHC000005

- after any storm event greater than one-half inch of rain per 24-hour period by the end of the next calendar day, excluding weekends and holidays unless work is scheduled; and
- once every seven calendar days.

The inspection frequency may be reduced to at least once every month for dormant sites if:

- the entire site is temporarily stabilized or
- runoff is unlikely due to weather conditions for extended periods of time (e.g., site is covered with snow, ice, or the ground is frozen).

The beginning and ending dates of any reduced inspection frequency shall be documented in the SWP3.

Once a definable area has achieved final stabilization, the area may be marked on the SWP3 and no further inspection requirements shall apply to that portion of the site.

Following each inspection, a checklist must be completed and signed by the qualified inspection personnel representative. At a minimum, the inspection report shall include:

- i. the inspection date;
- ii. names, titles, and qualifications of personnel making the inspection;
- iii. weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
- iv. weather information and a description of any discharges occurring at the time of the inspection;
- v. location(s) of discharges of sediment or other pollutants from the site;
- vi. location(s) of BMPs that need to be maintained;
- vii. location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
- viii. location(s) where additional BMPs are needed that did not exist at the time of inspection; and
- ix. corrective action required including any changes to the SWP3 necessary and implementation dates.

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of or the potential for pollutants entering the drainage system. Erosion and sediment control measures identified in the SWP3 shall be observed to ensure that those are operating correctly. Discharge locations shall be inspected to ascertain whether erosion and sediment control measures are effective in preventing significant impacts to the receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.

Page 31 of 60 Ohio EPA Permit No.: OHC000005

The permittee shall maintain for three years following the submittal of a notice of termination form, a record summarizing the results of the inspection, names(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWP3 and a certification as to whether the facility is in compliance with the SWP3 and the permit and identify any incidents of non-compliance. The record and certification shall be signed in accordance with Part V.G. of this permit.

- i. When practices require repair or maintenance. If the inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment settling pond, it shall be repaired or maintained within 3 days of the inspection. Sediment settling ponds shall be repaired or maintained within 10 days of the inspection.
- ii. When practices fail to provide their intended function. If the inspection reveals that a control practice fails to perform its intended function and that another, more appropriate control practice is required, the SWP3 shall be amended and the new control practice shall be installed within 10 days of the inspection.
- iii. When practices depicted on the SWP3 are not installed. If the inspection reveals that a control practice has not been implemented in accordance with the schedule contained in Part III.G.1.h of this permit, the control practice shall be implemented within 10 days from the date of the inspection. If the inspection reveals that the planned control practice is not needed, the record shall contain a statement of explanation as to why the control practice is not needed.
- 3. Approved State or local plans. All dischargers regulated under this general permit must comply, except those exempted under state law, with the lawful requirements of municipalities, counties and other local agencies regarding discharges of storm water from construction activities. All erosion and sediment control plans and storm water management plans approved by local officials shall be retained with the SWP3 prepared in accordance with this permit. Applicable requirements for erosion and sediment control and storm water management approved by local officials are, upon submittal of a NOI form, incorporated by reference and enforceable under this permit even if they are not specifically included in an SWP3 required under this permit. When the project is located within the jurisdiction of a regulated municipal separate storm sewer system (MS4), the permittee shall certify that the SWP3 complies with the requirements of the storm water management program of the MS4 operator.
- 4. Exceptions. If specific site conditions prohibit the implementation of any of the erosion and sediment control practices contained in this permit or site-specific conditions are such that implementation of any erosion and sediment control practices contained in this permit will result in no environmental benefit, then the permittee shall provide justification for rejecting each practice based on site conditions. Exceptions from implementing the erosion and sediment control standards contained in this permit will be approved or denied on a case-by-case basis.

This foregoing document was electronically filed with the Public Utilities

**Commission of Ohio Docketing Information System on** 

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in

Case No(s). 21-0268-EL-BLN

Summary: Notice Proof of Compliance Part 2 electronically filed by Hector Garcia-Santana on behalf of AEP Ohio Transmission Company, Inc.