

Notes: 1) "storm water" has been changed to "stormwater" to match the 2023 Construction General Permit (CGP). 2) Changes were made to Article V to synchronize the requirements with Article III - Earthwork Regulations, where applicable, for consistency between the two regulations. 3) New requirements based on the 2021 MS4 permit and the 2023 CGP are marked within this draft regulation.

**RULES AND REGULATIONS
OF THE
HAMILTON COUNTY SOIL AND WATER CONSERVATION DISTRICT
AND THE HAMILTON COUNTY STORM WATER DISTRICT
ISSUED BY THE
BOARD OF COUNTY COMMISSIONERS
HAMILTON COUNTY, OHIO**

DRAFT ARTICLE III

EARTHWORK REGULATIONS

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301 PURPOSE, SCOPE, AND APPLICABILITY

- A. The purpose of these Earthwork Regulations is to promote and maintain the health, safety, and welfare of the citizens of Hamilton County by establishing standards for stormwater controls that minimize the degradation of the water resources of Hamilton County by:
1. Reducing the discharge of pollutants from the municipal separate storm sewer systems (MS4s) owned or operated by Hamilton County and member Local Jurisdictions of the Hamilton County Storm Water District (“HCSWD”) to the extent practicable;
 2. Protecting the physical, chemical, and biological characteristics of the water resources of Hamilton County; and
 3. Satisfying the appropriate water quality requirements of the Clean Water Act, Ohio Law, and the Ohio Revised Code (ORC), including Section 6111.
- B. These Earthwork Regulations require implementation of the following measures during earth disturbing activities within the HCSWD:
1. **Erosion and Sediment Pollution Controls** of increased Erosion and Sediment caused by Earthwork.
 2. **Geotechnical** performance standards to maintain slope stability.
 3. **Non-Sediment Pollution Controls** for other Construction activities on the Site.
 4. **Restabilization of disturbed areas** once Earthwork is complete.
- C. These Earthwork Regulations are adopted under authority of Ohio Law and the Ohio Revised Code, including Chapters [307](#) and [6117](#), and implement the requirements of the latest discharge permit issued by Ohio EPA to Hamilton County and the HCSWD member Local Jurisdictions under the Phase II Program.
- D. The Board of County Commissioners of Hamilton County, Ohio (“Board”) shall designate the **Enforcing Official** within the unincorporated areas and townships of Hamilton County for the enforcement of these Earthwork Regulations, except to the extent that a home rule township has the authority to designate another entity as its **Enforcing Official** and exercises such authority. The **Enforcing Official** for each of the participating member municipalities and authorized home rule townships of the HCSWD shall be the chief administrative officer of the Local Jurisdiction unless the legislative body of the Local Jurisdiction legally authorizes another qualified party to fulfill all required responsibilities of the **Enforcing Official** under these Earthwork Regulations.
- E. Where authorized by law, the responsibilities of a participating Local Jurisdiction under these Earthwork Regulations may be delegated by the Local Jurisdiction to persons or entities acting in the beneficial interest of, or in the employment of, the participating Local Jurisdiction, including but not limited to, the HCSWD or the HCSWD’s designated representative, provided there is a lawfully enacted Resolution or Ordinance authorizing delegation of said responsibilities.
- F. These Earthwork Regulations apply as follows:

1. The Geotechnical Requirements of these Earthwork Regulations apply to all construction projects within the unincorporated townships of Hamilton County and within the jurisdiction of the municipal corporations which are participating members of the HCSWD and have adopted the Geotechnical Requirements of these Earthwork Regulations.
 2. In unincorporated portions of Hamilton County, the Erosion and Sediment Pollution Control Requirements and Non-Sediment Pollution Control Requirements of these Earthwork Regulations apply to all Earthwork. Earthwork disturbing less than one (1) acre of land and not part of a larger common plan of development that will disturb more than one (1) acre of land are not subject to the requirements of [Section 308 Improvement Submittal Procedures](#) and [Section 309 Requirements for Improvement Plans](#), but are required to comply with all other requirements of these Earthwork Regulations, and are subject to enforcement actions. Individual lots that are part of a larger common plan of development shall comply with Section 309(H) Continuation of Controls for Individual Lot Development.
 3. In incorporated member municipal corporations and authorized home rule townships within the HCSWD which have adopted these Earthwork Regulations, the Erosion and Sediment Pollution Control Requirements and Non-Sediment Pollution Control Requirements of these Earthwork Regulations apply to Earthwork disturbing one (1) acre of land or larger, or to Earthwork disturbing less than one (1) acre but part of a larger common plan of development that will disturb more than one (1) acre of land. The legislative body of incorporated member municipalities and authorized home rule townships may establish a smaller applicable area and specific requirements for these smaller areas.
- G. It is the standard sediment control policy of the Local Jurisdiction which has adopted these Earthwork Regulations that the Erosion and Sediment Pollution Control Performance Standards, and Non-Sediment Pollution Control Performance Standards of these Earthwork Regulations shall apply to all Earthwork Activities performed by the Local Jurisdiction.

302 DEFINITIONS

The words and phrases defined in [Article I – Definitions](#) of the Rules and Regulations of the HCSWD shall have the same meaning herein unless otherwise provided.

303 COMPLIANCE WITH OTHER LAWS AND DISCLAIMER OF LIABILITY

- A. Compliance with these Earthwork Regulations does not relieve the Owner from the duty to comply with any other applicable federal, state or local laws, regulations or ordinances or from responsibility otherwise imposed by law for damage to any person or property.
- B. Neither the submission, approval, or disapproval of Improvement Plans under these Earthwork Regulations; nor the Issuance or denial of a Permit; nor the compliance or lack of compliance with these Earthwork Regulations; nor any action or lack of action by the **Enforcing Official** shall relieve the Owner from responsibility for injury or damage to any person or property otherwise imposed by law, nor create or impose any liability upon Hamilton County, the Hamilton County Soil and Water Conservation District (HCSWCD),

or any participating Local Jurisdiction in the HCSWD or their respective officers, agents, or employees for injury or damage to any person or property.

- C. Stormwater control practices authorized under these Earthwork Regulations and maintained according to a Construction-Phase Inspection and Maintenance Plan approved under these Earthwork Regulations shall not be considered to be a nuisance under these Earthwork Regulations. The **Enforcing Official** will address conditions that may contribute to the creation of a nuisance according to pertinent local regulations when reviewing Improvement Plans and conducting facility inspections.
- D. Failure of the **Enforcing Official** to observe or recognize hazardous or unsightly conditions or to recommend appropriate corrective measures shall not relieve the Owner from the responsibility for any resulting condition or damage or injury or result in any liability on the part of the Local Jurisdiction, the **Enforcing Official**, Hamilton County, or their officers, employees, or agents for any resulting condition or damage or injury.
- E. These Earthwork Regulations do not create a duty upon the **Enforcing Official**, the Board, the HCSWD, the HCSWCD, or participating member Local Jurisdictions of the HCSWD to persons impacted by soil sediment pollution, erosion, or landslides.

304 CONFLICTS AND SEVERABILITY

- A. In the event that any of these Earthwork Regulations may conflict with other applicable provisions of law or ordinance, the more restrictive applicable provisions, as determined by the **Enforcing Official**, shall prevail where permitted by law.
- B. Should any article, section, subsection, clause, or provision of these Earthwork Regulations be declared by a court of applicable jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the remainder of these Earthwork Regulations, in whole or in part.

