FILE

GEAUGA COUNTY
138 KV TRANSMISSION LINE SUPPLY AND STACY SUBSTATION PROJECT

STORM WATER POLLUTION PREVENTION PLAN

Prepared for:

First Energy Corporation
76 South Main Street
Akron, Ohio 44308

ATSI

the Illuminating Company
A FirstEnergy Company

Prepared by:

URS

36 East Seventh Street, Suite 2300
Cincinnati, Ohio 45202

APRIL 2011

Storm Water Pollution Prevention Plan for
Construction of the Geauga County 138kV Transmission Line and Stacy Substation
Geauga County and Lake County, Ohio
Revision 0

Storm Water Pollution Prevention Plan prepared in accordance with the Ohio Environmental Protection Agency's National Pollutant Discharge Elimination System Permit No. OHC000003 for Storm Water Discharges Associated with Construction Activity.

Project Name and Location:	**Geauga County 138kV Transmission Line and Stacy Substation** **Geauga County and Lake County, Ohio** **Stacy Latitude: 41.53501626 decimal degrees** **Stacy Longitude: -81.04536906 decimal degrees**
Anticipated Schedule:	**July 5, 2011 through June 30, 2013**
Project Owner / Site Operator:	**FirstEnergy Corp. Subsidiaries:** American Transmission Systems, Incorporated 76 South Main Street Akron, Ohio 44308 The Cleveland Electric Illuminating Company 76 South Main Street Akron, Ohio 44308
Project Contact:	**FirstEnergy Corp.** **William Beach, CPG** **(330) 384-3878** **76 South Main Street** **Akron, Ohio 44308**
Authorized Representative:	**FirstEnergy Corp.** **Michael Walczak** **Project Lead** **(440) 350-7696**
Prepared by:	**URS Corporation** **36 East 7th Street, Suite 2300** **Cincinnati, OH 45202**
Preparation Date:	**April 2011**

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Appendix

Storm Water Pollution Prevention Plan

Geauga County 138kV Transmission Line and Stacy Substation Project
Geauga County and Lake County, Ohio

This plan has been issued and revised as indicated below. The Storm Water Pollution Prevention Plan (SWP3) is required to be amended by the permit holder whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the State or if the plan proves to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity (Part III. D).

REV. NO.	REV. DATE	PREPARED BY NAME/INITIAL	REVIEWED BY NAME/INITIAL	DESCRIPTION

Storm Water Pollution Prevention Plan

Geauga County 138kV Transmission Line and Stacy Substation Project
Geauga County and Lake County, Ohio

1.0 MANAGEMENT CERTIFICATION [Part V.H]

I certified under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system design to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon 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.

Authorized Representative Signature:

Name: MIKE WALCZAK

Title: ADV ENGINEER / PROJECT LEAD

Date Approved: 4/20/11

2.0 CONTRACTORS CERTIFICATION [Part III.E]

All contractors and subcontractors engaged in land disturbance activities that may result in the introduction of sediment and/or other pollutants to storm water are required to review and understand the terms and conditions of the General Permit and this Storm Water Pollution Prevention Plan (SWP3). The contractors or subcontractors shall sign the Contractor Certification Statement (Appendix A) following this review. This statement indicates that the contractor or subcontractor acknowledges, and accepts responsibility for, compliance with the terms and conditions of this SWP3 and the control measures and best management practices (BMPs) contained herein.

3.0 PROVISIONS FOR PLAN REVISIONS [Part III.D]

The proposed control measures, BMPs, inspection schedules and other provisions presented in this SWP3 represent anticipated minimum controls based upon the available project information. It is the responsibility of the on-site construction supervisor, contractors and subcontractors to recognize and implement any changes to this SWP3 that may be needed during the period of construction. The SWP3 is required to be amended whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the State or if the plan proves to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity. Any plan amendments, revisions or modifications will be documented on page 1 of the SWP3 and shall be implemented as soon as practical.

4.0 SITE AND PROJECT DESCRIPTION [Part III. G]

Project Name: Geauga County 138 kV Transmission Line

Location: Geauga County and Lake County, Ohio

Project Owner: FirstEnergy Corp. Subsidiaries:

American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308

The Cleveland Electric Illuminating Company
76 South Main Street
Akron, Ohio 44308

*a) **Nature and Type of Activity (Part III.G1a):*** American Transmission Systems, Incorporated and The Cleveland Electric Illuminating Company, FirstEnergy Corp. subsidiaries (FirstEnergy) will be constructing a new 138 kV electric transmission line from an existing American Transmission System, Incorporated (ATSI) transmission line located near the border of Geauga and Lake Counties in northeast Ohio, to a new, jointly-owned ATSI and Cleveland Electric Illuminating Company (CEI) 138 to 36 kV distribution substation located near United States (U.S.) 322 (Mayfield Road) in the eastern portion of Geauga County. The purpose of this project is to meet existing and increasing electric demand due to continued growth and development in Geauga and Ashtabula Counties.

The Geauga County 138 kV Transmission Line is approximately 14.7 miles long and will pass through Geauga and Lake Counties. The transmission line route generally follows a south to north alignment east of Madison Road (State Route 528). The existing land use along the proposed alignment is primarily rural and agricultural lands. The new transmission line will be constructed as a double-circuit 138 kV transmission line primarily supported on single wood pole tangent structures. As part of the project a new distribution substation, Stacy Substation, will be located along Mayfield Road (U.S. 322) in Huntsburg Township, Geauga County. In addition, the construction of laydown areas and several temporary access routes will be necessary to facilitate construction.

The Ohio Power Siting Board (OPSB) issued a Opinion, Order and Certificate on November 24, 2008 where it "ORDERED, That a certificate be issued to ATSI and CEI for construction, operation, and maintenance of the Project as proposed along the Preferred Route." The United States Army Corps of Engineers (USACE) issued authorization for the project under Nationwide Permit 12 on February 22, 2011. A 401 Water Quality Certification (WQC) application has been submitted to Ohio Environmental Protection Agency (OEPA), and is currently under review. A Notice of Intent requesting coverage under the OEPA General Permit for construction stormwater was filed February 2, 2011. The OEPA WQC and NPDES authorizations are anticipated to be granted by July 1,, 2011.

Construction of the project will result in the filling of 0.03 acres of wetland at the Stacy Substation site, and the conversion of approximately 6.7 acres of forested wetland and to scrub-shrub wetland within the maintained right-of-way corridor. Compensatory preservation of wetlands and adjacent upland buffers, as well as riparian corridors proximate to the project limits has been included as part of OPSB authorization for the project and is expected to be included as part of the OEPA 401 WQC authorization.

A project vicinity map is included as Figure 1. Color aerial photographs of the project area showing the transmission line route, access locations, the substation, and the construction laydown areas are included as Figures A through Y, LD1 and LD2, and a detail layout of the substation is provided in Appendix B Example drawings, specifications, and installation methodologies for erosion control practices are included in Appendix C.

The earth disturbing activities associated with constructing the Geauga County 138 kV Transmission Line are not anticipated to be significant. Earth disturbing activities anticipated for constructing the transmission line are associated with installing each pole of the transmission line and stream crossing improvements. Installation of each pole of the transmission line is expected to disturb an isolated area estimated to be typically in the range of less than 100 square feet – as there are approximately 300 poles, this would translate to a combined disturbed area of approximately 0.7 acres within the transmission line right-of-way.

As few as 12, and as many as 24 locations are expected to be used for equipment set-up locations for pulling in the transmission line conductors and static wire ("Pulling Locations".) The Pulling Locations will be approximately 60 feet wide and 100 feet long and generally located within upland portions of the transmission line right-of-way (i.e. outside of wetland areas and stream corridors). Grading and associated earth disturbing activities are not planned at the Pulling Locations. Temporary access routes are necessary to construct the transmission line. Grading, earthwork, and similar permanent and temporary improvements that would cause earth disturbance are generally not planned along the access routes. However, construction access routes and Pulling Locations that receive unusually frequent equipment traffic may require maintenance and stabilization depending on seasonal conditions. Best management practices will be used where necessary to address areas that may become destabilized due to equipment movement.

Temporary stream crossings and culvert installations will disturb approximately 0.02 acres of stream. Five temporary culverts and three permanent culvert crossings are being installed along construction access routes. These activities are detailed within the Culvert Design Basis Report included with the US Army Corps of Engineers Nationwide Permit 12 Authorization for this project.

It will be necessary to remove vegetation that is not compatible with the construction, operation and maintenance of the transmission line along the transmission line corridor. The transmission line corridor is approximately 14.7 miles long and 60-feet wide. This vegetation will be removed using non-mechanized clearing techniques and is expected to not disturb the soil or root zone. The nature and extent of the transmission line construction activities, as well as the proposed sediment and pollutant control measures are described in more detail in subsequent sections of this SWP3.

Two equipment construction staging areas are planned to be developed. Activities at these sites will include construction trailers, equipment and material storage and soil stock piles. These sites are the Clay Street Construction Staging Areas and Spruce Construction Staging Area. Earth disturbance at these two sites is expected to be approximately 7.4 acres in total. The nature and extent of the development of the construction staging areas, as well as the proposed sediment and pollutant control measures are described in more detail in subsequent sections of this SWP3.

Construction of the Stacy Substation will involve grading, access improvements, foundation installation and similar earth disturbing activities. Approximately 1.5 acres of earth disturbance is expected to occur at this location. The nature and extent of the substation construction activities, as well as the proposed sediment and pollutant control measures are described in more detail in subsequent sections of this SWP3.

b) Site Area (Part III.G1b): The total area of the project (including the transmission line corridor, temporary and permanent access routes, laydown areas, line pulling locations, and the substation is anticipated to approach 133-acres. Of this, approximately 9.6 acres are anticipated to be disturbed and will require erosion controls. Construction of the Stacy Substation and development of the construction staging areas will generally occur in one phase. The transmission line right-of-way construction activities will generally be phased largely based on seasonal vegetation removal limitations and right-of-way acquisition, such that the initial phase of construction will likely focus on setting poles in non-forested accessible and available portions of the right-of-way, with subsequent phases involving both vegetation removal and setting poles on available portions of the right-of-way. Conductor(s) and the static wire may be installed soon after poles are set if a practical length of the supporting poles are in place or may be installed at a later date.,

The total area of the project that is planned to be disturbed under the definition provided in Part VII.G (destruction of man-made or natural cover that exposes the underlying soils) is estimated at 9.6 acres, though allowance is being made for erosion controls throughout the right-of way and along construction access routes in areas that become destablized due to unusually frequent equipment traffic.

c) Impervious Areas (Part III.G1c): The existing land use within the project limits is primarily rural and agricultural. The impervious areas that currently exist are primarily

roadways, driveways and similar features. The construction of the transmission line will result in the installation of potentially up to five concrete foundations, totaling approximately 100-square feet. The construction of the substation will result in the installation of a limited area of impervious features (concrete foundations totaling 180-square feet). The remainder of the project is not anticipated to result in additional impervious features. Access roads will generally not be installed. Where limited access route improvements are necessary they will be constructed of soil or gravel.

d) Runoff Coefficients (Part III.G1d): As described above, the installation of significant impervious areas are not anticipated as part of this project, and the few concrete foundations installed at dispersed locations will have de minimis effect on runoff. For this reason, the post-construction runoff coefficients for this project will be consistent with the pre-construction conditions.

e) Existing Soil Data (Part III.G1e): According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service, Soil Survey of Lake and Geauga Counties, Ohio the soil series within the site area primarily include Ellsworth Silt Loam, Holly Silty Loam, Haskins Loam, Mahoning Silt Loam, Platea Silt Loam, Rawson Silt Loam and Sebring Silt Loam. These soil series are classified as hydrologic soil group C or D, and exhibit generally low infiltration rates when already saturated. No areas of severe erosion hazard soils are anticipated to be located within the project vicinity. Figure 2 shows the soils series overlay of the Project limits.

f) Prior Land Use (Part III.G1f): The proposed project is located in Geauga and Lake Counties, Ohio. Land use in the area is primarily dominated by agricultural and rural land uses. No institutional, or other sensitive land uses are located within the project area. Some residences are located at the project perimeter or adjacent to the access routes. These residents have been informed of the proposed project.

g) Schedule (Part III.G1g): Project construction is expected to commence as early as July 5, 2011 and extend through June 30, 2013. The construction schedule is attached to this SWP3 as Appendix D.

The project is primarily related to the construction of a 14.7-mile long electric transmission line with 60-foot wide corridor. The project will also require the preparation of temporary and permanent access routes and the installation of a substation, and two construction staging areas.

In order to construct the transmission line and access routes, the proposed corridors for each item will need to be cleared of woody vegetation that would impact the construction, operation and maintenance of the transmission line (60-feet wide and 12-feet wide, respectively). The clearing activities, other than at the locations of the poles are anticipated to not include grubbing, stump removal, or similar activities that will result in soil "disturbance".

h) Receiving Waters (Part III.G1h): The project does not discharge to a municipal separate storm sewer system (MS4).

The proposed project will cross the following named streams: Phelps Creek, Spring Creek, Mill Creek, Trumbull Creek and Hoskins Creek, which are tributaries to the Grand River.

As part of the transmission line installation, approximately 18-acres of wetlands and 0.8-acres of stream are anticipated to be spanned within the limits of the righ-of-way. As part of the construction access route use, approximately 0.02-acres of streams may be disturbed. The project has been designed to minimize disturbance to these types of areas. In addition, conditions stipulated by the OPSB Certificate, USACE and OEPA authorizations will be strictly adhered to so that temporary impacts to these surface water features are minimized.

i) Subdivided Developments (Part III.GIi): This is not a project involving subdivided developments. This part is not applicable.

j) Asphalt and Concrete Discharges (Part III.G1h): Concrete foundations will be installed at the Stacy substation and at as many as five pole structures within the transmission line right-of-way. Temporary concrete wash-out structures will be maintained at the substation site and used at the pole locations where concrete foundations will be installed, to contain all washout materials throughout construction. A detail of the washout facility is provided on the substation construction drawings in Appendix B.

k) Permit Requirements (Part III.G1k): A copy of the permit requirements is provided for reference as Appendix E.

l) Cover Page and Contact Information (Part III.G1l): A cover page meeting the requirements of this part has been provided.

m) Records (Part III.G1m): A log has been provided to document grading and stabilization activities in Appendix A. A log has also been provided to document inspection and maintenance activities in Appendix A. A training log for contractor and subcontractor's employees is provided in Appendix A. A log to record amendments to this SWP3 is provided on page 2 of this SWP3.

n) Site Maps (Part III.G1n): The permit describes a number of items that should be shown on the site map provided for the project. Given the nature and linear extent of this project, it is impractical to include all of these items on the site map. Instead a number of these items will be described, and some will be shown on the site map. A project vicinity map is included as Figure 1. A color aerial photograph of the project showing the transmission line, access roads, substation, streams, wetlands, existing

buildings/roads, etc., and similar features are provided in Figures A through Y, LD1 and LD2. Substation construction drawings are provided in Appendix B.

The following items are requested as part of the permit Part III, Item G1n:

Limits of Disturbance: The limits of disturbance are described throughout this SWP3 and are primarily related to the substation and construction staging areas. The total area of the project is approximately 133-acres. The areas of anticipated earth disturbance within the project limits are as follows:

- Transmission Line Corridor: 0.7 acres (individual pole installations)
- Construction Access Routes: 0.02 acres of temporary stream disturbance for stream crossings and culvert installations.
- Clay Street and Spruce Construction Staging Areas: 7.4 acres in total.
- Stacy Substation: 1.5 acres
- Additionally, construction access routes and Pulling Locations that receive unusually frequent equipment traffic may require maintenance and stabilization depending on seasonal conditions. Best management practices will be used where necessary to address areas that may become destabilized due to equipment movement.

Soil Types: The soil types within the project limits are described in item 5e above. Figure 2 is a soils maps for the project vicinity.

Contours: The general topography of the area is depicted on Figure 1, Site Vicinity Map. With the exception of the substation, no fill or regrading activities are anticipated as part of this project. The existing and proposed contours for the substation are provided in Appendix B.

Surface Waters: The tributaries and streams, as well as wetland areas, within the project vicinity are depicted on Figures A through Y, LD1 and LD2. More specific information regarding disturbance to these areas can be found in the application for coverage under the USACE Nationwide 12 Permit and OEPA 401 WQC application.

Locations of Buildings, Roads, Parking, Utilities: The locations of existing features such as buildings, roads, parking areas, and utilities within the project vicinity are generally depicted on Figures A through Y, LD1 and LD2 and in Appendix B.

Erosion/Sediment Control Locations: The locations for erosion and sediment control practices will be dependent on the nature and extent of the construction activities and

where soil disturbing activities occur. The practices that will be employed are discussed in Section 6.0

Basins: No basins are anticipated to be constructed as part of this project since the pre and post-construction conditions are anticipated to be the same. Construction runoff and post-construction substation drainage will be directed to a grass-filter and level spreader.

