NPDES - PHASE II

LORAIN COUNTY EROSION & SEDIMENT CONTROLREGULATIONS

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REFERENCES

The standards and specifications for Best Management Practices are contained within the

Rainwater and Land Development Manual, Ohio's Standards For Storm Water Management, Land Development and Urban Stream Protection, current edition

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LORAIN COUNTY EROSION & SEDIMENT CONTROL RULES

1. Purpose and Scope

- 1.1 The Lorain County Board of Commissioners adopts these Erosion and Sediment Control Rules, pursuant to Ohio Revised Code, Section 307.79, to establish technically feasible and economically reasonable standards to achieve a level of management and conservation practices in order to abate soil erosion and degradation of the waters of the State by soil sediment on land used or being developed for non-farm commercial, industrial, residential or other non-farm purposes, to establish criteria for determination of the acceptability of such management and conservation practices, and to implement Phase II of the storm water program of the National Pollutant Discharge Elimination System (NPDES) established in 40 CFR Part 122, and to promote the health, safety and well-being of the residents of Lorain County. Specifically, the Rules are intended to protect:
 - a) Adjacent landowners from property loss due to sedimentation, erosion and flooding.
 - b) County and township ditches, culverts and storm sewers from loss of capacity due to siltation.
 - c) Water and habitat quality in streams and wetlands.
- 1.2 These Rules apply to soil-disturbing activities on land within the unincorporated area of Lorain County used or being developed for non-farm commercial, industrial, residential, or other non-farm purposes, including, but not limited to, individual or multiple lots, subdivisions, multifamily developments, commercial and industrial developments, recreational projects, general clearing and grading projects, underground utilities, highways, building activities on farms, redevelopment of urban areas and all other uses unless expressly excluded as follows:
 - a) Activities related to producing agricultural crops or silviculture operations or areas regulated by the Ohio Agricultural Sediment Pollution Abatement Rules.
 - b) Strip mine and surface mine operations.
- 1.3 An Erosion and Sediment Control Plan is not required before clearing, grading, excavating, filling or otherwise wholly or partially disturbing less than one contiguous acre of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other similar non-farm uses; however, areas of

less than one contiguous acre are not exempt from compliance with all other provisions of these Rules.

- 1.4 An Erosion and Sediment Control Plan is not required for a public highway, transportation, or drainage improvement or maintenance thereof undertaken by a governmentagency or political subdivision in accordance with a statement of its Standard Sediment Control Policies that is approved by the Lorain County Board of Commissioners or the Chief of theODNR Division of Soil and Water Conservation.
- 1.5 No soil disturbing activities shall commence without compliance with these rules.

1.6 Disclaimer of Liability

Compliance with the provisions of this regulation shall not relieve any person from responsibility for damage to any person otherwise imposed by law. The provisions of this regulation are promulgated to promote the health, safety, and welfare of the public and are not designed for the benefit of any individual or for the benefit of any particular parcel of property.

1.7 Conflicts, Severability, Nuisances and Responsibility

- (a) Where this regulation is in conflict with other provisions of law, resolutions, or ordinances, the most restrictive provisions shall prevail.
- (b) If any clause, section, or provision of this regulation is declared invalid or unconstitutional by a court of competent jurisdiction, the validity of the remainder shall not be affected thereby.
- (c) This regulation shall not be construed as authorizing any person to maintain a private or public nuisance on their property, and compliance with the provisions of this regulation shall not be a defense in any action to abate such a nuisance.
- (d) Failure of the County to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the site owner from the responsibility for the condition or damage resulting therefrom, and shall notresult in the County, its officers, employees, or agents being responsible for any condition or damage resulting therefrom.

2 Terms Defined

2.1 Interpretation of Terms and Words

- (a) Words used in the present tense include the future tense and the singular include the plural, unless the context clearly indicates the contrary.
- (b) The term "shall" and "must" are always mandatory and not discretionary. The word "may" is permissive. The term "should" is permissive but indicates strong suggestion.
- (c) The word or term not interpreted or defined by this section shall be construed according to the rules of grammar and common usage so as to give these Rules their most reasonable application.

2.2 Definitions

<u>Abbreviated Erosion and Sediment Control Plan (Abbreviated ESC Plan)</u>: The written document that sets forth the plans and practices to be used to meet the requirements of this regulation.

Accelerated Soil Erosion: The increased loss of the land surface that occurs as a result of human activities.

Acre: A unit of measure equaling 43,560 square feet.

<u>Administrator</u>: The person or entity having the responsibility and duty of administering and ensuring compliance with these Rules. The Administrator shall be appointed by the Board of Lorain County Commissioners.

Best Management Practices: Structural or nonstructural facilities or activities that control soilerosion and/or storm water runoff at a development site. Includes treatment requirements, operating and maintenance procedures, or other practices to control site runoff, leaks, or waste disposal.

<u>Buffer Area</u>: A designated transitional area around a stream or wetland left in a natural, usually vegetated, state so as to protect a stream or wetland from runoff pollution. Construction activities in this area shall be restricted or prohibited based on the sensitivity of the stream or wetland and the recommendation of the Administrator.

<u>Channel</u>: A natural or manmade bed or ditch, existing or excavated for the conveyance of water.

Commencement of Construction: The initial disturbance of soils associated with clearing, grubbing, grading, placement of fill, or excavating activities or other construction activities.

<u>Common Plan of Development:</u> A term used to define the entire scope of a development project, both onsite and off-site, regardless of ownership, including phases (future and existing), sublots, and parcels of development, associated easements, road and utility right of ways, and other land development or soil disturbances in support of the development project.

<u>Clean Water Act:</u> The Federal Water Pollution Control Act enacted in 1972 by Public Law 92-500 and amended by the Water Quality Act prohibits the discharge of pollutants to Waters of the United States unless said discharge is in accordance with an NPDES permit. The 1987 amendments include guidelines for regulating municipals, industrial, and construction storm water discharges under the NPDES permit.

<u>Conservation</u>: The development of land using alternative layout and building arrangements in order to better conserve open space and retain natural resources.

<u>Construction Entrance:</u> The permitted points of ingress and egress to development areas regulated under this regulation.

<u>Critical Area:</u> Any portion of an area subject to this Rule the disturbance of which would cause soil erosion and sediment run-off and damage to private properties, water courses, storm sewers or public lands due to topography, soil type, hydrology or proximity to a water course. These areas include, but are not limited to, riparian areas, wetlands and highly erodible soils.

Cut: An excavation that reduces an existing elevation, as in road or foundation construction.

Development Area: A contiguous area owned by one person or persons, or operated as one development

unit, and used or being developed for non-farm commercial, industrial, residential or other institutional construction or alteration which changes the runoff characteristics of a parcel of land.

<u>Development Project:</u> An area of land, parcel or parcels, portions of parcels, and associated land disturbance that is being developed, redeveloped, or disturbed in support of development, for non-farm commercial, industrial, residential or other institutional construction or alteration which changes, either permanently or temporarily, the runoff characteristics or grade of the lands therein.

<u>Dewatering Volume:</u> See current Ohio Rainwater and Land Development Manual.

<u>Discharge</u>: The addition of any pollutant to surface waters of the state from a point source.

<u>Disturbance</u>: 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.

<u>Disturbed Area</u>: An area of land subject to erosion due to the removal of vegetative cover and/or soil moving activities, including filling.

<u>Ditch</u>: An open channel, either dug or natural, for the purpose of drainage or irrigation with intermittent flow.

Drainage: The removal of excess surface water or groundwater from land by surface or subsurface drains.

<u>Drainage Surface Area</u>: An area, measured in a horizontal plane, enclosed by a topographic divide from which surface runoff from precipitation normally drains by gravity into a stream above the specified point of measurement.

<u>Drainage Improvement</u>: An improvement as defined in O.R.C. 6131.01(C), and/or conservation works of improvement as defined in O.R.C. 1511 and 1515.

<u>Drainage Way</u>: A natural or manmade channel, ditch, or waterway that conveys surface water in a concentrated manner by gravity. See also watercourse, channel, stream.

<u>Dumping</u>: A grading, pushing, piling, throwing, unloading or placing.

