

**CASE No. 16-52-GA-BNR
CONSTRUCTION NOTICE FOR
LINE 1745 (2016) PIGGABILITY PROJECT**

ATTACHMENT F

STORMWATER POLLUTION PREVENTION PLAN



THE EAST OHIO GAS COMPANY

STORMWATER POLLUTION PREVENTION PLAN (SWP3)

Line 1745 Piggability

City of New Franklin, Summit County and Lawrence Township, Stark County Ohio

Planned Construction Start Date: _____

Planned Construction Completion Date: _____

Construction Supervisor: _____

Telephone: _____

Project Manager (signature): _____

Construction Contractor (signature): _____

Environmental Inspector (signature): _____

Note:

**THIS PLAN MUST BE KEPT AT THE
CONSTRUCTION SITE DURING WORKING HOURS**

SWP3 Prepared: January 18, 2016

Prepared by: The East Ohio Gas Company and EnviroScience, Inc.

STORMWATER POLLUTION PREVENTION PLAN
THE EAST OHIO GAS COMPANY
Line 1745 Piggability
City of New Franklin, Summit County and Lawrence
Township, Stark County Ohio

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LIST OF DEFINITIONS

BMP	Best Management Practice
C&DD	Construction and Demolition Debris
CWA	Clean Water Act
Director	the Director of the Ohio Environmental Protection Agency
E&S	Erosion and Sediment
EDv	Extended Detention Volume
EPA	Environmental Protection Agency
General Permit	General Permit for Stormwater Discharges Associated with Construction Activities Under the National Pollutant Discharge Elimination System Permit No. OHC000004, effective April 21, 2013, expires April 21, 2018.
HUC14	Fourteen-Digit Hydrologic Unit Code
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
OAC	Ohio Administrative Code
ORAM	Ohio Rapid Assessment Method
PCSM	Post-Construction Stormwater Management
PTI	Permit to Install
SPCC	Spill Prevention Control and Countermeasures
SWP3	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
VAP	Voluntary Action Program
WQv	Water Quality Volume

EXECUTIVE SUMMARY

This Stormwater Pollution Prevention Plan (SWP3) sets forth procedures to be followed during construction activities to minimize adverse impacts due to sedimentation and potential environmental pollutants resulting from storm water runoff and to reduce sediment and environmental pollutant runoff after Project completion for the East Ohio Gas Company (Dominion) Line 1745 Piggability located in the City of New Franklin in Summit County and Lawrence Township in Stark County Ohio. The procedures developed in this plan must be implemented throughout the duration of the Project.

Dominion will be responsible for the development and enforcement of this plan. Dominion personnel may designate qualified representatives such as environmental inspectors or contractors to ensure the provisions of this permit are properly employed.

This document was prepared in accordance with the following documents, regardless of applicability: Ohio Department of Natural Resources, Division of Soil and Water Conservation. "Rainwater and Land Development" Manual Third Edition 2006. Updated 11-6-14; Ohio Environmental Protection Agency (EPA), Authorization for Stormwater Discharges Associated with Construction Activity Under the National Pollutant Discharge Elimination System (NPDES) Permit OHC000004; and Ohio EPA Stormwater Program Website. <http://www.epa.state.oh.us/dsw/storm/index.aspx>.

This plan covers discharges composed entirely of stormwater associated with a specific construction activity that enter surface waters or a storm drain leading to surface waters. Construction activities include any clearing, grading, excavating, grubbing and/or filling activities that disturb one or more acres of land.

1.0 STORMWATER POLLUTION PREVENTION PLAN

The purpose of this SWP3 is to present procedures that will be followed during construction activities to minimize adverse impacts due to sedimentation resulting from storm water runoff and to reduce sediment runoff after Project completion. This plan was 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 stormwater management practices addressing all phases of construction. This SWP3 was prepared by Dominion and EnviroScience, Inc.

This SWP3 has identified potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with construction activities. This SWP3 describes and ensures the implementation of Best Management Practices (BMPs) that reduce the pollutants in stormwater discharges during construction and pollutants associated with post-construction activities to ensure compliance with applicable Federal, State, and Local regulations. In addition, the SWP3 conforms to the specifications of the Ohio Rainwater and Land Development Manual Third Edition 2006, updated November 6, 2014.

Plan Availability

Dominion will provide this plan, upon request, to any regulatory authority associated with approval of this plan and will do so within the time frames stipulated by each regulatory authority.

Plan Revisions and Amendments

This plan must be revised if any regulatory authority associated with approval of this plan notifies Dominion that the SWP3 does not meet one or more the minimum requirements of the regulatory authority. Within ten (10) days after such notification, the plan must be revised by Dominion and if requested, Dominion must submit the revised plan to the regulatory authority.

This plan must be amended by Dominion whenever there is a change in site design, construction, operation, or maintenance that requires the installation of BMPs or modifications to the existing BMPs.

Plan Notifications to Contractors and Subcontractors

Dominion must inform all contractors and subcontractors who will be involved in the implementation of the SWP3, of any terms and conditions of any approval from any regulatory authority associated with review of this plan. Dominion must 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 must be developed and signatures of each individual contractor must be obtained prior to their commencement of work on the construction site. Certification statements for contractors and subcontractors can be found in Section 3.0.

1.1 SITE DESCRIPTION

The purpose of this project is to ensure 8,868 feet of Line 1745, between the Dominion Franklin Station and Valve #4853 on Glencoe Street, is suitable to internally assess the existing natural gas line for abnormalities and internal corrosion. For this purpose, fifteen (15) existing fittings (elbows, tees and valves) will be replaced. Each dig location will require a ten (10) foot by ten (10) foot work area. In addition 1,650 feet of existing eight (8)-inch diameter pipeline between Glencoe Street NW and Fairpark Avenue NW will be replaced with twelve (12)-inch diameter pipeline and a pig launcher/receiver will be installed. Pipeline replacement activities will require a 60 foot wide construction corridor. All construction activities will be limited to the existing 60 foot wide (30 feet on either side of the pipeline) utility right-of-way (ROW). Additionally, an existing access road that originates at Fairpark Avenue NW, will be used to access the two (2) work locations located northwest of Stream S-1 and within the Summit MetroParks property. Construction activities will require minor tree and shrub clearing. After all work is completed, grades will be returned to pre-construction contours. Three (3) wetlands, one (1) perennial stream, and one (1) intermittent stream were identified within the project area. No onsite wetlands or streams will be impacted for project activities. The project area is composed of a maintained ROW within a residential, agricultural, forested, and wetland setting.

The Project is located in the City of New Franklin in Summit County and Lawrence Township in Stark County, Ohio. The project area begins at an existing Dominion station located west of Hampsher Road in the City of New Franklin. The project area continues south within off-road utility ROW, crossing over West Comet Road, Fairpark Avenue NW, Skyline Street NW, and ending just north of Glencoe Street NW in Lawrence Township. The site map included in Appendix A depicts the location of the Project in relation to nearby roads and surface waters.

The Project is expected to disturb approximately 2.3 acres due to clearing, grubbing, excavation, filling, grading, installation of erosion control measures, post-construction control measures, and including off-site borrow sites.

1.2 PRE-CONSTRUCTION AND POST-CONSTRUCTION SITE CONDITIONS

New impervious surfaces will not be created. The Project will essentially result in no permanent change in land use or land cover and, therefore, is not expected to result in an increase in runoff. All areas disturbed by the Project will be restored to their pre-construction material, condition, and contours; therefore, the calculation of runoff coefficients for pre-construction vs. post-construction conditions is not warranted or applicable to this linear Project.

1.3 EXISTING SOIL DATA

The United States Department of Agriculture, Natural Resources Conservation Service (NRCS) Soil Survey was utilized to identify soil map units within the Project site. Sixteen (16) soil types are depicted within the project area and are listed in Table 1. Two (2) soil types, Carlisle Muck (Cg) and Luray Silt Loam (Ly), are listed as all hydric. A copy of the Soil Survey Map for the Project is provided in Appendix B.

Table 1: Soil Types Mapped in Project Area

Symbol	Soil Name	Drainage Capacity	Common Landform	Percent Hydric	Depth to Water Table (centimeters)	Percent Within Project Area
Cg	Carlisle muck	Very poorly drained	bogs, kettles	100	N/A	2.5
CnB	Chili loam, 2 to 6 percent slopes	Well drained	N/A	0	N/A	5.4
CnC	Chili loam, 6 to 12 percent slopes	Well drained	kames, terraces	0	N/A	8.6
CoC2	Chili gravelly loam, 6 to 12 percent slopes, moderately eroded	Well drained	till plains, moraines	0	N/A	3.3
CpA	Chili silt loam, 0 to 2 percent slopes	Well drained	N/A	0	N/A	0.9
CpB	Chili silt loam, 2 to 6 percent slopes	Well drained	N/A	0	N/A	4.0
CyD2	Conotton gravelly loam, 12 to 18 percent slopes, moderately eroded	Well drained	terraces	0	N/A	2.3
Ly	Luray silt loam	Very poorly drained	depressions on glacial lakes, depressions on uplands	100	N/A	7.0
OsB	Oshtemo sandy loam, 2 to 6 percent slopes	Well drained	terraces	0	N/A	4.6
OsC	Oshtemo sandy loam, 6 to 12 percent slopes	Well drained	terraces	0	N/A	9.2
WmB	Wheeling loam, 2 to 6 percent slopes	Well drained	N/A	0	N/A	11.8
WmC2	Wheeling loam, 6 to 12 percent slopes, moderately eroded	Well drained	terraces	0	N/A	7.0
WuB	Wooster silt loam, 2 to 6 percent slopes	Well drained	N/A	0	122	2.3
WuC2	Wooster silt loam, 6 to 12 percent slopes, moderately eroded	Well drained	hillsides	0	122	25.0
WuD2	Wooster silt loam, 12 to 18 percent, moderately eroded	Well drained	hillsides on uplands	0	122	6.0

1.4 PRIOR LAND USES

Prior land uses for the Project site includes existing utility ROW where vegetation is mostly maintained in an herbaceous condition. Several areas, mostly along the perimeter of the ROWs, are not maintained and have forested vegetation. The existing ROW has maintained lawn, agricultural field, open field, and forest plant communities. The surrounding area includes open, agricultural, forested, and residential areas.

1.5 IMPLEMENTATION SCHEDULE

A general implementation schedule providing the sequence of major construction operations is provided below. Construction activities are planned to begin in Summer 2016, as soon as all permits and clearances are in place, and will last until Summer 2016, weather permitting. Surface stabilization at the Project site is expected to take place incrementally, as construction progresses. Once all land disturbing activities have been completed, the site must be permanently stabilized. Throughout the life of the Project, construction logs must be kept to record major dates of grading, excavating, and stabilizing.

1 - SITE PREPARATION FOR ENTIRE PROJECT – March 2016 (tree clearing only); June 2016 through July 2016

- Mobilization.
- Survey and stake existing pipeline and limits of construction.
- Flag/field mark wetland areas, as necessary.
- Installation/improvement to construction entrances, and installation of silt fence or other BMPs designated to control storm water at the project boundary.
- Install gravel on dirt roads, and fill-in rutted areas on existing gravel roads.

2 - SITE PREPARATION FOR EACH JOB – March 2016 (tree clearing only); June 2016 through July 2016

- Install BMPs (see Section 2.0) for access roads/equipment crossings at stream crossings and wetland crossings.
- Begin clearing and grubbing of the site.
- Install temporary runoff controls and erosion control devices where needed.
- Conduct grading activities, as needed.
- Monitor all erosion and sediment controls per the monitoring schedule.

3 - MAJOR CONSTRUCTION ACTIVITIES – June 2016 through July 2016

- Excavation.
- Implement BMPs (See Section 2.0) for dewatering (if required).
- Monitor all erosion and sediment controls per the monitoring schedule.

4 - RESTORATION – July 2016 through August 2016

- Restore grade to preconstruction contours and install permanent runoff controls, where needed.
- Apply seed and mulch to all disturbed upland areas.
- Install erosion control blankets or turf matting on steep slopes.
- Monitor all erosion and sediment controls per the monitoring schedule.

5 - POST-CONSTRUCTION MONITORING (On-going until 70 percent cover reached)

- Monitor adequacy of erosion control practices.
- After permanent stabilization is achieved, remove temporary erosion and sediment controls and runoff controls once 70 percent uniform vegetative growth is achieved.
- Submit Notice of Termination, if required.

1.6 RECEIVING STREAMS OR SURFACE WATERS

The Project is located within the Tuscarawas River Watershed (Hydrologic Unit Code # 05040001) and is not expected to cross any streams or wetlands. Project mapping is included in Appendix C.

1.7 SITE MAP

A Project site location map is provided in Appendix A. The project specific erosion and sediment control location drawings (in Appendix C) depict the limits of earth-disturbing activity, soil types, existing and proposed contours, surface water locations and locations of any in-stream activities, existing buildings, roads, and utilities, the location of all erosion and sediment control measures including basins, the location of any permanent stormwater management controls including basins, areas designated for disposal and storage, as well as, location of all construction entrances. Typical erosion and sediment control drawings for sediment and erosion controls and post-construction stormwater management practices are included in Appendix D.

2.0 CONTROLS

To the extent practicable, the locations of temporary and permanent stormwater BMPs to be implemented for the Project site are shown on the drawings provided in Appendix C. The BMPs will be implemented in accordance with the Typical Drawings provided in Appendix D. The erosion, sediment, and stormwater management practices to be implemented are in accordance with the standards and specification in the current edition of Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection, Rainwater and Land Development Manual, Third Edition 2006 updated November 6, 2014.

2.1 NON-STRUCTURAL PRESERVATION METHODS

In order to preserve the existing natural condition as much as feasible, the Project will avoid clearing and grubbing where feasible, minimize the amount of soil and vegetation disturbances by phasing construction operations and minimize disturbances to surface waters. The recommended buffer along any surface water to be undisturbed is 25 feet measured from the ordinary high water mark of the surface water.

2.2 EROSION CONTROL PRACTICES

Erosion control measures provide cover over disturbed soils in order to minimize erosion. Disturbed areas must be stabilized after construction activities. Erosion control measures included in the Project include: construction entrances, dust control, topsoiling, temporary seeding, mulching, permanent seeding, and sodding. Erosion Control Measures are in accordance with Chapter 7 of the Rainwater and Land Development Manual, Third Edition 2006 updated November 6, 2014. Typical drawings for these erosion control measures are provided in Appendix D.

Permanent stabilization is defined as the establishment of permanent vegetation, decorative landscape mulching, matting, sod, rip rap, and landscaping techniques to provide permanent erosion control on areas where construction operations are complete or where no further disturbance is expected for at least one (1) year.

Temporary stabilization is defined as the establishment of temporary vegetation, mulching, geotextiles, sod, preservation of existing vegetation, and other techniques capable of quickly establishing cover over disturbed areas to provide erosion control between construction operations.

Final stabilization is defined and achieved when all soil disturbing activities at the site are complete and disturbed surfaces are covered with permanent structures, pavement, a uniform perennial vegetative cover (e.g., evenly distributed, without large bare areas) with a density of at least 70 percent cover, or other equivalent stabilization measures (such as the use of landscape mulches, rip-rap, gabions or geotextiles) have been employed. In addition, all temporary erosion and sediment control practices are removed and disposed of, and all trapped sediment is permanently stabilized to prevent further erosion.

Disturbed areas will be stabilized following completion of construction activities as specified in Tables 2 and 3 below and in accordance with the site layout maps and drawings provided in Appendix C.

Table 2: Permanent Stabilization

Area Requiring Permanent Stabilization	Time Frame to Apply Erosion Controls
Any areas that will lie dormant for one (1) year or more.	Within seven (7) days of the most recent disturbance.
Any areas within 50 feet of a surface water of the State and at final grade.	Within two (2) days of reaching final grade.
Any other areas at final grade.	Within seven (7) days of reaching final grade within that area.

Table 3: 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 (2) days of the most recent disturbance if the area will remain idle for more than fourteen (14) days.
For all construction activities, any disturbed areas that will be dormant for more than fourteen (14) days but less than one (1) year, and not within 50 feet of a surface water of the State.	Within seven (7) days of the most recent disturbance within the area. For residential subdivisions, disturbed areas must be stabilized at least seven (7) 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.

Construction Entrance: A construction entrance is a method of erosion control that is used to reduce the amount of mud tracked off-site with construction traffic. A construction entrance is a stabilized pad of stone underlain with a geotextile. These entrances are located at points of ingress/egress of construction traffic.

Dust Control: Dust control is a method of erosion control that involves preventing or reducing dust from exposed soils or other sources during land disturbing, demolition, and construction activities to reduce the presence of airborne substances which may present health hazards, traffic safety problems, or harm animal or plant life.

Mulching: Mulching is a temporary or permanent method of erosion control used to protect exposed soil or freshly seeded areas from the direct impact of precipitation by providing a temporary surface cover. Mulch also helps establish vegetation by conserving moisture and creating favorable conditions for seeds to germinate. Mulch must be used liberally throughout construction to limit the areas that are bare and susceptible to erosion. Mulch can be used in conjunction with seeding to establish vegetation or by itself to provide erosion control when the season does not allow grass to grow. Mulch and other vegetative practices must be applied on all disturbed portions of construction-sites that will not be re-disturbed for more than fourteen (14) days.

Permanent Seeding: Permanent seeding is a method of erosion control used to permanently stabilize soil on construction sites where land-disturbing activities, exposed soil, and work has been completed or is not scheduled for more than twelve (12) months. Permanent seeding must be applied to any disturbed areas or portions of construction sites at final grade. Permanent seeding must not be delayed on any one portion of the site at final grade while construction on another portion of the site is being completed. Permanent seeding must be completed in phases, if necessary. Permanent vegetation is used to stabilize soil, reduce erosion, prevent sediment pollution, reduce runoff by promoting infiltration, and provide stormwater quality benefits offered by dense grass cover.