Other Wastes: During the construction activities, all solid wastes will be collected in dumpsters and disposed off-site at an appropriate licensed facility. The management of toxic wastes are not anticipated as part of this project. The contractor may install temporary sanitary facilities (portable toilets) as needed. Any sanitary wastes will be managed appropriately by the subcontractor providing the portable toilets. There may be temporary locations for vehicle and equipment fueling. Any temporary tanks will be double walled or otherwise provided with secondary containment, and the fueling activities will be manned at all times so that spills can be quickly responded to. An isolated area for cement washout will be provided at the substation construction areas, as shown on the drawings provided in Appendix B.

Construction Entrances: The construction entrances are generally depicted in Figures A through Y, LD1 and LD2.

Stream Crossings: The stream crossings are generally depicted in Figures A through Y, LD1 and LD2.

5.0 SEDIMENTATION AND EROSION CONTROL MEASURES [Part III.G2]

The SWP3 must contain a description of the controls appropriate for the construction operations covered by this permit and the operator must implement such controls. URS has prepared this plan to provide a description of the anticipated minimum sedimentation and erosion control measures given the current understanding of the construction procedures. However, as the construction conditions change it is the operator or the contractor's responsibility to update the SWP3 to describe the minimum sedimentation and erosion control standards. The erosion, sediment and storm water management practices used to satisfy the conditions of the permit should meet the standards and specifications provided in the current edition of Ohio's Rainwater and Land Development Manual.

a) Non-Structural Preservation Methods [Part III.G2a]: One goal of the SWP3 is to preserve the natural, existing conditions to the extent practical. As described in Section 5, the construction plans require clearing of vegetation within the transmission corridor and access routes that is not compatible with the construction, operation and maintenance of the transmission line, but grubbing, stump removal, and other earth disturbing activities are anticipated to be minimal. Soil disturbance activities may occur within the limits of the proposed substation (approximately 1.5-acres) and within the two construction staging areas. Soil disturbance in these areas may include clearing, grubbing, minor grading and placement of fill (aggregate, etc.). These areas will be stabilized in accordance with the SWP3 (construction staging areas) or the plan provided on the drawings contained in Appendix B (substation).

In-stream construction activities will be required to install culverts for construction access, but the disturbance to these areas will be minimized in accordance with the Culvert Design Basis Report. The total area of in-stream disturbance is anticipated to be 0.02-acres. For temporary culverts, the stream will be restored to pre-construction conditions following use.

b) Erosion Control Practices [Part III.G2b]: The SWP3 must specify erosion controls that are capable of providing cover to disturbed soils. These erosion control practices must be implemented in accordance with the schedule provided in the permit (see page 16 of Appendix E). In general, this requires that temporary stabilization practices must be implemented when an area will remain disturbed and dormant for more than 21 days (i.e., no construction activities will be conducted in this area). Permanent stabilization practices must be implemented if an area will remain disturbed and dormant for more than 1 year. Stabilization measures include seeding, mulching, matting, and the installation of geofabric and aggregate. Construction entrances will also be maintained as necessary to reduce the likelihood of soil transfer to paved roads, and erosion from disturbed areas.

c) Runoff Control Practices [Part III.G2c]: Runoff control practices generally consist of measures designed to control the flow of runoff from disturbed areas and prevent erosion. These measures generally consist of rock check dams, velocity dissipation practices, diversions to direct flow from disturbed areas, and protective grading practices. Given the relatively flat nature of the limits of construction activities and the isolated areas that are anticipated to be disturbed, these runoff control practices are not anticipated to apply to this project (see Item d below for structural erosion control practices).

d) Sediment Control Practices [Part III.G2d]: The structural sediment control practices that are anticipated to be implemented for this project include silt fence and straw bales. The intent of these sediment control practices is to store runoff and allow sediments to settle and be collected in the proposed devices in order to prevent them from reaching surface waters. These structural practices should be implemented before any land disturbing activities. The structural sediment control practices shall remain in place and functional until the disturbed areas are stabilized. The sediment control practices shall be inspected, maintained, and modified to maintain functionality. Additional information regarding the use of silt fence can be found in the permit (see pages 18 and 19 of Appendix E) and in Appendix C.

Sediment settling ponds are required when runoff from common drainage locations is anticipated from 10 or more acres of disturbed land. Due to the dispersed, linear and phased nature of the construction activities, it is not anticipated that the total area of disturbance in any active work area will exceed 5 acres at any given time. At the substation area (~1.5 acres) level spreaders and vegetated filters will be installed and maintained throughout construction (as shown on the construction drawings included in Appendix B) to treat runoff. These areas will be maintained post-construction No other basins are anticipated to be constructed as part of this project since the pre and post-construction conditions are anticipated to be the same.

e) Post-Construction Storm Water Management Requirements [Part III.G2e]: This part of the permit is not applicable to this project because it is a primarily linear construction project that does not result in the installation of additional impervious surface. The project has been designed to minimize the number of stream and wetland crossings, and final stabilization of any disturbed areas will be achieved in accordance with Part VII.H.1 of the permit.

f) Surface Water Protection [Part III.G2f]: The limits of the construction project contain approximately 18-acres of wetlands and 0.8-acres of streams. As described throughout this SWP3, the project has been designed to minimize disturbance to these types of areas. BMPs will be utilized when working in the vicinity of environmentally sensitive areas. This includes, but is not limited to, the installation of silt fencing (or similarly effective measures) prior to initiating construction near streams and wetlands. The movement of equipment working within wetlands will be limited to the minimum

necessary to accomplish the work. Low ground pressure equipment may be used without matting, provided ground disturbance can be sufficiently minimized. All other equipment that is required to traverse wetland areas will be supported on either timber mats or steel sheeting, where necessary to minimize ground disturbance. All temporary and permanent culver installations for stream crossings will be made during dry or dewatered streambed conditions. Existing streamflow will be maintained at all times to sustain aquatic life downstream. Where temporary diversion of stream flow is necessary, water will be diffused at the pump outlet. All temporary diffusing materials will be removed upon completion of the project. Furthermore, conditions stipulated by the OPSB Certificate, USACE and OEPA authorizations will be strictly adhered to so that temporary impacts to surface water features are minimized.

g) Other Controls [Part III.G2g]: The SWP3 must also give consideration to pollutant sources other than sediments. These may include liquid or solid wastes (including concrete washout), off-site tracking of sediments by vehicles, sanitary or septic wastes, vehicle fueling and maintenance activities, and other similar non-sediment pollutant sources.

1) Waste Disposal: Project related solid wastes will be collected regularly and transferred to a licensed solid waste disposal site. No construction waste materials will be buried onsite. Any concrete washout activities will not occur directly into a drainage channel, storm sewer, or surface water of the state. Hazardous wastes are not anticipated as part of this project.

Potentially hazardous wastes will be disposed of in a manner specified by state and federal regulations, or by the manufacturer. No toxic or hazardous waste shall be disposed into storm drains, septic tanks, or by burying, burning, or mixing the waste. The release of any potentially hazardous materials is expected to be limited to the unlikely release of petroleum products from construction vehicles. The ultimate responsibility for the disposal of any hazardous wastes and contaminated cleanup materials will be with the Project Manager. Spill clean up kits and personnel trained in their use will be at each construction location.

Portable sanitary waste units will be utilized as required by the project. If used, a licensed sanitary waste management contractor will collect sanitary waste from the portable units as necessary.

It will be the responsibility of the Operator and Contractor to insure that all construction personnel are instructed regarding the correct procedure for waste disposal and that these practices are followed.

2) Offsite Vehicle Tracking: Trucks hauling materials to and from the project site will use existing paved and gravel roads, and unsurfaced temporary access

routes. Any excessive amounts of soil transferred to local paved roads will be removed daily.

Equipment cleaning will be limited to water washing as required to prevent the removal of excessive dirt and mud from the project site. Washings will be collected in a catchment area to prevent sediment migration.

3) Compliance with Other Requirements: The Operator or Contractor shall comply with applicable State and/or local waste disposal, sanitary sewer, or septic system regulations, including prohibiting waste disposal by open burning.

4) Trench and Ground Water Control: This section is not applicable to the proposed construction activities.

5) Contaminated Sediment: This section is not applicable to the proposed construction activities.

6) Reporting of Incidents, Spill Control and Cleanup: Incidents involving a reportable quantity release of potentially hazardous materials are expected to be limited to the accidental release of small quantities of petroleum products from construction vehicles, including but not limited to motor oil, transmission fluids, and hydraulic oils. Spill clean up kits and personnel trained in their use will be generally accessible in the event of a spill.

For large spills (25 or more gallons) of petroleum products, in addition to contacting William Beach (330-384-3878) at **FirstEnergy Corp.**, the Ohio Environmental Protection Agency [Ohio EPA] (at 1-800-282-9378), the local fire department, and the local emergency planning committee (LEPC) must be contacted within 30 minutes of the spill.

No vehicle maintenance activities that could result in storm water contamination (e.g. oil changes, engine repairs) will be permitted outside of topographically flat construction areas and not without appropriate spill control measures in place before maintenance activities occur. All maintenance and fueling areas will be located away from watercourses, drainage ditches, field drains, or other streams.

6.0 MAINTENANCE, INSPECTIONS, AND RECORDS [Part III.Gh and Gi]

To maintain the storm water management system in effective operating condition, erosion, and sedimentation control structures will receive routine observation from construction personnel. In addition, each installed erosion and sedimentation control structure, and areas contributing to storm water discharges at the locations of these structures, will also be regularly inspected at least weekly and again after each rainfall/precipitation event exceeding 0.5 inch in 24 hours. Areas that have been temporarily or finally stabilized will be inspected at least once a month during construction. The results of such inspections will be noted on the written Inspection and Maintenance Report Forms included in Appendix A. The regular inspections will be conducted by qualified personnel with the weekly inspections focusing on:

- Disturbed areas of the construction site that have not undergone final stabilization;
- Receiving surface drainage ways for evidence of siltation effects resulting from construction;
- Structural control measure integrity and efficacy; and
- Locations where vehicles enter or exit the project site as potential locations of offsite sediment tracking.

Any damage or deficiency noted during routine or regular inspections will be written down on an Inspection and Maintenance Report Form (Appendix A) and corrected by the construction crew as directed by the Operator or Contractor. The written inspection records will be kept on file within the SWP3 master binder, and will include notes on any corrective actions taken. These records will be made available for inspection by any regulating agency.

Any deficiencies will be corrected immediately following observation, by repair of damaged or deteriorated controls, or by modifying structural or operational practices to achieve the desired results. If needed, the erosion and sedimentation control plan shall be revised within 10 days following such modifications.

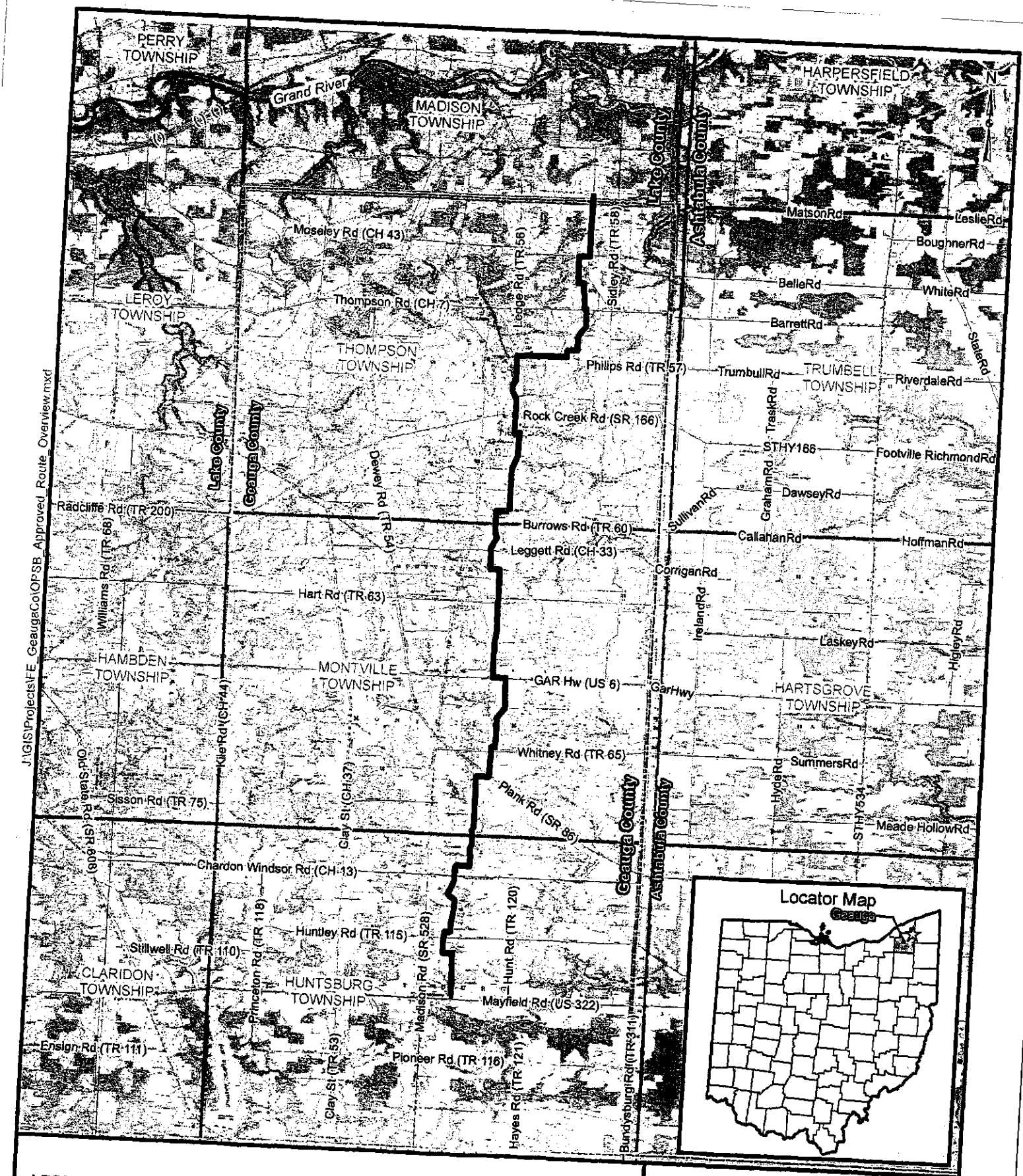
Maintenance of stabilization and structural erosion control measures will include the following:

- Seeded areas shall be checked regularly for bare spots, washouts, and healthy growth to assure that a good stand of grass is being maintained. Areas that fail to establish vegetation cover will be re-seeded as soon as such areas are identified.
- Silt fencing will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that fence posts are firmly in the ground. Built up sediment will be removed from silt fencing before it has reached one-third the height of the fence.

- Straw bales, if utilized, will be inspected for depth of sediment, bale coherence, separation from adjacent bales, and to see that stakes are firmly in the ground. Built up sediment will be removed from straw bales before it has reached one-third the height of the bale.
- The Operator or Contractor will be responsible for inspections, maintenance, and erosion control measure repair, and filling out of the Inspection and Maintenance Report Forms.

It is also the responsibility of the Operator or Contractor to confirm that the personnel selected for inspection and maintenance responsibilities are trained in inspection and maintenance practices necessary to keep the erosion and sedimentation controls used onsite in good working order.

All maintenance and inspection records must be maintained for a period of at least 3 years following submission of the Notice of Termination for the project.