<u>Earth Material</u>: The soil, sediment, rock, sand, gravel and organic material or residue associated with or attached to the soil.

Engineer: A Professional Engineer registered in the State of Ohio.

<u>Erosion</u>: The process by which the land surface is worn away by the action of wind, water, ice, gravity or any combination of those forces.

<u>Erosion and Sediment Control</u>: The control of soil material, both mineral and organic, during soil-disturbing activity to prevent its transport out of the disturbed area by means of wind, water, ice or gravity.

<u>Erosion Sediment Control Plan:</u> The written document meeting the requirements of Sections 3, 4 and 5 of these Rules which sets forth the plans and practices to be used to minimize soil erosion and prevent off-site disposal of soil sediment by containing sediment on-site or by passing sediment-laden runoff

through a sediment control measure during and after land development.

<u>Farm</u>: Land or water devoted to agricultural uses as defined in O.R.C. 519.01 including farming; ranching; aquaculture; horticulture; viticulture; animals; poultry husbandry and the production poultry products; dairy production; the productions of field crops, tobacco, fruits, vegetables, nursery stock, ornamental shrubs, ornamental trees, flowers, sod, or mushrooms; timber; pasturage, any combination of the foregoing; the processing, drying, storage, and marketing of agricultural products when those activities are conducted in conjunction with, but are secondary to, such husbandry or production.

<u>Final Stabilization</u>: All soil-disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of at least 70% cover for all disturbed areas has been established or equivalent stabilization measures, such as the use of mulches or geo-textiles, 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. Final stabilization also requires the installation of permanent (post-construction) BMPs.

<u>Grading</u>: The excavating, filling, or stockpiling of earth material, or any combination thereof, including the land in its excavated or filled condition.

Grubbing: removing or grinding of roots, stumps and other unwanted material below existing grade.

<u>Grassed Waterway</u>: A broad or shallow natural watercourse or constructed channel, covered with erosion-resistant grasses or similar vegetative cover, used to convey surface water.

Impervious: That which does not allow infiltration.

Landscape Architect: A Professional Landscape Architect registered in the State of Ohio.

Landslide: A rapid mass movement of soil and rock moving downhill under the influence of gravity.

<u>Larger Common Plan of Development or Sale:</u> A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.

<u>Maximum Extent Practicable (MEP):</u> The technology-based discharge standard of Municipal Separate Storm Sewer Systems to reduce pollutants in storm water discharges that was established by the Clean Water Act 402(p). A discussion of MEP as it applies to small MS4s is found in 40 CFR 122.34.

<u>Municipal Separate Storm Sewer System (MS4):</u> 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:

Owned or operated by the federal government, state, municipality, township, county, district, or other public body (created by or pursuant to state or federal law) including a 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 Federal Water Pollution Control Act that discharges into surface waters of the state; and

Designed or used for collecting or conveying solely stormwater,

Which is not a combined sewer, and

Which is not part of a publicly owned treatment works.

<u>Multi-family Development</u>: Apartments, condominiums, duplexes or other similar buildings housing more than one family.

<u>Natural Waterway</u>: A waterway that is part of the natural topography, which usually maintains continuous or seasonal flow during the year and is characterized as being irregular in cross-section with a meandering course.

<u>NPDES</u>: National Pollutant Discharge Elimination System, a regulatory program in the Federal Clean Water Act that prohibits the discharge of pollutants into surface waters of the United States without a permit.

Operator: Any party associated with a construction project that meets either of the following two criteria:

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

The party has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a Stormwater Pollution Prevention Plan (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.

Owner or Operator: The owner or operator of any "facility or activity" subject to regulation under the NPDES program.

<u>Parcel:</u> Means a tract of land occupied or intended to be occupied by a use, building or group of buildings and their accessory uses and buildings as a unit, together with such open spaces and driveways as are provided and required. A parcel may contain more than one contiguous lot individually identified by a 'Permanent Parcel Number' assigned by the Lorain County Auditor's Office.

<u>Percent Imperviousness:</u> The impervious area created divided by the total area of the project site.

<u>Permanent Stabilization:</u> 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.

<u>Person</u>: An individual, corporation, firm, trust, commission, board, public or private partnership, joint venture, agency, unincorporated association, municipal corporation, county or state agency, federal government or any combination thereof.

<u>Phasing</u>: Clearing a parcel of land in distinct sections, with the stabilization of each section before the clearing of the next.

<u>Point Source</u>: 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 stormwater runoff.

<u>Pre-Construction Meeting</u>: A meeting between the Administrator and all principal parties, prior to the start of any construction, at a site that requires an Erosion Sediment Control Plan.

<u>Pre-Winter Stabilization Meeting:</u> A meeting between the Administrator and all principal parties, prior to October 1, in order to plan winter erosion and sediment controls for a site that requires an Erosion Sediment Control Plan.

Professional Engineer: A Professional Engineer registered in the State of Ohio.

Qualified Inspection Personnel: A person knowledgeable in the principles and practice of erosion and sediment controls, who possess the skills to assess all conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measure selected to control the quality of stormwater discharges from the construction activity.

<u>Rainwater and Land Development Manual</u>: Ohio's standards for storm water management, land development, and urban stream protection. The most current edition of these standards shall be used with this regulation.

<u>Riparian Area:</u> The transition area between flow 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.

<u>Runoff:</u> The portion of rainfall, melted snow, or irrigation water that flows across the ground surface and is eventually conveyed to water resources or wetlands.

<u>Sediment</u>: The soils or other surface materials that can be transported or deposited from its site of origin by the action of wind, water, ice or gravity as a product of erosion.

<u>Sedimentation</u>: The deposit of sediment in water bodies.

<u>Sediment Basin</u>: A temporary barrier or other suitable retention structure built across an area of water flow to intercept runoff and allow transported sediment to settle and be retained prior to discharge into waters of the State.

<u>Sediment Pollution</u>: The degradation of waters of the State by sediment as a result of failure to apply management or conservation practices to abate wind or water soil erosion, specifically in conjunction with soil-disturbing activities on land used or being developed for commercial, industrial, residential or other non-farm purposes.

<u>Silviculture</u>: The activity for which the primary purpose is the growing, managing and harvesting of a merchantable forest product of commercial species under accepted silvicultural systems through natural or artificial reforestation methods and for which there is an approved forest management plan.

<u>Sloughing/Slumping</u>: A slip or downward movement of an extended layer of soil resulting from the undermining action of water or the soil-disturbing activity of man.

<u>Soil Conservation</u>: The use of the soil within the limits of its physical characteristics and protecting it from unalterable limitations of climate and topography.

<u>Soil-Disturbing Activity</u>: A clearing, grading, excavating, filling or other alteration of the earth's surface where natural or man-made ground cover is destroyed, which may result in, or contribute to, erosion and sediment pollution. Grubbing and stump removal that occurs during clearing or timber activities constitutes a soil disturbing activity.

<u>Soil and Water Conservation District</u>: An entity organized under Chapter 1515 of the Ohio RevisedCode referring either to the Soil and Water Conservation District Board or its designated employee(s), hereinafter referred to as the Lorain SWCD.

Soil Loss: The soil moved from a given site by the forces of erosion, measured using "T."

<u>Stabilization</u>: The installation of vegetative and/or structural measures to establish a soil cover inorder to reduce soil erosion by storm water runoff, wind, ice, and gravity.

Stream or Watercourse: Shall have the same meaning as "water of the state" contained in O.R.C. 6111.01 and shall include all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs irrigation systems, drainage systems, and other bodies or accumulations of water, surface and underground, natural or artificial, regardless of the depth of the strata in which underground water is located, that are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters that do not combine or effect a junction with natural surface or underground waters.

Storm Drain: A conduit, pipe or human-made structure, which serves to transport storm water runoff.

Storm Water Pollution Prevention Plan: (SWP3): The written document that sets forth the plans and practices to be used to meet the requirements of the NPDES permit.

<u>Storm Water Runoff</u>: The direct response of a watershed to precipitation, which includes the surface and subsurface runoff that enters a stream, ditch, storm sewer or other concentrated flow during and following the precipitation.