Sodding: Sodding is a method of erosion control that utilizes rolls or mats of turf grass to provide immediate stabilization to bare soils. It is especially useful in highly erosive areas such as drainage ways and on slopes that will be mowed. Sod may be used where immediate cover is required or preferred and where vegetation will be adequate stabilization such as minor swales, around drop inlets, and lawns.

Temporary Seeding: Temporary seeding is a method of erosion control used to temporarily and quickly stabilize soil on construction sites where land-disturbing activities have been initiated but not completed. Appropriate rapidly growing annual grasses or small grains must be planted on the disturbed areas. Temporary seeding effectively minimizes the area of a construction site prone to erosion and must be used everywhere the sequence of construction operations allows vegetation to be established. Temporary seeding must be applied on exposed soil where additional work (grading, etc.) is not scheduled for more than fourteen (14) days. Mixes to be applied are specific to the time of year the seeding will take place and the location of the Project within the state.

Topsoiling: During grading operations, topsoil and the upper most organic layer of soil will be stripped and stockpiled and then subsequently replaced on the newly graded areas. Topsoil provides a more suitable growing medium than subsoil or on areas with poor moisture, low nutrient levels, undesirable pH, or in the presence of other materials that would inhibit establishment of vegetation. Replacing topsoil helps plant growth by improving the water holding capacity, nutrient content, and consistency of the soils.

2.3 RUNOFF CONTROL PRACTICES

Temporary and permanent runoff control is important on development sites to minimize on-site erosion and to prevent off-site sediment discharge. Methods of runoff control that will be implemented on this Project include dewatering measures, diversions, and rock check dams. Runoff control Measures will be in accordance with Chapter 4 and 5 of the Rainwater and Land Development Manual.

Dewatering Measures. Dewatering measures provide a stable area for receiving and treating water pumped from excavation or work areas prior to being released off the site. These practices reduce sediment impacts to downstream water resources.

Diversion. A diversion is a permanent channel constructed across the slope with a supporting ridge on the lower side used to divert excess water from one area for use or safe disposal in other areas.

Rock Check Dam. Check dams are small rock dams constructed in swales, grassed waterways or diversions. Rock check dams reduce the velocity of concentrated flows thereby reducing erosion within the swale or waterway.

Temporary Diversion. A temporary diversion is a dike and/or channel constructed to direct sediment-laden runoff to a settling pond, route clean runoff away from disturbed areas, divert runoff to reduce the effective length of the slope, or direct runoff away from steep cut or fill slopes.

Waterbar. A water bar is a diversion constructed across the slope of an access road or utility right of-way. Water bars are used to reduce concentrated runoff on unpaved road surfaces, thus reducing water accumulation and erosion gullies from occurring. Water bars divert runoff to road side swales, vegetated areas, or settling ponds.

2.4 SURFACE WATER PROTECTION

The Project site contains three (3) wetlands, one (1) perennial stream, and one (1) intermittent stream. These waters must be protected by avoiding crossing of wetlands and streams where feasible and using sediment and erosion control practices to prevent sediment-laden runoff from reaching the surface waters.

Surface Waters of the State Protection. If construction activities disturb areas adjacent to surface waters of the State, structural practices must be designed and implemented onsite 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) must be used in a surface water of the State. For all construction activities immediately adjacent to surface waters of the State, it is recommended that a setback of at least 25 feet, as measured from the ordinary high water mark of the surface water, be maintained in its natural state as a permanent buffer.

Where impacts within this setback area are unavoidable due to the nature of the construction activity (e.g., stream crossings for roads or utilities), the Project must be designed such that the number of stream crossings and the width of the disturbance within the setback area are minimized.

In order to minimize the amount of disturbance and sedimentation caused by work at stream and wetland crossings, every effort will be made to minimize impacts. Movement across waters will be limited to necessary equipment only. BMPs for vehicle crossing of streams and wetlands will be utilized when practical. Dominion will employ a typical temporary equipment crossing at each crossing location. These crossing methods are found on the typical drawings in Appendices F and G. All stream crossings will be restored to pre-construction grades contours, and substrate material, and banks will be revegetated and stabilized. Similarly, all wetland crossings will be restored to pre-construction grades, contours, and, when feasible, vegetation type. Dominion

will obtain all necessary stream and wetland crossing permits from Federal and State regulatory agencies. Summaries of the onsite surface waters and any impacts are provided in Tables 4 and 5.

Surface Water Utility Crossing. Surface water utility crossings include pipeline, power line, or road construction projects that cross streams, rivers, or wetlands. Measures used to minimize damage from the construction of utilities across streams and wetlands start in the planning stages of a project and continue through site restoration.

Temporary Surface Water Crossing. A temporary surface water crossing provides construction traffic temporary access across a surface water while reducing the amount of disturbance and sediment pollution. It is a temporary practice which includes restoring the crossing area after construction. The typical kinds of surface water crossings are: bridges, timber mats, culverts, and fords. Each has specific applications and each is designed to minimize surface water damage by leaving wetlands and stream banks stable and vegetated.

Table 4: Summary of Onsite Streams/Rivers

Stream ID	Stream Length within the 60-Foot Easement (linear feet)	Bankfull Width (feet)	Flow Regime	Substrate Type(s)	Designation ¹	Crossing Method ²	Impacts Upstream to Downstream Length (linear feet)	Impacts Length of Crossing (linear feet)
Nimisila Creek	68	15	Perennial	sand (55), gravel (20), silt (15), detritus (10)	Modified Warmwater	Avoid	0	0
S-1	68	3	Intermittent	sand (40), gravel (25), muck (20), leaf pack (10), silt (5)	Class II	Avoid	0	0

Note:

- 1 Designation determinations made using Quantitative Habitat Evaluation Index (QHEI) and the Headwater Habitat Evaluation Index (HHEI) scoring methods.
- 2 Project Managers must approve changes to crossing methods.

Table 5: Summary of Onsite Wetlands

Wetland ID	Vegetation Cover Type within 60-Foot Easement	Area within 60-Foot Easement (acres)	ORAM ¹ Category	Crossing Method ²	Impacts Area (acres)	Impacts Length of Wetland Crossing (linear feet)
W-1	PEM	0.378	3	Avoid	0	0
	PSS	0.422			0	0
W-2	PEM	0.001	3	Avoid	0	0
W-3	a	PEM	3	Avoid	0	0
		PSS			0	0
	b	PEM			0	0
		PSS			0	0

Notes:

- 1 Ohio Rapid Assessment Method.
- 2 Project Managers must approve changes to crossing methods.

2.5 SEDIMENT CONTROL PRACTICES

All Project activities, including use of laydown yards, will occur within the areas indicated on site drawings in Appendix C. Construction activities for this Project will be limited to the Limit of Disturbance of 2.3 acres. Sediment Control Practices must store runoff allowing sediments to settle and/or divert flows away from exposed soils or otherwise limit runoff from exposed areas. Structural practices must be used to control erosion and trap sediment from a disturbed site. Methods of control that may be used include, among others: silt fence, storm drain inlet protection, filter berms, and filter socks. 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. Dominion discourages the use of haybales unless utilized as a secondary treatment element in conjunction with another erosion and sediment control(s) and only if approved by Dominion.

Timing. Sediment control structures must be functional throughout the course of earth disturbing activity. Sediment basins and perimeter sediment barriers must be implemented prior to grading and within seven (7) days from the start of grubbing. Sediment control structures must continue to function until the up-slope development area is restabilized. As construction progresses and the topography is altered, appropriate controls must be constructed or existing controls altered to address the changing drainage patterns.

Silt Fence. Silt fence is a temporary method of sediment control that is used in sheet-flow areas to encourage the ponding of runoff and settling of sediments. It consists of a geotextile fabric secured to wood or steel posts that have been trenched into the ground. It is installed downslope of the disturbed area, installed along slopes, at bases of slopes on a level contour, and around the perimeter of a site as a final barrier to sediment being carried off site. Silt fence is removed after permanent vegetation is established.

Silt fence must be installed where indicated on the site drawings and as needed throughout the Project site where construction activity is likely to cause sediment-laden runoff to be carried offsite and into downstream surface waters. After construction is completed and the Project site has been permanently stabilized, silt fence must be removed and disposed of at an appropriate offsite disposal facility.

Placing silt fence in a parallel series does not extend the size of the drainage area. Stormwater diversion practices must be used to keep runoff away from disturbed areas and steep slopes where practicable. Such diversion devices, which include swales, dikes or berms, may receive stormwater runoff from areas up to ten (10) acres.

See the silt fence detail located in Appendix D (Typical Upland Erosion and Sediment Control Plan Drawings) for additional information on proper installation procedures.

Inlet Protection. Storm drain inlet protection devices remove sediment from stormwater before it enters storm sewers and downstream areas. Inlet protection devices may consist of washed gravel or crushed stone, geotextile fabrics, and other materials that are supported around or

across storm drain inlets. Inlet protection is installed to capture some sediment and reduce the maintenance of storm sewers and other underground piping systems prior to the site being stabilized. Due to their poor effectiveness, inlet protection is considered a secondary sediment control to be used in conjunction with other more effective controls. Other erosion and sediment control practices must minimize sediment-laden water entering active storm drain systems, unless the storm drain system drains to a sediment settling pond. Generally inlet protection is limited to areas draining less than one (1) acre; areas of one (1) or more acres will require a sediment settling pond.

Filter Sock. Filter socks are sediment-trapping devices using compost inserted into a flexible, permeable tube. Filter socks trap sediment by filtering water passing through the berm and allowing water to pond, creating a settling of solids. Filter socks may be a preferred alternative where equipment may drive near or over sediment barriers, as they are not as prone to complete failure as silt fence if this occurs during construction. Driving over filter socks is not recommended; however, if it should occur, the filter sock must be inspected immediately, repaired, and moved back into place as soon as possible. Typically, filter socks can handle the same water flow or slightly more than silt fence. For most applications, standard silt fence is replaced with twelve (12) -inch diameter filter socks.

Modifying Controls. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, Dominion must replace or modify the control for site conditions.

2.6 POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM)

The proposed disturbance associated with the Project is temporary; therefore, no permanent stormwater structures will be required. The Project area will be restored to original contours and re-vegetated. No impervious areas will be created for this Project.

2.7 OTHER CONTROLS

In some instances, a non-sediment pollutant source may become present on the Project site and pollution controls may be required.

Non-Sediment Pollutant Controls

Handling of Toxic or Hazardous Materials. All construction personnel, including subcontractors who may use or handle hazardous or toxic materials, must be made aware of the general guidelines regarding management and disposal of toxic or hazardous construction wastes. This can be accomplished by training for construction personnel by the Contractor or by Dominion.

Waste Disposal. Containers (e.g., dumpsters, drums) must be available for the proper collection of all waste material including construction debris, sanitary garbage, petroleum products, and any hazardous waste materials to be used on-site. Containers must be covered and not leaking; all containers must be appropriately labeled. All waste material must be disposed of at facilities approved by the Ohio EPA for that material.

Clean Hard Fill. No Construction related waste materials are to be buried on-site. By exception, clean fill (clean bricks, hardened concrete, and soil) may be utilized in a way which does not encroach upon natural wetlands, streams, or floodplains or result in the contamination of waters.

Construction and Demolition Debris (C&DD). C&DD waste will be disposed of in an Ohio EPA permitted C&DD landfill as required by Ohio Revised Code 3714 and approved by Dominion.

Construction Chemical Compounds. Storing, mixing, pumping, transferring, or other handling of construction chemicals such as fertilizer, lime, asphalt, concrete drying compounds, and all other potentially hazardous materials must be done in an area away from any waterbody, ditch, or storm drain.

Equipment Fueling and Maintenance. Oil changing, equipment refueling, maintenance on hydraulic systems, etc., must be performed away from waterbodies, ditches, or storm drains and in an area designated for that purpose. The designated area must be equipped for recycling oil and catching spills. Secondary containment must be provided for all fuel and oil storage tanks. These areas must be inspected every seven (7) days and within 24 hours of a one half (0.5)-inch or greater rain event to ensure there are no exposed materials which would contaminate stormwater. Site operators must be aware that Spill Prevention Control and Countermeasures (SPCC) requirements may apply. An SPCC plan is required for sites with one (1) single aboveground tank of 660 gallons or more, accumulative aboveground storage of 1,320 gallons or more, or 42,000 gallons of underground storage.

Concrete Wash Water and Wash Outs. Concrete wash water must not be allowed to flow to streams, wetlands, ditches, storm drains, or any other water conveyance. A lined sump or pit with no potential for discharge must be constructed if needed to contain concrete wash water. Field tile (agricultural drain tiles) or other subsurface drainage structures within ten (10) feet of the concrete sump or wash pit must be cut and plugged. Concrete wash water is wastewater and thus is not permitted to be discharged under the provisions of Ohio EPA's Construction General Permit which only allows the discharge of stormwater. Concrete washout details are located in Appendix F. The location for concrete washout will be determined in the field as necessary.

Spill Reporting Requirements. In the event of a spill of a regulated or hazardous material, immediately contact the DES ECC assigned to the site or project. The DES ECC (if DES ECC not available, other Dominion Environmental staff) will coordinate spill reporting to the appropriate agencies. Spills on pavement must be absorbed with sawdust, kitty litter or other absorbent material. Spills to land require excavation of the contaminated material. Wastes generated from spill cleanup must be disposed of in accordance with applicable Federal, State, and Local waste regulations. Hazardous or industrial wastes including, but not limited to, most solvents, gasoline, oil-based paints, oil, grease, battery acid, muriatic acid, and cement curing compounds require special handling¹. Spills must be reported to Ohio EPA (1-800-282-9378).

¹ The Federal Resource Conservation and Recovery Act (RCRA) requires that all wastes generated by industrial activity, including construction activities, be evaluated to determine if the waste is hazardous, non-hazardous or special wastes. Hazardous waste and special wastes have specific handling and disposal requirements which must be met to comply with RCRA. Additional information regarding the waste evaluation process and the proper handling and disposal requirements for wastes can be found in the following Dominion Guidance

Spills of 25 gallons or more of petroleum products must be reported to Ohio EPA (1-800-282-9378), the local fire department, and the Local Emergency Planning Committee within thirty (30) minutes of the discovery of the release. All spills (no matter how small), which result in contact with waters of the state, must be reported to Ohio EPA's Hotline. Spills of hazardous substances, extremely hazardous substances, petroleum, and objectionable substances that are of a quantity, type, duration, and in a location as to damage the waters of the state must be immediately reported to the Ohio EPA's Regional Environmental Coordinator.

Contaminated Soils. If substances such as oil, diesel fuel, hydraulic fluid, antifreeze, etc. are spilled, leaked, or released onto the soil, the soil must be dug up and disposed of at a licensed sanitary landfill or other approved petroleum contaminated soil remediation facility (not a construction/demolition debris landfill) which has been approved by Dominion.

Open Burning. Waste disposal by open burning is prohibited by Dominion.

Dust Controls/Suppressants. Dust control is required to prevent nuisance conditions. Dust controls must be used in accordance with the manufacturer's specifications and not be applied in a manner which would result in a discharge to waters of the state. Isolation distances from bridges, catch basins, and other drainage ways must be observed. Application (excluding water) may not occur when precipitation is imminent as noted in the short term forecast. Used oil may not be applied for dust control. Watering must be done at a rate that prevents dust but does not cause soil erosion. Chemical stabilizers and adhesives must not be used, unless written permission is received from Ohio EPA.

Air Permitting Requirements. All contractors and subcontractors must be made aware that certain activities associated with construction will require air permits. Activities including, but not limited to, mobile concrete batch plants, mobile asphalt plants, concrete crushers, generators, etc., will require specific Ohio EPA Air Permits for installation and operation. Dominion must seek authorization from the corresponding district of Ohio EPA for these activities. Notification for Restoration and Demolition must be submitted to Ohio EPA for all commercial sites to determine if asbestos abatement actions are required.

Process Wastewater/Leachate Management. All contractors must be made aware that Ohio EPA's Construction General Permit only allows the discharge of stormwater. Other waste discharges including, but not limited to, vehicle and/or equipment washing, leachate associated with on-site waste disposal, concrete wash outs, etc. are a process wastewater. These types of wastewaters are not authorized for discharge under the General Stormwater Permit associated with Construction Activities. All process wastewaters must be collected and properly disposed at a Dominion approved disposal facility. In the event there are leachate outbreaks (water that has passed through contaminated material and has acquired elevated concentrations of the contaminated material) associated with onsite disposal, measures must be taken to isolate this discharge for collection and proper disposal at a Dominion approved disposal facility.

Documents: "Hazardous Waste Guidance", "Hazardous Waste Guidance Labeling", "Hazardous Waste Guidance Labeling - Appendix A", "Nonhazardous Waste Management", "Universal Waste Management", "Universal Waste Guidance - Appendix A - Labeling Matrix", and "Used Oil and Oil Filter Management". Consult with the DES ECC assigned to the site or project for advice.

Investigative measures and corrective actions must be implemented to identify and eliminate the source of all leachate outbreaks.

Permit to Install (PTI) Requirements. All contractors and subcontractors must be made aware that a PTI must be submitted and approved by Ohio EPA prior to the construction of all centralized sanitary systems, including sewer extensions, and sewerage systems (except those serving one (1), two (2), and three (3) family dwellings) and potable water lines. The issuance of an Ohio EPA Construction General Stormwater Permit does not authorize the installation of any sewerage system where Ohio EPA has not approved a PTI. If necessary, Dominion will acquire the PTI or Dominion will require the contractor to acquire the PTI.

Compliance with Other Requirements. This plan is consistent with State and/or local waste disposal, sanitary sewer, or septic system regulations including provisions prohibiting waste disposal by open burning. Contaminated soils [are/are not] expected to be encountered on this Project. If contaminated soils are encountered within the limits of construction, they will be managed and disposed of properly by trained personnel.