LEGEND:

- OPSB Approved Route
- County Boundary
- Township Boundary

0 2 4

Scale In Miles

BASE MAP SOURCE:
USGS 7.5-minute Topographic Maps
Thompson, Ohio (1971, revised 1970);
and East Claridon, Ohio (1970, revised 1970)

FirstEnergy

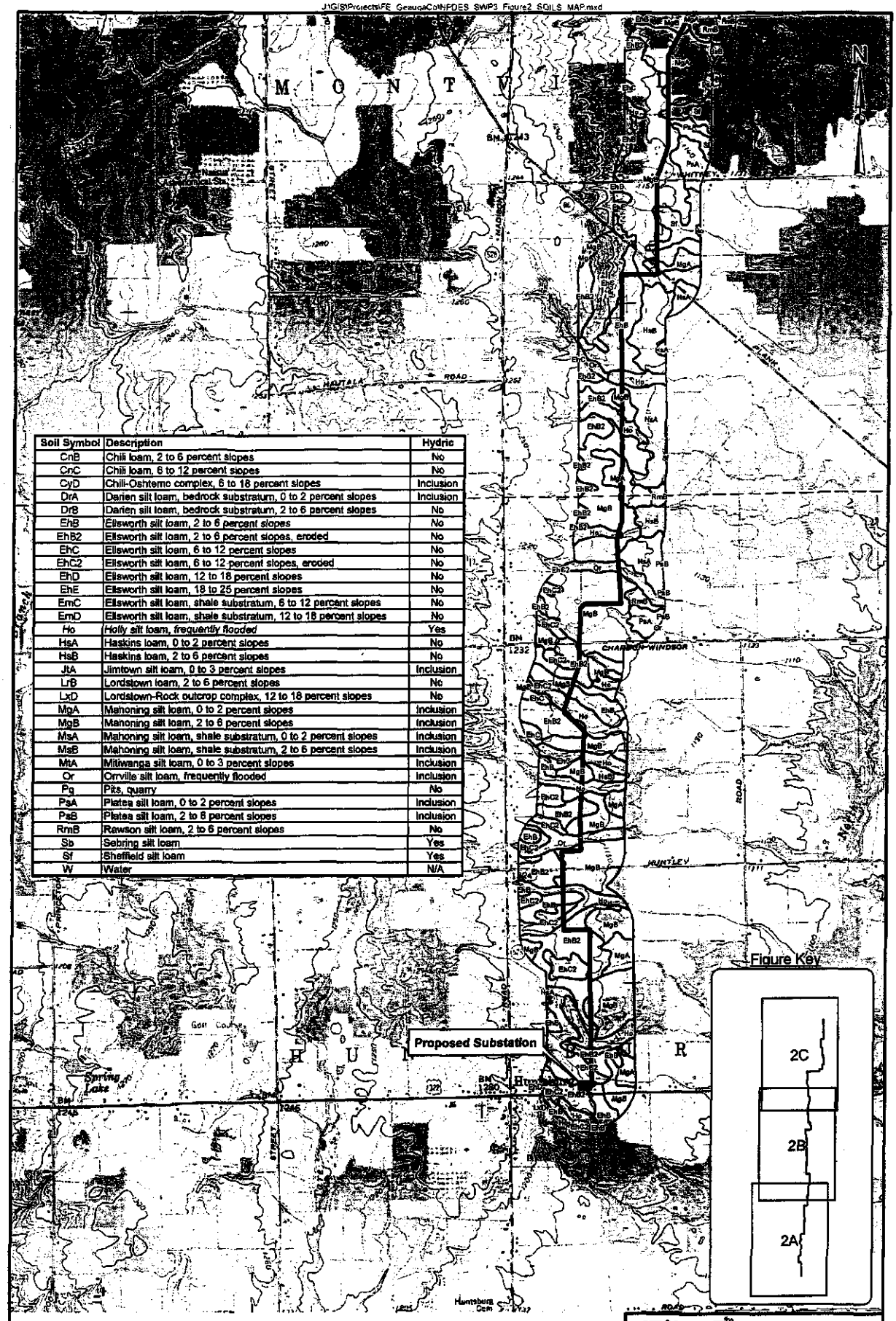
Geauga County 138kV Electric Transmission Line

FIGURE 01
SITE VICINITY MAP

JOB NO. 14947866

URS

J:\GIS\Projects\FE Geauga Co\NPDES SWP3 Figure2 SOILS MAP.mxd



Soil Symbol	Description	Hydric
CnB	Chili loam, 2 to 6 percent slopes	No
CnC	Chili loam, 6 to 12 percent slopes	No
CyD	Chili-Oshtemo complex, 6 to 18 percent slopes	Inclusion
DrA	Darien silt loam, bedrock substratum, 0 to 2 percent slopes	Inclusion
DrB	Darien silt loam, bedrock substratum, 2 to 6 percent slopes	No
EhB	Ellsworth silt loam, 2 to 6 percent slopes	No
EhB2	Ellsworth silt loam, 2 to 6 percent slopes, eroded	No
EhC	Ellsworth silt loam, 6 to 12 percent slopes	No
EhC2	Ellsworth silt loam, 6 to 12 percent slopes, eroded	No
EhD	Ellsworth silt loam, 12 to 18 percent slopes	No
EhE	Ellsworth silt loam, 18 to 25 percent slopes	No
EmC	Ellsworth silt loam, shale substratum, 6 to 12 percent slopes	No
EmD	Ellsworth silt loam, shale substratum, 12 to 18 percent slopes	No
Ho	Holly silt loam, frequently flooded	Yes
HsA	Haskins loam, 0 to 2 percent slopes	No
HsB	Haskins loam, 2 to 6 percent slopes	No
JtA	Jimtown silt loam, 0 to 3 percent slopes	Inclusion
LrB	Lordstown loam, 2 to 6 percent slopes	No
LxD	Lordstown-Rock outcrop complex, 12 to 18 percent slopes	No
MgA	Mahoning silt loam, 0 to 2 percent slopes	Inclusion
MgB	Mahoning silt loam, 2 to 6 percent slopes	Inclusion
MsA	Mahoning silt loam, shale substratum, 0 to 2 percent slopes	Inclusion
MsB	Mahoning silt loam, shale substratum, 2 to 6 percent slopes	Inclusion
MtA	Mitiwanga silt loam, 0 to 3 percent slopes	Inclusion
Or	Orrville silt loam, frequently flooded	Inclusion
Pg	Pits, quarry	No
PsA	Platea silt loam, 0 to 2 percent slopes	Inclusion
PsB	Platea silt loam, 2 to 6 percent slopes	Inclusion
RmB	Rawson silt loam, 2 to 6 percent slopes	No
Sb	Sebring silt loam	Yes
Sf	Sheffield silt loam	Yes
W	Water	N/A

LEGEND:
- Proposed Route
- 2000 ft. Corridor
- Soil Series (within 1000 ft)
- Proposed Substation
- Existing Transmission Line

0 2,000 4,000
Scale in Feet

BASE MAP SOURCE:
USGS 7.5-minute Topographic Maps
Thompson, Ohio (1971);
and East Claridon, Ohio (1970)

ATSI — The Illuminating Company — Geauga County 138 kV Electric Transmission Line

FIGURE 2A
SOILS SERIES MAP

JOB NO. 14947866

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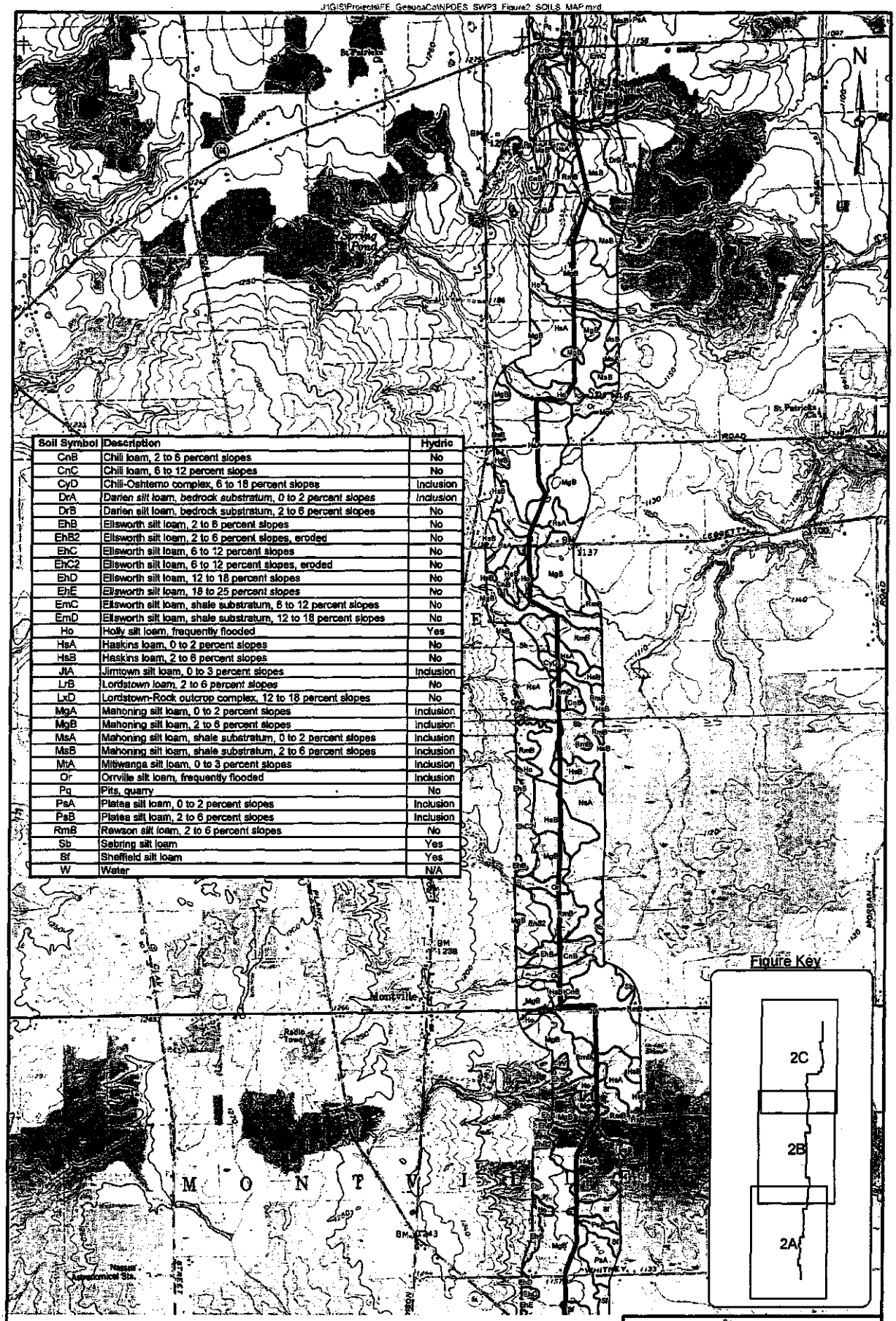

Soil Symbol	Description	Hydric
CnB	Chili loam, 2 to 6 percent slopes	No
CnC	Chili loam, 6 to 12 percent slopes	No
CyD	Chili-Oshtemo complex, 6 to 18 percent slopes	Inclusion
DrA	Darien silt loam, bedrock substratum, 0 to 2 percent slopes	Inclusion
DrB	Darien silt loam, bedrock substratum, 2 to 6 percent slopes	No
EhB	Ellsworth silt loam, 2 to 6 percent slopes	No
EhB2	Ellsworth silt loam, 2 to 6 percent slopes, eroded	No
EhC	Ellsworth silt loam, 6 to 12 percent slopes	No
EhC2	Ellsworth silt loam, 6 to 12 percent slopes, eroded	No
EhD	Ellsworth silt loam, 12 to 18 percent slopes	No
EhE	Ellsworth silt loam, 18 to 25 percent slopes	No
EmC	Ellsworth silt loam, shale substratum, 6 to 12 percent slopes	No
EmD	Ellsworth silt loam, shale substratum, 12 to 18 percent slopes	No
Ho	Holly silt loam, frequently flooded	Yes
HsA	Haskins loam, 0 to 2 percent slopes	No
HsB	Haskins loam, 2 to 6 percent slopes	No
JtA	Jimtown silt loam, 0 to 3 percent slopes	Inclusion
LrB	Lordstown loam, 2 to 6 percent slopes	No
LxD	Lordstown-Rock outcrop complex, 12 to 18 percent slopes	No
MgA	Mahoning silt loam, 0 to 2 percent slopes	Inclusion
MgB	Mahoning silt loam, 2 to 6 percent slopes	Inclusion
MsA	Mahoning silt loam, shale substratum, 0 to 2 percent slopes	Inclusion
MsB	Mahoning silt loam, shale substratum, 2 to 6 percent slopes	Inclusion
MtA	Mitiwanga silt loam, 0 to 3 percent slopes	Inclusion
Or	Orrville silt loam, frequently flooded	Inclusion
Pg	Pits, quarry	No
PsA	Platea silt loam, 0 to 2 percent slopes	Inclusion
PsB	Platea silt loam, 2 to 6 percent slopes	Inclusion
RmB	Rawson silt loam, 2 to 6 percent slopes	No
Sb	Sebring silt loam	Yes
Sf	Sheffield silt loam	Yes
W	Water	N/A

LEGEND:
- Proposed Route
- 2000 ft. Corridor
- Soil Series (within 1000 ft)
- Proposed Substation
- Existing Transmission Line

0 2,000 4,000
Scale in Feet

BASE MAP SOURCE:
USGS 7.5-minute Topographic Maps
Thompson, Ohio (1971);
and East Claridon, Ohio (1970)

ATSI Illuminating Company Geauga County 138 kV Electric Transmission Line

FIGURE 2B
SOILS SERIES MAP

JOB NO. 14947868

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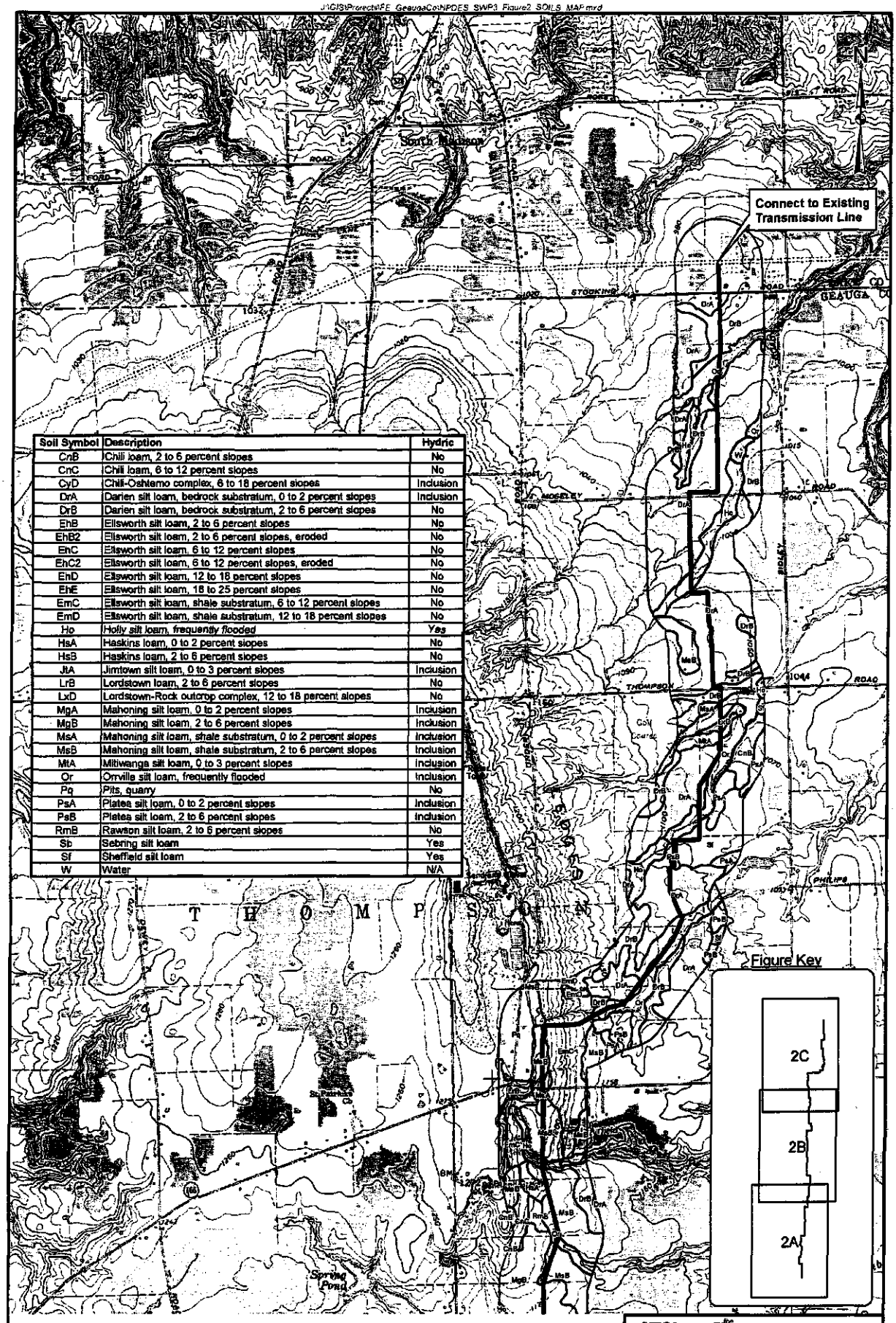

Soil Symbol	Description	Hydric
CnB	Chili loam, 2 to 6 percent slopes	No
CnC	Chili loam, 6 to 12 percent slopes	No
CyD	Chili-Oshtemo complex, 6 to 18 percent slopes	Inclusion
DrA	Darien silt loam, bedrock substratum, 0 to 2 percent slopes	Inclusion
DrB	Darien silt loam, bedrock substratum, 2 to 6 percent slopes	No
EhB	Ellsworth silt loam, 2 to 6 percent slopes	No
EhB2	Ellsworth silt loam, 2 to 6 percent slopes, eroded	No
EhC	Ellsworth silt loam, 6 to 12 percent slopes	No
EhC2	Ellsworth silt loam, 6 to 12 percent slopes, eroded	No
EhD	Ellsworth silt loam, 12 to 18 percent slopes	No
EhE	Ellsworth silt loam, 18 to 25 percent slopes	No
EmC	Ellsworth silt loam, shale substratum, 6 to 12 percent slopes	No
EmD	Ellsworth silt loam, shale substratum, 12 to 18 percent slopes	No
Ho	Holly silt loam, frequently flooded	Yes
HsA	Haskins loam, 0 to 2 percent slopes	No
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JtA	Jimtown silt loam, 0 to 3 percent slopes	Inclusion
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MsB	Mahoning silt loam, shale substratum, 2 to 6 percent slopes	Inclusion
MtA	Mitiwanga silt loam, 0 to 3 percent slopes	Inclusion
Or	Orrville silt loam, frequently flooded	Inclusion
Pg	Pits, quarry	No
PsA	Platea silt loam, 0 to 2 percent slopes	Inclusion
PsB	Platea silt loam, 2 to 6 percent slopes	Inclusion
RmB	Rawson silt loam, 2 to 6 percent slopes	No
Sb	Sebring silt loam	Yes
Sf	Sheffield silt loam	Yes
W	Water	N/A