<u>Subsoil</u>: That portion of the soil below the topsoil or plow layer, beginning 6-12" below surface down to bedrock parent material.

<u>Surface Waters of the State:</u> Also, Water Resource or Water Body. Any stream, lake, reservoir, pond, marsh, wetland or other waterway situated wholly or partly within the boundaries of the state, except those private waters which do not combine or affect a junction with surface water. Waters defined as sewerage systems, treatment works or disposal systems in Section 6111.01 or the Ohio Revised Code are not included.

<u>T</u>: The soil loss tolerance expressed in tons per acre per year as determined by the USDA Revised Universal Soil Loss Equation (RUSLE).

<u>Temporary Soil Erosion and Sediment Control Measures:</u> Also, Temporary Stabilization. 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.

<u>Topsoil</u>: The upper layer of soil that is usually darker in color and richer in organic matter and nutrients than the subsoil.

<u>Unstable Soils:</u> A portion of land surface or area which is prone to slipping, sloughing, landslides or is identified by Natural Resource Conservation Service, USDA methodology as having low soil strength.

<u>Water Quality Volume</u>: (WQv) The volume of stormwater runoff which must be captured and treated prior to discharge from the developed site after construction is complete. WQv 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.

<u>Water Resource</u>: Also, Surface water of the state. Any stream, lake, reservoir, pond, marsh, wetland or other waterway situated wholly or partly within the boundaries of the state, except those private waters which do not combine or affect a junction with surface water. Waters defined as sewerage systems, treatment works or disposal systems in Section 6111.01 or the Ohio Revised Code are not included.

Watershed: The total drainage area contributing runoff to a single point.

<u>Wetland</u>: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas (40 CFR 232, as amended).

3. Regulated Activities.

No person shall cause or allow soil-disturbing activities, land clearing, grading, excavating or filling within the scope of these Rules without full compliance with the requirements set forth in these Rules and all applicable fees are paid.

- 3.1 When a proposed soil-disturbing activity on land used or being developed, either wholly or partially, for non-farm residential, commercial, industrial, or other non-farm purposes consisting of one or more contiguous acres of land owned by one person or operated as one development unit for the construction of non-farm buildings, structures, utilities, recreational areas or other limited non-farm uses, the owner of said land shall prepare and file with the Administrator an Erosion and Sediment Control (ESC) plan. Areas of less than one contiguous acre shall not be exempt from compliance with all other provisions of these Rules.
- 3.2 When a residential dwelling unit is proposed on an individual lot of one or more acres or a lot which is part of a large common plan of development, the owner of said land shall prepare and file with the Administrator an Abbreviated Erosion and Sediment Control (ESC) plan, which shall consist of items listed in Section 4.11 of this document. A copy of the Ohio EPA Notice of Intent or General Permit authorization shall be provided.
- 3.3 When a residential dwelling unit on an individual lot is proposed, which is not part of a larger common plan of development and less than one-acre, the owner of said land shall not be required to prepare and file an Erosion and Sediment Control Plan; however, said owner shall comply with all other provisions of these Rules.
- 3.4 The submitted ESC plan must be approved by the Administrator of these Rules prior to the start of any soil-disturbing activity. The owner of said land shall notify the Administrator no less than two (2) working days before the start of soil-disturbing activity. The Administrator shall also be notified by the owner no later than two (2) working days after project completion. Failure to comply may result in the issuance of a stop work order, additional fees, and/or other adverse actions such as fines.
- 3.5 The ESC plan shall be submitted to the Administrator for review no less than thirty (30) working days prior to any soil-disturbing activity at the proposed site.
- 3.6 The ESC plan shall contain narrative and drawings that explain practices to be used to prevent soil erosion and off-site discharge of soil sediment during and after land development. (SeeSection 5 for plan requirements and review schedules.)

- 3.7 Erosion and sediment control practices used to satisfy the performance criteria of these Rules shall meet the specifications provided in the current edition of Rainwater & Land Development Manual, Ohio's Standards for Storm Water Management and Land Development, and UrbanStream Protection, published by the Ohio Department of Natural Resources and Provisions of the Lorain County Floodplain Regulations. (See Section 4 for performance standards and requirements.)
- Approvals issued in accordance with this regulation do not relieve the applicant of responsibility for obtaining all other necessary permits and/or approvals from the Ohio EPA, the US Army Corps of Engineers, and other federal, state, and/or county agencies. If requirements vary, the most restrictive requirement shall prevail. These permits may include, but are not limited to, those listed below. All submittals required showing proof of compliance with these state and federal regulations shall be submitted with Erosion and Sediment Control Plans or Abbreviated Erosion and Sediment Control Plans to the Administrator.
 - (a) Ohio EPA NPDES Permits authorizing storm water discharges associated with construction activity or the most current version thereof: Proof of compliancewith these requirements shall be the applicant's Notice of Intent (NOI) number from Ohio EPA, a copy of the Ohio EPA Director's Authorization Letter for the NPDES Permit, or a letter from the site owner certifying and explaining why the NPDES Permit is not applicable.
 - (b) Section 401 of the Clean Water Act: Proof of compliance shall be a copy of the Ohio EPA Water Quality Certification application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 401 of the Clean Water Act is not applicable. Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
 - (c) Ohio EPA Isolated Wetland Permit: Proof of compliance shall be a copy of Ohio EPA's Isolated Wetland Permit application tracking number, public notice, project approval, or a letter from the site owner certifying that a qualified professional has surveyed the site and determined that Ohio EPA's Isolated Wetlands Permit is not applicable. Isolated wetlands shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
 - (d) Section 404 of the Clean Water Act: Proof of compliance shall be a copy of the U.S. Army Corps of Engineers Individual Permit application, public notice, or project approval, if an Individual Permit is required for the development project. If an Individual Permit is not required, the site owner shall submit proof of compliance with the U.S. Army Corps of Engineer's Nationwide Permit Program. This shall include one of the following:
 - (1) A letter from the site owner certifying that a qualified professional has surveyed the site and determined that Section 404 of the Clean Water Act is not applicable.
 - (2) A site plan showing that any proposed fill of waters of the United States conforms to the general and special conditions specified in the applicable Nationwide Permit. Wetlands, and other waters of the United States, shall be delineated by protocols accepted by the U.S. Army Corps of Engineers at the time of application of this regulation.
 - (e) Ohio Dam Safety Law: Proof of compliance shall be a copy of the ODNR Division of Water permit application tracking number, a copy of the project approval letter from the ODNR Division of Water, or a letter from the site owner certifying and explaining why the Ohio Dam Safety Law is not applicable.

- 3.9 The ESC plan shall be certified by a professional engineer, professional surveyor or certified professional erosion and sediment control specialist or landscape architect registered in the State of Ohio.
- 3.10 The owner of said land and the developer, engineer and contractor of the project, and other principal parties, shall meet with the Administrator for a Pre-Construction Meeting no less than seven (7) days prior to soil-disturbing activity at the site in order to ensure that erosion and sediment control devices are properly installed, limits of disturbance and buffer areas are properly delineated and construction personnel are aware of such devices and areas. Pre-Construction Meetings for Abbreviated ESC Plans may be waived at the discretion of the Administrator.
- 3.11 The approved erosion and sediment control plan shall be kept at the development site and made available to contractors, site managers, inspectors, and the administrators of these regulations.
- 3.12 The project engineer shall perform first inspection of erosion and sediment control devices to certify that the 'as built' condition complies with the approved plan no less than two (2) working days prior of the start of the project. An inspection report shall be produced and kept at the development site and be made available to the Administrator within seven (7) working days from the date of inspection.
- 3.13 All project activity shall be subject to monitoring. A record of site inspections and compliance and non-compliance shall be maintained by the Administrator.
- 3.14 If the site is, or planned, to remain active through the winter months, a Pre-Winter Stabilization Meeting shall be held by the owner of said land and the developer, engineer and contractor of the project and the Administrator prior to October 1, in order to plan and approve winter erosion and sediment controls as defined in the most current edition of Rainwater and Land Development Manual Ohio's Standards for Storm Water Management and Land Development and Urban Stream Protection published by the Ohio Department of Natural Resources.
- 3.15 Upon completion of all construction and final stabilization of the entire construction site, theowner of said land shall contact the Administrator through written notification that construction is complete and final stabilization has been achieved.