Trench and Groundwater Control. There must be no turbid discharges to surface waters resulting from dewatering activities. If trench or groundwater contains sediment, it must 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. Groundwater dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care must be taken when discharging groundwater to ensure that it does not become pollutant laden by traversing over disturbed soils or other pollutant sources. Discharge of contaminated groundwater is not authorized.

Contaminated Sediment. Where construction activities are to occur on sites with historical contamination, operators must be aware that concentrations of materials that meet other criteria (is not considered a Hazardous Waste, meeting VAP standards, etc.) may still result in stormwater discharges in excess of Ohio Water Quality Standards. Such discharges are not authorized and may require coverage under a separate individual or general remediation permit. Contaminated soil stockpiles shall be protected from discharges by covering the contaminated soil with a tarp or other such material which will prohibit water from coming in contact with the soils. Contaminated soils can also be removed from the site and disposed of at a Dominion approved facility.

2.8 MAINTENANCE

All temporary and permanent control measures must be maintained and repaired as needed to ensure continued performance of their intended function. All sediment control measures must be maintained in a functional condition until all up-slope areas are permanently stabilized. The following maintenance procedures will be conducted to ensure the continued performance of control practices.

- Qualified personnel must inspect all BMPs at least once every seven (7) days and within 24 hours of a one-half (0.5)-inch or greater rainfall within any 24-hour period, as determined by Dominion personnel or a designated representative using National Weather Service or other acceptable resources such as an on-site rain gauge, and determine if the SWP3 has been properly implemented.
- Maintenance or repair of BMPs must be completed by the designated contractor within three (3) days of the date of the inspection that revealed a deficiency. For sediment ponds, repair or maintenance is required within ten (10) days of the date of the inspection.
- Off-site vehicle tracking of sediments and dust generation must be minimized. Temporary construction entrances must be provided where applicable to help reduce vehicle tracking of sediment. Any paved roads adjacent to the site entrance must be swept daily to remove excess mud, dirt, or rock tracked from the site, as necessary.

2.9 INSPECTIONS

The following inspection practices must be followed once site activities have commenced and erosion and sediment control measures have been installed.

- All onsite controls must be inspected by Dominion personnel or a designated representative at least once every seven (7) calendar days and within 24 hours after any storm event greater than one-half (0.50)-inch of rain per 24-hour period, as determined by Dominion personnel or a designated representative using Nation Weather Service or other acceptable resources such as an on-site rain gauge.
- Inspection frequency may be reduced to at least once every month if the entire site is temporarily stabilized or runoff is unlikely due to weather conditions (e.g., site is covered with snow, ice, or the ground is frozen).
- Once a definable area has reached final stabilization as defined in Section 2.2 Upland Erosion Control Areas, the area may be marked on the SWP3 and no further inspection requirements apply to that portion of the site.
- A Dominion or designated representative “qualified inspection personnel” must 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 or whether additional control measures are required.
- Following inspection, a checklist must be completed and signed by the qualified inspection personnel representative. The checklist is provided in Appendix E.
- For BMPS that require repair or maintenance, BMPs must be repaired or maintained within three (3) days of the inspection; sediment settling ponds must be repaired or maintained within ten (10) days of the inspection.

- For BMPs that are not effective and that another, more appropriate BMP is required, the SWP3 must be amended and the more appropriate BMP must be installed within ten (10) days of the inspection.
- For BMPs depicted on the SWP3 that have not been actually installed onsite, the control practice must be implemented within ten (10) days from the inspection.

3.0 CERTIFICATION

Owner/Developer Certification (must be signed by president, vice-president or equivalent or ranking elected official)

I certify 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.

Signature

Date

Printed Name

Title

If authorization is no longer accurate because of a different individual or position has responsibility for the overall operation of the Project, a new authorization must be submitted to the Director prior to, or together with any reports, information, or applications to be signed by an authorized representative.

Contractor(s) Certification (must be signed by president, vice-president or equivalent or ranking elected official)

I certify that I have reviewed this document, and any appendices referenced above. Based on my inquiry of the construction site owner/developer identified above, and/or my inquiry of the person directly responsible for assembling this SWP3, I believe the information submitted is accurate. I am aware that there are potential significant penalties for knowing violations and for failure to comply with these requirements.

Primary Contractor Name

Primary Contractor Address

Signature

Date

Printed Name

Title

Subcontractor Name

Subcontractor Address

Signature

Date

Printed Name

Title

APPENDIX A

Site Location Maps

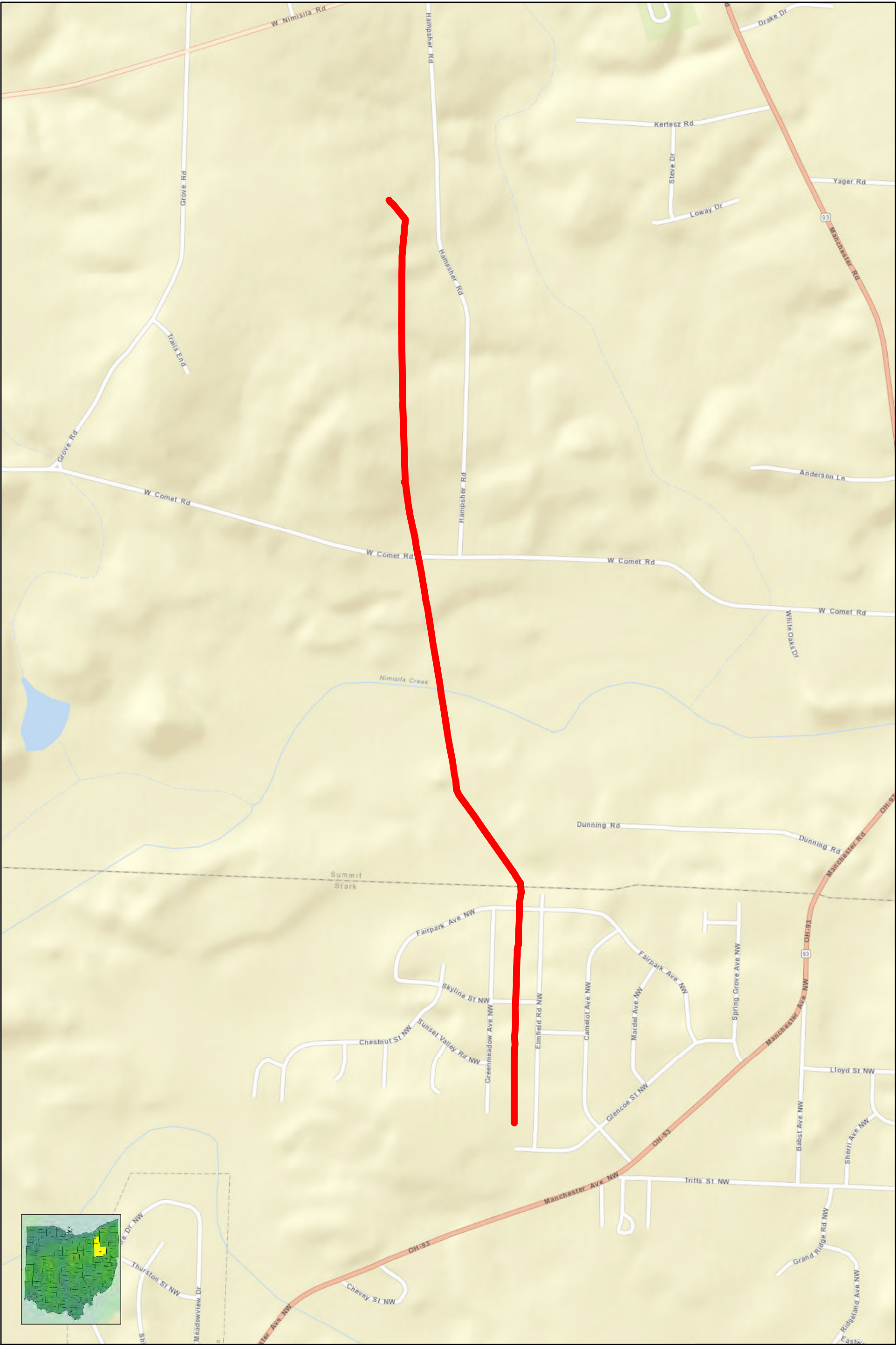


Figure A-1. Location of Site on Highway Map of Summit and Stark Counties, Ohio. Line 1745 Piggability.

 Project Area



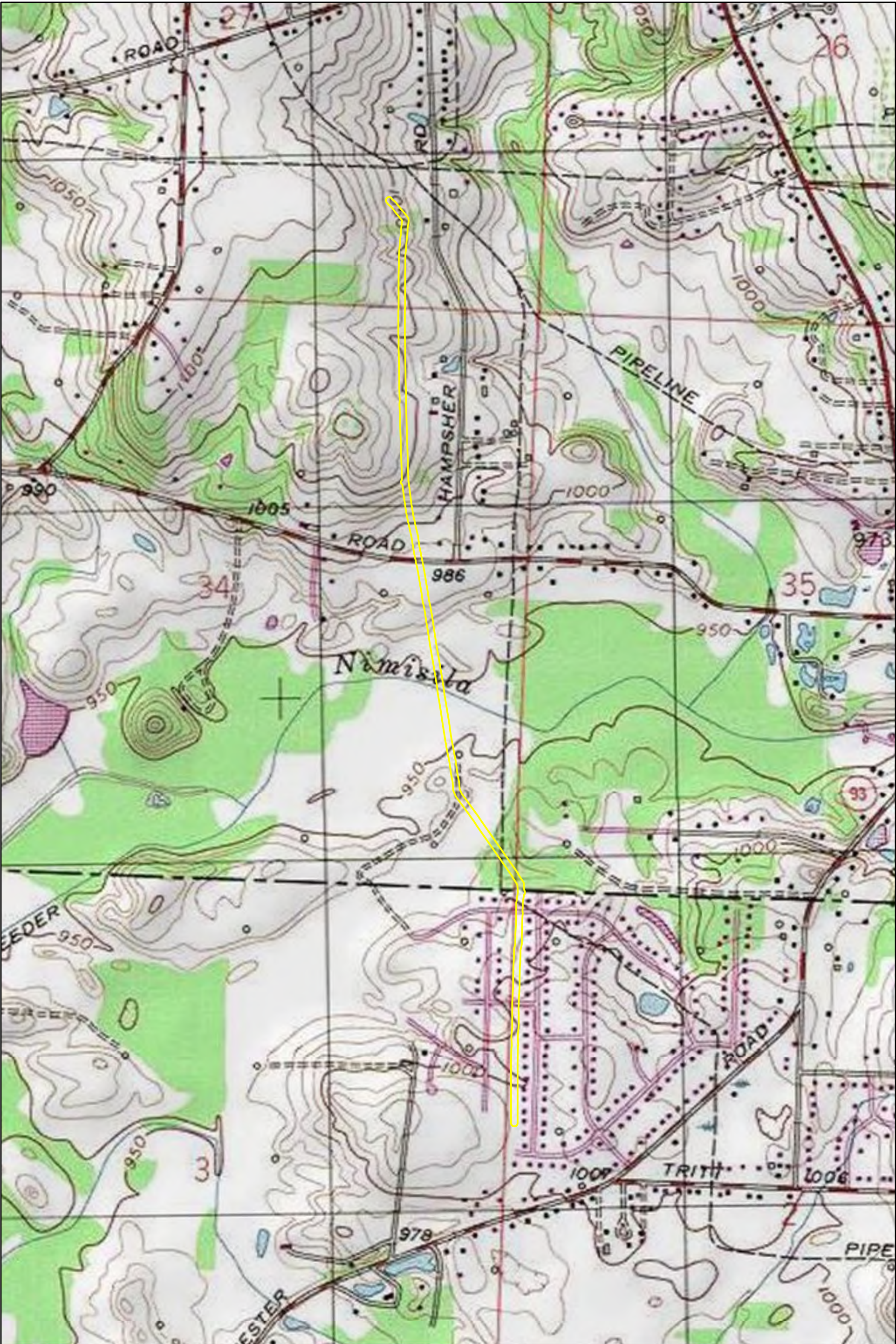
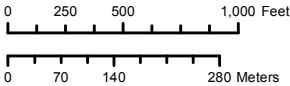


Figure A-2. USGS 7.5-minute
Topographic Map of
Canal Fulton Quadrangle.
Line 1745 Piggability.

 Project Area



APPENDIX B

Existing Soil Data



APPENDIX C

Detailed Erosion and Sediment Control Location Drawings

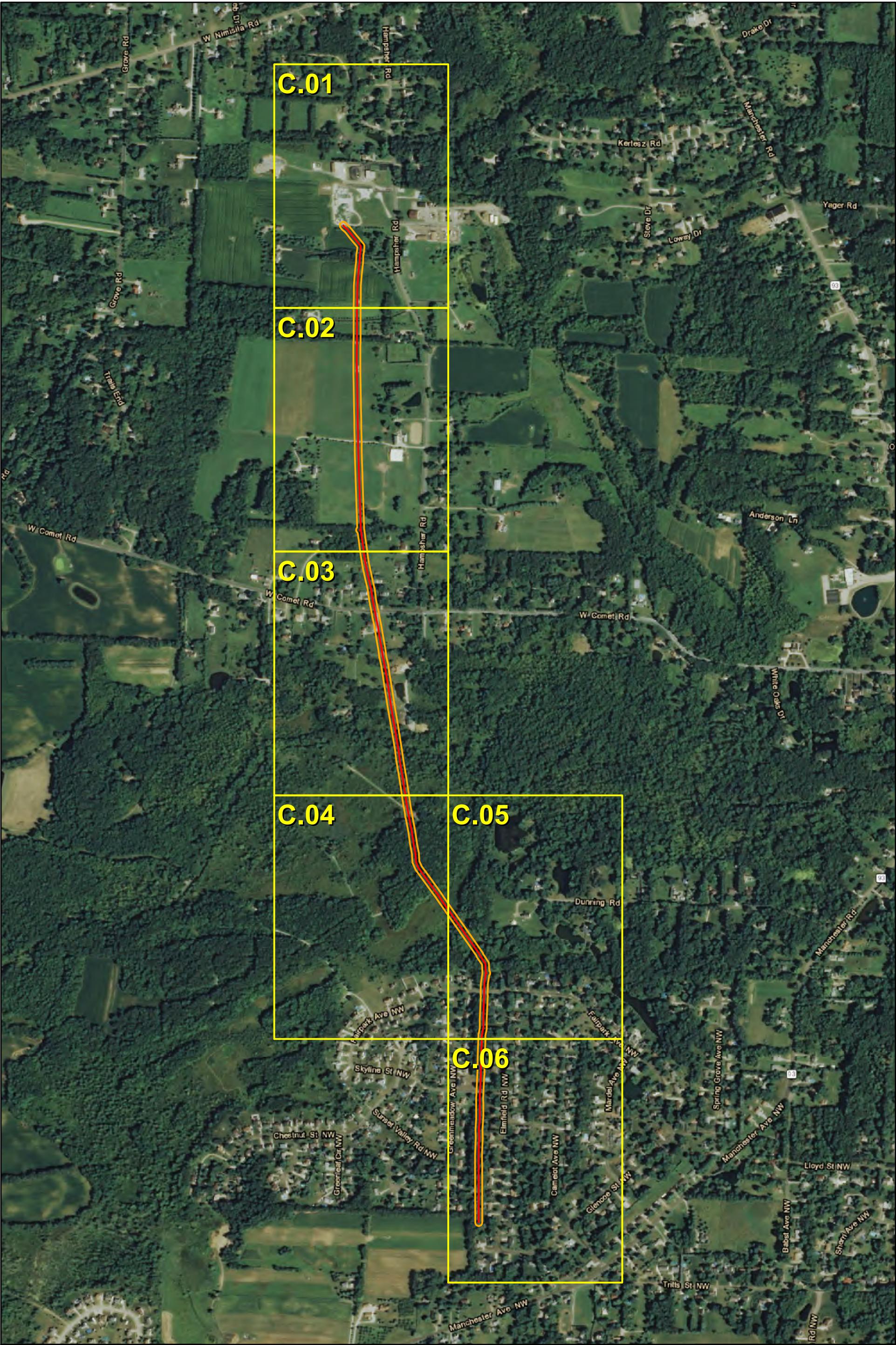
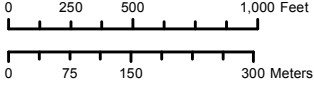


Figure C-1. Site Map Overview of Wetlands and Other Water Resources. Line 1745 Piggability.

- Pipeline
- Project Area (60")





- Notes:
- Inlet protection will be installed prior to construction.
 - Silt fence, filter socks, and/or check dams will be installed prior to construction.
 - Construction will be limited to existing road right-of-way.
 - Steel plates will be placed across roadways and driveways for ingress and egress.
 - Following completion of construction activities, disturbed areas will be permanently stabilized (i.e., seeded, mulched, and fertilized).

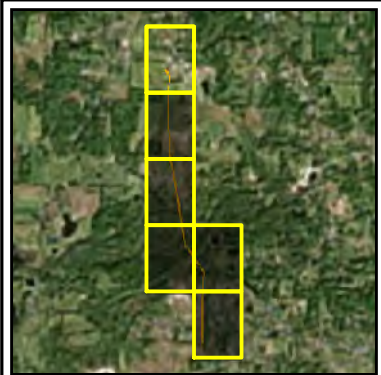


Figure C-1.01. Site Map of Wetlands and Other Water Resources.
Line 1745 Piggability.