LEGEND:
- Proposed Route
- 2000 ft. Corridor
- Soil Series (within 1000 ft)
- Proposed Substation
- Existing Transmission Line

0 2,000 4,000
Scale in Feet

BASE MAP SOURCE:
USGS 7.5-minute Topographic Maps
Thompson, Ohio (1971);
and East Claridon, Ohio (1970)

ATSI | The Illuminating Company — Geauga County 138 kV Electric Transmission Line

FIGURE 2C
SOILS SERIES MAP

JOB NO. 14947866

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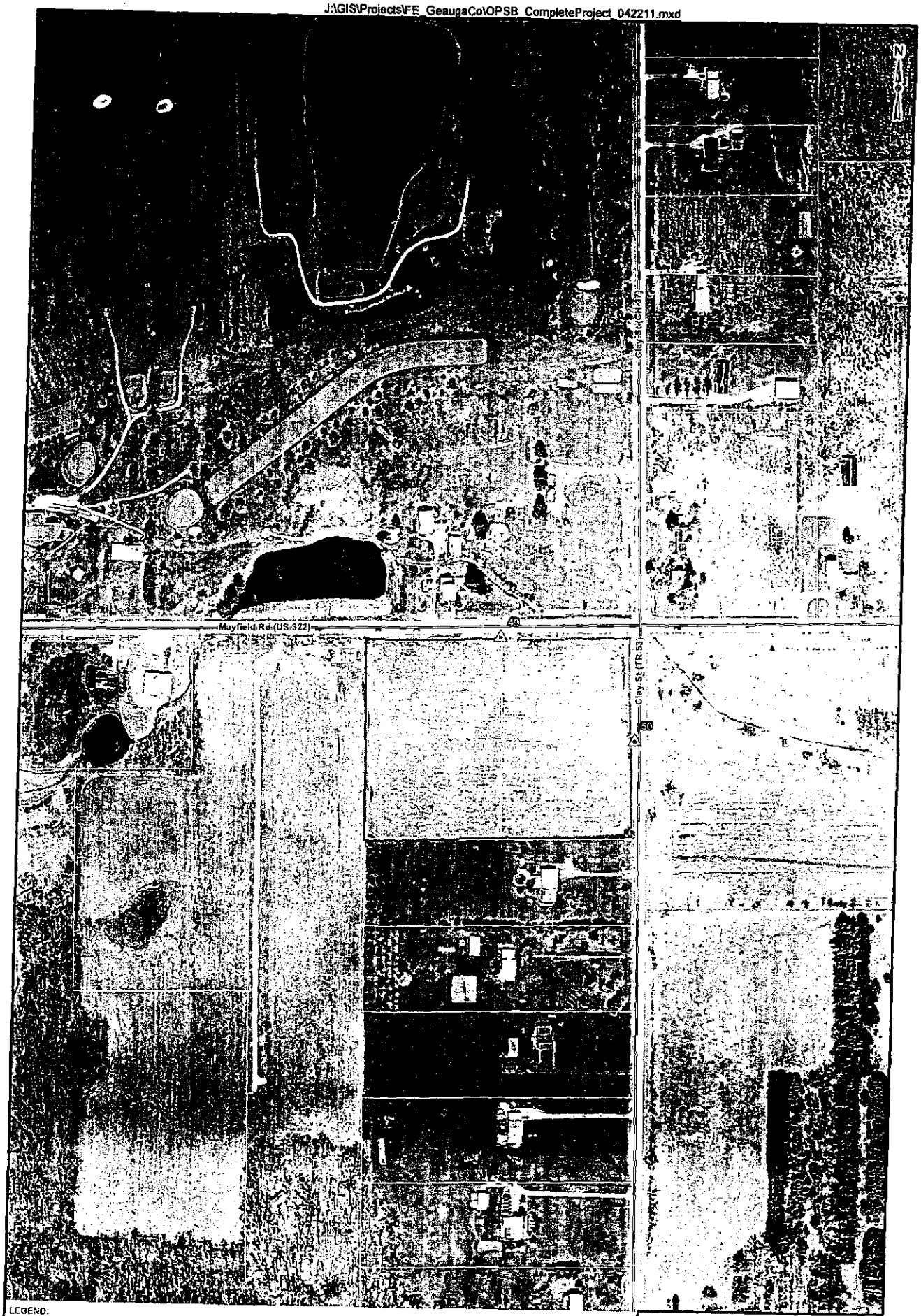

LEGEND:

- OPSB Approved Route
- Potential Route Variation
- 60 Foot Construction Corridor
- Wood Pole
- Substation
- Construction Staging Area
- Access Road
- Culvert Location
- Delineated Stream
- Delineated Wetland
- Delineated Pond
- Snowshoe Hare Limitation
- Fence
- Gate
- County Auditor Parcel Boundary
- Indiana Bat Moderate - High Quality Habitat Property
- Street Centerline

0 200 400

Scale in Feet: 1 Inch = 200 Feet

BASE MAP SOURCE:
Geauga County Auditor;
2005 Aerial Photography

ATSI Illuminating Company

Geauga County 138 kV Electric Transmission Line

REVISION 1
FIGURE LD 1
CONSTRUCTION STAGING FIGURES
GENERATED 04/22/2011

JOB NO. 14947666

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LEGEND:
- OPSB Approved Route
- Potential Route Variation
- 80 Foot Construction Corridor
- Access Road
- Culvert Location
- Delineated Stream
- Delineated Wetland
- Delineated Pond
- Fence
- Gate
- County Auditor Parcel Boundary
- Indiana Bat Moderate - High Quality Habitat Property
- Street Centerline

BASE MAP SOURCE:
Geauga County Auditor,
2005 Aerial Photography

0 200 400
Scale in Feet: 1 inch = 200 Feet

ATSI
The Illuminating Company
Geauga County 138 kV Electric Transmission Line

REVISION 1
FIGURE LD 2
CONSTRUCTION STAGING FIGURES
GENERATED 04/22/2011

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JOB NO. 14947666

APPENDIX A

CONTRACTOR'S CERTIFICATION STATEMENT

CONTRACTORS WMSC PLAN CERTIFICATION

Project Name: _____

Owner Name and Address: _____

_____

Description of activity: _____

_____

I, the undersigned, certify that I understand and will adhere to the requirements, terms, and conditions of the Water Management and Sediment Control Plan reviewed and approved by the Geauga Soil and Water Conservation District for compliance with the *Geauga County Water Management and Sediment Control Regulations* for the above referenced project.

Signature of Responsible Party	Contractor (name, address, phone)	Activity responsible for:
Signature	Name	
Print Name:	Address	
Date:	Phone	
Signature	Name	
Print Name:	Address	
Date:	Phone	
Signature	Name	
Print Name:	Address	
Date:	Phone	
Signature	Name	
Print Name:	Address	
Date:	Phone	

Inspection and Maintenance Report Form

Complete this form every 7 days and within 24 hours of a rainfall event of 0.5 inch or more

Date:_____ **Inspector:** _____

Page ____ **of** ____ **Reason for Inspection:**_____

Description of Weather Since Last Inspection: _____

Current Weather Conditions?: _____

NO.	DESCRIPTION	YES	NO*	N/A
1.	Are all erosion control devices in-place and functioning in accordance with the erosion control plan?			
2.	Are all sediment traps, barriers, and basins clean and functioning properly?			
3.	Are sediment controls in place at site perimeter and storm drain inlets and are these controls appropriate (i.e. no signs of significant water pooling or sediment build-up)?			
4.	Are all discharge points free of any noticeable pollutant discharges?			
5.	Is sediment, debris, or mud on public roads being prevented by construction entrances and/or regularly cleaned where the public roads intersect with site access roads?			
6.	Are all exposed slopes protected from erosion through the implementation of acceptable soil stabilization practices?			
7.	Are all temporary stockpiles or construction materials located in approved areas and protected from erosion?			
8.	Are dust control measures being appropriately implemented?			
9.	Are all materials and equipment properly covered, and if appropriate, runoff from these controlled?			
10.	Are all material handling and storage areas clean and free of spills, leaks, or other deleterious materials?			
11.	Are all equipment storage and maintenance areas clean and free of spills, leaks, or any other deleterious materials?			
12.	Are all on-site traffic routes, parking, and storage of equipment and supplies restricted to designated areas?			
13.	Other? (Explain briefly or comment below)			

* If the answer is no to any of the above questions specify the location, problem, and the needed corrections below. Attach additional sheets, maps, and sketches if necessary.

AREA(S) INSPECTED: **COMMENTS ON FINDINGS AND ACTIONS TAKEN**

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Are areas inspected in compliance with SWP3 and permit? Yes ____ No ____

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.

Inspector's Signature: _____

Inspector's Title / Qualifications: _____

LOG SHEET FOR TRAINING ACTIVITIES

Date	Name	Company

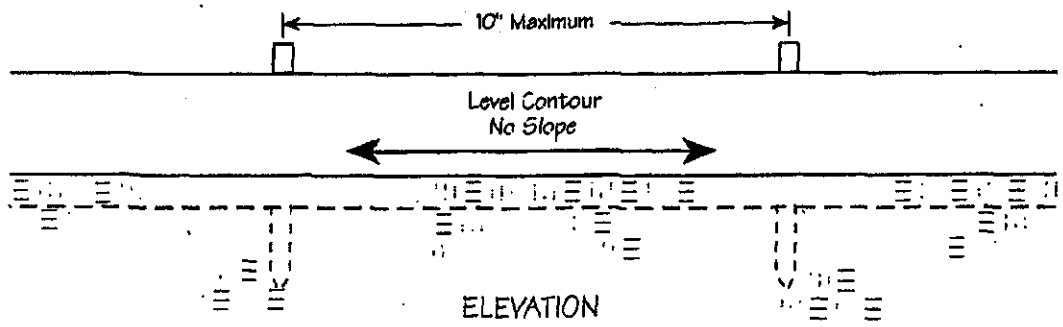
DISTURBANCE / STABILIZATION LOG

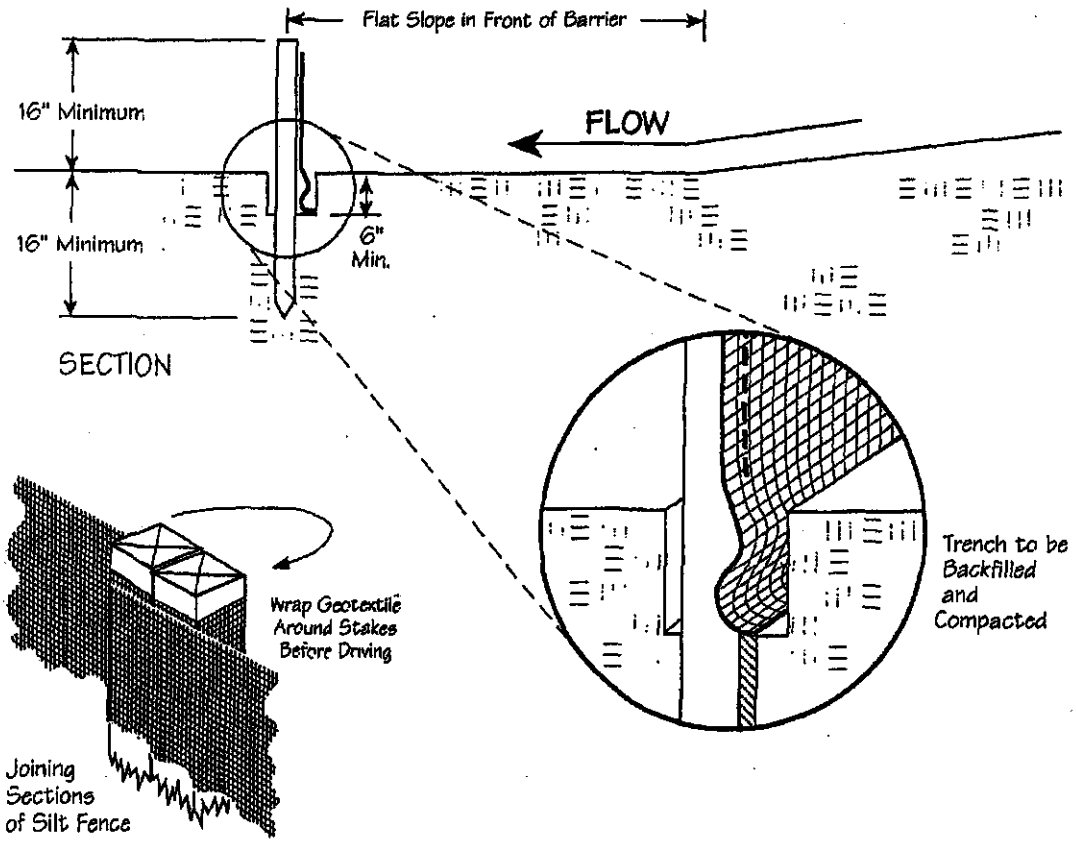
Date Disturbed	Description of Area	Approximate Size (SF)	Date Stabilized	Means of Stabilization (indicate Permanent or Temporary)
9/1/10	*Example: Transmission Line Sta. X+XX*	*5,000*	*9/22/10*	*Permanent, Seeding, Work in Area Complete*
8/10/10	*Example: Access Road from Township Rd. 65*	*1,200*	*8/20/10*	*Temporary, DGA Cover, Access Road will be Used Again*

APPENDIX B

STANDARD EROSION CONTROL DETAILS

Specifications
for
Silt Fence





Specifications
for
Silt Fence

1. Silt fence shall be constructed before upslope land disturbance begins.

2. All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions which may carry small concentrated flows to the silt fence are dissipated along its length.

3. To prevent water ponded by the silt fence from flowing around the ends, each end shall be constructed upslope so that the ends are at a higher elevation.

4. Where possible, silt fence shall be placed on the flattest area available.

5. Where possible, vegetation shall be preserved for 5 ft. (or as much as possible) upslope from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the installation of the silt fence.

6. The height of the silt fence shall be a minimum of 16 in. above the original ground surface(when installed).

7. The silt fence shall be placed in a trench cut a minimum of 6 in. deep. The trench shall be cut with a trencher, cable laying machine, or other suitable device which will ensure an adequately uniform trench depth.

8. The silt fence shall be placed with the stakes on the downslope side of the geotextile and so that 8 in. of cloth are below the ground surface. Excess material shall lay on the bottom of the 6-in.-deep trench. The trench shall be backfilled and compacted.

9. Seams between section of silt fence shall be overlapped with the end stakes of each section wrapped together before driving into the ground.

10. Maintenance--Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence, flows under or around the ends, or in any other way becomes a concentrated flow, one of the following shall be performed, as appropriate: 1) The layout of the silt fence shall be changed, 2) Accumulated sediment shall be removed, or 3) Other practices shall be installed.

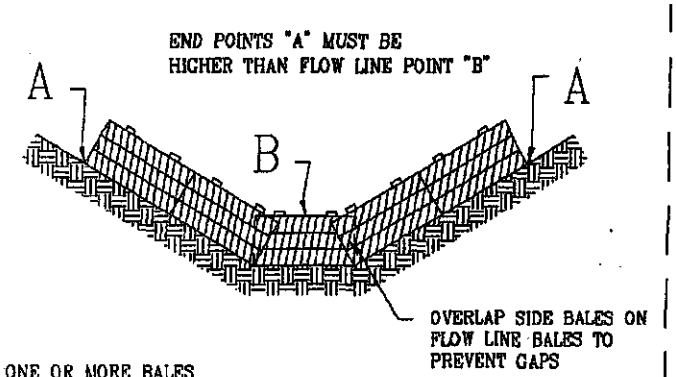
Criteria for Silt Fence Materials

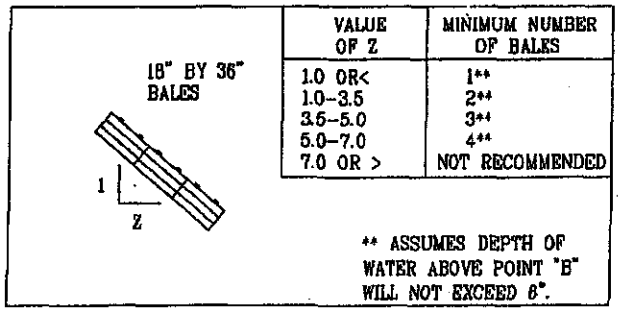
1. Fence Posts--The length shall be a minimum of 32 in. long. Wood posts will be 2-by-2-in. hardwood of sound quality. The maximum spacing between posts shall be 10 ft.