4. Performance Standards

All properties adjacent to the site of soil-disturbing activity shall be protected from soil erosion and sediment run-off and damage, including, but not limited to, private properties, natural and artificial waterways, wetlands, storm sewers and public lands.

Construction site erosion and sediment control practices used to satisfy this requirement shall conform, as a minimum, to State of Ohio standards as set forth in the most-current edition of the *Rainwater and Land Development Manual* and shall conform to the most current Ohio Environmental Protection Agency, Ohio Revised Code Chapter 6111, requirements. The ESC Plan must meet the minimum requirements of the Ohio EPA's current General Storm Water permit. All SWP3 requirements listed in the General permit must also be met.

Erosion and sediment control plan approvals issued in accordance with these Rules do not relieve the owner of responsibility for obtaining all other necessary permits and/or approvals from federal, state and/or county agencies. If requirements vary, the most stringent requirement shall be followed.

Erosion and sediment control practices at the site, and as identified in the ESC plan, shall comply with the following:

The ESC Plan must contain a description of the controls appropriate for each construction operation and the applicant must implement such controls. The ESC Plan must clearly describe for each major construction activity the appropriate control measures; the general sequence during the construction process under which the measures will be implemented; and the contractor 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 controls shall include the following minimum components:

- 4.1 NON-STRUCTURAL PRESERVATION MEASURES: The ESC Plan must make use of practices that preserve the existing natural condition to the maximum extent practicable. Such practices include preserving riparian areas, reserving existing vegetation and vegetative buffer strips, phasing of construction operations in order to minimize the amount of disturbed land at any one time, minimizing disturbance of steep slopes, designation of tree preservation areas or other protective clearing or grubbing practices. Soil compaction shall be minimized and, unless infeasible, topsoil shall be preserved. Provide and maintain a 50-foot buffer of undisturbed natural vegetation around surface waters of the state, or riparian or wetland setbacks, if applicable, whichever is greater, unless maintaining this buffer is infeasible (e.g., stream crossings for roads or utilities, or for channel and floodplain rehabilitation and restoration). Direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration.
- 4.2 EROSION CONTROL PRACTICES: The ESC Plan must make use of erosion controls that are capable of providing cover over disturbed soils. The amount of soil exposed during construction activity shall be minimized. A description of control practices designed to re-stabilize disturbed areas after grading or construction shall be included in the ESC Plan. The ESC Plan 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, the use of construction entrances, and the use of alternative ground cover.

Erosion control practices must meet the following requirements:

(a) <u>Stabilization</u>. Disturbed areas must be stabilized as specified in Tables 1 and 2 below.

Table 1: Permanent Stabilization

Area requiring permanent stabilization	Time frame to apply erosion controls
Any area that will lie dormant for one year or more.	Within 7 days of the most recent disturbance.
Any area within 50 feet of a watercourse or wetland and at final grade.	Within 2 days of reaching final grade.
Other areas at final grade.	Within 7 days of reaching final grade within that
	area.

Table 2: Temporary Stabilization

Area requiring temporary stabilization	Time frame to apply erosion controls
Any disturbed area within 50 feet of a watercourse or	Within 2 days of the most recent disturbance if that
wetland and not at final grade.	area will remain idle for more than 14 days.
Any disturbed area, including soil stockpiles that will be dormant for more than 14 days but less than one year, and not within 50 feet of a surface water of the state.	stabilized at least 7 days prior to transfer of
Disturbed areas that will be idle over winter.	ownership or operational responsibility. Prior to November 1 or the onset of winter weather,
	whichever occurs first.
Note: Where vegetative stabilization techniques may cause	e structural instability or are otherwise unobtainable,

Note: Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed. These techniques may include mulching or erosion matting.

- (b) <u>Permanent stabilization of conveyance channels.</u> Applicants shall under takespecial measures to stabilize channels and outfalls and prevent erosive flows. Measures may include seeding, dormant seeding, mulching, erosion control matting, sodding, riprap, natural channel design with bioengineering techniques, or rock check dams, all as defined in the most recent edition of <u>Rainwater and Land Development Manual</u> or the Field Office Technical Guide available at http://epa.ohio.gov/dsw/storm/technical_guidance.
- 4.3 RUNOFF CONTROL PRACTICES. The ESC Plan shall incorporate measures that control the volume and velocity of stormwater runoff within the site to prevent erosion. Peak flow rates and total stormwater volume shall be controlled to minimize erosion and outlets, downstream channel and streambank erosion. 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.
- 4.4 SEDIMENT CONTROL PRACTICES. The ESC Plan shall include a description of, and detailed drawings for, all 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 to minimize sediment discharges from the site. 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, storm drain inlet protection, and earth diversion dikes or channels which direct runoff to a sediment settling pond. 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 used in conjunction with a sediment settling pond.

Sediment control practices must meet the following requirements:

(a) <u>Timing</u>. 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 (7) days from the start of grubbing. They shall continue to function until the up-slope development area is re-stabilized. As construction progresses and the topography is altered, appropriate controls must be constructed, or existing controls altered to addressthe changing drainage patterns.

<u>Sediment settling ponds</u>. Sediment settling ponds shall be provided in the form of a sediment trap or sediment basin as defined in the latest edition of *Rainwater and Land Development*. The maximum allowable contributing drainage area to a sediment trap shall be limited to less than 5 acres. Contributing drainage areas of 5 acres or more shall be treated with a sediment basin. An equivalent best management practice may be utilized upon approval from the Lorain County Stormwater Management District.

The sediment-settling pond shall provide both a sediment storage zone and a dewatering zone. The volume of the dewatering zone shall be at least 1,800 cubic feet of storage per acre of total contributing drainage area. The dewatering structure of sediment basins shall be designed to have a minimum 48-hour drain time, and, unless infeasible, be designed to always withdraw runoff from the surface of the pond throughout the storm cycle. As such, a skimmer discharge device consistent with *Rainwater and Land Development* shall be provided to dewater sediment basins. Sediment traps shall also provide both a sediment storage zone and dewatering zone, but the outlet structure shall be constructed consistent with the specifications contained in the latest edition of *Rainwater and Land Development*.

When post-construction detention/water quality ponds are to be used as temporary sediment trapping BMPs, a skimmer discharge device consistent with *Rainwater and Land Development* shall be utilized during construction phase and until the site is deemed permanently stabilized by the Administrator.

The skimmer shall be designed per the equivalent requirements of sediment basins and the operator must ensure that the outlet structure of the pond provides an equivalent or better sediment storage zone and dewatering zone. As such, temporarily while the site is under construction, there shall be no discharge of runoff below the elevation required for the sediment storage zone and the discharge of stormwater within the dewatering zone shall only occur through the skimmer.

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 1000ft³ per disturbed acre within the watershed of the basin.

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

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 (5) feet. The configuration between the inlets and the outlet of the sediment-settling pond must provide at least two units of length for each one unit of width $\geq 2:1$ length-to-width ratio; however, a length to width ratio of $\geq 4:1$ is recommended. Sediment must be removed from the sediment-settling pond when the design capacity of the sediment storage zone has been completely filled by sediment accumulations. This limit is typically reached when sediment occupies one-half of the basin depth. When designing sediment settling ponds, the applicant 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.

(b) <u>Silt fence and diversions</u>. Sheet flow runoff from denuded areas shall be intercepted by silt fence or diversions to protect adjacent properties, water resources, and wetlands from sediment transported via sheet flow. Where intended to provide sediment control, silt fence shall be placed on a level contour and shall be capable of temporarily ponding runoff. The relationship between the maximum drainage area to silt fence for a particular slope range is shown in Table 3 below. Placing silt fence in a parallel series does not extend the size of the permissible drainage area. Stormwater diversion practices shall be used to keep runoff away from disturbed areas and steep slopes. Such devices, which include swales, dikes or berms, may receive storm water runoff from areas up to 10 acres.