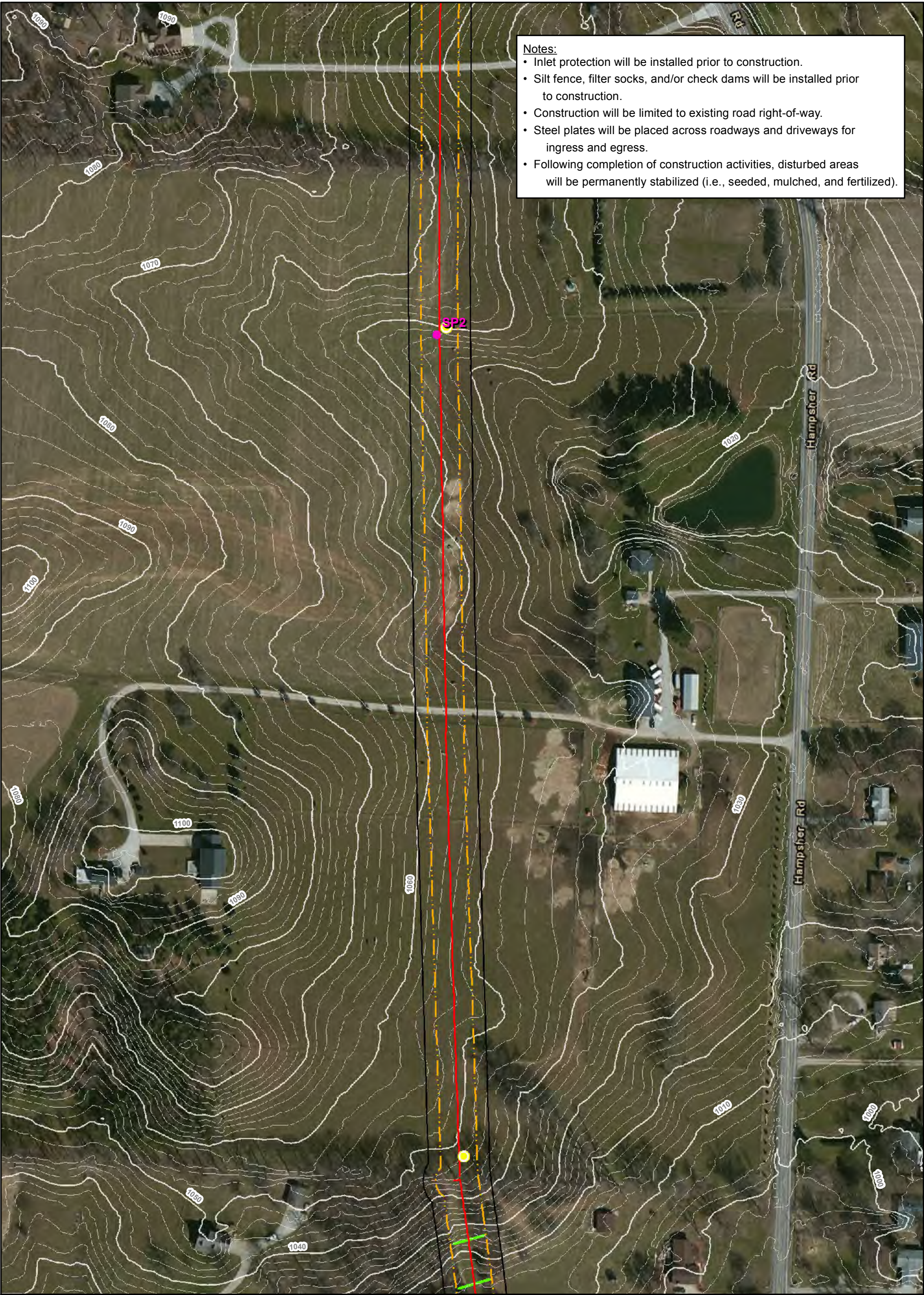


- | | | | | |
|---------------|--|---------------|-------------------------|---------------------|
| ▲ PMRT | ● Dig Location | — PSCD | — Stream (Intermittent) | ■ Wetland (PEM) |
| ▲ PRT | — Pipeline | — Water Bar | — Stream (Perennial) | ■ Wetland (PSS) |
| ● Sample Plot | — Project Area Buffer (additional 20') | — RCE | — Stream (Offsite) | ■ Wetland (Offsite) |
| | — Project Area (60') | — Access Road | | |

0 75 150 300 Feet

0 20 40 80 Meters

C-1.01



- Notes:
- Inlet protection will be installed prior to construction.
 - Silt fence, filter socks, and/or check dams will be installed prior to construction.
 - Construction will be limited to existing road right-of-way.
 - Steel plates will be placed across roadways and driveways for ingress and egress.
 - Following completion of construction activities, disturbed areas will be permanently stabilized (i.e., seeded, mulched, and fertilized).

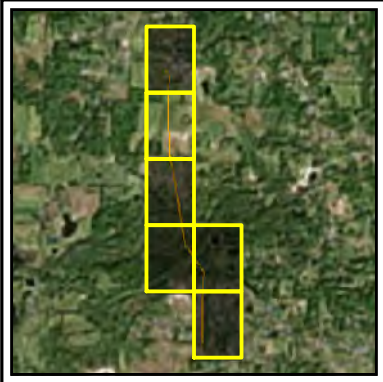


Figure C-1.02. Site Map of Wetlands and Other Water Resources.
Line 1745 Piggability.

PMRT	Dig Location	PSCD	Stream (Intermittent)	Wetland (PEM)
PRT	Pipeline	Water Bar	Stream (Perennial)	Wetland (PSS)
Sample Plot	Project Area Buffer (additional 20')	RCE	Stream (Offsite)	Wetland (Offsite)
	Project Area (60')	Access Road		

0

75

150

300 Feet

0

20

40

80 Meters

C-1.02

EnviroScience
Excellence In Any Environment

Notes:

- Inlet protection will be installed prior to construction.
- Silt fence, filter socks, and/or check dams will be installed prior to construction.
- Construction will be limited to existing road right-of-way.
- Steel plates will be placed across roadways and driveways for ingress and egress.
- Following completion of construction activities, disturbed areas will be permanently stabilized (i.e., seeded, mulched, and fertilized).

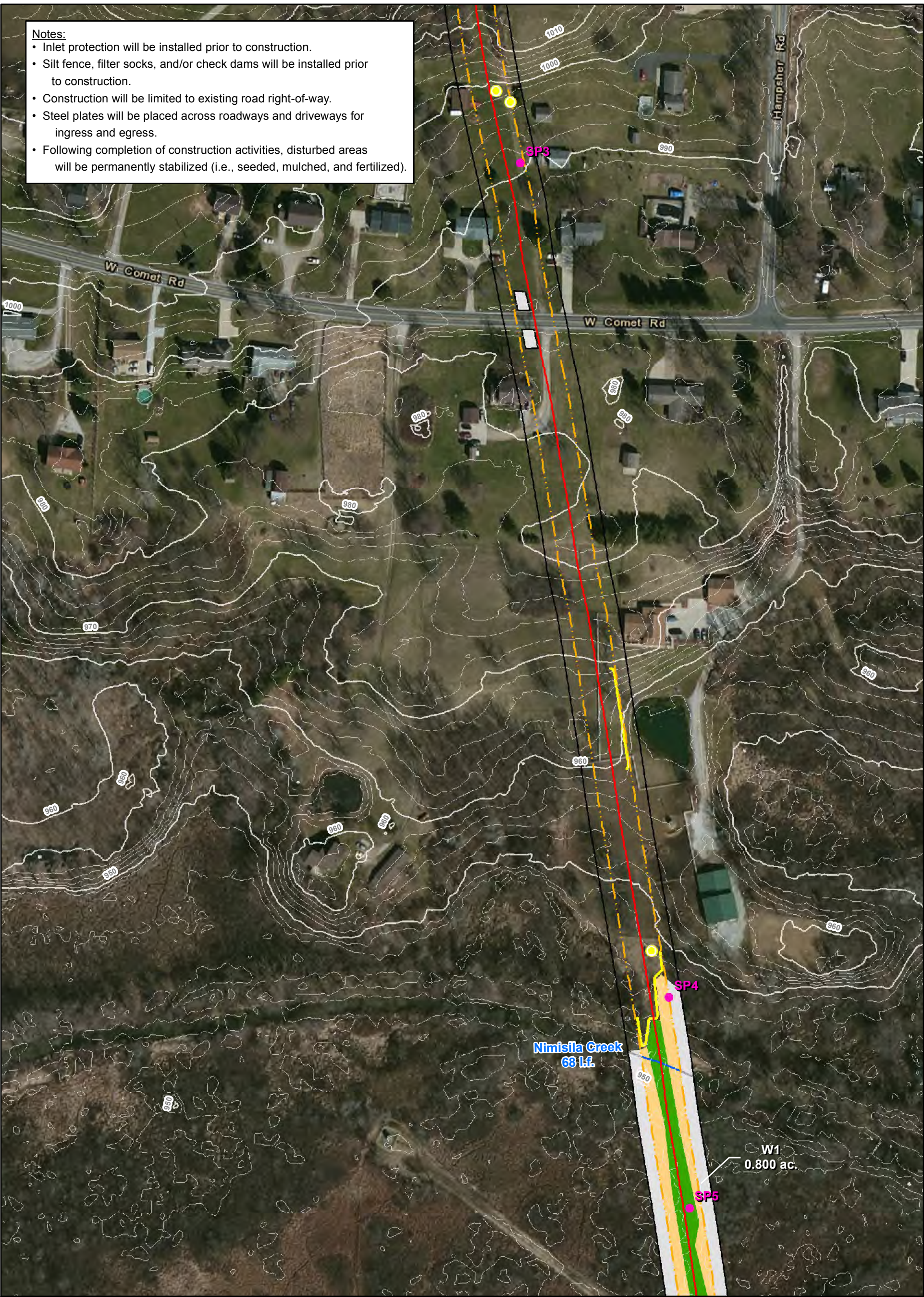


Figure C-1.03. Site Map of Wetlands and Other Water Resources.
Line 1745 Piggability.

- | | | | | |
|---------------|--|---------------|-------------------------|---------------------|
| ▲ PMRT | ● Dig Location | — PSCD | — Stream (Intermittent) | ■ Wetland (PEM) |
| ▲ PRT | — Pipeline | — Water Bar | — Stream (Perennial) | ■ Wetland (PSS) |
| ● Sample Plot | ■ Project Area Buffer (additional 20') | — RCE | — Stream (Offsite) | ■ Wetland (Offsite) |
| | ■ Project Area (60') | — Access Road | | |

0 75 150 300 Feet

0 20 40 80 Meters



C-1.03

- Notes:
- Inlet protection will be installed prior to construction.
 - Silt fence, filter socks, and/or check dams will be installed prior to construction.
 - Construction will be limited to existing road right-of-way.
 - Steel plates will be placed across roadways and driveways for ingress and egress.
 - Following completion of construction activities, disturbed areas will be permanently stabilized (i.e., seeded, mulched, and fertilized).

Existing access road to be used exclusively.
Vehicles must proceed slowly and with caution.

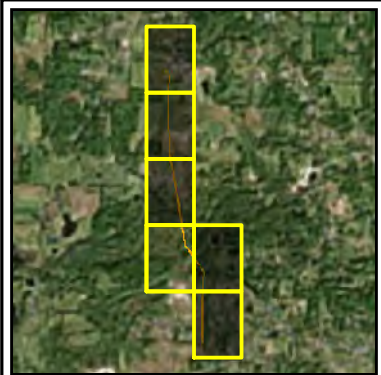


Figure C-1.04. Site Map of Wetlands and Other Water Resources.
Line 1745 Piggability.

- | | | | | |
|---------------|--|---------------|-------------------------|---------------------|
| ▲ PMRT | ● Dig Location | — PSCD | — Stream (Intermittent) | ■ Wetland (PEM) |
| ▲ PRT | — Pipeline | — Water Bar | — Stream (Perennial) | ■ Wetland (PSS) |
| ● Sample Plot | — Project Area Buffer (additional 20') | — RCE | — Stream (Offsite) | ■ Wetland (Offsite) |
| | — Project Area (60') | — Access Road | | |

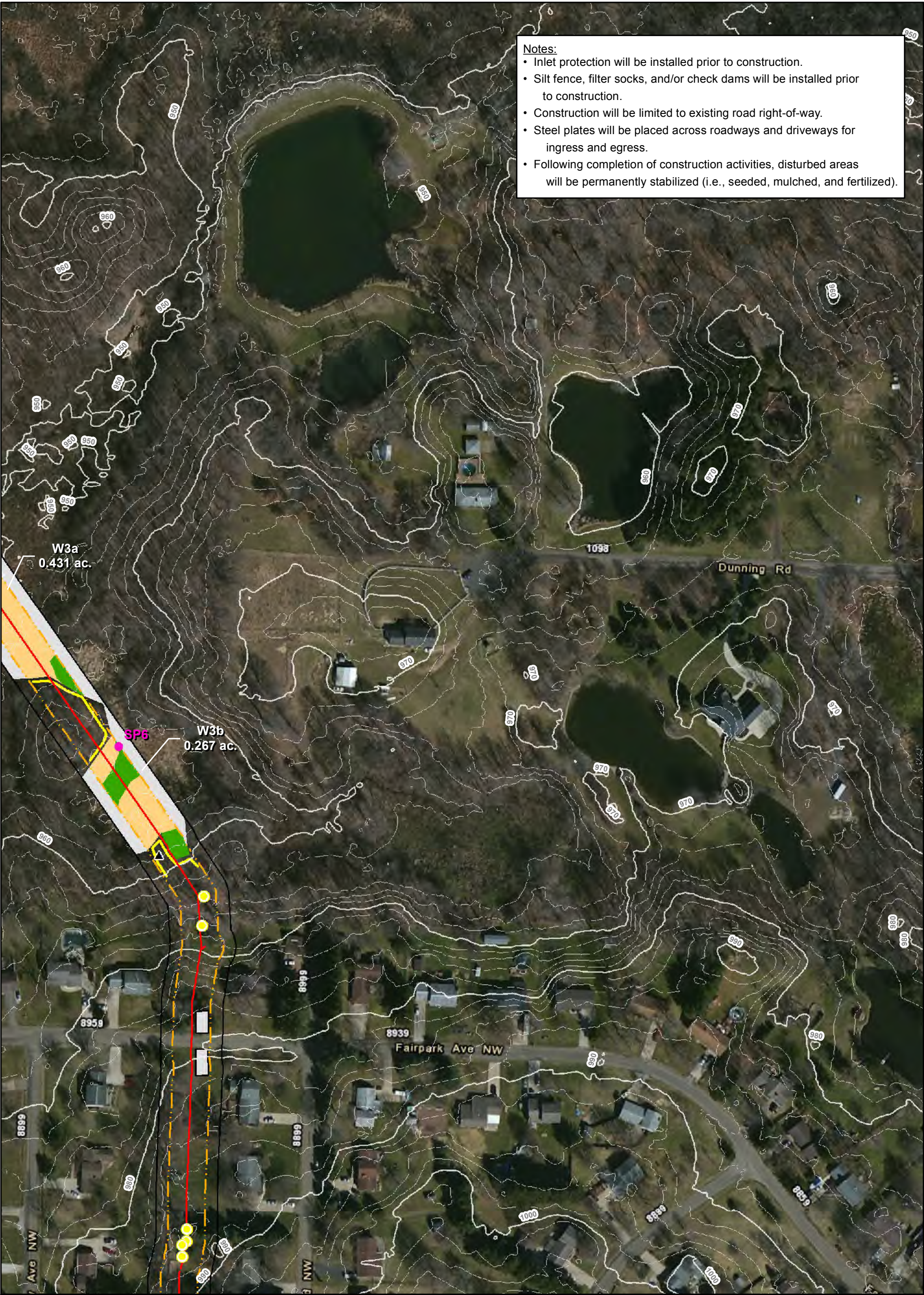
0 75 150 300 Feet

0 20 40 80 Meters



C-1.04

Date: 1/18/2016 Path: P:\10_Projects\Domination\EOG470NPRNon_PIR\Line1745-Piggability\GIS\MapC1_Site_REV.mxd



- Notes:
- Inlet protection will be installed prior to construction.
 - Silt fence, filter socks, and/or check dams will be installed prior to construction.
 - Construction will be limited to existing road right-of-way.
 - Steel plates will be placed across roadways and driveways for ingress and egress.
 - Following completion of construction activities, disturbed areas will be permanently stabilized (i.e., seeded, mulched, and fertilized).

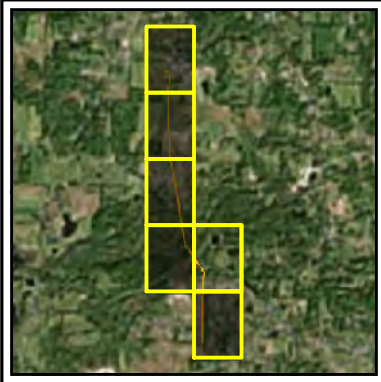


Figure C-1.05. Site Map of Wetlands and Other Water Resources.
Line 1745 Piggability.