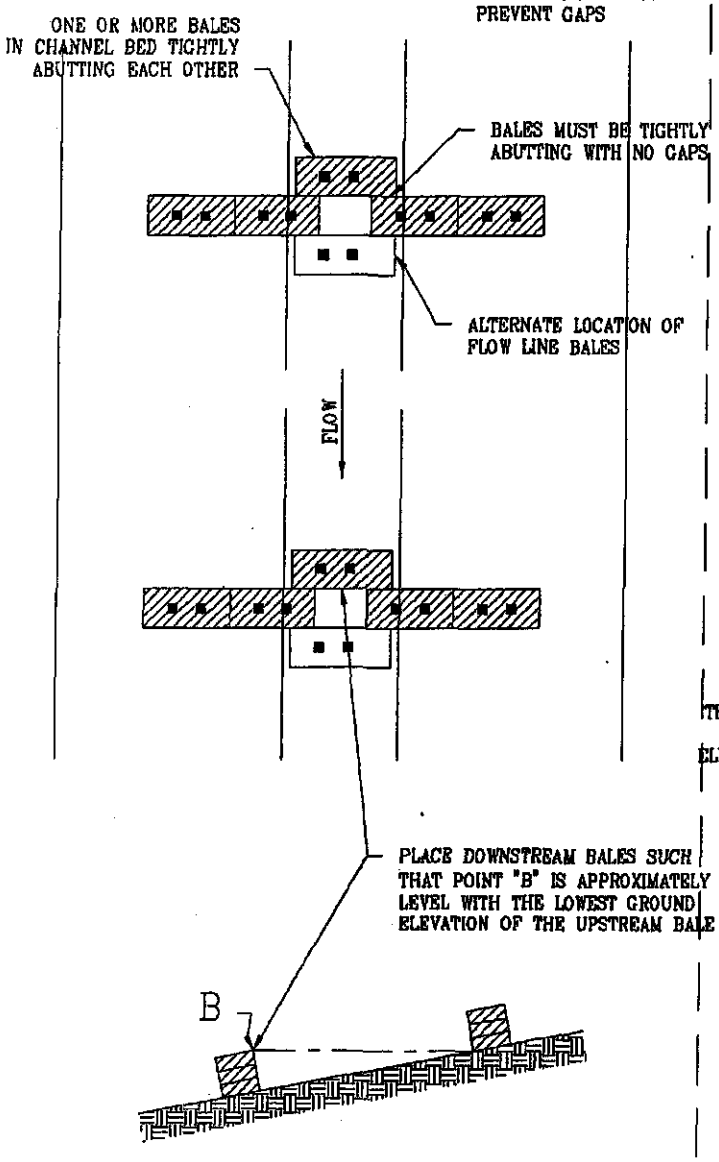
2. Silt Fence Fabric shall be ODOT Type C Geotextile Fabric or as described by the chart below:

Fabric Properties	
Minimum Tensile Strength	120 lbs.
Maximum Elongation at 60 lbs	50%
Minimum Puncture Strength	50 lbs.
Minimum Tear Strength	40 lbs.
Minimum Burst Strength	200 psi
Apparent Opening Size	≤ 0.84mm
Minimum Permittivity	$1X10^{-2}$ sec.$^{-1}$
Ultraviolet Exposure Strength Retention	70%

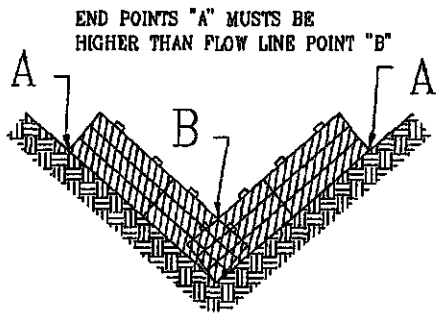
Specifications
for
Straw Bale Structures in Ephemeral Drainage Channels

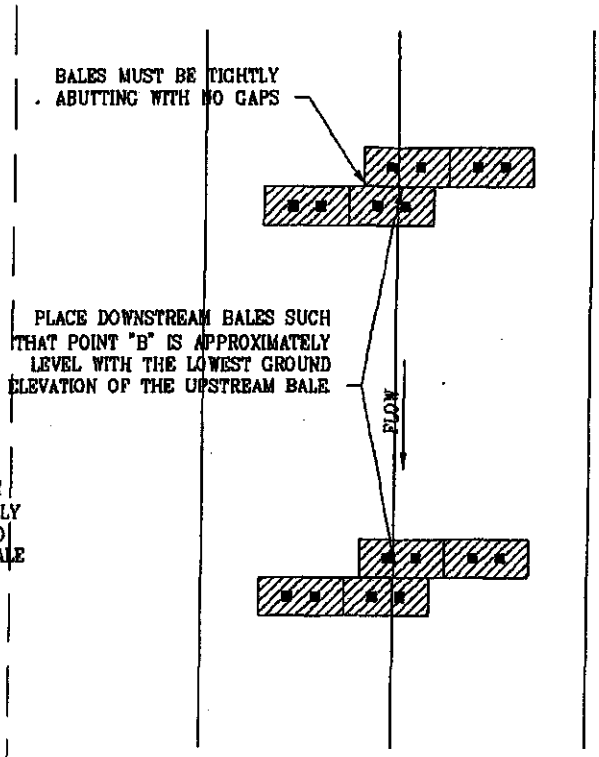






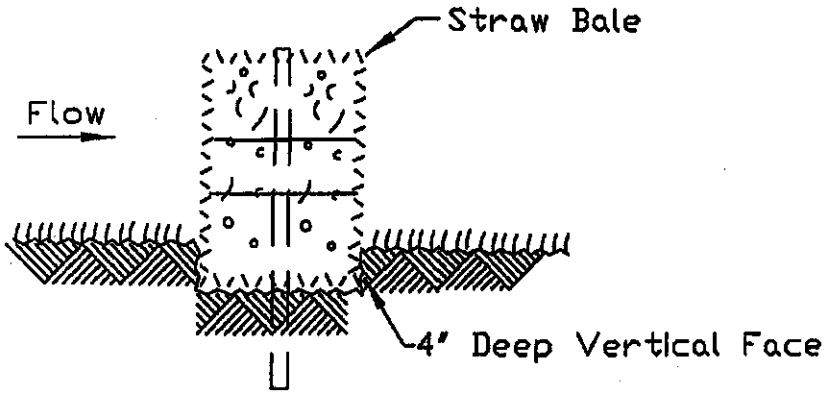
WIDE CHANNELS



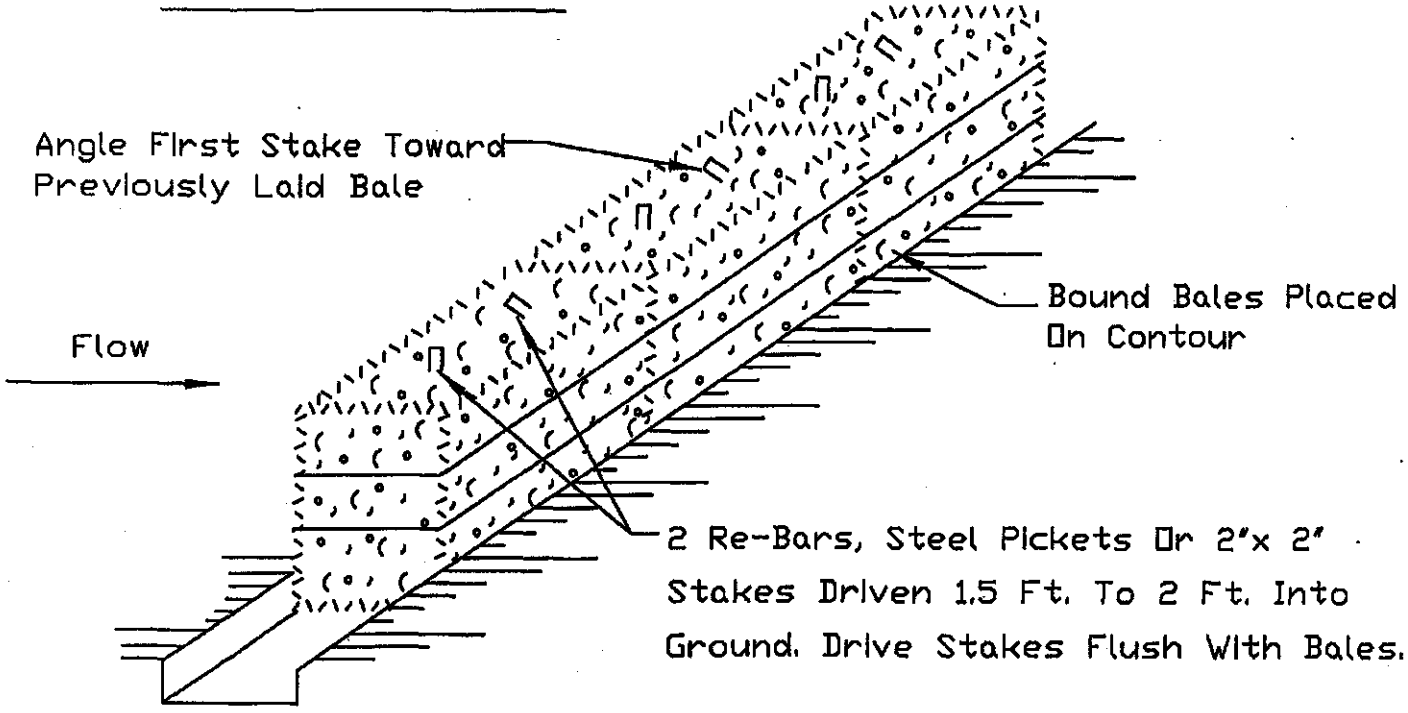


NARROW CHANNELS

Specifications
for
Straw Bale Barriers



BEDDING DETAIL

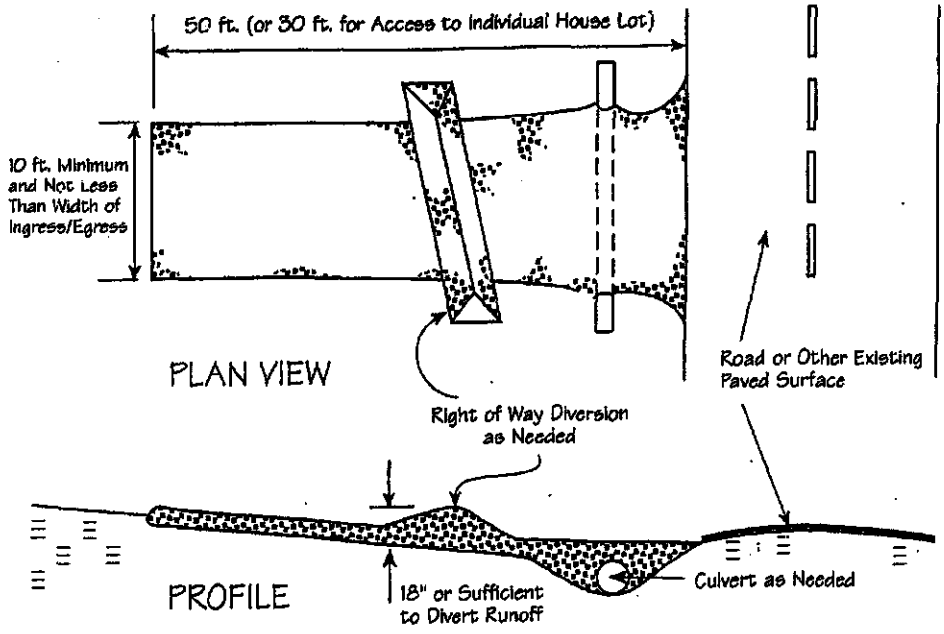


ANCHORING DETAIL

NOTES

1. Bales shall be placed at the top of slope or on the contour and in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4", and placed so that bindings are horizontal.
3. Bales shall be securely anchored in place by either two stakes or re-bars driven through the bale. The first stake in each bale shall be driven towards the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.

Specifications
for
Construction Entrance



1. Stone Size--Two-inch stone shall be used, or recycled concrete equivalent.

2. Length--The construction entrance shall be as long as required to stabilize high traffic areas but not less than 50 ft. (except on single residence lot where a 30-ft. minimum length applies).

3. Thickness--The stone layer shall be at least 6 in. thick.

4. Width--The entrance shall be at least 10 ft. wide, but not less than the full width at points where ingress or egress occurs.

5. Bedding--A geotextile shall be placed over the entire area prior to placing stone. It shall have a Grab Tensile Strength of at least 200 lb. and a Mullen Burst Strength of at least 190 lb.

6. Culvert--A pipe or culvert shall be constructed under the entrance if needed to prevent surface water flowing across the entrance from being directed out onto paved surfaces.

7. Water Bar--A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.

8. Maintenance--Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.

9. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction-site shall be restricted from muddy areas.

Specifications
for

Permanent Seeding

SITE PREPARATION

1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing vegetation.

2. The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation and seeding.

3. Resoil shall be applied where needed to establish vegetation.

SEEDBED PREPARATION

1. Lime--Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lb./1,000 sq. ft. or 2 tons/ac.

2. Fertilizer--Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be applied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac. of 10-10-10 or 12-12-12 analysis.

3. The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour.

SEEDING DATES AND SOIL CONDITIONS

Seeding should be done March 1 to May 31 or Aug 1 to September 30. These seeding dates are ideal but, with the use of additional mulch and irrigation, seedings may be made any time throughout the growing season. Tillage/seedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seeding.

DORMANT SEEDINGS.

1. Seedings shall not be planted from October 1 through November 20. During this period the seeds are likely to germinate but probably will not be able to survive the winter.

2. The following methods may be used for "Dormant Seeding":

   - From October 1 through November 20, prepare the seedbed, add the required amounts of lime and fertilizer, then mulch and anchor. After November 20, and before March 15, broadcast the selected seed mixture. Increase the seeding rates by 50% for this type of seeding.

   - From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilize, apply the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this type of seeding.

   - Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydro-seeder (slurry may include seed and fertilizer) on a firm, moist seedbed.

   - Where feasible, except when a cultipacker type seeder is used, the seedbed should be firmed following seeding operations with a cultipacker, roller, or light drag. On sloping land, seeding operations should be on the contour where feasible.

MULCHING

1. Mulch material shall be applied immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization. Dormant seeding shall be mulched.

2. Materials

   - Straw--If straw is used it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000-sq.-ft. sections and spread two 45-lb. bales of straw in each section.

   - Hydroseeders--If wood cellulose fiber is used, it shall be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft.

   - Other--Other acceptable mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.

3. Straw Mulch Anchoring Methods

   Straw mulch shall be anchored immediately to minimize loss by wind or water.

   - Mechanical--A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but, generally, be left longer than 6 in.

   - Mulch Nettings--Nettings shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.

   - Asphalt Emulsion--Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gal./ac.

   - Wood Cellulose Fiber--Wood cellulose fiber binder shall be applied at a net dry weight of 18 lb./ 1,000 sq. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal. of wood cellulose fiber.

IRRIGATION

1. Permanent seeding shall include irrigation to establish vegetation during dry or hot weather or on adverse site conditions as needed for adequate moisture for seed germination and plant growth.

2. Excessive irrigation rates shall be avoided and irrigation monitored to prevent erosion and damage from runoff.

Permanent Seeding			
Seed Mix	Seeding Rate		Notes:
	lb./ac.	lb./1,000ft.^{2}	
General Use			
Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass	20-40 10-20 10-20	½-1 ¼-½ ¼-½	
Tall Fescue	40	1	
Dwarf Fescue	40	1	
Steep Banks or Cut Slopes			
Tall Fescue	40	1	
Crown Vetch Tall Fescue	10 20	¼ ½	Do not seed later than August.
Flat Pea Tall Fescue	20 20	½ ½	Do not seed later than August.
Road Ditches and Swales			
Tall Fescue	40	1	
Dwarf Fescue Kentucky Bluegrass	90 5	2¼	
Lawns			
Kentucky Bluegrass Perennial Ryegrass	60 60	1½ 1½	
Kentucky Bluegrass Creeping Red Fescue	60 60	1½ 1½	For shaded areas
Note: Other approved seed species may be substituted.			

Specifications
for

Non-Sediment Pollution Control

1. Construction personnel, including subcontractors who may use or handle hazardous or toxic materials, shall be made aware of the following general guidelines:

Disposal and Handling
of
Hazardous and Other Construction Waste

DO:

- Prevent spills
- Use products up
- Follow label directions for disposal
- Remove lids from empty bottles and cans when disposing in trash
- Recycle wastes whenever possible

DON'T

- Don't pour into waterways, storm drains or onto the ground
- Don't pour down the sink, floor drain or septic tanks
- Don't bury chemicals or containers
- Don't burn chemicals or containers
- Don't mix chemicals together

2. Containers shall be provided for collection of all waste material including construction debris, trash, petroleum products and any hazardous materials to be used on-site. All waste material shall be disposed of at facilities approved for that material.

3. No waste materials shall be buried on-site. Site personnel, including subcontractors shall be notified that no construction-related materials are to be buried on-site.

4. Mixing, pumping, transferring or otherwise handling construction chemicals such as fertilizer, lime, asphalt, concrete drying compounds, and all other potentially hazardous materials shall be performed in an area away from any watercourse, ditch or storm drain.