305 EARTHWORKS PERMIT, IMPROVEMENT PLANS, AND STORMWATER POLLUTION PREVENTION PLAN (SWP3) REQUIRED

- A. Earthwork shall be managed according to these Earthwork Regulations.
- B. An Owner performing Earthwork on a Site subject to these Earthwork Regulations shall submit Improvement Plans to the **Enforcing Official** addressing the requirements of these Earthworks Regulations, receive approval of the Improvement Plans from the **Enforcing Official** prior to submittal of a Notice of Intent (NOI) to Ohio EPA, provide an Ohio EPA-approved NOI to the **Enforcing Official** when applying for an Earthwork and/or Building Permit, and obtain an Earthwork and/or Building Permit prior to commencing any Earthwork, unless exempted under these Earthwork Regulations. For a multi-phase construction project, a separate Improvement Plan shall be submitted to the **Enforcing Official** for each subsequent phase.
- C. The Improvement Plans will contain all the information required by [Section 309](#) of these Earthwork Regulations and demonstrate how the Performance Standards stated in [Section 310](#) of these Earthwork Regulations will be satisfied.

- D. A Site Stormwater Pollution Prevention Plan (SWP3) – the stand-alone document containing all information required by the [Ohio EPA CGP Part III.G](#) and [Sections 309](#) and [310](#) of these Article III Earthworks Regulations.
- E. If there is a conflict between the requirements for the Improvement Plans in these Article III Earthwork Regulations and the requirements for a SWP3 in [Ohio EPA CGP Part III.G](#), the most stringent requirement shall apply.
- F. The Improvement Plans shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with Earthwork and associated Construction activities. In addition, the Improvement Plans shall describe the implementation of stormwater management controls that reduce the pollutants and impact of stormwater discharges during construction and pollutants associated with the post-construction land use.
- G. The Improvement Plan shall describe how stormwater will be managed and 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 stormwater management practices addressing all phases of construction. The Improvement Plans shall not be implemented until all required approvals are obtained. ~~Those permit required elements that are included in the Improvement Plan may be incorporated by reference into the SWP3.~~
- H. The Improvement Plans shall also comply with all drainage, flood control, floodplain management, and related Stormwater quantity control requirements of the Local Jurisdiction.
- I. The Improvement Plans may be prepared, signed, and kept electronically rather than in paper form, if the records are: (a) in a format that can be read in a similar manner as a paper record; (b) legally dependable with no less evidentiary value than their paper equivalent; and (c) immediately accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.
- J. The Improvement Plans shall be made available immediately upon request of the **Enforcing Official** or their authorized representative during working hours. A copy of the NOI from Ohio EPA, the letter granting permit coverage under the [Ohio EPA General Permit Authorization for Stormwater Discharges Associated with Construction Activity under the NPDES \(CGP\)](#), and the Earthworks permit also shall be made available at the site. These documents can be maintained electronically under the condition that they can be immediately produced on-site upon request.
- K. The **Enforcing Official** shall have the authority to administer these Earthwork Regulations and issue such notices and orders as may be necessary. The **Enforcing Official** may consult with the HCSWD, the Hamilton County Engineer (HCEO), Hamilton County Planning and Development (HCPD), private engineers, or other technical experts in administering these Earthwork Regulations.
- L. A Building Permit approved by the authorized Local Jurisdiction shall serve as authorization for Earthwork to proceed for projects that disturb less than one (1) acre of a site in unincorporated areas and do not present geotechnical stability issues as set forth in these Earthwork Regulations, as determined by the **Enforcing Official**.

306 EXEMPTIONS

- A. The following Earthwork is exempt from these Earthwork Regulations:
1. Subject to the provisions of [Section 301\(F\)](#) of these Earthwork Regulations, a public highway, transportation or drainage improvement or maintenance project undertaken by a government agency or political subdivision in accordance with a statement of standard sediment control policies that is approved by the Chief of the Ohio Department of Agriculture - Division of Soil and Water Conservation.
 2. Surface mining operations regulated by [ORC, Section 1514.01](#).
 3. Strip mining operations regulated under [ORC, Section 1513.01](#).
 4. Grading of land for purposes of farm activity as regulated under ORC.
 5. Temporary excavations for underground utility lines, wells, tunnels, tanks, and vaults or sign foundations, provided all such excavations shall be promptly and properly backfilled and restored to the existing terrain and stabilized immediately.
 6. Exploratory excavations under the direction of a Professional Engineer, provided all such excavations shall be promptly and properly backfilled and restored to the existing terrain and stabilized immediately.
 7. Normal cemetery operations involving opening and closing graves as permitted in ORC, Sections [517](#) & [759](#).
 8. Operations involving refuse disposal, mining, quarrying, processing and stockpiling of soils or rock materials where controlled by other regulations, provided such operations do not cause instability of any adjacent property or the discharge of sediment.
- B. Application and enforcement of the exemptions under Section 306 Exemptions of these Earthwork Regulations shall be conducted by the ***Enforcing Official***.