PMRT	Dig Location	PSCD	Stream (Intermittent)	Wetland (PEM)
PRT	Pipeline	Water Bar	Stream (Perennial)	Wetland (PSS)
Sample Plot	Project Area Buffer (additional 20')	RCE	Stream (Offsite)	Wetland (Offsite)
	Project Area (60')	Access Road		

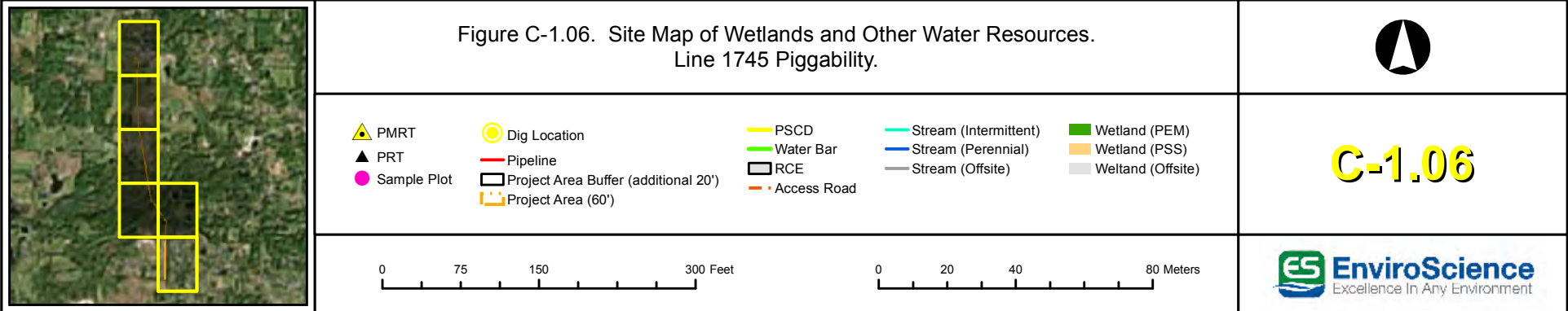
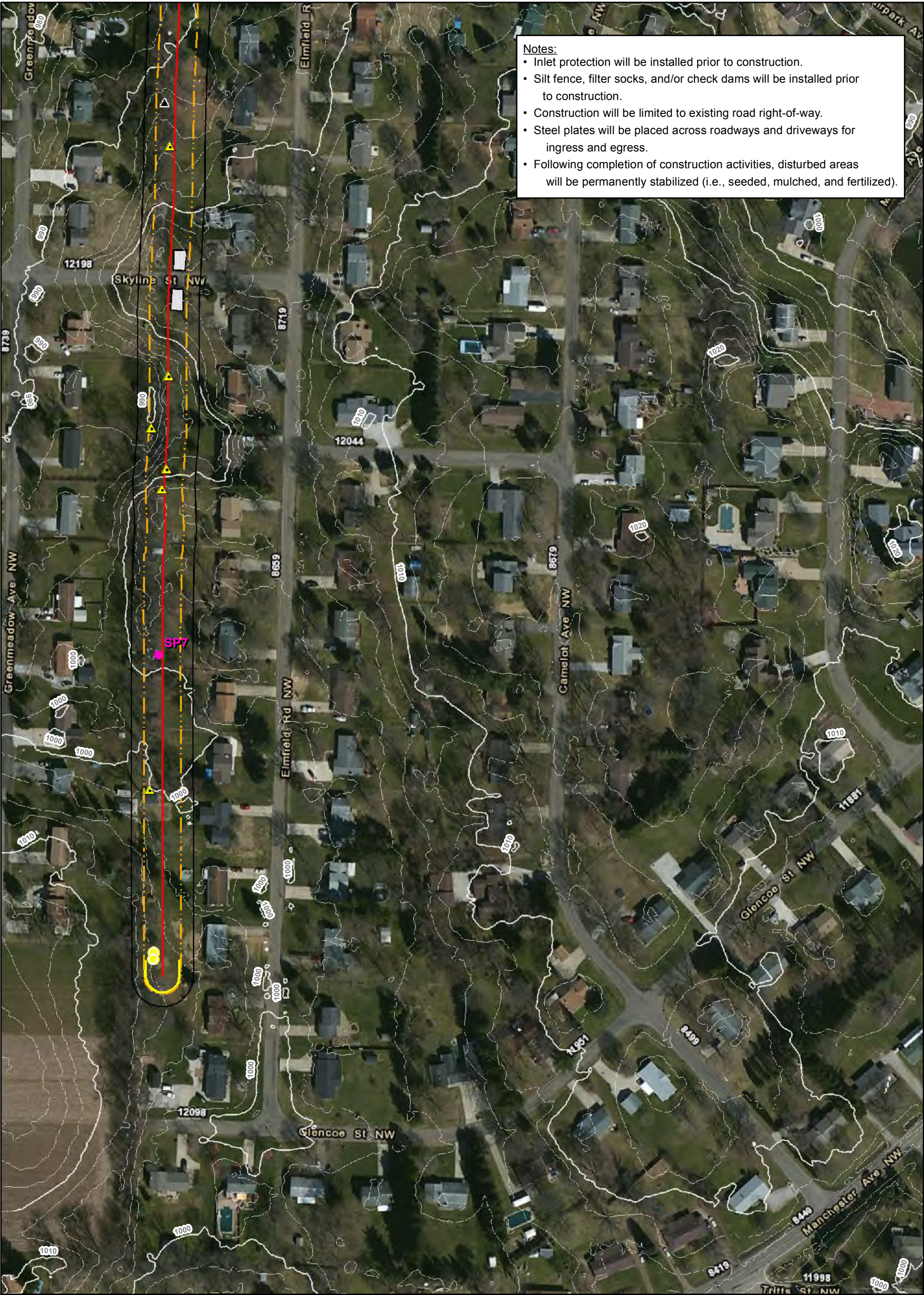
075150300

Feet

0204080

Meters

C-1.05

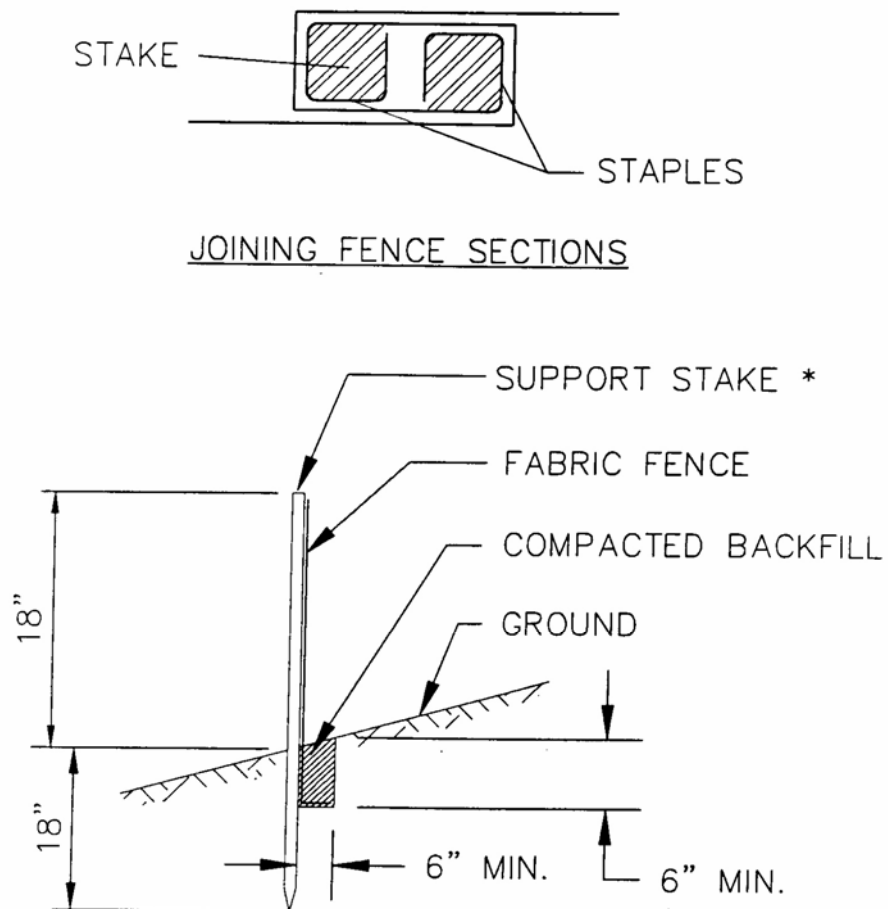


APPENDIX D

Typical Upland Erosion and Sediment Control Drawings

DETAIL D-1

FILTER FABRIC FENCE DETAIL



*Stakes spaced @ 8' maximum. Use 2"x 2" wood or equivalent steel stakes.

Filter Fabric Fence must be placed at level existing grade. Both ends of the barrier must be extended at least 8 feet up slope at 45 degrees to the main barrier alignment.

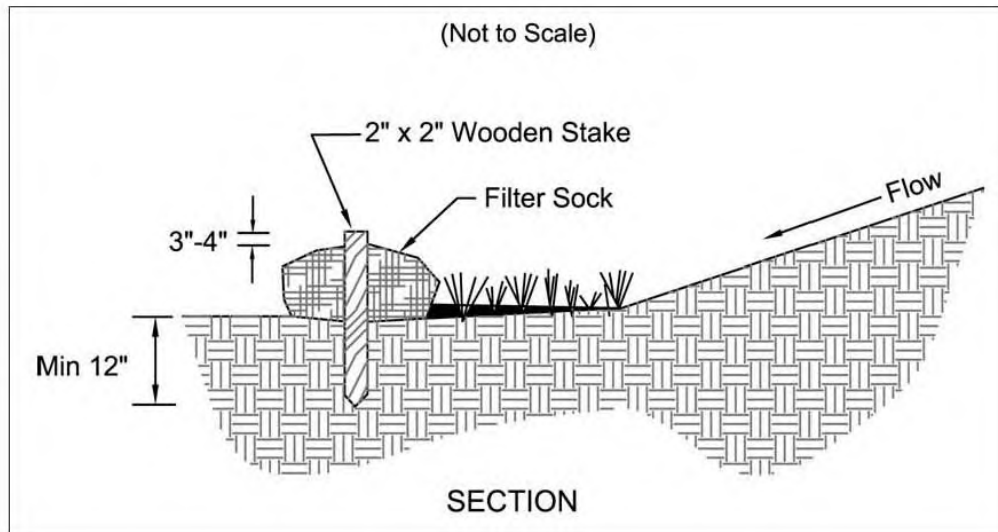
Trench shall be backfilled and compacted to prevent runoff from cutting underneath the fence.

Sediment must be removed when accumulations reach 1/2 the above ground height of the fence.

Any section of Filter fabric fence that has been undermined or topped should be immediately replaced.

DETAIL D-2

FILTER SOCK DETAIL



1. Materials – Compost used for filter socks shall be weed, pathogen and insect free and free of any refuse, contaminants or other materials toxic to plant growth. They shall be derived from a well-decomposed source of organic matter and consist of particles ranging from 3/8" to 2".
2. 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.

INSTALLATION:

3. 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.
4. 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.

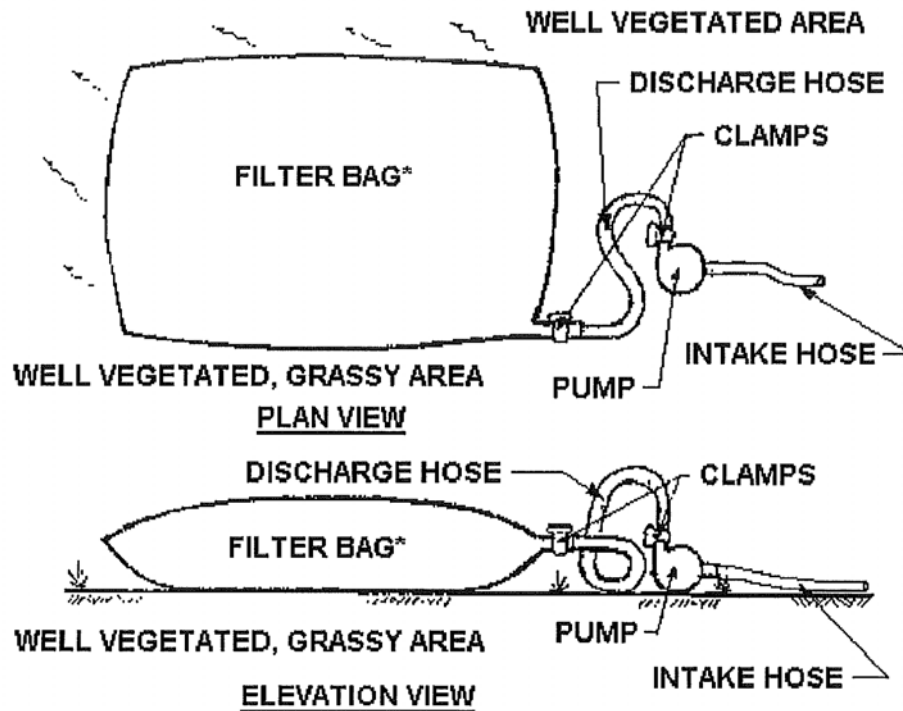
5. Filter Socks are not to be used in concentrated flow situations or in runoff channels.

MAINTENANCE:

6. Routinely inspect filter socks after each significant rain, maintaining filter socks in a functional condition at all times.
7. Remove sediments collected at the base of the filter socks when they reach 1/3 of the exposed height of the practice.
8. Where the filter sock deteriorates or fails, it will be repaired or replaced with a more effective alternative.
9. Removal – Filter socks will be dispersed on site when no longer required in such a way as to facilitate and not obstruct seedings.

DETAIL D-3

PUMPED WATER FILTER BAG DETAIL



Filter bags shall be made from non-woven geotextile material sewn with high strength, double stitched "J" type seams. They shall be capable of trapping particles larger than 150 microns.

A suitable means of accessing the bag with machinery required for disposal purposes must be provided. Filter bags shall be replaced when they become 1/2 full. Spare bags shall be kept available for replacement of those that have failed or are filled.

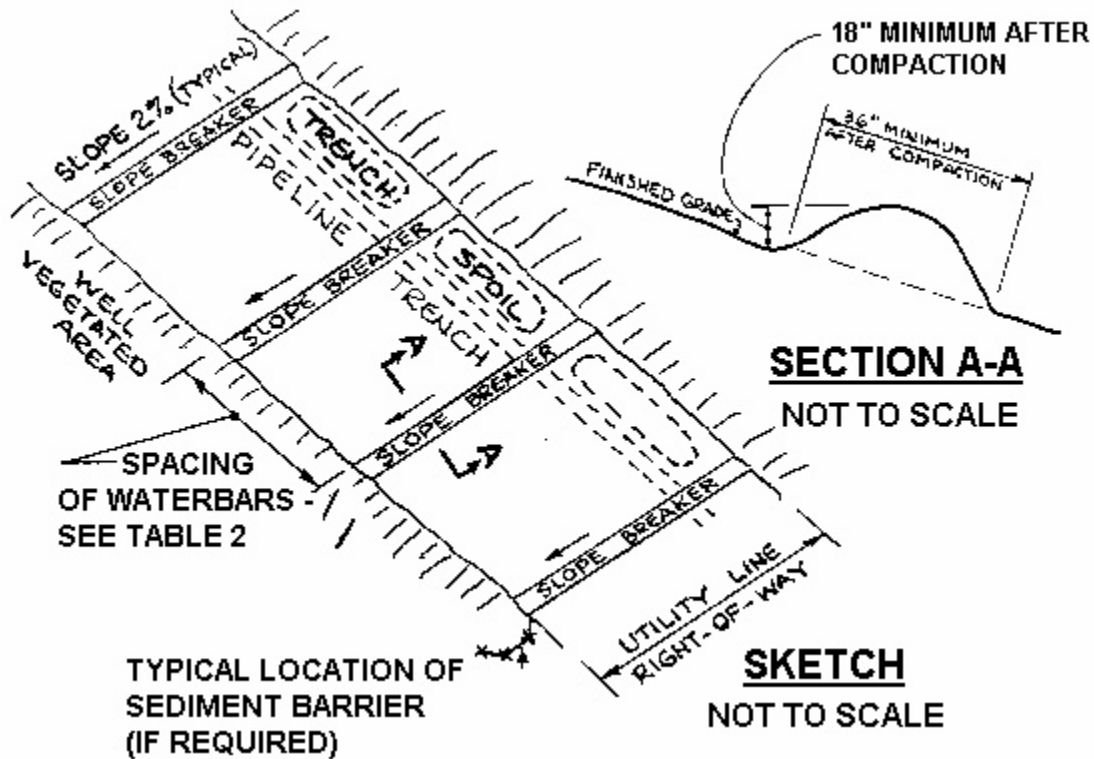
Bags shall be located in a well-vegetated (grassy) area, and discharge onto stable, erosion resistant areas. Where this is not possible, a geotextile flow path shall be provided. Bags should not be placed on slopes greater than 5%.

For hydrostatic discharge, the pumping rate is 350-500 gallons per minute (gpm). For trench dewatering, the pumping rate shall be no more than 750 gpm. Floating pump intakes should be considered to allow sediment-free water to be discharged during dewatering.

Filter bags shall be inspected daily. If any problem is detected, pumping shall cease immediately and not resume until the problem is corrected.

DETAIL D-4

WATERBAR INSTALLATION



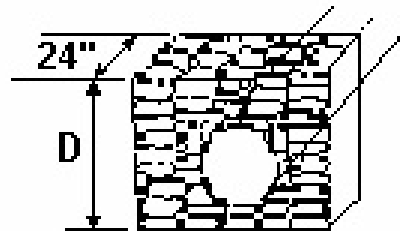
Required Spacing for Temporary and Permanent Waterbars	
Percent Slope	Spacing (FT)
1	400
2	250
5	135
10	80
15	60
20	45

Waterbars should be constructed at a slope of 1% and discharge to a well-vegetated area. Waterbars should not discharge into an open trench. Waterbars should be oriented so that the discharge does not flow back onto the ROW. Obstructions, (e.g. silt fence, rock filters, etc.) should not be placed in any waterbars. Where needed, they should be located below the discharge end of the waterbar.