Table 3: Maximum Drainage Area to Silt Fence

Maximum Drainage Area (acres)	Range of Slope for a
to 100 linear feet of silt fence	drainage area (%)
0.5	< 2%
0.25	≥_2% but < 20%
0.125	≥20% but < 50%

Silt fence or similar perimeter controls shall not be implemented where the slope is greater than 50%; instead water should be collected and conveyed to a sediment settling pond. Where slopes are greater than 50% adjacent to water resources, the use of erosion controls shall be emphasized.

- (c) <u>Inlet protection</u>. Erosion and sediment control practices, such as boxed inlet protection, shall be installed to minimize sediment-laden water entering active storm drain systems. All inlets receiving runoff from drainage areas of one or more acres will require a sediment settling pond. Straw or hay bales and filter socks around catch basins are not acceptable forms of inlet protection.
- (d) Off-site tracking of sediment and dust control. Best management practices must be implemented to ensure sediment is not tracked off-site and that dust is controlled. These best management practices must include, but are not limited to, the following:
 - Construction entrances shall be built and shall serve as the only permitted points of ingress and egress to the development area. These entrances shall be built of a stabilized pad of aggregate stone or recycled concrete or cement sized greater than 2" in diameter, placed over a geotextile fabric, and constructed in conformance with specifications in the most recent edition of the Rainwater and Land Development Manual. Construction entrances shall be installed prior to the commencement of any soil disturbing activity.
 - 2. Streets and catch basins adjacent to construction entrances shall be kept free of sediment tracked off site. Streets directly adjacent to construction entrances and receiving traffic from the development area, shall be cleaned daily to remove sedimenttracked off-site. If applicable, the catch basins on these streets nearest to the construction entrances shall also be cleaned weekly and protected from sediment-laden runoff, if feasible without posing a public safety hazard.

Based on site conditions the Administrator may require additional best management practices to control off site tracking and dust. These additional BMPs may include:

- 1. Silt fence or construction fence installed around the perimeter of the development area to ensure that all vehicle traffic adheres to designated construction entrances.
- 2. Designated wheel-washing areas. Wash water from these areas must be directed to a designated sediment trap, the sediment-settling pond, or to a sump pump for dewatering in conformance with Section 4.7 of this regulation.
- 3. Applicants shall take all necessary measures to comply with applicable regulations regarding fugitive dust emissions, including obtaining necessary permits for such emissions. The Administrator may require dust controls including the use of water trucks to wet disturbed areas, tarping stockpiles, temporary stabilization of disturbed areas, and regulation of the speed of vehicles on the site.
- (e) <u>Surface Waters of the State protection</u>. Construction vehicles shall avoid water resources. A 50-foot undisturbed natural buffer shall be provided around surface waters of the state unless infeasible. If it is infeasible to provide and maintain an undisturbed 50-foot natural buffer, the ESC plan shall comply with the stabilization requirements for areas within 50 feet of a surface water and minimize soil compaction and, unless infeasible, preserve topsoil. If the applicant is permitted to disturb areas within 50 feet of a water resource or wetland, the following conditions shall be addressed in the ESC Plan:
 - 1. All BMPs and stream crossings shall be designed as specified in the most recent edition of the Rainwater and Land Development Manual.
 - 2. Structural practices shall be designated and implemented on site to protect water resources or wetlands from the impacts of sedimentrunoff. A 25-foot minimum set back on all sides must be maintained as a permanent buffer and protected with construction fence until final site stabilization occurs except as otherwise provided in Subsection F.
 - 3. No structural sediment controls (e.g., the installation of silt fence or a sediment settling pond in-stream) shall be used in a water resource, wetland or floodplain.
 - 4. Where stream crossings for roads or utilities are necessary and permitted, the project shall be designed such that the number of stream crossings and the width of the disturbance are minimized.
 - Temporary stream crossings shall be constructed if water resources or wetlands will be crossed by construction vehicles during construction.
 - 6. Construction of bridges, culverts, or sediment control structures shall not place soil, debris, or other particulate material into or close to the water resources or wetlands in such a manner that it may slough, slip, or erode.
 - 7. Concentrated stormwater runoff from BMPs to natural wetlands shall be converted to diffuse flow through the use of level spreaders or other such appropriate measure 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 to ensure non-erosive velocities.
 - 8. Protected areas or critical areas, including wetlands and riparian areas shall be physically

marked in the field prior to earth disturbing activities.

- (f) <u>Modifying controls</u>. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the applicant shall replace or modify the control for site conditions.
- 4.5 NON-SEDIMENT POLLUTANT CONTROLS: No solid or liquid waste, including building materials, shall be discharged in storm water runoff. The applicant must implement site best management practices to prevent toxic materials, hazardous materials, or other debris from entering water resources, wetlands or the MS4. These practices shall include but are not limited to the following:
 - (a) <u>Waste Materials</u>: A covered dumpster shall be made available for the proper disposal of garbage, plaster, drywall, grout, gypsum, and other waste materials.
 - (b) <u>Concrete Truck Wash Out:</u> The washing of concrete material into a street, catch basin, other public facility, natural resource or water of the state is prohibited. A designated area for concrete washout shall be provided and clearly marked for usage.
 - (c) <u>Disposal of Other Wastewaters:</u> The discharge of washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials to a street, catch basin, other public facility, natural resource or waters of the state is prohibited. The discharge of soaps or solvents used in vehicle and equipment washing is also prohibited. If generated, these wastewaters must be collected and disposed of properly.
 - (d) <u>Fuel/Liquid Tank Storage</u>: All fuel/liquid tanks and drums shall be stored in a marked storage area. A dike shall be constructed around this storage area with a minimum capacity equal to 110% of the volume of all containers in the storage area.
 - (e) <u>Toxic or Hazardous Waste Disposal:</u> Any toxic or hazardous waste shall be disposed of properly.
 - (f) Contaminated Soils Disposal and Runoff: Discovery of previously unknown contaminated soils onsite shall be self-reported to Ohio EPA and local authorities. Contaminated soils from redevelopment sites shall be disposed of properly. Runoff from contaminated soils shall not be discharged from the site. Proper permits shall be obtained for development projects on solid waste landfill sites or redevelopment sites. Where construction activities are to occur on sites with contamination from previous activities, operators shall be aware that concentrations of materials that meet other criteria (i.e. not considered a Hazardous Waste, meeting Voluntary Action Program (VAP standards)) may still result in stormwater discharges in excess of Ohio Water Quality Standards. Such discharges are not authorized by this code. Control measures which may be utilized to meet this requirement include, but are not limited to:
 - (1) Use berms, trenches, pits or tanks to collect contaminated runoff and prevent discharge.
 - (2) Pump runoff from contaminated soils to the sanitary sewer with the prior approval of the sanitary sewer system operator, or pump into a container for transport to an appropriate treatment or disposal facility; and
 - (3) Cover areas of contamination with tarps, daily cover or other such methods to prevent storm water from coming into contact with contaminated materials.

The SWP3 must include methods to minimize the exposure of building materials,

building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, and sanitary waste to precipitation, stormwater runoff, and snow melt. The SWP3 shall include measures to prevent and respond to chemical spills and leaks. Applicants may also reference the existence of other plans (i.e., Spill Prevention Control and Countermeasure (SPCC) plans, spill control programs, Safety Response Plans, etc.) provided that such plan addresses this requirement and a copy of such plan is maintained on site.

- (g) Restroom facilities must be provided for site workers during all phases of construction.
- 4.6 COMPLIANCE WITH OTHER REQUIREMENTS. The ESC Plan shall be consistent with applicable State and/or local waste disposal, sanitary sewer, orseptic system regulations, including provisions prohibiting waste disposal byopen burning, and shall provide for the proper disposal of contaminated soils located within the development area.
- 4.7 TRENCH AND GROUND WATER CONTROL. There shall be no sediment-laden or turbid discharges to water resources or wetlands 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.
- 4.8 INTERNAL INSPECTIONS. At a minimum, procedures in an ESC Plan 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 one 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 theground is frozen). A waiver of inspection requirements is available until one month before following 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., morethan one month); land disturbance activities have been suspended; and the beginning and ending dates of the waiver period are documented in the ESC Plan.