5. Equipment fueling and maintenance, oil changing, etc., shall be performed away from watercourses, ditches or storm drains, in an area designated for that purpose. The designated area shall be equipped for recycling oil and catching spills.

6. Concrete wash water shall not be allowed to flow to streams, ditches, storm drains, or any other water conveyance. A sump or pit shall be constructed if needed to contain concrete wash water.

7. If hazardous substances such as oil, diesel fuel, hydraulic fluid, antifreeze, etc. are spilled, leaked, or released onto the soil, the soil should be dug up and disposed of with the trash at a licensed sanitary landfill (not a construction/demolition debris landfill). Spills on pavement shall be absorbed with sawdust or kitty litter and disposed of with the trash at a licensed sanitary landfill. Hazardous or industrial wastes such as most solvents, gasoline, oil-based paints, and cement curing compounds require special handling. Contact Ohio EPA (1-800-282-9378).

8. Spills of 25 gal. or more of petroleum products shall be reported to Ohio EPA (1-800-282-9378), the local fire department, and the Local Emergency Planning Committee within 30 min. of the discovery of the release.

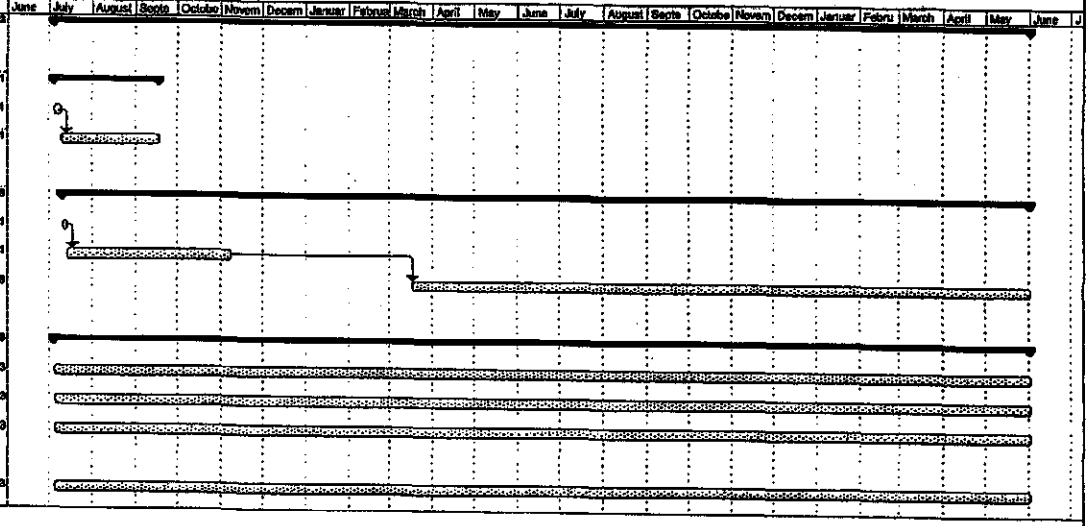
9. Construction maintenance vehicles shall be equipped with petroleum spill absorbent mats to provide rapid small spill containment and cleanup.

APPENDIX C

CONSTRUCTION SCHEDULE
(to be provided by FirstEnergy)

Geauga County 138 kV Transmission Line Project
Storm Water Pollution Prevention Plan Tasks For Construction

ID	Task Name	Duration	Start	Finish
1	GEAUGA COUNTY 138 KV TRANSMISSION LINE SWPS TASKS	698 days?	Tue 7/5/11	Sat 6/1/13
2				
3	Staging Areas	75 days	Tue 7/5/11	Sat 9/17/11
4	Install Erosion/Sediment Controls at Staging Areas	5 days	Tue 7/5/11	Sat 7/9/11
5	Construct Staging Areas	70 days	Sun 7/10/11	Sat 9/17/11
6				
7	Substation	692 days?	Mon 7/11/11	Sat 6/1/13
8	Install Erosion/Sediment Controls at Substation Site for Below Grade Work	3 days	Mon 7/11/11	Wed 7/13/11
9	Below Grade Construction at Substation	117 days?	Thu 7/14/11	Mon 11/7/11
10	Above Grade Construction at Substation	441 days	Sun 2/19/12	Sat 6/1/13
11				
12	Transmission Line ROW	698 days?	Tue 7/5/11	Sat 6/1/13
13	Install Erosion/Sediment Controls where Appropriate along ROW	698 days?	Tue 7/5/11	Sat 6/1/13
14	Vegegation Clearing	698 days?	Tue 7/5/11	Sat 6/1/13
15	Transmission Line Construction	698 days?	Tue 7/5/11	Sat 6/1/13
16				
17	Ensure Erosion/Sediment Controls are Maintained and Functional	698 days?	Tue 7/5/11	Sat 6/1/13



Project: Geauga_SWPS_Schedule_041
Date: Mon 4/18/11

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

APPENDIX D

NPDES PERMIT NO. OHC000003

Ohio EPA Permit No.: OHC000003

Effective Date: April 21, 2008
Expiration Date: April 20, 2013

OHIO ENVIRONMENTAL PROTECTION AGENCY

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

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

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

This permit is conditioned upon payment of applicable fees, submittal of a complete NOI application form and written approval of coverage from the director of Ohio EPA in accordance with Ohio Administrative Code ("OAC") Rule 3745-38-06.

Laura H. Powell

Laura H. Powell
Assistant Director

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

By: _____ Date: 4-21-08

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PART I. COVERAGE UNDER THIS PERMIT

A. Permit Area.

This permit covers the entire State of Ohio.

B. Eligibility.

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

   For the purposes of this permit, construction activities include any clearing, grading, excavating, grubbing and/or filling activities that disturb one or more acres of land. Discharges from trench dewatering are also covered by this permit as long as the dewatering activity is carried out in accordance with the practices outlined in Part III.G.2.g.iv of this permit. The threshold acreage includes the entire area disturbed in the larger common plan of development or sale.

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

   a. The support activity is directly related to a construction site that is required to have NPDES permit coverage for discharges of storm water associated with construction activity;

   b. The support activity is not a commercial operation serving multiple unrelated construction projects and does not operate beyond the completion of the construction activity at the site it supports;

   c. Appropriate controls and measures are identified in a storm water pollution prevention plan (SWP3) covering the discharges from the support activity; and

   d. The support activity is on or contiguous with the property defined in the NOI (off-site borrow pits and soil disposal areas, which serve only one project, do not have to be contiguous with the construction site);

Part I.B

2. Limitations on coverage. The following storm water discharges associated with construction activity are not covered by this permit:

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

   b. Storm water discharges associated with construction activity that the director has shown to be or may reasonably expect to be contributing to a violation of a water quality standard; and

   c. Storm water discharges authorized by an individual NPDES permit or an alternative NPDES general permit;

3. Waivers. After March 10, 2003, sites whose larger common plan of development or sale have at least one, but less than five acres of land disturbance, which would otherwise require permit coverage for storm water discharges associated with construction activities, may request that the director waive their permit requirement. Entities wishing to request such a waiver must certify in writing that the construction activity meets one of the two waiver conditions:

   a. **Rainfall erosivity waiver.** For a construction site to qualify for the rainfall erosivity waiver, the cumulative rainfall erosivity over the project duration must be five or less and the site must be stabilized with at least a 70 percent vegetative cover or other permanent, non-erosive cover. The rainfall erosivity must be calculated according to the method in U.S. EPA Fact Sheet 3.1 Construction Rainfall Erosivity Waiver dated January 2001. If it is determined that a construction activity will take place during a time period where the rainfall erosivity factor is less than five, a written waiver certification must be submitted to Ohio EPA at least 21 days before construction activity is scheduled to begin. If the construction activity will extend beyond the dates specified in the waiver certification, the operator must either: (a) recalculate the waiver using the original start date with the new ending date (if the R factor is still less than five, a new waiver certification must be submitted) or (b) submit an NOI application form and fee for coverage under this general permit at least seven days prior to the end of the waiver period (see Attachment A); or

Part I.B.3

b. **TMDL (Total Maximum Daily Load) waiver.** Storm water controls are not needed based on a TMDL approved or established by U.S. EPA that addresses the pollutant(s) of concern or, for non-impaired waters that do not require TMDLs, an equivalent analysis that determines allocations for small construction sites for the pollutant(s) of concern or that determines that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. The pollutant(s) of concern include sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the director of Ohio EPA that the construction activity will take place, and storm water discharges will occur, within the drainage area addressed by the TMDL or equivalent analysis. A written waiver certification must be submitted to Ohio EPA at least 21 days before the construction activity is scheduled to begin.

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

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

Part I.B

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

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

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

1. The director may require an alternative permit. The director may require any operator eligible for this permit to apply for and obtain either an individual NPDES permit or coverage under an alternative NPDES general permit in accordance with OAC Rule 3745-38-04. Any interested person may petition the director to take action under this paragraph.

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

Part I.C

2. Operators may request an individual NPDES permit. Any owner or operator eligible for this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request to the director in accordance with the requirements of 40 CFR 122.26. If the reasons adequately support the request, the director shall grant it by issuing an individual NPDES permit.

3. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit or the owner or operator is approved for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of approval for coverage under the alternative general permit, whichever the case may be.

D. Permit requirements when portions of a site are sold

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

E. Authorization

1. Obtaining authorization to discharge. Operators that discharge storm water associated with construction activity must submit an NOI application form in accordance with the requirements of Part II of this permit to obtain authorization to discharge under this general permit. As required under OAC Rule 3745-38-06(E), the director, in response to the NOI submission, shall notify the applicant in writing that he/she has been granted general permit coverage to discharge storm water associated with construction activity under the terms and conditions of this permit or that the applicant must apply for an individual NPDES permit or coverage under an alternate general NPDES permit as described in Part I.C.1.

Part I.E

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

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for notification.

Initial coverage: Operators who intend to obtain initial coverage for a storm water discharge associated with construction activity under this general permit must submit a complete and accurate NOI application form and appropriate fee at least 21 days prior to the commencement of construction activity. If more than one operator, as defined in Part VII of this general permit, will be engaged at a site, each operator shall seek coverage under this general permit. Where one operator has already submitted an NOI prior to other operator(s) being identified, the additional operator shall request modification of coverage to become a co-permittee. In such instances, the co-permittees shall be covered under the same facility permit number. No additional permit fee is required.

Individual lot transfer of coverage: Operators must each submit an individual lot notice of intent (Individual Lot NOI) application form (no fee required) to Ohio EPA at least seven days prior to the date that they intend to accept responsibility for permit requirements for their portion of the original permitted development from the previous permittee. The original permittee may submit an Individual Lot NOT at the time the Individual Lot NOI is submitted. Transfer of permit coverage is not granted until an approval letter from the director of Ohio EPA is received by the applicant.

B. Failure to notify.

Operators who fail to notify the director of their intent to be covered and who discharge pollutants to surface waters of the State without an NPDES permit are in violation of ORC Chapter 6111. In such instances, Ohio EPA may bring an enforcement action for any discharges of storm water associated with construction activity.

Part II

C. Where to submit an NOI.

Operators seeking coverage under this permit must submit a signed NOI form, provided by Ohio EPA, to the address found in the associated instructions.

D. Additional notification.

The permittee shall make NOIs and SWP3s available upon request of the director of Ohio EPA, local agencies approving sediment and erosion control plans, grading plans or storm water management plans, local governmental officials, or operators of municipal separate storm sewer systems (MS4s) receiving drainage from the permitted site. Each operator that discharges to an NPDES permitted MS4 shall provide a copy of its Ohio EPA NOI submission to the MS4 in accordance with the MS4's requirements, if applicable.

E. Renotification.

Upon renewal of this general permit, the permittee is required to notify the director of his intent to be covered by the general permit renewal. Permittees covered under the previous NPDES general permits for storm water discharges associated with construction activity (NPDES permit numbers OHR100000 and OHC000002) shall have continuing coverage under this permit. The permittees covered under OHR100000 or OHC000002 shall submit a letter within 90 days of receipt of written notification by Ohio EPA expressing their intent that coverage be continued. There is no fee associated with these letters of intent for continued coverage. Permit coverage will be terminated after the 90-day period if the letter is not received by Ohio EPA. Ohio EPA will provide instructions on the contents of the letter and where it is to be sent within the notification letter.

PART III. STORM WATER POLLUTION PREVENTION PLAN (SWP3)

A. Storm Water Pollution Prevention Plans.

A SWP3 shall be developed for each site covered by this permit. For a multi-phase construction project, a separate NOI shall be submitted when a separate SWP3 will be prepared for subsequent phases. SWP3s shall be prepared in accordance with sound engineering and/or conservation practices by a professional experienced in the design and implementation of standard erosion and sediment controls and storm water management practices addressing all phases of construction. The SWP3 shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with construction activities. The SWP3 shall be a comprehensive, stand-alone document, which is not complete unless it contains the information required by Part III.G of this permit. In addition, the SWP3 shall describe and ensure the implementation of best management practices (BMPs) that reduce the pollutants in storm water discharges during construction and pollutants associated with post-construction activities to ensure compliance with ORC Section 6111.04, OAC Chapter 3745-1 and the terms and conditions of this permit.

B. Timing

A SWP3 shall be completed prior to the timely submittal of an NOI and updated in accordance with Part III.D. Upon request and good cause shown, the director may waive the requirement to have a SWP3 completed at the time of NOI submission. If a waiver has been granted, the SWP3 must be completed prior to the initiation of construction activities. The SWP3 must be implemented upon initiation of construction activities.

Permittees continuing coverage from the previous generations of this permit (OHR100000 and OHC000002) that have initiated construction activity prior to the receipt of the first written notification from Ohio EPA to submit a letter of intent to continue coverage, as required in Part II.E, are not required to update their SWP3 as a result of this renewal (OHC000003). Permittees continuing coverage from the previous generations of this permit (OHR100000 and OHC000002) that have not initiated construction activity prior to the receipt of the first written notification from Ohio EPA to submit a letter of intent to continue coverage, as required in Part II.E, are required to update their SWP3 as a result of this renewal (OHC000003).

C. SWP3 Signature and Review.

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

Part III.C

2. Plan Availability

   a. On-site: The plan shall be made available immediately upon request of the director or his authorized representative during working hours. A copy of the NOI and letter granting permit coverage under this general permit also shall be made available at the site.

   b. By written request: The permittee must provide a copy of the SWP3 within 10 days upon written request by any of the following:

      i. The director or the director's authorized representative;

      ii. A local agency approving sediment and erosion plans, grading plans or storm water management plans; or

      iii. In the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the operator of the system.

   c. To the public: All NOIs, general permit approval for coverage letters, and SWP3s are considered reports that shall be available to the public in accordance with the Ohio Public Records law. The permittee shall make documents available to the public upon request or provide a copy at public expense, at cost, in a timely manner. However, the permittee may claim to Ohio EPA any portion of an SWP3 as confidential in accordance with Ohio law.

3. Plan Revision. The director or authorized representative, may notify the permittee at any time that the SWP3 does not meet one or more of the minimum requirements of this part. Within 10 days after such notification from the director (or as otherwise provided in the notification) or authorized representative, the permittee shall make the required changes to the SWP3 and, if requested, shall submit to Ohio EPA the revised SWP3 or a written certification that the requested changes have been made.

D. Amendments

The permittee shall amend the SWP3 whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the potential for the discharge of pollutants to surface waters of the State or if the SWP3 proves to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity. Amendments to the SWP3 may be reviewed by Ohio EPA in the same manner as Part III.C.

Part III

E. Duty to inform contractors and subcontractors

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

F. Total Maximum Daily Load (TMDL) allocations

If a TMDL is approved for any waterbody into which the permittee's site discharges and requires specific BMPs for construction sites, the director may require the permittee to revise his/her SWP3.

G. SWP3 Requirements

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

1. Site description. Each SWP3 shall provide:

   a. A description of the nature and type of the construction activity (e.g., low density residential, shopping mall, highway, etc.);

   b. Total area of the site and the area of the site that is expected to be disturbed (i.e., grubbing, clearing, excavation, filling or grading, including off-site borrow areas);

   c. An estimate of the impervious area and percent imperviousness created by the construction activity;

   d. A calculation of the runoff coefficients for both the pre-construction and post construction site conditions;

   e. Existing data describing the soil and, if available, the quality of any discharge from the site;

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

Part III.G.1

g. An implementation schedule which describes the sequence of major construction operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion, sediment and storm water management practices or facilities to be employed during each operation of the sequence;

h. The name and/or location of the immediate receiving stream or surface water(s) and the first subsequent named receiving water(s) and the areal extent and description of wetlands or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project. For discharges to an MS4, the point of discharge to the MS4 and the location where the MS4 ultimately discharges to a stream or surface water of the State must be indicated;

i. For subdivided developments where the SWP3 does not call for a centralized sediment control capable of controlling multiple individual lots, a detail drawing of a typical individual lot showing standard individual lot erosion and sediment control practices.