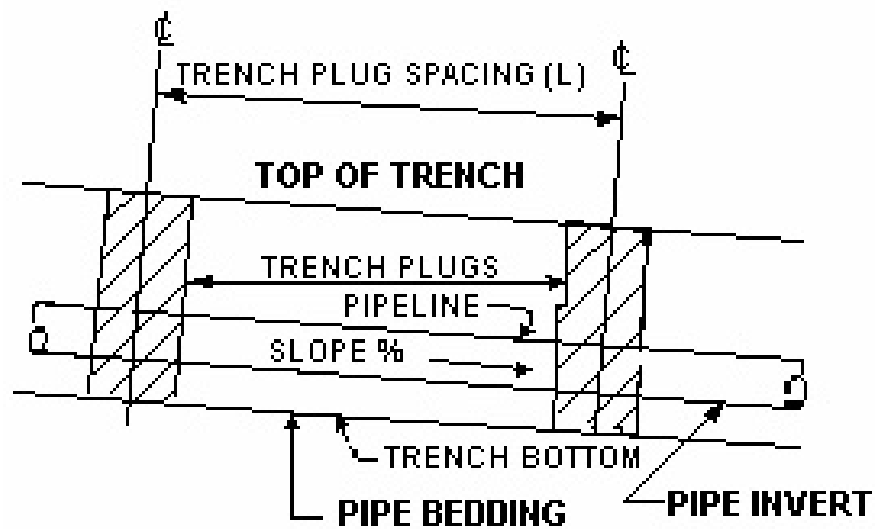
DETAIL D-5

TRENCH PLUG INSTALLATION DETAIL

D - DEPTH TO BOTTOM OF TRENCH



SECTION VIEW NOT TO SCALE

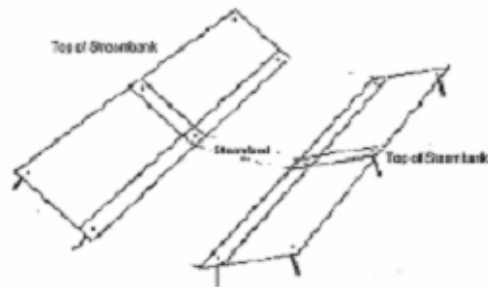


ELEVATION NOT TO SCALE

DETAIL D-6

STREAM BANK RESTORATION DETAIL

Erosion Control Mat Details



Refer to matting manufacturer's installation detail for overlap, embedment, staple patterns, and vegetative stabilization specifications

Stream Rip-Rap Details



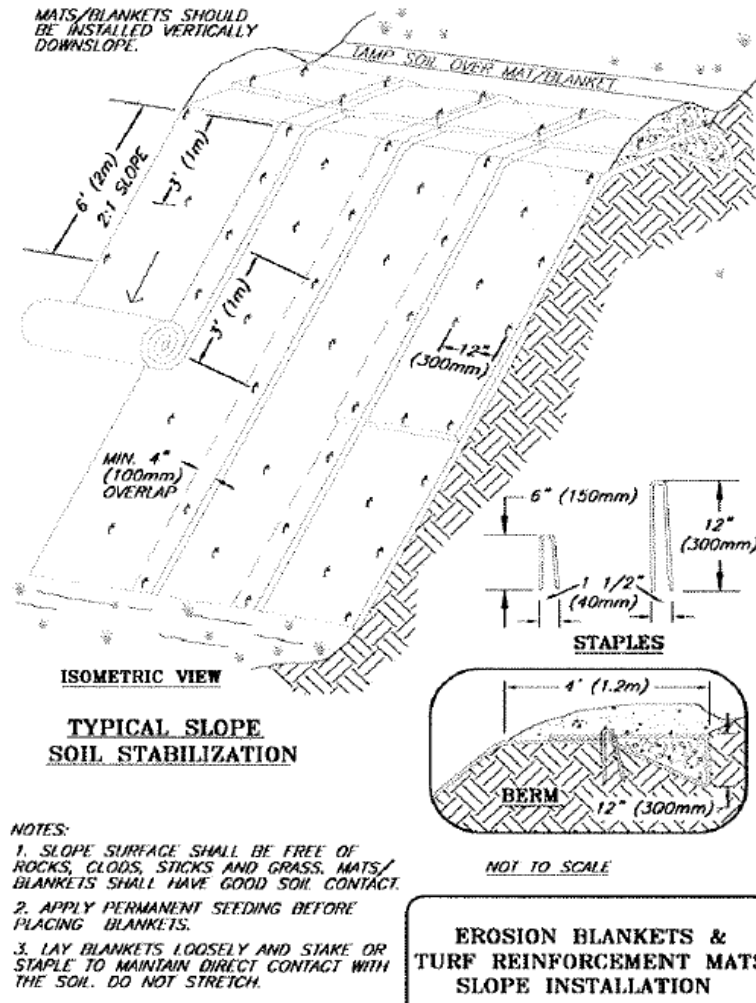
The following guidelines will be used to select riprap size and thickness:

- For channels with water depth > 3 feet, use R-5 at 6" thick.
- For channels with water depth between 2 and 3 feet, use R-4 at 4" thick
- For channels with water depth between 1 and 2 feet, use R-3 at 3" thick
- For channels with water depth < 1 feet, use R-2 at 3" thick

DETAIL D-7

EROSION CONTROL MATTING DETAIL

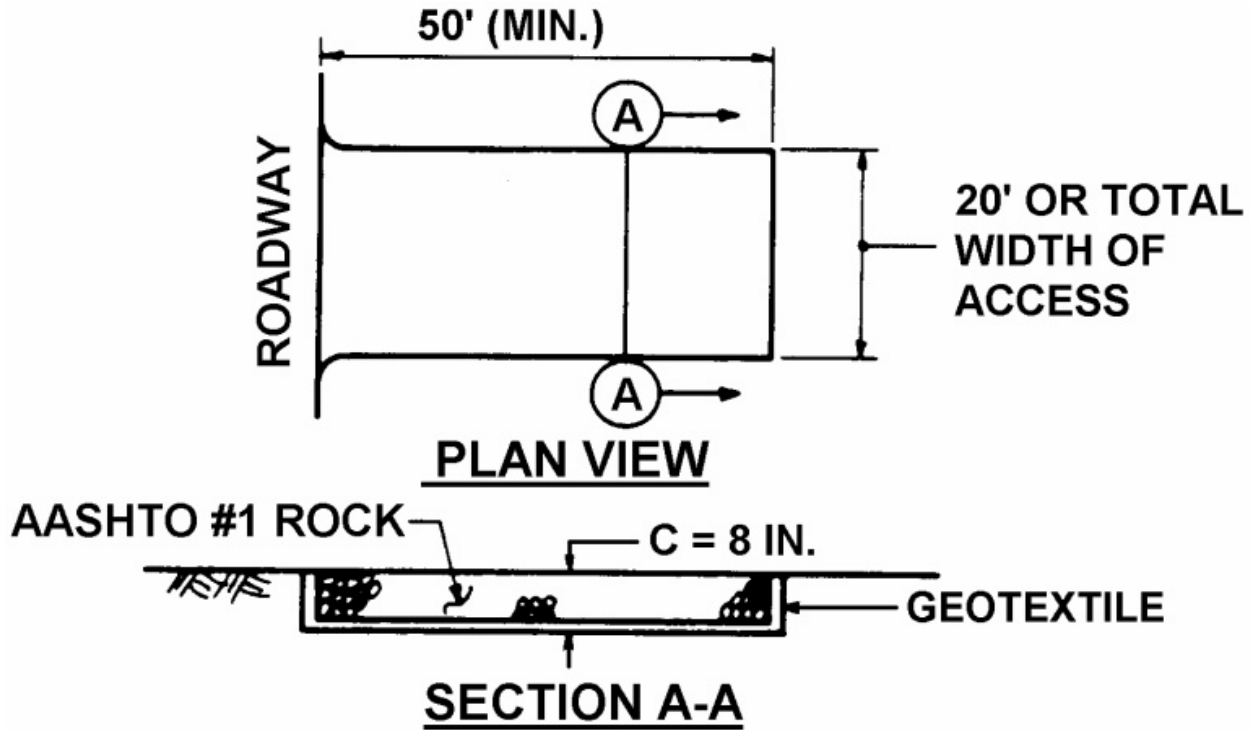
EROSION CONTROL BLANKET DETAIL



Refer to manufacturer's lining installation detail for overlap, embedment, staple patterns, and vegetative stabilization specifications

DETAIL D-8

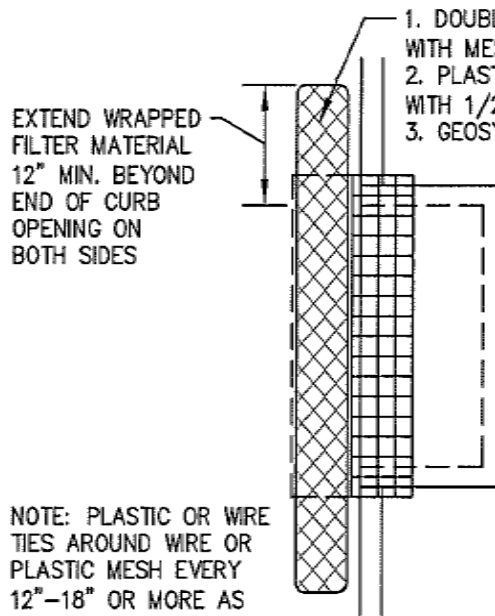
ROCK CONSTRUCTION ENTRANCE DETAIL



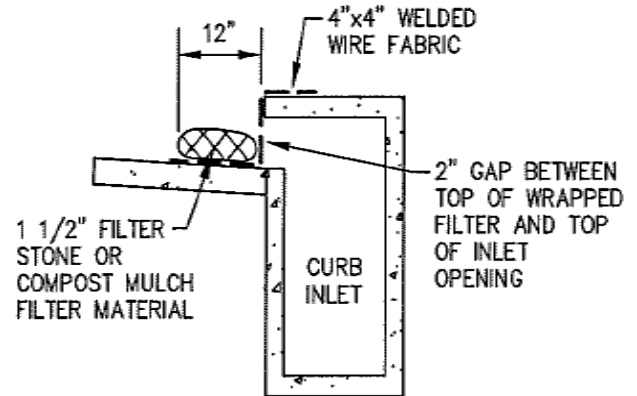
MAINTENANCE: Rock Construction Entrance thickness shall be constantly maintained to the specified dimensions by adding rock. A stockpile shall be maintained on site for this purpose. At the end of each construction day, all sediment deposited on paved roadways shall be removed and returned to the construction site. Steel plates, timber mats, and tires are also acceptable materials for short-term construction entrances.

DETAIL D-9A

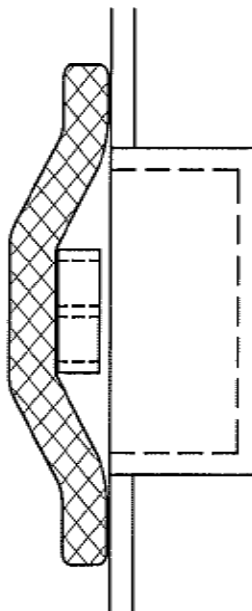
CURB INLET PROTECTION



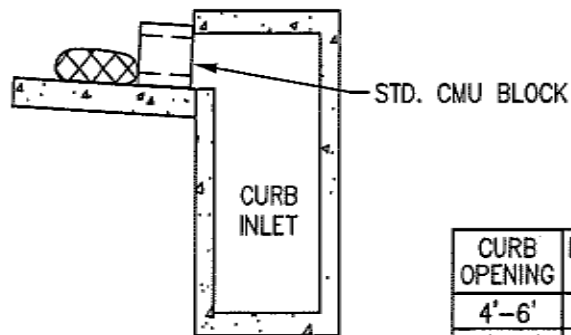
PLAN VIEW



CROSS SECTION



PLAN VIEW

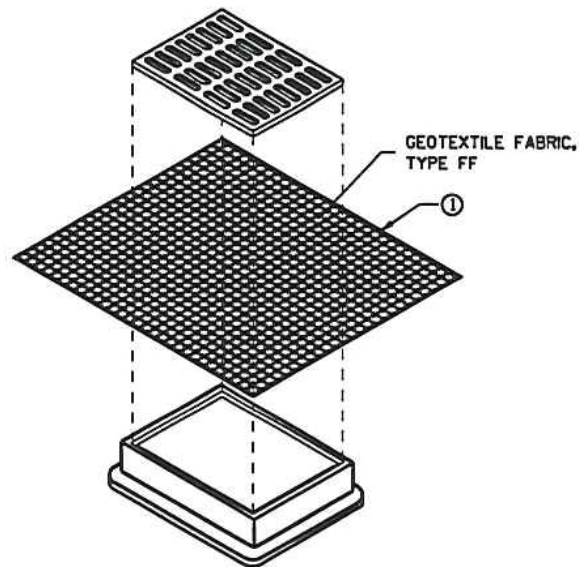


CROSS SECTION

CURB OPENING	MIN. NO. BLOCKS
4'-6'	1
8'-10'	2
12'-14'	3
16'-20'	4

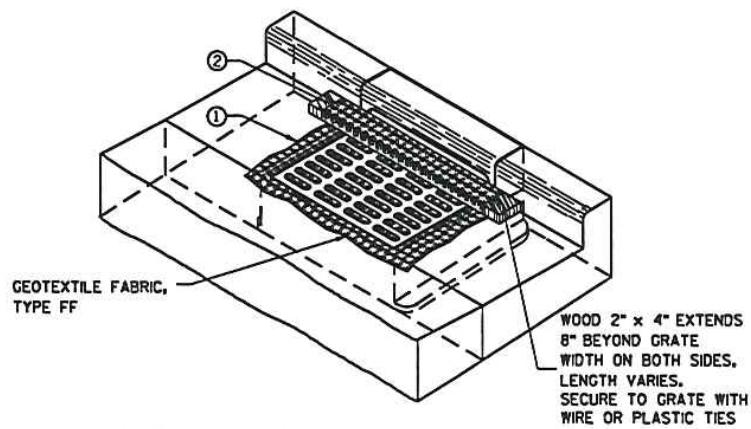
DETAIL D-9B

CURB INLET PROTECTION



INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

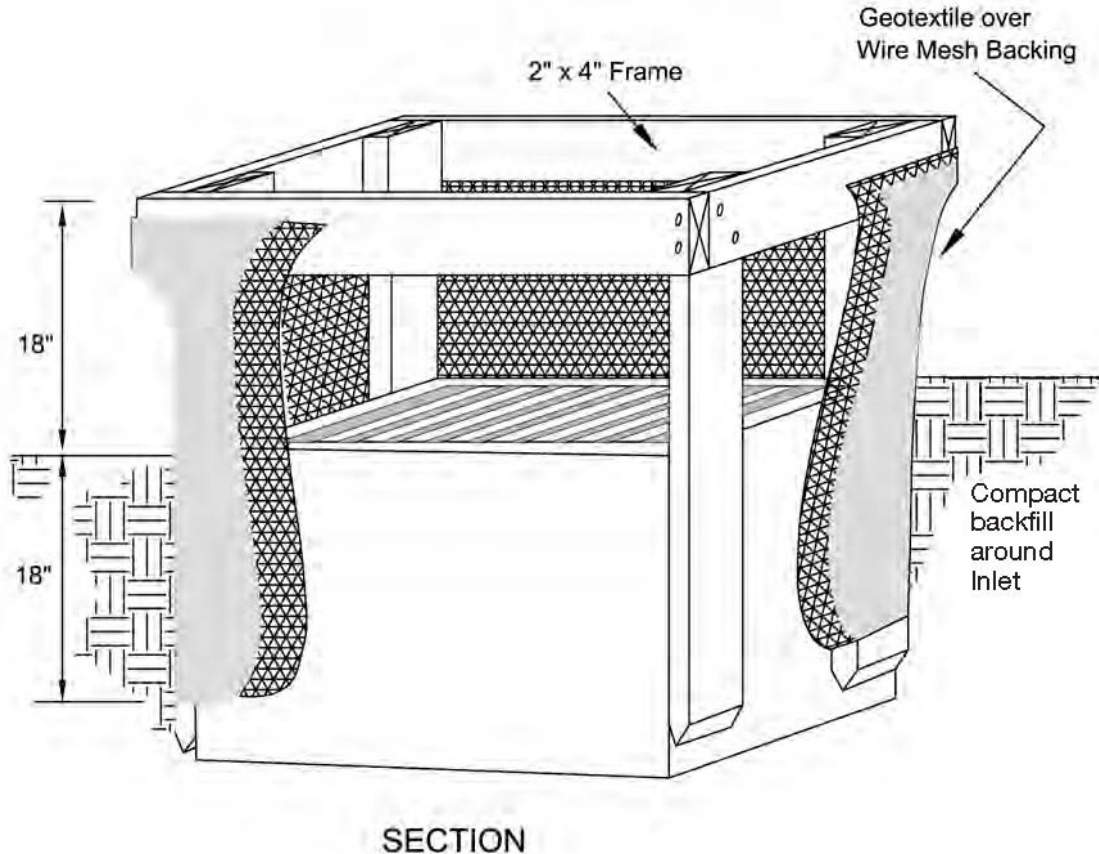
TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

DETAIL D-9C

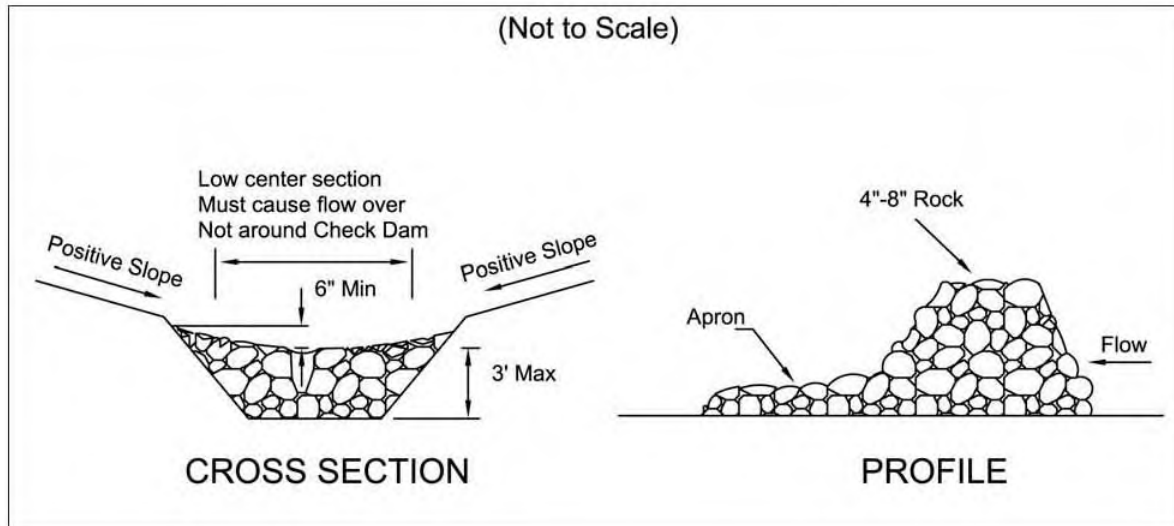
GEOTEXTILE INLET PROTECTION DETAIL



1. Inlet protection shall be constructed either before upslope land disturbance begins or before the inlet becomes functional.
2. The earth around the inlet shall be excavated completely to a depth at least 18 inches.
3. The wooden frame shall be constructed of 2-inch by 4-inch construction grade lumber. The 2-inch by 4-inch posts shall be driven one (1) ft. into the ground at four corners of the inlet and the top portion of 2-inch by 4-inch frame assembled using the overlap joint shown. The top of the frame shall be at least 6 inches below adjacent roads if ponded water will pose a safety hazard to traffic.
4. Wire mesh shall be of sufficient strength to support fabric with water fully impounded against it. It shall be stretched tightly around the frame and fastened securely to the frame.
5. Geotextile material shall have an equivalent opening size of 20-40 sieve and be resistant to sunlight. It shall be stretched tightly around the frame and fastened securely. It shall extend from the top of the frame to 18 inches below the inlet notch elevation. The geotextile shall overlap across one side of the inlet so the ends of the cloth are not fastened to the same post.
6. Backfill shall be placed around the inlet in compacted 6inch layers until the earth is even with notch elevation on ends and top elevation on sides.
7. A compacted earth dike or check dam shall be constructed in the ditch line below the inlet if the inlet is not in a depression. The top of the dike shall be at least 6 inches higher than the top of the frame.
8. Filter fabric and filter socks can also be used as inlet protection.