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 thesite. The applicant shall assign "qualified inspection personnel" to conduct these inspections to ensure that the control practices are functional and to evaluate whether the ESC Plan is adequate and properly implemented in accordance with the schedule proposed herein 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:

- 1) the inspection date;
- 2) names, titles, and qualifications of personnel make the inspections;
- 3) weather information for the period since the last inspection (or since commencement of construction activities if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall or each storm event (in inches), and whether any discharges occurred;

- 4) weather information and a description of any discharges occurring at the time of the inspection;
- 5) location(s) of discharges of sediment or other pollutants from the site;
- 6) location(s) of BMP's that need to be maintained;
- 7) locations(s) of BMP's that failed to operate as designed or proved inadequate for a particular location;
- 8) location(s) where additional BMP's are needed that did not exist at the time of inspection; and
- 9) corrective action required including any changes to the ESC Plan necessary with implementation dates.

These inspections shall meet the following requirements:

- 1) 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.
- 2) Erosion and sediment control measures identified in the ESC Plan shall be observed to ensure that they are operating correctly. The applicant shall utilize an inspection form to be provided by the Administrator or an alternate form acceptable to the Administrator.
- 3) Discharge locations shall be inspected to determine whether erosion and sediment control measures are effective in preventing significant impacts to the receiving water resource or wetlands.
- 4) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.
- 5) The applicant shall maintain for three (3) years following final stabilization the results of these inspections, the names and qualifications of personnel making the inspections, the dates of inspections, major observations relating to the implementation of the ESC Plan, a certification as to whether the facility is in compliance with the ESC Plan, and information on any incidents of non-compliance determined by these inspections.
- 4.9 MAINTENANCE. The ESC Plan shall be designed to minimize maintenance requirements. All control practices shall be maintained and repaired as needed to ensure continued performance of their intended function until final stabilization. All sediment control practices must be maintained in a functional condition until all up-slope areas they control reach final stabilization. The applicant shall provide a description of maintenance procedures needed to ensure the continued performance of control practices and shall ensure a responsible party and adequate funding to conduct this maintenance.

When inspections reveal the need for repair, replacement, or installation of erosion and sediment control BMPs, the following procedures shall be followed:

(a) When practices require repair or maintenance. If an internal 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 (3) days of the inspection. Sediment settling ponds must be repaired or maintained within ten (10) days of the inspection.
- (b) When practices fail to provide their intended function. If an internal inspection reveals that a control practice fails to perform its intended function as detailed in the ESC plan and that another, more appropriate control practice is required, the ESC plan must be amended, and the new control practice must be installed within ten (10) days of the inspection.
- (c) When practices depicted on the ESC Plan are not installed. If an internal inspection reveals that a control practice has not been implemented in accordance with the schedule, the control practice must be implemented within ten (10) days from the date of the inspection. If the internal 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.
- 4.10 FINAL STABLIZATION. Final stabilization shall be determined by the Administrator. "Final stabilization" means that either:
 - 1) All soil disturbing activities at the site are completed 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 areas 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 geotextile) 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 homeowner completing final stabilization as specified above; or
 - b) The homeowner establishing temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner on the need for and benefits of, final stabilization; or
 - 3) For construction projects on land used for agricultural purposes (e.g., pipelines across crop or rangeland), final stabilization may be accomplished by returning the disturbed land to its preconstruction 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.

4.11 ABBREVIATED EROSION AND SEDIMENT CONTROL PLAN.

- (a) Any Abbreviated ESC Plan which does not follow the model provided by the Lorain Soil & Water Conservation District must be designed by a certifiedengineer, landscape architect, surveyor or erosion and sediment controlspecialist. In order to control sediment pollution of water resources andwetlands, the applicant shall submit an Abbreviated ESC Plan in accordance with the requirements of this regulation. Said plan shall contain the minimum requirements set forth in (c) hereafter and substantially conform with the model developed by the Administrator.
- (b) The Administrator may require re-submission of any plan which does not comply with this section.
- (c) The Abbreviated ESC Plan shall include a minimum of the following BMPs. The Administrator may require other BMPs as site conditions warrant.

- Construction Entrances: Construction entrances shall be built and shall serve as the
 only permitted points of ingress and egress to the development area. These entrances
 shall be built of a stabilized pad of aggregate stone or recycled concrete sized greater
 than 2" in diameter, placed over a geotextile fabric, and constructed in conformance
 with specifications in the most recent edition of the Rainwater and Land Development
 Manual.
- Concrete Truck Wash Out: The washing of concrete material into a street, catch basin, or other public facility or natural resource is prohibited. A designated area for concrete washout shall be indicated on the plan. Use for other waste and wastewater is prohibited.
- 3. <u>Street Sweeping</u>: Streets directly adjacent to construction entrances and receiving traffic from the development area shall be cleaned daily to remove sediment tracked off-site. If applicable, the catch basins on these streets nearest to the construction entrances shall be cleaned weekly.
- 4. <u>Stabilization:</u> The development area shall be stabilized as detailed in Table 4.

Table 4: Stabilization

Table 4. Stabilization			
Area	Time frame to apply		
Any disturbed area within	Within 2 days of the most recent disturbance if that		
50 feet of a watercourse or	area will remain idle for more than 14 days		
For all construction	Within 7 days of the most recent disturbance within		
activities, any disturbed	the area		
area, including soil			
Disturbed areas that will be	Prior to November 1.		
idle over winter			
Note: Where vegetative stabilization techniques may cause structural instability or			
are otherwise unobtainable, alternative stabilization techniques must be employed.			
These techniques may include mulching or erosion matting.			

- 5. <u>Silt Fence or Other Approved Perimeter Barriers</u>: Shall be placed along the down slope of any disturbed areas and along any water resources.
- 6. <u>Inlet Protection.</u> Erosion and sediment control practices, such as boxed inlet protection, shall be installed to minimize sediment-laden water entering active storm drain systems, including rear yard inlets. Straw, hay bales, and filter socks are not acceptable forms of inlet protection.
- 7. <u>Internal Inspection and Maintenance</u>. All controls on the development area shall be inspected at least once every seven-calendar days and within 24hours after any storm event greater than one-half inch of rain per 24-hour period. Maintenance shall occur as detailed below:
 - A. When practices require repair or maintenance. If the internal inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment-settling pond, itmust be repaired or maintained within three (3) days of the inspection. Sediment settling ponds must be repaired or maintained within ten (10) days of the inspection.

- B. When practices fail to provide their intended function. If the internal inspection reveals that a control practice fails to perform its intended function and that another, more appropriate control practice is required, the Abbreviated ESC Plan must be amended, and the new control practice must be installed within ten (10)days of the inspection.
- C. When practices depicted on the Abbreviated ESC Plan are not installed. If the internal inspection reveals that a control practice has not been implemented in accordance with the schedule, the control practice must be implemented within ten (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.
- 8. <u>Final Stabilization:</u> Final stabilization shall be determined by the Administrator in accordance with Section 4.10.

5. Application Procedures for ESC Plan

The ESC Plan for development projects shall be submitted to the Administrator after the approval of the preliminary plans and prior to the approval of improvement plans or drawings by the Lorain County Planning Commission in the case of subdivisions; concurrently with the submittal of construction drawings to the Lorain County Engineer or Township Zoning Inspector in the case of other construction projects; and thirty (30) working days prior to any soil-disturbing activity for general clearing projects.

The Administrator shall review the ESC plan and approve or return for revision with comments and recommendations for revision, within twenty-one (21) working days after receipt of said plan. A plan rejected because of deficiencies shall receive a narrative report stating specific problems and the procedure for filing a revised plan. At the time of receipt of a revised plan, another 21-day review period shall be commenced.

Approved plans shall remain valid for two years from the date of approval. A copy of the approved plan and its review report shall be forwarded by the Administrator to the Lorain Soil & Water Conservation District, County Planning Commission, and County Engineer.

A plan is considered complete when it contains two sets of the following:

- 5.1 Site construction plans intended for contractor's bid.
- **Contact information** for the owner of the land, the developer and project engineer; project engineer's certification; project name; and, project vicinity map.