307 COORDINATION WITH LOCAL, STATE, AND FEDERAL REGULATIONS AND PERMITS

- A. Approvals issued in accordance with these Earthwork Regulations do not relieve the Owner of responsibility for obtaining all other necessary permits and/or approvals from federal, state, and/or local governments and compliance with other legal requirements. If requirements vary, the most restrictive shall prevail. Other permits and requirements may include, but are not limited to, those listed below.
1. The latest applicable CGP authorizing stormwater discharges associated with construction activity;
 2. U.S. Army Corps of Engineers permits under [Section 404 of the Clean Water Act](#);
 3. [Ohio EPA Section 401 Water Quality Certification General Isolated Wetland Permit](#) and/or non-jurisdictional wetland/stream program approvals;

4. Ohio Dam Safety Law Section [1501.21 OAC](#);
 5. Applicable Flood Plain Regulations;
 6. Applicable ground water protection laws; and
 7. [Hamilton County Public Health \(HCPH\) Clean Hard Fill Regulations](#)
- B. Earthworks Permits and Building Permits shall be processed in the following manner:
1. No Building Permit shall be issued within the work area until the Owner has complied with all provisions of these Earthwork Regulations. All Erosion and Sediment Pollution Controls must be in compliance with the Erosion and Sediment Pollution Control Performance Standards of these Earthwork Regulations and the approved plans, including but not limited to, proper installation and maintenance of sediment settling ponds and traps, sediment barriers and inlet protection, and that all idle areas have temporary and permanent stabilization as required under these Earthwork Regulations.
 2. In unincorporated areas, Building Permits will be issued only after the **Enforcing Official** sends notice to the Hamilton County Building Official of compliance with the Hamilton County Building Code. The **Enforcing Official** may request the Hamilton County Building Official to withhold the issuance of additional Building Permits, issue a Stop Work Order on active Building Permits, withhold inspections, or withhold the issuance of a Certificate of Occupancy on active Building Permits for non-compliance with the Earthwork Regulations, in addition to any other remedies that may be available to the **Enforcing Official** under these Earthwork Regulations and other law.
 3. Incorporated member municipalities within the HCSWD shall not issue Building Permits until the **Enforcing Official** provides notice to the incorporated member municipality of compliance with the Earthwork Permit. The **Enforcing Official** may request the appropriate building official to withhold the issuance of additional Building Permits, issue a Stop Work Order on active Building Permits, withhold inspections, or withhold the issuance of a Certificate of Occupancy on active Building Permits for non-compliance with these Earthwork Regulations, in addition to any other remedies that may be available to the **Enforcing Official** under these Earthwork Regulations and other law.
- C. Earthwork Permits will not be issued by the **Enforcing Official** having jurisdiction absent a showing by the Owner that compliance with all applicable regulations and permit requirements has been demonstrated.
- D. The issuance of an Earthwork Permit and activities conducted by the Owner pursuant to the Earthwork Permit process shall be coordinated with local utility providers to allow any necessary adjustment, relocation, addition or other modification to an existing utility, including overburden loading.

308 IMPROVEMENT PLAN SUBMITTAL PROCEDURES

- A. An Owner wishing to undertake Earthwork covered by these Earthwork Regulations shall submit an Earthwork Permit Application and Improvement Plans to the **Enforcing**

Official prior to undertaking any such Earthwork. No Earthwork shall be undertaken until such Permit Application and Improvement Plans have been reviewed and approved by the **Enforcing Official**, a Building Permit is issued by the Local Jurisdiction, and, where applicable, a Notice of Intent (NOI) approved by the Ohio EPA has been received.