DETAIL D-10

ROCK CHECK DAM DETAIL



1. The check dam shall be constructed of 4-8 inch diameter stone, placed so that it completely covers the width of the channel. ODOT Type D stone is acceptable, but should be underlain with a gravel filter consisting of ODOT No. 3 or 4 or suitable filter fabric.
2. Maximum height of check dam shall not exceed 3.0 feet.
3. The midpoint of the rock check dam shall be a minimum of 6 inches lower than the sides in order to direct across the center and away from the channel sides.
4. The base of the check dam shall be entrenched approximately 6 inches.
5. Spacing of check dams shall be in a manner such that the toe of the upstream dam is at the same elevation as the top of the downstream dam.
6. A Splash Apron shall be constructed where check dams are expected to be in use for an extended period of time, a stone apron shall be constructed immediately downstream of the check dam to prevent flows from undercutting the structure. The apron should be 6 in. thick and its length two times the height of the dam.
7. Stone placement shall be performed either by hand or mechanically as long as the center of check dam is lower than the sides and extends across entire channel.
8. Side slopes shall be a minimum of 2:1.

APPENDIX E

SWP3 Inspection Forms

ECTS Checklist Guidance

Checklist Title: SWP3 Inspection Form

(For Dominion Transmission, Inc. Construction Projects with a SWP3)

THIS CHECKLIST IS TO BE COMPLETED BY AN ENVIRONMENTAL INSPECTOR (EI) CONTRACTED BY DOMINION OR A DOMINION INSPECTOR DURING SCHEDULED OR UNSCHEDULED SITE INSPECTIONS OF ACTIVE CONSTRUCTION SITES WITH A SWP3.

- **Information at the top of the form.**

- **Site Name:** Note the Project name and/or location of the construction activity.
- **Inspector:** Note the inspector's name and circle the appropriate title.
- **Qualifications:** Note applicable qualifications (Y/N).
 - Eight-Hour Stormwater Management During Construction Course - A course administered by numerous third-party trainers.
 - CESSWI - Certified Erosion, Sediment and Stormwater Inspector. A federal certification program administered by EnviroCert International. If "Yes" include certification number.
 - Dominion SWP3 Training - A training module prepared by Dominion Environmental Services for Dominion construction Sites
- **Signature:** Include the signature of the inspector on paper copy maintained at the site.

- **Inspection Documentation Area:**

- Circle the applicable inspection type:
 - "Weekly" - Inspection required during active construction and restoration.
 - "Monthly" - Inspection required after all construction and restoration activity has ceased.
 - "Routine" - Minimum weekly inspection interval
 - "Precipitation Event" - Must be completed within 24 hours of a more than 0.5-inch precipitation event, as determined by Dominion personnel or a designated representative using National Weather Service or other acceptable resources such as an on-site rain gauge.
 - "Other" - Random inspection, Compliance Inspection, Follow-up, etc.
- **Has it rained since last inspection?** (Y/N) Circle as appropriate and note the time started and duration of the previous storm event. If the precipitation amount is known, insert this information here.
- **Current Conditions:** Describe the weather conditions during this inspection. Circle the most appropriate soil condition. "Saturated" = standing water is visible on the ground surface.
- **Features Inspected:** List each feature inspected at the site. The Feature ID must correspond to the site plan submitted with the SWP3 or E&S Control Plan. Record any repairs or maintenance necessary for each device; include an accurate description of the location of repair and a date when the repair must be completed.

- **Information on Second Page.**

- **Construction Inspector(s):** Note the inspection date, site name, and inspector'(s) name.
- **Previous Inspections:** Review the previous site inspection form, including action items and dates of completion. Comment on any ongoing activities and its progress. The site has 3 days from discovery to complete applicable repairs and 10 days from discovery to install new controls if warranted.
- **Necessary Documents:** Confirm the presence of environmental permit, plans, and notices. These must include: a Stormwater Pollution Prevention Plan (SWP3) or Erosion and Sediment (E&S) Control Plan; Construction Permit/Land Disturbance Permit; Notice of Intent (NOI) to begin disturbance; and Notices of Termination.
- **Disturbed Areas:** Any disturbed areas that are anticipated to lie dormant for more than 21 days must be stabilized to prevent potential erosion. Stabilization may include: permanent cover (e.g., building, parking lot, etc.); vegetation (seed and straw), mulch or tack; gravel, stone or rip rap.
- **E/SCDs:** Are Erosion/Sediment Control Devices (E/SCDs) of appropriate design for the areas they are controlling, properly installed and being maintained? The E/SCDs installed must be described in the SWP3 or E&S Control Plan. Furthermore, design details must meet the minimum design details described in the state stormwater control manual. If alternate control methods were installed: notify the site manager and engineer to confirm the controls installed are sufficiently designed; revise the plans accordingly; or remove and replace insufficient controls. The site has 3 days from discovery to complete applicable repairs and 10 days from discovery to install new controls if warranted.
- **Final Grade:** List any areas at final grade since last inspection. Areas at final grade are not likely to be disturbed again and must be stabilized. See Question # 9 above.
- **Untreated Discharges:** Observations of untreated discharge may include:
 - A sheen indicating petroleum products;
 - Foam or froth indicating a chemical or other discharge;
 - Suspended particles or sludge beneath the surface;
 - Discolored water, including dirty/muddy characteristics of sedimentation;
 - A change in water temperature; and
 - Damaged or stressed vegetation or wildlife.
- **Notification:** Review the inspection findings with a site manager or other responsible person and note this individual.

Checklist Owner: Tara Milette

Local: 8-657-2579

Work: 330-664-2579

Cell: 330-604-8871

Email: Tara.E.Milette@dom.com

Subject Matter Expert: Greg Eastridge

Local: 8-657-2576

Work: 330-664-2576

Cell: 330-571-7855

Email: Gregory.K.Eastridge@dom.com

Date of Last Revision: December 2012

OHIO SWP3 INSPECTION FORM

Site Name:

Date:

Environmental Inspection Company:

Environmental Inspector:

Qualifications: Completed 8-HR Stormwater Management During Construction Course

Y

N

CESSWI

Y

N

Dominion SWP3 Training

Y

N

Inspector Signature:

Weekly

Monthly

Routine Inspection

Precipitation Event >0.5"

Other

(circle all applicable)

Has it rained since last inspection? *(circle one)*

Yes: Date(s) & Approx. Amount _____

No

Current Conditions: _____

Soil Conditions:

Dry

Wet

Saturated

Frozen

(circle applicable conditions)

Feature ID

BMP, ECD, SCD Applied

Recommendations

BMP: Best Management Practice E/SCD: Erosion/Sediment Control Device SF: Silt Fence SW: Straw Wattle W: Wetland S: Stream
TM: Timber Mat IP: Inlet Protection WB: Water Bar RCE: Rock Construction Entrance ECM: Erosion Control Matting FS: Filter
Sock

Date:

Site:

Stormwater Pollution Prevention Plan Inspection Form

Construction Inspector(s) On Site:

Unresolved issues from previous inspections:

Are the SWP3, NOI and General Permit Letter on-site? Yes No
If no, explain.

List newly disturbed areas likely to lie dormant for more than 14 days:

Have soil stockpiles been placed at least 50 feet from drainageways?

List construction entrances and SCDs used to prevent tracking into roadway:

Are E/SCDs of appropriate design for area they are controlling, properly installed and being maintained?

List any new areas at final grade since last inspection:

Is the inlet protection of appropriate design?

Were any untreated discharges into streams, wetlands or inlets observed? If yes, document location(s):

Note person(s) notified of any inspection finding(s) and expected date of correction:

Notes:

APPENDIX F

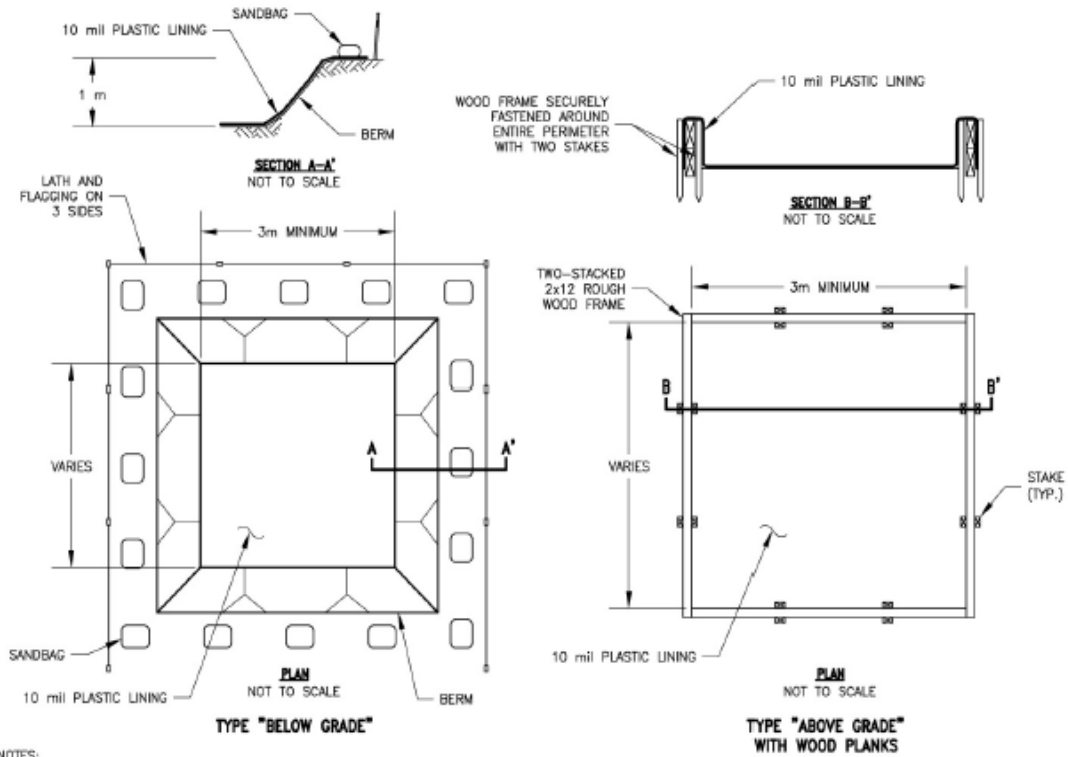
Concrete Washout Detail

DETAIL F-1

Concrete Washout Detail

Note: This detail to be used in the absence of the following concrete washout BMPs:

1. Washout into a depressional area where new sidewalks will be poured
2. Washout into a lined pit in the ground with filter socks as perimeter control



NOTES:

1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN (SEE PAGE 6) SHALL BE INSTALLED WITHIN 10 m OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



Sign Examples



Photograph of the "ABOVE GRADE" concrete washout structure

**CASE No. 16-52-GA-BNR
CONSTRUCTION NOTICE FOR
LINE 1745 (2016) PIGGABILITY PROJECT**

ATTACHMENT G

**U.S. FISH & WILDLIFE SERVICE
COORDINATION CORRESPONDENCE**



December 9, 2015

BY FED-EX

Dan Everson
United States Fish and Wildlife Service
Ecological Services Field Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230

RE: The East Ohio Gas Company
Endangered Species Act Coordination
Line 1745 Piggability

Dear Mr. Everson:

Please review the following information regarding the East Ohio Gas Company (EOG) Line 1745 Piggability project. To assist with your review of the project area, a site map and a topographic map are enclosed.

Project Purpose and Location

EOG proposes testing of approximately 8,868 feet of existing 12-inch diameter natural gas pipeline. Twenty-eight (28) above ground valves along the pipeline will be assessed at dig locations to detect abnormalities or corrosion in the pipeline valve. In addition, 1,650 feet of 8-inch diameter pipeline between Glencoe Street NW and Fairpark Avenue NW will be replaced with 12-inch diameter and a pig launcher/receiver will be installed. Construction will be limited to the existing 60 foot wide (30 feet on either side of the pipeline) utility right-of-way (ROW). Construction activities will require minor tree and shrub clearing. After all work is completed, grades will be returned to pre-construction contours. No onsite wetlands or streams will be impacted for project activities.

The project area begins at an existing EOG station located west of Hampsher Road in the City of New Franklin, Summit County, Ohio. The project area continues south within off-road utility ROW, ending just north of Glencoe Street NW in Lawrence Township, Stark County, Ohio. The center latitude and longitude coordinates for the project area are 40.917555°N and -81.577467°W.

Site Description

An ecological survey of the project area was conducted in July 2015. The site map (Attachment A; Figures 1.01-1.05) from the survey and a topographic map (Attachment A; Figure 2) of the project area are included. Additionally, photographs of the site are enclosed in Attachment B.

The project area exists as agricultural field, maintained lawn, open field, and forest. The agricultural field includes planted soybean (*Soja max*), great ragweed (*Ambrosia trifida*), Japanese bristle grass (*Setaria faberi*), pinkweed (*Persicaria pensylvanica*), yellow wood sorrel (*Oxalis stricta*), and field mustard (*Brassica rapa*) in the herbaceous layer.

The maintained lawn community includes Kentucky bluegrass (*Poa pratensis*), common dandelion (*Taraxacum officinale*), and white clover (*Trifolium repens*) in the herbaceous layer.

The open field plant community includes white clover, red clover (*Trifolium pratense*), Queen Anne's lace (*Daucus carota*), common Timothy (*Phleum pratense*), curly doc (*Rumex crispus*), ox-eye daisy (*Leucanthemum vulgare*), and eastern daisy fleabane (*Erigeron annuus*) in the herbaceous layer.

The forested plant community includes black cherry (*Prunus serotina*), hawthorn species (*Crataegus* sp.), and black walnut (*Juglans nigra*) in the tree layer. The shrub layer is dominated by tree saplings and European privet (*Ligustrum vulgare*). Growing in herbaceous layer of the forest is curly doc, yellow wood sorrel, poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), climbing nightshade (*Solanum dulcamara*), and American pokeweed (*Phytolacca americana*).

Three (3) wetlands (Wetlands W-1, W-2, and W-3) exist within the project area and are shown on Figures 1.03-1.04 (Attachment A). Onsite wetlands consist of palustrine emergent (PEM) and palustrine scrub/shrub (PSS) vegetative communities. Vegetation within the onsite PEM wetlands includes rice cut grass (*Leersia oryzoides*), fringed sedge (*Carex crinita*), reed canary grass (*Phalaris arundinacea*), swamp milkweed (*Asclepias incarnata*), sensitive fern (*Onoclea sensibilis*), skunk cabbage (*Symplocarpus foetidus*), soft-stem club-rush (*Schoenoplectus tabernaemontani*), spotted touch-me-not (*Impatiens capensis*), broad-leaf cattail (*Typha latifolia*), spotted trumpetweed (*Eutrochium maculatum*), fringed yellow loosestrife (*Lysimachia ciliata*), and fowl manna grass (*Glyceria striata*) in the herbaceous layer.

Vegetation within the onsite PSS wetlands includes American elm (*Ulmus americana*), gray dogwood (*Cornus racemosa*), and European privet in the shrub layer. The herbaceous layer of onsite PSS wetlands includes fowl manna grass, spotted touch-me-not, skunk cabbage, and greater straw sedge (*Carex normalis*).

Two (2) jurisdictional streams (Streams S-1 and Nimisila Creek) exist within the project area and are shown on Figures 1.03-1.04 (Attachment A). Stream S-1 is classified as intermittent and is flowing west into Nimisila Creek. Nimisila Creek is a perennial stream that also crosses through the project area. All onsite water resources are located within the Tuscarawas River watershed.

No onsite water resources will be impacted during assessments and replacement of the pipeline. Following valve assessments, launcher/receiver installation, and replacement of the pipeline, the disturbed areas will be restored to pre-existing grade and re-vegetated.

All Best Management Practices will be utilized to minimize sedimentation and erosion. Representative photographs of onsite water resources are included in Attachment B.

Federally Listed Species within Summit and Stark Counties

Federally listed species with ranges within **Summit** and **Stark Counties** include:

- **Indiana bat (*Myotis sodalis*)**, federally endangered and **northern long-eared bat (*Myotis septentrionalis*)**, federally threatened: The project area is composed of a maintained ROW located within a residential, agricultural, forested, and wetland setting. The portion of pipeline planned for replacement is located within a partially forested ROW. This area will need to be cleared to allow safe and immediate access to the pipeline. The forested segment along the portion of pipeline to be replaced is not contiguous with a larger tract of offsite forest.