5.3 Permit Verification

(a) Jurisdictional Wetlands: In areas where jurisdictional wetlands as defined by an on-site delineation verified by the United States Army Corps of Engineers will be affected, a copy of the wetland delineation report shall be submitted with the ESC Plan. If an Individual Permit is required, a copy of that Permit, showing project approval and any restrictions that apply to site activities, shall also be submitted. If an Individual Permit is not required for the proposed project, the site owner shall submit proof of compliancewith the Nationwide Permit Program as detailed under Section 3.8. If an Ohio EPASection 401 Water Quality Certification and/or an Ohio EPA Isolated Wetland Permit is required, the site owner shall submit proof of compliance with the Ohio EPA Water Quality Certification and/or Isolated

Wetland Permit program as detailed in Section 3.8.

- (b) An Ohio Environmental Protection Agency (OEPA) <u>National Pollutant Discharge</u> <u>Elimination System</u> permit with permit verification number or Notice of Intent shall be submitted with the ESC Plan.
- **Project Description:** A brief description of the project and types of soil-disturbing activities. Note specifically items not self-evident from the plan drawings. The project description shall list total project acreage, north arrow and adjacent property boundaries.
 - (1) <u>Site description:</u> The ESC Plan shall provide:
 - A. A description of the nature and type of the construction activity (e.g. 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 borrowareas).
 - C. Existing data describing the soil and, if available, the quality of any known pollutant discharge from the site such as that which may result from previous contamination caused by prior land uses.
 - D. A description of prior land uses at the site.
 - E. An implementation schedule which describes the sequence of major soil- disturbing operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion and sediment controls to be employed during each operation of the sequence.
 - F. The location and name of the immediate receiving stream or surface water(s) and the first subsequent receiving water(s).
 - G. The aerial (plan view) 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.
 - H. For subdivided developments where the ESC Plan 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.
 - I. Site map showing:
 - Limits of soil-disturbing activity of the site, including off site spoil and borrow areas.
 - ii. Soils types should be depicted for all areas of the site, including locations of unstable or highly erodible soils.
 - iii. Existing and proposed one-foot (1') contours. This must include 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 applicant intends to fill or relocate for which the applicant is seeking approval from the Army Corps of Engineers and/or Ohio EPA.
- v. Existing and planned locations of buildings, roads, parking facilities, utilities and easements.
- 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 ponds, including their sediment settling volume and contributing drainage area.
- viii. Areas designated for the storage or disposal of solid, sanitary and toxic wastes, including dumpster areas, areas designated for concrete truck washout, and vehicle fueling.
- ix. The location of designated stoned construction entrances where the vehicles will ingress and egress the construction site.
- x. The location of any in-stream activities including stream crossings.
- xi. Location and identification of all permanent post-construction BMP's.
- **Existing site conditions** shown with maximum scale of 1"=200' and 2' contour intervals; locations and names of soil type boundaries, vegetation, ditches, springs, streams, lakes, wetlands, woods, agricultural fields; location of downstream lakes and wetlands within 1000' of project; and, existing drainage patterns including direction of flow and watershed acreage.
- 5.6 Grading plan showing types of soils and boundaries; limits of disturbance; areas of excavation and fill; final contours; and, proposed drainage pattern including storm sewer inlets and permanent storm water basins. Basin detail shall be drawn to scale and show volumes and size of contributing drainage area.
- 5.7 Erosion and Sediment Control plan showing location, type and construction detail for perimeter controls; sediment settling devices; limits of disturbance; buffers for streams, wetlands, ponds and drainages; seeding mixtures and rates; and, type and quantity of mulching; application of water or fertilizer. Erosion and Sediment Control plans shall also provide a detailed construction sequence. Updates and/or corrections to schedules and/or sequencing shall be clearly marked or listed on approved plans, which shall be located at the site.
- **5.8 Storm Water Control Methods** adequate to prevent pollution of public waters by soil sediment from accelerated storm water runoff from development areas.
- 5.9 Contractor's Construction Sequence that estimates the time frame required for the following:
 - (a) Pre-Construction meeting.
 - (b) Initial clearing and grubbing to gain access and installation of perimeter controls within seven (7) days of clearing and grubbing.

- (c) Clearing and grubbing followed by excavation of sediment traps and basins and temporary soil stabilization for these sediment settling devices within seven (7) days of excavation.
- (d) Project engineer's initial inspection of erosion and sediment controls for "as-built" certification.
- (e) Maintenance inspection schedule and party responsible for inspection and repair of erosion and sediment control devices.
- (f) Pre-Winter Stabilization meeting if project is to be through the winter.
- (g) Final grading and permanent soil stabilization within seven (7) days of finishing final grade.
- (h) Removal of temporary sediment control devices. The construction maintenance guarantee shall not be released until all temporary devices are removed; properly disposed of and trapped sediment has been stabilized or removed.
- **5.10** Review and Inspection Fee shall be submitted with the Erosion and Sediment Control Plan.ESC Plans shall not be reviewed until the fee has been paid. The fee is based on project size and paid by the owner or developer directly to the Administrator. The review and inspection fee shall be established by the Board of Lorain County Commissioners by Resolution. Payment is made payable to Lorain County Commissioners.

6. Monitoring for Compliance: Enforcement

- 6.1 Following the initial inspection of erosion and sediment control devices by the project engineer, regular inspections will be performed by the Administrator for compliance with these Rules. If it appears that a violation of any of these Rules has occurred, the owner and developer will be notified of deficiencies or noncompliance in writing by certified mail, return receipt requested.
- 6.2 The rules shall be enforced in accordance with O.R.C. 309.79 and at a minimum shall permit: The Board of County Commissioners or any duly authorized representative of the Board may, upon identification to the owner or person in charge, enter any land upon obtaining agreement with the owner, tenant, or manager of the land in order to determine whether there is compliance with the rules adopted under this section. If the Board or its duly authorized representative is unable to obtain such an agreement, the Board or representative may apply for, and a judge of the Lorain County Common Pleas Court inspection warrant as necessary to achieve the purposes of this chapter.
 - 1. If the Board of County Commissioners or its duly authorized representative determines that a violation of the rules adopted under this section exists, the Board or representative may issue an immediate stop work order if the violator failed to obtain any federal, state or local permit necessary for sediment and erosion control, earth movement, clearing, or cut and fill activity. In addition, if the Board or representative determines such a rule violation exists, regardless of whether or not the violator has obtained the proper permits, the Board or representative may authorize the issuance of a notice of violation. If, after a period of not less than thirty (30) days has elapsed following the issuance of the notice of violation, the violation continues, the Board or its duly authorized representative shall issue a second notice of violation. Except as provided in division Subsection (3) of this section, if after a period of not less than fifteen

(15) days has elapsed following theissuance of the second notice of violation, the violation continues, the Board or its duly authorized representative may issue a stop work order after first obtaining the written approval of the prosecuting attorney of the county if, in the opinion of the prosecuting attorney, the violation is egregious.

Once a stop work order is issued, the Board or duly authorized representative shall request, in writing, the prosecuting attorney of the county to seek an injunction or other appropriate relief in the court of common pleas to abate excessive sedimentation and secure compliance with the rules adopted under this section. If the prosecuting attorney seeks an injunction or other appropriate relief, then, in granting relief, the Court of Common Pleas may order the construction of sediment control improvements or implementation of other control measure and may assess a civil fine of not less than one hundred or more than five hundred dollars. Each day of violation of a rule or stop work order issued under this section shall be considered a separate violation subject to a civil fine.

- 2. The person to who a stop work order is issued under this section may appeal the order to Lorain County Common Pleas Court issued, seeking any equitable or other appropriate relief from that order.
- 3. No stop work order shall be issued under this section against any public highway transportation, or drainage improvement or maintenance project undertaken by a government agency or political subdivision in accordance with a statement of its standard sediment control policies that is approved by the Board or the Chief of the Division of Soil and Water Conservation, Ohio Department of Natural Resources.

The Administrator shall have the authority to require immediate on-site adjustments to the ESC Plan in order to achieve compliance with these Rules.