- B. **Pre-Submittal Meeting:** A Pre-Submittal Meeting with the **Enforcing Official** may be requested to discuss the proposed construction for the Site, review requirements, identify unique aspects of the project that must be addressed during the review process, and establish a preliminary review and approval schedule.
- C. **Initial Plans:** The Owner of a Site requiring a Record Plat or equivalent submittal shall submit Improvement Plans that include the proposed Earthwork in concept (Initial Plan), and the applicable fees to the **Enforcing Official**. Initial Plans shall show approximate preliminary locations of the proposed parcel boundaries, setbacks, stream protection corridor delineations (if applicable), dedicated open space and preserved vegetation areas, conservation areas, public roads, water resources receiving stormwater discharge, flood plains, existing topography, on-site and off-site areas vulnerable to erosion and sediment damage, existing and proposed drainage facilities, proposed construction access points, limits of earth disturbing activity, proposed Erosion and Sediment Pollution Controls, new and existing Post-Construction Controls, and easements to allow the **Enforcing Official** to determine if the site is laid out in a manner that meets the intent of these Earthwork Regulations and if the proposed Erosion and Sediment Pollution Controls and Post-Construction Controls are capable of controlling runoff from the site in compliance with these Earthwork Regulations and the Post-Construction Regulations ([Article V of the Rules and Regulations of the HCSWD](#)). The **Enforcing Official** shall review the Initial Plans and provide comments and recommendations for revisions if any.

Initial Plans are required:

1. For all subdivisions.
2. For all non-residential development and Fill Sites that will involve disturbing one (1) acre of land or more.

For other construction projects, Initial Plans are encouraged to be submitted for review by the **Enforcing Official** in advance of submitting an application for an Earthwork Permit in order to avoid subsequent delays caused by the submittal of Improvement Plans which do not comply with these Earthwork Regulations.

- D. **Improvement Plans:** The Improvement Plans submission shall consist of construction drawings and specifications together with the applicable permit forms and such fees as may be required. The Improvement Plans shall meet the requirements of these Earthwork Regulations and must be approved by the **Enforcing Official** prior to approval of the Earthwork Permit and/or before issuance of a building permit by the Building Department. Any revised Improvement Plans shall be submitted to the **Enforcing Official** for approval prior to implementing the proposed modification.
- E. **Consent to Enter Private Property:** Submittal of an Earthwork Permit application, Initial Plans, and/or Improvement Plans shall be deemed to provide consent to the **Enforcing Official** to enter property subject to these Earthwork Regulations for the purpose of

gathering information necessary for review of and comment to such Permit application, Initial Plans and/or Improvement Plans.

- F. Review and Comment: The **Enforcing Official** shall review and comment on any Concept and/or Improvement Plans submitted within a reasonable period of time after proper submission. The final Improvement Plans submitted may be either approved or disapproved. If the Improvement Plans are disapproved, they shall be returned with comments stating the reasons for disapproval and requirements for revisions, if any.
- G. Approval Required:
1. The **Enforcing Official** shall issue final approval of Improvement Plans for Earthwork covered by these Earthwork Regulations to allow the Owner to submit a complete and accurate Notice of Intent (NOI) to the director of the Ohio EPA at least 21 days prior to the commencement of construction activities.
 2. The **Enforcing Official** will issue an Earthwork Permit where required upon receiving notification that authorization to begin construction has been received from the director of Ohio EPA through approval of the NOI.
 3. For sites requiring a building permit, Earthwork shall not begin and building permits shall not be issued without final approval of Improvement Plans for Earthwork covered by these Earthwork Regulations and an authorization to begin construction has been received from the director of Ohio EPA, through an approved NOI.
 4. For sites that do not need a building permit, Earthwork shall not begin without final approval of Improvement Plans for Earthwork covered by these Earthwork Regulations and an authorization to begin construction has been received from the director of Ohio EPA, through an approved NOI.
 5. Individual Lot Construction Will Not Proceed: Improvement Plans for individual lots in a subdivision will not be approved and building permits will not be issued unless the larger common plan of development or sale containing the lot is in compliance with these Earthwork Regulations.
- H. Approval Valid for Two (2) Years / Modification of Plans: If Earthwork has not commenced within two (2) years of approval, Improvement Plans must be re-submitted for review and approval in accordance with rules in effect at the time of re-submittal. Modifications to the project require submittal and approval of the revised Improvement Plans before work may proceed.
- I. Stopped or Abandoned Earthwork: Earthwork that is in compliance with these Regulations and is stopped or abandoned for a period of two (2) consecutive years from the date of discontinuation of Earthwork shall cause the approval of the Improvement Plans to expire and become invalid. For site work to continue either the previously approved plans must be submitted if the scope of the Earthwork has not changed, **or** an updated set of plans must be submitted for approval by the **Enforcing Official**.
- J. Preconstruction Meeting Required: On all Earthwork activities one (1) acre or larger and all fill sites, an onsite Erosion and Sediment Pollution Control pre-construction meeting