This does not remove the responsibility to designate specific erosion and sediment control practices in the SWP3 for critical areas such as steep slopes, stream banks, drainage ways and riparian zones.

j. Location and description of any storm water discharges associated with dedicated asphalt and dedicated concrete plants covered by this permit and the best management practices to address pollutants in these storm water discharges;

k. A copy of the permit requirements (attaching a copy of this permit is acceptable);

l. A cover page or title identifying the name and location of the site, the name and contact information of all construction site operators, the name and contact information for the person responsible for authorizing and amending the SWP3, preparation date, and the estimated dates that construction will start and be complete;

m. A log documenting grading and stabilization activities as well as amendments to the SWP3, which occur after construction activities commence; and

n. Site map showing:

Part III.G.1.n

i. Limits of earth-disturbing activity of the site including associated off-site borrow or spoil areas that are not addressed by a separate NOI and associated SWP3;

ii. Soils types should be depicted for all areas of the site, including locations of unstable or highly erodible soils;

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

iv. Surface water locations including springs, wetlands, streams, lakes, water wells, etc., on or within 200 feet of the site, including the boundaries of wetlands or stream channels and first subsequent named receiving water(s) the permittee intends to fill or relocate for which the permittee is seeking approval from the Army Corps of Engineers and/or Ohio EPA;

v. Existing and planned locations of buildings, roads, parking facilities and utilities;

vi. The location of all erosion and sediment control practices, including the location of areas likely to require temporary stabilization during the course of site development;

vii. Sediment and storm water management basins noting their sediment settling volume and contributing drainage area;

viii. Permanent storm water management practices to be used to control pollutants in storm water after construction operations have been completed.

ix. Areas designated for the storage or disposal of solid, sanitary and toxic wastes, including dumpster areas, areas designated for cement truck washout, and vehicle fueling;

x. The location of designated construction entrances where the vehicles will access the construction site;

xi. The location of any in-stream activities including stream crossings;

Part III.G

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

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

   a. **Non-Structural Preservation Methods.** The SWP3 must make use of practices which preserve the existing natural condition as much as feasible. Such practices may include: preserving riparian areas adjacent to surface waters of the State, preserving existing vegetation and vegetative buffer strips, phasing of construction operations in order to minimize the amount of disturbed land at any one time and designation of tree preservation areas or other protective clearing or grubbing practices. The recommended buffer that operators should leave undisturbed along a surface water of the State is 25 feet as measured from the ordinary high water mark of the surface water.

   b. **Erosion Control Practices.** The SWP3 must make use of erosion controls that are capable of providing cover over disturbed soils unless an exception is approved in accordance with Part III.G.4. A description of control practices designed to restabilize disturbed areas after grading or construction shall be included in the SWP3. The SWP3 must provide specifications for stabilization of all disturbed areas of the site and provide guidance as to which method of stabilization will be employed for any time of the year. Such practices may include: temporary seeding, permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing of construction operations, use of construction entrances and the use of alternative ground cover.

Part III.G.2.b

i. **Stabilization.** Disturbed areas must be stabilized as specified in the following tables below. Permanent and temporary stabilization are defined in Part VII.

Table 1: Permanent Stabilization

Area requiring permanent stabilization	Time frame to apply erosion controls
Any areas that will lie dormant for one year or more	Within seven days of the most recent disturbance
Any areas within 50 feet of a surface water of the State and at final grade	Within two days of reaching final grade
Any other areas at final grade	Within seven days of reaching final grade within that area

Table 2: Temporary Stabilization

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed areas within 50 feet of a surface water of the State and not at final grade	Within two days of the most recent disturbance if the area will remain idle for more than 21 days
For all construction activities, any disturbed areas that will be dormant for more than 21 days but less than one year, and not within 50 feet of a surface water of the State	Within seven days of the most recent disturbance within the area For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of permit coverage for the individual lot(s).
Disturbed areas that will be idle over winter	Prior to the onset of winter weather

Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed.

ii. **Permanent stabilization of conveyance channels.** Operators shall undertake special measures to stabilize channels and outfalls and prevent erosive flows. Measures may include seeding, dormant seeding (as defined in the current edition of the Rainwater and Land Development manual), mulching, erosion control matting, sodding, riprap, natural channel design with bioengineering techniques or rock check dams.

Part III.G.2

c. **Runoff Control Practices.** The SWP3 shall incorporate measures which control the flow of runoff from disturbed areas so as to prevent erosion from occurring. Such practices may include rock check dams, pipe slope drains, diversions to direct flow away from exposed soils and protective grading practices. These practices shall divert runoff away from disturbed areas and steep slopes where practicable. Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected.

d. **Sediment Control Practices.** The plan shall include a description of structural practices that shall store runoff allowing sediments to settle and/or divert flows away from exposed soils or otherwise limit runoff from exposed areas. Structural practices shall be used to control erosion and trap sediment from a site remaining disturbed for more than 14 days. Such practices may include, among others: sediment settling ponds, silt fences, earth diversion dikes or channels which direct runoff to a sediment settling pond and storm drain inlet protection. All sediment control practices must be capable of ponding runoff in order to be considered functional. Earth diversion dikes or channels alone are not considered a sediment control practice unless those are used in conjunction with a sediment settling pond.

The SWP3 must contain detail drawings for all structural practices.

i. Timing. Sediment control structures shall be functional throughout the course of earth disturbing activity. Sediment basins and perimeter sediment barriers shall be implemented prior to grading and within seven days from the start of grubbing. They shall continue to function until the 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.

ii. Sediment settling ponds. A sediment settling pond is required for any one of the following conditions:
- concentrated storm water runoff (e.g., storm sewer or ditch);
- runoff from drainage areas, which exceed the design capacity of silt fence or other sediment barriers;
- runoff from drainage areas that exceed the design capacity of inlet protection; or
- runoff from common drainage locations with 10 or more acres of disturbed land.

Part III.G.2.d.ii

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

The sediment settling pond volume consists of both a dewatering zone and a sediment storage zone. The volume of the dewatering zone shall be a minimum of 1800 cubic feet (ft^3) per acre of drainage (67 yd^3/acre) with a minimum 48-hour drain time for sediment basins serving a drainage area over 5 acres. The volume of the sediment storage zone shall be calculated by one of the following methods: Method 1: The volume of the sediment storage zone shall be 1000 ft^3 per disturbed acre within the watershed of the basin. OR Method 2: The volume of the sediment storage zone shall be the volume necessary to store the sediment as calculated with RUSLE or a similar generally accepted erosion prediction model. The accumulated sediment shall be removed from the sediment storage zone once it's full. When determining the total contributing drainage area, off-site areas and areas which remain undisturbed by construction activity must be included unless runoff from these areas is diverted away from the sediment settling pond and is not co-mingled with sediment-laden runoff. The depth of the dewatering zone must be less than or equal to five feet. The configuration between inlets and the outlet of the basin must provide at least two units of length for each one unit of width (> 2:1 length:width ratio), however, a length to width ratio of 4:1 is recommended. When designing sediment settling ponds, the permittee must consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls must be used where site limitations would preclude a safe design. The use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal is encouraged.

iii. Silt Fence and Diversions. Sheet flow runoff from denuded areas shall be intercepted by silt fence or diversions to protect adjacent properties and water resources from sediment transported via sheet flow. Where intended to provide sediment control, silt fence shall be placed on a level contour downslope of the disturbed area. This permit does not preclude the use of other sediment barriers designed to control sheet flow runoff. The relationship between the maximum drainage area to silt fence for a particular slope range is shown in the table below.

Part III.G.2.d.iii

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

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

iv. Inlet Protection. Other erosion and sediment control practices shall minimize sediment laden water entering active storm drain systems, unless the storm drain system drains to a sediment settling pond. All inlets receiving runoff from drainage areas of one or more acres will require a sediment settling pond.

v. Surface Waters of the State Protection. If construction activities disturb areas adjacent to surface waters of the State, structural practices shall be designed and implemented on site to protect all adjacent surface waters of the State from the impacts of sediment runoff. No structural sediment controls (e.g., the installation of silt fence or a sediment settling pond) shall be used in a surface water of the State. For all construction activities immediately adjacent to surface waters of the State, 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 shall be designed such that the number of stream crossings and the width of the disturbance within the setback area are minimized.

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

Part III.G.2

e. **Post-Construction Storm Water Management Requirements.** So that the receiving stream's physical, chemical, and biological characteristics are protected and stream functions are maintained, post-construction storm water practices shall provide perpetual management of runoff quality and quantity. To meet the post-construction requirements of this permit, the SWP3 must contain a description of the post-construction BMPs that will be installed during construction for the site and the rationale for their selection. The rationale must address the anticipated impacts on the channel and floodplain morphology, hydrology, and water quality. Post-construction BMPs cannot be installed within a surface water of the State (e.g., wetland or stream) unless it's authorized by a CWA 401 water quality certification, CWA 404 permit, or Ohio EPA non-jurisdictional wetland/stream program approval. Note: localities may have more stringent post-construction requirements.

Detail drawings and maintenance plans must be provided for all post-construction BMPs. Maintenance plans shall be provided by the permittee to the post-construction operator of the site (including homeowner associations) upon completion of construction activities (prior to termination of permit coverage). For sites located within a community with a regulated municipal separate storm sewer system (MS4), the permittee, land owner, or other entity with legal control of the property may be required to develop and implement a maintenance plan to comply with the requirements of the MS4. Maintenance plans must ensure that pollutants collected within structural post-construction practices, be disposed of in accordance with local, state, and federal regulations. To ensure that storm water management systems function as they were designed and constructed, the post construction operation and maintenance plan must be a stand-alone document, which contains: (1) a designated entity for storm water inspection and maintenance responsibilities; (2) the routine and non-routine maintenance tasks to be undertaken; (3) a schedule for inspection and maintenance; (4) any necessary legally binding maintenance easements and agreements; and (5) a map showing all access and maintenance easements. Permittees are not responsible under this permit for operation and maintenance of post-construction practices once coverage under this permit is terminated.

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

Part III.G.2.e

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

Large Construction Activities. For all large construction activities (involving the disturbance of five or more acres of land or will disturb less than five acres, but is a part of a larger common plan of development or sale which will disturb five or more acres of land), the post construction BMP(s) chosen must be able to detain storm water runoff for protection of the stream channels, stream erosion control, and improved water quality. The BMP(s) chosen must be compatible with site and soil conditions. Structural (designed) post-construction storm water treatment practices shall be incorporated into the permanent drainage system for the site. The BMP(s) chosen must be sized to treat the water quality volume (WQv) and ensure compliance with Ohio's Water Quality Standards in OAC Chapter 3745-1. The WQv shall be equivalent to the volume of runoff from a 0.75-inch rainfall and shall be determined according to the following equation:

$WQv = C * P * A / 12$

where:

WQv = water quality volume in acre-feet

C = runoff coefficient appropriate for storms less than 1 inch (Either use the following formula: $C = 0.858i^3 - 0.78i^2 + 0.774i + 0.04$, where i = fraction of post-construction impervious surface or use Table 1)

P = 0.75 inch precipitation depth

A = area draining into the BMP in acres

Part III.G.2.e

Table 1
Runoff Coefficients Based on the Type of Land Use

Land Use	Runoff Coefficient
Industrial & Commercial	0.8
High Density Residential (>8 dwellings/acre)	0.5
Medium Density Residential (4 to 8 dwellings/acre)	0.4
Low Density Residential (<4 dwellings/acre)	0.3
Open Space and Recreational Areas	0.2

Where the land use will be mixed, the runoff coefficient should be calculated using a weighted average. For example, if 60% of the contributing drainage area to the storm water treatment structure is Low Density Residential, 30% is High Density Residential, and 10% is Open Space, the runoff coefficient is calculated as follows (0.6)(0.3) + (0.3)(0.5) + (0.1)(0.2) = 0.35.

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

The BMPs listed in Table 2 below shall be considered standard BMPs approved for general use. However communities with a regulated MS4 may limit the use of some of these BMPs. BMPs shall be designed such that the drain time is long enough to provide treatment, but short enough to provide storage for successive rainfall events and avoid the creation of nuisance conditions. The outlet structure for the post-construction BMP must not discharge more than the first half of the WQv or extended detention volume (EDv) in less than one-third of the drain time. The EDv is the volume of storm water runoff that must be detained by a structural post-construction BMP. The EDv is equal to 75 percent of the WQv for wet extended detention basins, but is equal to the WQv for all other BMPs listed in Table 2.

Part III.G.2.e

Table 2
Structural Post-Construction BMPs & Associated Drain (Drawdown) Times

Best Management Practice	Drain Time of WQv
Infiltration Basin^	24 - 48 hours
Enhanced Water Quality Swale	24 hours
Dry Extended Detention Basin*	48 hours
Wet Extended Detention Basin**	24 hours
Constructed Wetland (above permanent pool)+	24 hours
Sand & Other Media Filtration	40 hours
Bioretention Cell^	40 hours
Pocket Wetland#	24 hours
Vegetated Filter Strip	24 hours

* Dry basins must include forebay and micropool each sized at 10% of the WQv
** Provide both a permanent pool and an EDv above the permanent pool, each sized at 0.75 * WQv
+ Extended detention shall be provided for the full WQv above the permanent water pool.
^ The WQv shall completely infiltrate within 48 hours so there is no standing or residual water in the BMP.
# Pocket wetlands must have a wet pool equal to the WQv, with 25% of the WQv in a pool and 75% in marshes. The EDv above the permanent pool must be equal to the WQv.

The permittee may request approval from Ohio EPA to use alternative post-construction BMPs if the permittee can demonstrate that the alternative BMPs are equivalent in effectiveness to those listed in Table 2 above. Construction activities shall be exempt from this condition if it can be demonstrated that the WQv is provided within an existing structural post-construction BMP that is part of a larger common plan of development or if structural post-construction BMPs are addressed in a regional or local storm water management plan. A municipally operated regional storm water BMP can be used as a post-construction BMP provided that the BMP can detain the WQv from its entire drainage area and release it over a 24 hour period.

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

Part III.G.2.e

Offsite Mitigation of Post-Construction Ohio EPA may authorize the offsite mitigation of the post-construction requirements of Part III.G.2.e of this permit on a case by case basis provided the permittee clearly demonstrates the BMPs listed in Table 2 are not feasible and the following criteria is met: (1) a maintenance agreement or policy is established to ensure operations and treatment in perpetuity; (2) the offsite location discharges to the same HUC-14 watershed unit; and (3) the mitigation ratio of the WQv is 1.5 to 1 or the WQv at the point of retrofit, whichever is greater. Requests for offsite mitigation must be received prior to receipt of the NOI applications.

Redevelopment Projects Sites that have been previously developed where no post-construction BMPs were installed shall either ensure a 20 percent net reduction of the site impervious area, provide for treatment of at least 20 percent of the WQ_v, or a combination of the two. A one-for-one credit towards the 20 percent net reduction of impervious area can be obtained through the use of pervious pavement and/or green roofs. Where projects are a combination of new development and redevelopment, the total WQv that must be treated shall be calculated by a weighted average based on acreage, with the new development at 100 percent WQv and redevelopment at 20 percent WQv.

Non-Structural Post-Construction BMPs The size of the structural post-construction can be reduced by incorporating non-structural post-construction BMPs into the design. Practices such as preserving open space will reduce the runoff coefficient and, thus, the WQv. Ohio EPA encourages the implementation of riparian and wetland setbacks. Practices which reduce storm water runoff include permeable pavements, green roofs, rain barrels, conservation development, smart growth, low-impact development, and other site design techniques contained in the Ohio Lake Commission's Balanced Growth Program (see www.glc.org/landuse/ohroundtable/ohiobgi.html). In order to promote the implementation of such practices, the Director may consider the use of non-structural practices to demonstrate compliance with Part III.G.2.e of this permit for areas of the site not draining into a common drainage system of the site, i.e., sheet flow from perimeter areas such as the rear yards of residential lots, for low density development scenarios, or where the permittee can demonstrate that the intent of pollutant removal and stream protection, as required in Part III.G.2.e of this permit is being addressed through non-structural post-construction BMPs based upon review and approval by Ohio EPA.

Part III.G.2.e

Use of Alternative Post-Construction BMPs This permit does not preclude the use of innovative or experimental post-construction storm water management technologies. However, the Director may require these practices to be tested using the protocol outlined in the Technology Acceptance Reciprocity Partnership's (TARP) Protocol for Stormwater Best Management Practice Demonstrations (see http://www.dep.state.pa.us/dep/deputate/pollprev/techservices/tarp).

The Director may require discharges from such structures to be monitored to ensure compliance with Part III.G.2.e of this permit. Permittees must request approval from Ohio EPA to use alternative post-construction BMPs if the permittee can demonstrate that the alternative BMPs are equivalent in effectiveness to those listed in Table 2 above. To demonstrate this equivalency, the permittee must show that the alternative BMP has a *minimum* total suspended solids (TSS) removal efficiency of 80 percent. Also, the WQv discharge rate from the practice must be reduced to prevent stream bed erosion and protect the physical and biological stream integrity unless there will be negligible hydrological impact to the receiving surface water of the State. The discharges will have a negligible impact if the permittee can demonstrate that one of the following four conditions exist:

i. The entire WQv is recharged to groundwater;

ii. The larger common plan of development or sale will create less than one acre of impervious surface;

iii. The project is a redevelopment project within an ultra-urban setting (i.e., a downtown area or on a site where 100 percent of the project area is already impervious surface and the storm water discharge is directed into an existing storm sewer system); or

iv. The storm water drainage system of the development discharges directly into a large river (fourth order or greater) or to a lake and where the development area is less than 5 percent of the watershed area upstream of the development site, unless a TMDL identified water quality problems in the receiving surface waters of the State.