A final inspection will be made to determine if the criteria of these Rules have been satisfied and a report will be presented to the Board of Lorain County Commissioners on the site's compliance status.

The Administrator will monitor soil-disturbing activities for non-farm residential, commercial, industrial, or other non-farm purposes on land of less than one contiguous acre to ensure compliance required bythese Rules.

The Administrator shall notify the U.S. Army Corps of Engineers when there is a violation on a development project covered by an Individual or Nationwide Permit. The Administrator shall notify the Ohio Environmental Protection Agency when there is a violation on a development project covered by a Section 401 Water Quality Certification and/or Isolated Wetland Permit.

The Administrator shall not review or approve erosion and sediment control plans, of any type, for applicants that have an existing development project or site(s) that is not in compliance with its approved erosion and sediment control plan, or a project site(s) that is otherwise not in compliance with the Lorain County Erosion and Sediment Control Rules.

The Administrator shall not review or approve Erosion and Sediment Control Plans for sub-lots or other areas within existing development projects that are not in compliance with its approved Erosion and Sediment Control Plan or otherwise not in compliance with the Lorain County Erosion and Sediment Control Rules. Such development projects include but not limited to, subdivisions or other common plans of development

The County of Lorain reserves the right to withhold relevant inspections and/or other approvals from its

departments and/or agencies for development projects or activities in support of development projects that are not in compliance with these Rules.

The County shall not issue building permits for projects regulated under the Lorain County Erosion and Sediment Control Rules that have not received approval for an Erosion and Sediment Control Plan forsaid project(s).

7. Variances to Rules

The Lorain County Board of Commissioners, or its designated agent, may grant a variance to these Rules if all of the following are found to exist:

- (a) There are exceptional or extraordinary circumstances or conditions applying to the land.
- (b) Literal enforcement of the Rules would cause undue hardship or practical difficulties. The standards shall have the same general meaning as applied in zoning variances.
- (c) The exceptional or extraordinary circumstances or conditions and the undue hardship or practical difficulties were not the result of any prior actions of the owner of the land.
- (d) The variance is necessary for the preservation and enjoyment of substantial property rights of the owner of the land.
- (e) The variance will not be a substantial detriment to adjacent land and will not materially impair the purposes of these Rules.

Adverse economic conditions shall not be a valid reason to grant a variance.

A request for a variance shall be in writing and shall state specifically the reasons for the request and shall include all data and information in support of the request. The request shall be reviewed and approved, disapproved or approved with modifications within thirty -(30) working days. Failure to act within said time will result in the variance request being approved.

8. Appeals

Any person receiving a denial of permit may appeal the determination to the Board of Commissioners or its designee. The Notice of Appeal must be mailed to the Clerk of the Board of Commissioners within 14 days of the Notice of Denial. A hearing shall take place within 30 days of receipt of the Notice. Written notice of the hearing will be sent to the appellant.

9. Penalties

No person shall violate any rule adopted or order issued under this section. Notwithstanding Section 6.2 of this section, if the Board of County Commissioners determines that a violation of any rule adopted, or administrative order issued under this section exists, the Board may request, in writing, the prosecuting attorney of the county to seek an injunction or other appropriate relief in the Court of Common pleas to abate excessive erosion or sedimentation and secure compliance with the rules or order. In granting relief, the Court of Common Pleas may order the construction of sediment control improvements or implementation of other control measures and may assess a civil fine or not less than one hundred ormore than five hundred dollars. Each day of violation or a rule adopted, or administrative order issued under this section shall be considered a separate violation subject to a civil fine.

10. Contractor Registration

Contractors planning to perform erosion and sediment control related construction activities must be registered with the Lorain County Storm Water Management District. To become registered the contractor must have on staff and in responsible charge of erosion and sediment control permit compliance a certified inspector. Lorain County Stormwater Management District will keep on file specific requirements and application forms which may be updated as needed for contractor registration.

In order to obtain an Erosion and Sediment Control permit the applicant must include the name and contact information of the registered contractor that will be performing the work.

Review and Inspection Fee Schedule

Please make all checks payable to: Lorain County Commissioners

Full Erosion & Sediment Control Plan Review-For Up To Three (3) Submittals

Subdivisions, Commercial, Industrial, Residential Subdivisions *	10 acres or less	\$ 120.00
Acondonnal Subultisions	More than 10 to and including 20 acres	\$ 180.00
	More than 20 to and including 50 acres	\$ 240.00
	More than 50 acres	\$300.00
Non-Residential Individual Development Site	One acre to and including 5 acres	\$ 120.00
	More than 5 to and including 10 acres	\$ 180.00
	For each additional 5 acres, above fees apply plus	+\$60.00
Multi Family Development Site	10 acres or less	\$ 120.00
(Apartments, Condominiums, Townhouses)	More than 10 to and including 20 acres	\$ 180.00
	More than 20 to and including 50 acres	\$ 240.00
	More than 50 acres	\$ 300.00
A Non-Residential lot within a Common Plan of Development	Any lot one acre or greater within a Common Plan of Development	\$120.00
Multi-Family Development within a Common Plan of Development	Any lot one acre or greater within a Common Plan of Development	\$120.00
General Non-Residential Grading and Clearing/ Grading for Recreational	10 acres or less	\$ 30.00
Cicaring Grading for Recreational	More than 10 up to and including 20 acres	\$60.00
	More than 20 up to and including 50 acres	\$90.00
	For all acreage over 50 acres	\$120.00

^{*} Fees will be assessed with each phase of development.

Abbreviated ESC Plan - see page 35

Review and Inspection Fees

Please make all checks payable to: Lorain County Commissioners

Erosion and Sediment Control Permit- Valid for 2 years. Includes up to 24 monthly Inspections

ears. Includes up to 24 monthly inspection	5	
Subdivisions, Commercial, Industrial, Residential Subdivisions *	10 acres or less	\$ 2,160.00
Residential Subdivisions *	More than 10 to and including 20 acres	\$ 2,880.00
	More than 20 to and including 50 acres	\$ 4,320.00
	More than 50 acres	\$5,760.00
Non-Residential Individual Development Site	one acre to and including 5 acres	\$ 1,440.00
	More than 5 up to and including 10 acres	\$ 2,160.00
	For each additional 5 acres, above fees apply plus	+\$1,000.00
Multi Family Development Site (Apartments, Condominiums, Townhouses)	10 acres or less	\$ 500.00
	More than 10 to and including 20 acres	\$ 800.00
	More than 20 to and including 50 acres	\$ 1,100.00
V	More than 50 acres	\$ 1,400.00
A Non-Residential lot within a Common Plan of Development	Any lot one acre or greater within a Common Plan of Development	\$360.00
Multi-Family Development within a Common Plan of Development	Any lot one acre or greater within a Common Plan of Development	\$360.00
General Non-Residential Grading and	10 acres or less	\$ 30.00
Clearing/ Grading for Recreational	More than 10 up to and including 20 acres	\$60.00
	More than 20 up to and including 50 acres	\$90.00
	For all acreage over 50 acres	\$120.00
	For all acreage over 50 acres	\$120.00

^{*} Fees will be assessed with each phase of development.

Erosion and Sediment Control Permit- Valid for 2 years. Includes up to 24 monthly Inspections

Individual Residential Projects	Any project one acre or greater	\$360.00

Review and Inspection Fee Schedule

Please make all checks payable to: Lorain County Commissioners

Abbreviated ESC Plan		
Single Lot ESC Evaluation (Lot	Lots 10 acres or less	\$20.00
Splits)	Lots more than 10 acres	\$30.00
All New, Single-Family Residential Projects	Any project one acre or greater or part of a common Plan of development	\$ 50.00
Any Residential Clearing	Any project one acre or greater	\$ 30.00
Variance Fee		\$ 150.00
Stop Work Order Inspections – Inspection to determine contractor is	10 acres or less	\$ 100.00
in compliance following a stop work order	More than 10 Acres	\$ 200.00
Stop Work Order Re-inspections	Initial Stop Work Order fee above plus \$50 for each additional week of non- compliance	\$50.00
Non-Compliance re-inspections (NOV 2)		\$100.00