Living or dead trees with shedding or peeling bark or cavities may serve as roosting trees for the Indiana bat and/or the northern long-eared bat. Ten (10) potential habitat trees for the Indiana bat and/or northern long-eared bat exist within the project area and are shown on Figures 1.03-1.05 (Attachment A). The potential roost trees (PRTs) include northern red oak (*Quercus rubra*), Eastern cottonwood (*Populus deltoides*), American elm (*Ulmus americana*), and black cherry (*Prunus serotina*) trees with diameters at breast height (dbh) measurements ranging from eight (8) to 45 inches. The PRTs have 70 to 100% solar exposure, peeling bark, holes and/or crevices. Photographs of the PRTs are included in Attachment B (Photos 9-18). A table summarizing the characteristics of the PRTs is included in Attachment C.

Presently, this project will impact seven (7) of the onsite potential habitat trees (PRTs 4-10). The Indiana bat and northern long-eared bat may use these trees as summer roosting habitat between April 1 and September 30. Therefore, EOG proposes to cut any PRTs between October 1 and March 31. In addition to the PRTs, clearing of non-habitat trees will be necessary for pipeline replacement activities and could be cleared at any time. ROW tree clearing is expected to total approximately 0.75 acres. Please indicate if known Indiana bat or northern long-eared bat roost trees or hibernacula are located near the project area. No clear cutting is proposed.

- **Northern monkshood (*Aconitum noveboracense*)**, federally threatened (Summit County only): Preferred habitat for northern monkshood is cool, moist, shaded cliff faces or talus slopes in wooded ravines, near water seeps. Suitable habitat for the northern monkshood is not located within the project area.
- **Bald eagle (*Haliaeetus leucocephalus*)**, federal species of concern: The bald eagle nests in large trees near water. No bald eagles or nests were observed within or adjacent to the project area. According to the EOG Categorical

Exclusion Agreement with the United States Fish and Wildlife Service (USFWS) dated January 23, 2015, Franklin Township in Summit County and Lawrence Township in Stark County have no known occurrences of bald eagle nesting sites.

Request for Finding

Considering the information above, EOG is requesting a finding from the USFWS regarding any adverse effect to any federally listed, threatened, or endangered species in the project area. This project is anticipated to begin in March 2016. Therefore, a timely response is respectfully requested to ensure compliance relative to federally-listed endangered species prior to initiating activities.

Please forward your response at the earliest possible convenience to the attention of:

Tara Buzzelli
Environmental Specialist
320 Springside Drive, Suite 320
Akron, Ohio 44333
Tara.E.Buzzelli@dom.com

If you have any questions or need additional information, please contact Tara Buzzelli at (330) 664-2579.

Sincerely,



Amanda B. Tornabene
Director, Gas Environmental Services

Enclosures

cc: Tara Buzzelli

Attachment A

(Maps)

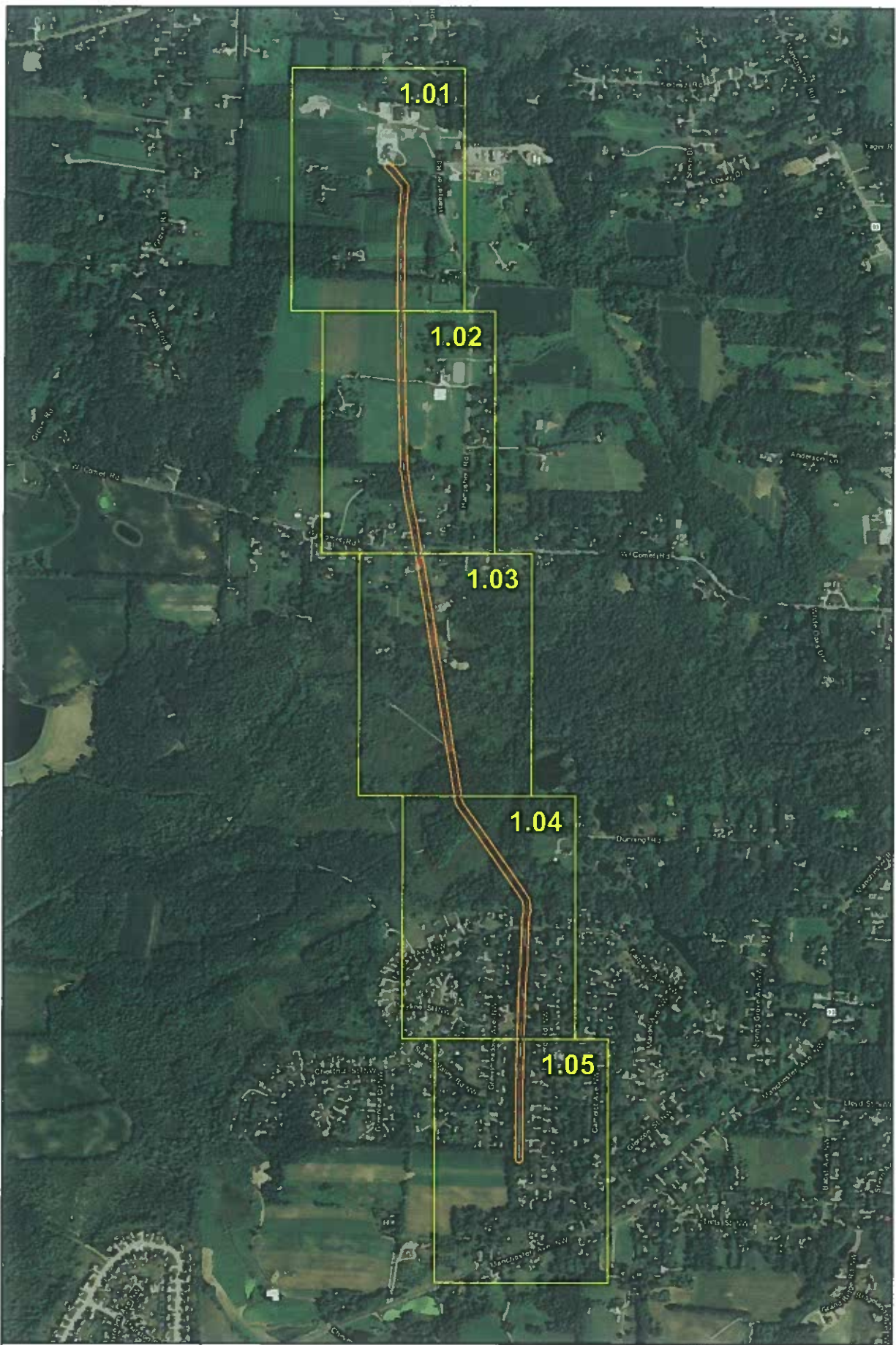
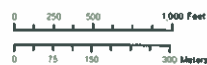


Figure 1. Site Map Overview of Wellands and Other Water Resources. Line 1745 Piggability.

— Pipeline
 Project Area (60')



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Draw: 1/18/2015 File: P:\10_Piggyback\CDOT\2014\1745_Piggability\GIS\Map1_101.mxd



Figure 1.01. Site Map of Wetlands and Other Water Resources.
Line 1745 Piggability.

- | | | | |
|---|---|--|--|
| <ul style="list-style-type: none"> PMRT PRT Sample Plot Dig Locations | <ul style="list-style-type: none"> Stream (Intermittent) Stream (Perennial) Stream (Offsite) Pipeline | <ul style="list-style-type: none"> Wetland (PEM) Wetland (PSS) Wetland (Offsite) | <ul style="list-style-type: none"> Project Area (50') Project Area Buffer (additional 20') |
|---|---|--|--|



1.01



Figure 1.02. Site Map of Wetlands and Other Water Resources.
Line 1745 Piggability.

- | | | | |
|---------------|-----------------------|-------------------|--------------------------------------|
| PMRT | Stream (Intermittent) | Wetland (PEM) | Project Area (60') |
| PRT | Stream (Perennial) | Wetland (PSS) | Project Area Buffer (additional 20') |
| Sample Plot | Stream (Offsite) | Wetland (Offsite) | |
| Dig Locations | Pipeline | | |

0 75 150 300 Feet

0 20 40 80 Meters



1.02



Figure 1.03. Site Map of Wetlands and Other Water Resources.
Line 1745 Piggability.

- | | | | |
|---------------|-----------------------|-------------------|--------------------------------------|
| PMRT | Stream (Intermittent) | Wetland (PEM) | Project Area (80') |
| PRT | Stream (Perennial) | Wetland (PSS) | Project Area Buffer (additional 20') |
| Sample Plot | Stream (Offsite) | Wetland (Offsite) | |
| Dig Locations | Pipeline | | |

0 75 150 300 Feet

0 20 40 80 Meters



1.03



Figure 1.05. Site Map of Wetlands and Other Water Resources.
Line 1745 Piggability.

- | | | | |
|-----------------|-------------------------|---------------------|--|
| ▲ PMRT | — Stream (Intermittent) | ■ Wetland (PEM) | ■ Project Area (80') |
| ▲ PRT | — Stream (Perennial) | ■ Wetland (PSS) | ■ Project Area Buffer (additional 20') |
| ● Sample Plot | — Stream (Offsite) | ■ Wetland (Offsite) | |
| ● Dig Locations | — Pipeline | | |

0 75 150 200 Feet

0 20 40 80 Meters



1.05

Date: 10/20/15 Path: P:\13_Progect\CGO\enr\CGO\TNR\New_PRR\Line1745 Piggability\CGMap2_topo.mxd

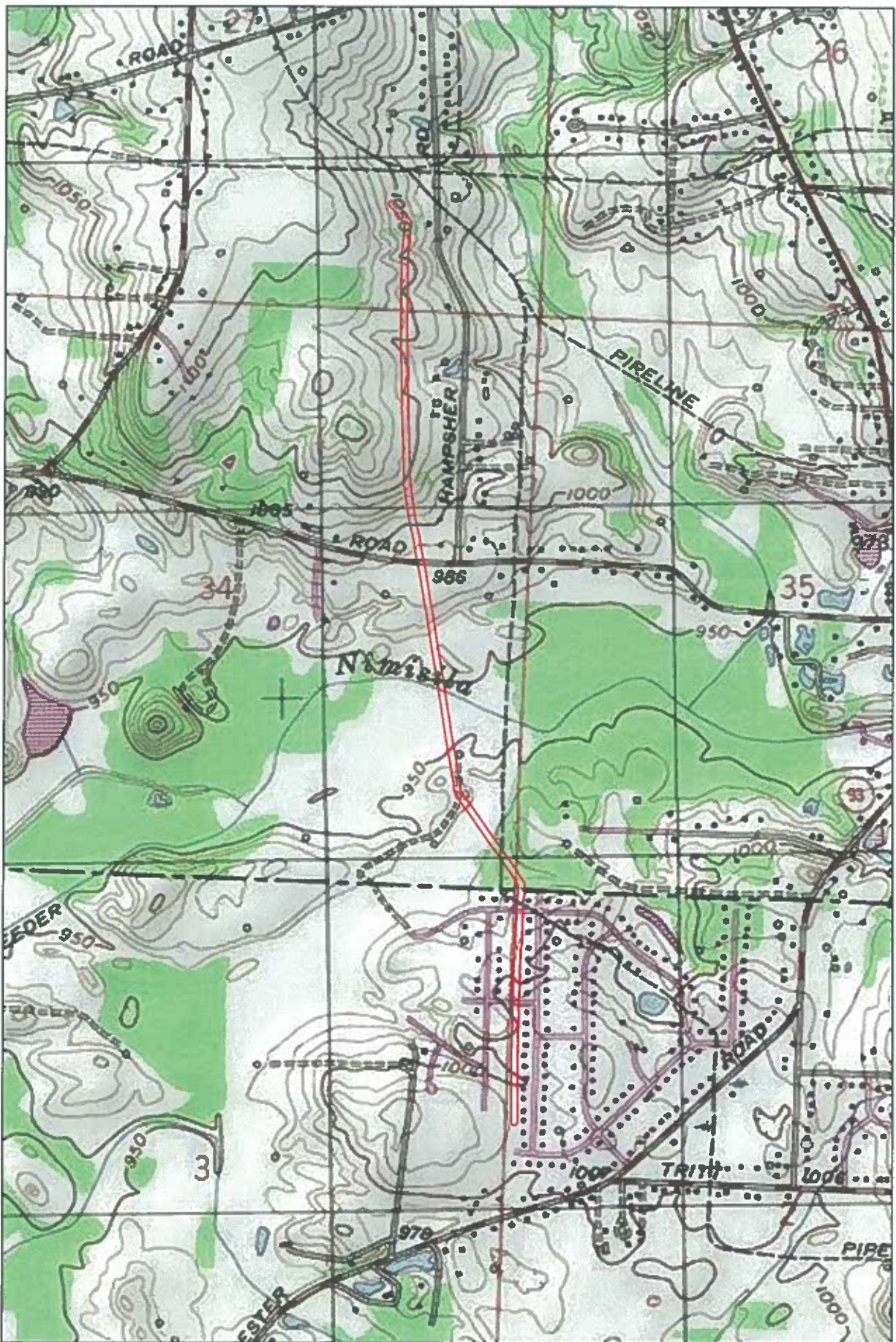


Figure 2. USGS 7.5-minute Topographic Map of Canal Fulton Quadrangle, Line 1745 Piggability.

Project Area



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Attachment B
(Photographs)

*Line 1745 Piggability
Photographed July 10, 2015*



Photo 1. Typical agricultural field within the project area.



Photo 2. Typical open field within the project area.

Line 1745 Piggability
Photographed July 10, 2015



Photo 3. Typical maintained lawn within the project area.



Photo 4. Typical forest within the project area.



Photo 5. Typical palustrine emergent wetland within the project area.



Photo 6. Typical palustrine scrub/shrub wetland within the project area.

*Line 1745 Piggability
Photographed July 10, 2015*



Photo 7. Typical perennial stream within the project area.



Photo 8. Typical intermittent stream within the project area.

Line 1745 Piggability
Photographed July 10, 2015



Photo 9. Tree 1 – Potential Roost Tree, Eastern Cottonwood.



Photo 10. Tree 2 – Potential Roost Tree, Eastern Cottonwood.



Photo 11. Tree 3 – Potential Roost Tree, Black Cherry.



Photo 12. Tree 4 – Potential Roost Tree, American Elm.

Line 1745 Piggability
Photographed July 10, 2015



Photo 13. Tree 5 – Potential Maternity Roost Tree, Black Cherry.



Photo 14. Tree 6 – Potential Maternity Roost Tree, Black Cherry.

Line 1745 Piggability
Photographed July 10, 2015



Photo 15. Tree 7 – Potential Maternity Roost Tree, Black Cherry.



Photo 16. Tree 8 – Potential Maternity Roost Tree, Black Cherry.



Photo 17. Tree 9 – Potential Maternity Roost Tree, Black Cherry.



Photo 18. Tree 10 – Potential Maternity Roost Tree, Red Oak.

Attachment C
(Tree Table)

**Characteristics of Potential Roost Trees within the Project Area.
Line 1745 Piggability**

Tree ID	Tree Species	Diameter at Breast Height (inches)	Latitude/Longitude	Solar Exposure (%)	Comments	Clearing Required
01	Eastern Cottonwood	10	40.915498	100		No
			-81.577649			
02	Eastern Cottonwood	11	40.913956	70		No
			-81.577049			
03	Black Cherry	11	40.912064	75	Standing dead	No
			-81.575421			
04	American Elm	8	40.90966	10		Yes
			-81.57542			
05	Black Cherry	20	40.909463	80	Potential maternity habitat	Yes
			-81.575395			
06	Black Cherry	45	40.908439	85	Potential maternity habitat	Yes
			-81.575416			
07	Black Cherry	10, 12, 16	40.908208	100	Triple trunk; Potential maternity habitat; Standing dead	Yes
			-81.57552			
08	Black Cherry	38	40.908027	85	Potential maternity habitat	Yes
			-81.575433			
09	Black Cherry	35	40.907935	75	Potential maternity habitat	Yes
			-81.575462			
10	Red Oak	38	40.906596	95	Potential maternity habitat	Yes
			-81.575554			

Tara E Buzzelli (Services - 6)

From: susan_zimmermann@fws.gov on behalf of Ohio, FW3 [ohio@fws.gov]
Sent: Wednesday, December 30, 2015 3:10 PM
To: Tara E Buzzelli (Services - 6)
Subject: Line 1745 Piggability Project, EOG, City of New Franklin, Summit Co. OH

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Red Category



UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994



TAILS# 03E15000-2016-TA-0342

Dear Ms. Buzzelli,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

FEDERALLY LISTED SPECIES COMMENTS: All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded

corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

The proposed project is in the vicinity of one or more confirmed records of Indiana bats.

Therefore, we recommend that trees ≥ 3 inches dbh be saved wherever possible. Because the project will result in a small amount of forest clearing relative to the available habitat in the immediately surrounding area, habitat removal is unlikely to result in significant impacts to Indiana bats or northern long-eared bats. Since Indiana bat presence in the vicinity of the project has been confirmed and presence of northern long-eared bats is assumed, clearing of trees during the summer roosting season may result in direct take of individuals. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and tree removal is unavoidable, we recommend that removal of any trees ≥ 3 inches dbh only occur between October 1 and March 31. Following this seasonal tree clearing recommendation should ensure that any effects to Indiana bats and northern long-eared bats are insignificant or discountable. **Please note that, because Indiana bat presence has already been confirmed in the project vicinity, any additional summer surveys would not constitute presence/absence surveys for Indiana bats.**

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at john.kessler@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dan Everson". The signature is fluid and cursive, with the first name "Dan" being more prominent than the last name "Everson".

Dan Everson

Field Office Supervisor

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Case No(s). 16-0052-GA-BNR

Summary: Text Construction Notice of Dominion East Ohio for Line 1745 (2016) Piggability Project - Part 2 electronically filed by Teresa Orahod on behalf of Sally Bloomfield