Part III.G.2.e

The Director shall only consider the use of alternative BMPs on projects where the permittee can demonstrate that the implementation of the BMPs listed in Table 2 is infeasible due to physical site constraints that prevent the ability to provide functional BMP design. Alternative practices may include, but are not limited to, underground detention structures, vegetated swales and vegetated filter strips designed using water quality flow, natural depressions, rain barrels, permeable pavements green roofs, rain gardens, catch basin inserts, and hydrodynamics separators. The Director may also consider non-structural post-construction approaches where no local requirement for such practices exist.

Small Construction Activities. For all small land disturbance activities (which disturb one or more, but less than five acres of land and is not a part of a larger common plan of development or sale which will disturb five or more acres of land), a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed must be included in the SWP3. Structural measures should be placed on upland soils to the degree attainable. Such practices may include, but are not limited to: storm water detention structures (including wet basins); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). The SWP3 shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

f. **Surface Water Protection.** If the project site contains any streams, rivers, lakes, wetlands or other surface waters, certain construction activities at the site may be regulated under the CWA and/or state non-jurisdictional stream and wetland requirements. Sections 404 and 401 of the Act regulate the discharge of dredged or fill material into surface waters and the impacts of such activities on water quality, respectively. Construction activities in surface waters which may be subject to CWA regulation and/or state requirements include, but are not limited to: sewer line crossings, grading, backfilling or culverting streams, filling wetlands, road and utility line construction, bridge installation and installation of flow control structures. If the project contains streams, rivers, lakes or wetlands or possible wetlands, the permittee must contact the appropriate U.S. Army Corps of Engineers District Office. (CAUTION: Any area of seasonally wet hydric soil is a potential wetland - please consult the Soil Survey and list of hydric soils for your County, available at your county's Soil and Water Conservation District. If you have any questions about Section 401 water quality certification, please contact the Ohio Environmental Protection Agency, Section 401 Coordinator.)

Part III.G.2.f

U.S. Army Corps of Engineers (Section 404 regulation):
Huntington, WV District (304) 399-5210 (Muskingum River, Hocking River, Scioto River, Little Miami River, and Great Miami River Basins)
Buffalo, NY District (716) 879-4191 (Lake Erie Basin)
Pittsburgh, PA District (412) 395-7154 (Mahoning River Basin)
Louisville, KY District (502) 315-6733 (Ohio River)

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

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

g. **Other controls.** The SWP3 must also provide BMPs for pollutant sources other than sediment. Non-sediment pollutant sources, which may be present on a construction site, include paving operations, concrete washout, structure painting, structure cleaning, demolition debris disposal, drilling and blasting operations, material storage, slag, solid waste, hazardous waste, contaminated soils, sanitary and septic wastes, vehicle fueling and maintenance activities, and landscaping operations.

i. **Non-Sediment Pollutant Controls.** No solid or liquid waste, including building materials, shall be discharged in storm water runoff. The permittee must implement all necessary BMPs to prevent the discharge of non-sediment pollutants to the drainage system of the site or surface waters of the State. Under no circumstance shall concrete trucks wash out directly into a drainage channel, storm sewer or surface waters of the State. No exposure of storm water to waste materials is recommended.

ii. **Off-site traffic.** Off-site vehicle tracking of sediments and dust generation shall be minimized.

Part III.G.2.g

iii. **Compliance with other requirements.** The SWP3 shall be consistent with applicable State and/or local waste disposal, sanitary sewer or septic system regulations, including provisions prohibiting waste disposal by open burning and shall provide for the proper disposal of contaminated soils to the extent these are located within the permitted area.

iv. **Trench and ground water control.** There shall be no turbid discharges to surface waters of the State resulting from dewatering activities. If trench or ground water 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. Ground water 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 ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.

v. **Contaminated Sediment.** Where construction activities are to occur on sites with contamination from previous activities, operators 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 storm water discharges in excess of Ohio Water Quality Standards. Such discharges are not authorized by this permit. Appropriate BMPs include, but are not limited to:

- The use of berms, trenches, and pits to collect contaminated runoff and prevent discharges;
- Pumping runoff into a sanitary sewer (with prior approval of the sanitary sewer operator) or into a container for transport to an appropriate treatment/disposal facility; and
- Covering areas of contamination with tarps or other methods that prevent storm water from coming into contact with the material.

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

h. **Maintenance.** All temporary and permanent control practices shall be maintained and repaired as needed to ensure continued performance of their intended function. All sediment control practices must be maintained in a functional condition until all up slope areas they control are permanently stabilized. The SWP3 shall be designed to minimize maintenance requirements. The applicant shall provide a description of maintenance procedures needed to ensure the continued performance of control practices.

Part III.G.2

i. **Inspections.** At a minimum, procedures in an SWP3 shall provide that all controls on the site are inspected at least once every seven calendar days and within 24 hours after any storm event greater than one-half inch of rain per 24 hour period. The 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). A waiver of inspection requirements is available until one month before thawing conditions are expected to result in a discharge if all of the following conditions are met: the project is located in an area where frozen conditions are anticipated to continue for extended periods of time (i.e., more than one month); land disturbance activities have been suspended; and the beginning and ending dates of the waiver period are documented in the SWP3. Once a definable area has been finally stabilized, you may mark this on your SWP3 and no further inspection requirements apply to that portion of the site. The permittee shall assign "qualified inspection personnel" to conduct these inspections to ensure that the control practices are functional and to evaluate whether the SWP3 is adequate and properly implemented in accordance with the schedule proposed in Part III.G.1.g of this permit or whether additional control measures are required.

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

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

Part III.G.2.I

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

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

i. **When practices require repair or maintenance.** If the inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment settling pond, it must be repaired or maintained within three days of the inspection. Sediment settling ponds must be repaired or maintained within 10 days of the inspection.

ii. **When practices fail to provide their intended function.** If the inspection reveals that a control practice fails to perform its intended function and that another, more appropriate control practice is required, the SWP3 must be amended and the new control practice must be installed within 10 days of the inspection.

iii. **When practices depicted on the SWP3 are not installed.** If the inspection reveals that a control practice has not been implemented in accordance with the schedule contained in Part III.G.1.g of this permit, the control practice must be implemented within 10 days from the date of the inspection. If the inspection reveals that the planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.

Part III.G

3. **Approved State or local plans.** All dischargers regulated under this general permit must comply, except those exempted under state law, with the lawful requirements of municipalities, counties and other local agencies regarding discharges of storm water from construction activities. All erosion and sediment control plans and storm water management plans approved by local officials shall be retained with the SWP3 prepared in accordance with this permit. Applicable requirements for erosion and sediment control and storm water management approved by local officials are, upon submittal of a NOI form, incorporated by reference and enforceable under this permit even if they are not specifically included in an SWP3 required under this permit. When the project is located within the jurisdiction of a regulated municipal separate storm sewer system (MS4), the permittee must certify that the SWP3 complies with the requirements of the storm water management program of the MS4 operator.

4. **Exceptions.** If specific site conditions prohibit the implementation of any of the erosion and sediment control practices contained in this permit or site specific conditions are such that implementation of any erosion and sediment control practices contained in this permit will result in no environmental benefit, then the permittee shall provide justification for rejecting each practice based on site conditions. Exceptions from implementing the erosion and sediment control standards contained in this permit will be approved or denied on a case-by-case basis.

   The permittee may request approval from Ohio EPA to use alternative methods to satisfy conditions in this permit if the permittee can demonstrate that the alternative methods are sufficient to protect the overall integrity of receiving streams and the watershed. Alternative methods will be approved or denied on a case-by-case basis.

PART IV. NOTICE OF TERMINATION REQUIREMENTS

A. Failure to notify.

The terms and conditions of this permit shall remain in effect until a Notice of Termination (NOT) form is submitted. Failure to submit an NOT constitutes a violation of this permit and may affect the ability of the permittee to obtain future permit coverage in the future.

B. When to submit an NOT

1. Permittees wishing to terminate coverage under this permit must submit an NOT form in accordance with Part V.G. of this permit. Compliance with this permit is required until an NOT form is submitted. The permittee's authorization to discharge under this permit terminates at midnight of the day the NOT form is

submitted. Prior to submitting the NOT form, the permittee shall conduct a site inspection in accordance with Part III.G.2.i of this permit and have a maintenance agreement is in place to ensure all post-construction BMPs will be maintained in perpetuity.

2. All permittees must submit an NOT form within 45 days of completing all permitted land disturbance activities. Enforcement actions may be taken if a permittee submits an NOT form without meeting one or more of the following conditions:

   a. Final stabilization (see definition in Part VII) has been achieved on all portions of the site for which the permittee is responsible (including, if applicable, returning agricultural land to its pre-construction agricultural use);

   b. Another operator(s) has assumed control over all areas of the site that have not been finally stabilized;

   c. For residential construction only, temporary stabilization has been completed and the lot, which includes a home, has been transferred to the homeowner. (Note: individual lots without housing which are sold by the developer must undergo final stabilization prior to termination of permit coverage.); or

   d. An exception has been granted under Part III.G.4.

C. How to submit an NOT

Permittees must use Ohio EPA's approved NOT form. The form must be completed and mailed according to the instructions and signed in accordance with Part V.G of this permit.

PART V. STANDARD PERMIT CONDITIONS.

A. Duty to comply.

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of ORC Chapter 6111. and is grounds for enforcement action.

2. Ohio law imposes penalties and fines for persons who knowingly make false statements or knowingly swear or affirm the truth of a false statement previously made.

B. Continuation of an expired general permit.

An expired general permit continues in force and effect until a new general permit is issued.

Part V

C. Need to halt or reduce activity not a defense.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to mitigate.

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Duty to provide information.

The permittee shall furnish to the director, within 10 days of written request, any information which the director may request to determine compliance with this permit. The permittee shall also furnish to the director upon request copies of records required to be kept by this permit.

F. Other information.

When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI, SWP3, NOT or in any other report to the director, he or she shall promptly submit such facts or information.

G. Signatory requirements.

All NOIs, NOTs, SWP3s, reports, certifications or information either submitted to the director or that this permit requires to be maintained by the permittee, shall be signed.

1. These items shall be signed as follows:

    a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

        i. A president, secretary, treasurer or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy or decision-making functions for the corporation; or

Part V.G.1.a

ii. The manager of one or more manufacturing, production or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA).

2. All reports required by the permits and other information requested by the director shall be signed by a person described in Part V.G.1 of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part V.G.1 of this permit and submitted to the director;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator of a well or well field, superintendent, position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

c. The written authorization is submitted to the director.

Part V.G

3. Changes to authorization. If an authorization under Part V.G.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part V.G.2 of this permit must be submitted to the director prior to or together with any reports, information or applications to be signed by an authorized representative.

H. Certification.

Any person signing documents under this section shall make the following certification:

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

I. Oil and hazardous substance liability.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the CWA or 40 CFR Part 112. 40 CFR Part 112 establishes procedures, methods and equipment and other requirements for equipment to prevent the discharge of oil from non-transportation-related onshore and offshore facilities into or upon the navigable surface waters of the State or adjoining shorelines.

J. Property rights.

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

K. Severability.

The provisions of this permit are severable and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

Part V

L. Transfers.

Ohio NPDES general permit coverage is transferable. Ohio EPA must be notified in writing sixty days prior to any proposed transfer of coverage under an Ohio NPDES general permit. The transferee must inform Ohio EPA it will assume the responsibilities of the original permittee transferor.

M. Environmental laws.

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

N. Proper operation and maintenance.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of SWP3s. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

O. Inspection and entry.

The permittee shall allow the director or an authorized representative of Ohio EPA, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

PART VI. REOPENER CLAUSE

A. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with construction activity covered by this permit, the permittee of such discharge may be required to obtain coverage under an individual permit or an alternative general permit in accordance with Part I.C of this permit or the permit may be modified to include different limitations and/or requirements.

B. Permit modification or revocation will be conducted according to ORC Chapter 6111.

PART VII. DEFINITIONS

A. "Act" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, Pub. L. 97-117 and Pub. L. 100-4, 33 U.S.C. 1251 et. seq.

B. "Best management practices (BMPs)" means schedules of activities, prohibitions of practices, maintenance procedures and other management practices (both structural and non-structural) to prevent or reduce the pollution of surface waters of the State. BMP's also include treatment requirements, operating procedures and practices to control plant and/or construction site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage.

C. "Commencement of construction" means the initial disturbance of soils associated with clearing, grubbing, grading, placement of fill or excavating activities or other construction activities.

D. "Concentrated storm water runoff" means any storm water runoff which flows through a drainage pipe, ditch, diversion or other discrete conveyance channel.

E. "Director" means the director of the Ohio Environmental Protection Agency.

F. "Discharge" means the addition of any pollutant to the surface waters of the State from a point source.

G. "Disturbance" means any clearing, grading, excavating, filling, or other alteration of land surface where natural or man-made cover is destroyed in a manner that exposes the underlying soils.

H. "Final stabilization" means that either:

1. All soil disturbing activities at the site are complete and a uniform perennial vegetative cover (e.g., evenly distributed, without large bare areas) with a density of at least 70 percent cover for the area has been established on all unpaved areas and areas not covered by permanent structures or 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; or

2. For individual lots in residential construction by either:

   a. The homebuilder completing final stabilization as specified above or

b. The homebuilder establishing temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for and benefits of, final stabilization. (Homeowners typically have an incentive to put in the landscaping functionally equivalent to final stabilization as quick as possible to keep mud out of their homes and off sidewalks and driveways.); or

3. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were previously used for agricultural activities, such as buffer strips immediately adjacent to surface waters of the State and which are not being returned to their pre-construction agricultural use, must meet the final stabilization criteria in (1) or (2) above.

I. "Individual Lot NOI" means a Notice of Intent for an individual lot to be covered by this permit (see parts I and II of this permit).

J. "Larger common plan of development or sale"- means a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.

K. "MS4" means municipal separate storm sewer system which means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) that are:

1. Owned or operated by the federal government, state, municipality, township, county, district(s) or other public body (created by or pursuant to state or federal law) including special district under state law such as a sewer district, flood control district or drainage districts or similar entity or a designated and approved management agency under section 208 of the act that discharges into surface waters of the State; and

2. Designed or used for collecting or conveying solely storm water,

3. Which is not a combined sewer and

4. Which is not a part of a publicly owned treatment works.

L. "National Pollutant Discharge Elimination System (NPDES)" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and enforcing pretreatment requirements, under sections 307, 402, 318 and 405 of the CWA. The term includes an "approved program."

Part VII

M. "NOI" means notice of intent to be covered by this permit.

N. "NOT" means notice of termination.

O. "Operator" means any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

2. The party has day-to-day operational control of those activities at a project which are necessary to ensure compliance with an SWP3 for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

As set forth in Part II.A, there can be more than one operator at a site and under these circumstances, the operators shall be co-permittees.

P. "Owner or operator" means the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

Q. "Permanent stabilization" means 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 year.

R. "Percent imperviousness" means the impervious area created divided by the total area of the project site.

S. "Point source" means any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or the floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

T. "Qualified inspection personnel" means a person knowledgeable in the principles and practice of erosion and sediment controls, who possesses the skills to assess all conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.

Part VII

U. "Rainwater and Land Development" is a manual describing construction and post-construction best management practices and associated specifications. A copy of the manual may be obtained by contacting the Ohio Department of Natural Resources, Division of Soil & Water Conservation.

V. "Riparian area" means the transition area between flowing water and terrestrial (land) ecosystems composed of trees, shrubs and surrounding vegetation which serve to stabilize erodible soil, improve both surface and ground water quality, increase stream shading and enhance wildlife habitat.

W. "Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

X. "Sediment settling pond" means a sediment trap, sediment basin or permanent basin that has been temporarily modified for sediment control, as described in the latest edition of the Rainwater and Land Development manual.

Y. "State isolated wetland permit requirements" means the requirements set forth in Sections 6111.02 through 6111.029 of the ORC.

Z. "Storm water" means storm water runoff, snow melt and surface runoff and drainage.

AA. "Surface waters of the State" or "water bodies" means all streams, lakes, reservoirs, ponds, marshes, wetlands or other waterways which are situated wholly or partially within the boundaries of the state, except those private waters which do not combine or effect a junction with natural surface or underground waters. Waters defined as sewerage systems, treatment works or disposal systems in Section 6111.01 of the ORC are not included.

BB. "SWP3" means storm water pollution prevention plan.

CC. "Temporary stabilization" means 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.

DD. "Water Quality Volume (WQ_v)" means the volume of storm water runoff which must be captured and treated prior to discharge from the developed site after construction is complete. WQ_v is based on the expected runoff generated by the mean storm precipitation volume from post-construction site conditions at which rapidly diminishing returns in the number of runoff events captured begins to occur.