shall be held with the **Enforcing Official**, the Owner, and the contractors before any Earthwork begins.

- K. Earthwork Permit Issuance Procedure: An Earthwork Permit or Approval will not be issued until all Improvement Plans for the project are approved by the **Enforcing Official** and all pertinent Local, State and Federal permits for the project are obtained, including the following:
1. An approved NOI from the Ohio EPA.
 2. Approval obtained under local planning, zoning, subdivision, storm drainage, special flood hazard approval and/or building requirements. For subdivisions of more than six lots (major subdivisions) in unincorporated areas, an Earthwork Permit or Approval will not be issued until Improvement Plans approval has been obtained from the Hamilton County Regional Planning Commission. For all other types of developments in unincorporated areas, zoning approval must be obtained from the appropriate zoning jurisdiction.
 3. All Earthwork greater than one acre shall comply with all planning, zoning, and/or development requirements of the Local Jurisdiction before an Earthwork Permit or approval will be granted. A copy of these approvals shall be provided to the **Enforcing Official**.
 4. In unincorporated Hamilton County, all sites receiving fill other than soil shall submit a Notice of Intent with the HCPH for unincorporated Hamilton County. A copy of this approval from the HCPH shall be provided to the **Enforcing Official**.
 5. Earthwork Permits for building applications and residential subdivision and commercial developments are valid for: the duration of the project unless Earthwork is stopped or abandoned as defined under [Paragraph 308\(J\)](#) of these Earthwork Regulations.
 6. Earthwork Permits for Fill Project Sites are valid for one (1) year. A renewal shall be obtained prior to expiration of the Earthwork Permit.
- L. 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 of the CGP is submitted. For developments which require the use of centralized sediment and erosion controls (i.e., controls that address stormwater runoff from one or more lots) for which the current permittee intends to terminate responsibilities under this permit for a lot after sale of the lot to a new owner and such termination will either prevent or impair the implementation of the controls and therefore jeopardize compliance with the terms and conditions of this permit, the permittee will be required to maintain responsibility for the implementation of those controls. For developments where this is not the case, it is the permittee's responsibility to temporarily stabilize all lots sold to individual lot owners unless an exception is approved in accordance with Part III.G.4 of the CGP. In cases where permit responsibilities for individual lot(s) will be terminated after sale of the lot, the permittee shall inform the individual lot owner of the obligations under this permit and ensure that the Individual Lot NOI application is submitted to Ohio EPA.

- M. If ownership of any portion of an approved project changes, the new Owner shall submit to the **Enforcing Official** in writing the new Owner's name, address, telephone number; and the name, address and telephone number of the new Owner's Professional Engineer if different from the original Professional Engineer. The new Owner shall contact the **Enforcing Official** to schedule an onsite meeting prior to continuing with the project.
- N. The Owner shall notify the **Enforcing Official**:
1. Of commencement of Earthwork covered by these Earthwork Regulations or the Earthwork Permit at least 48 hours in advance;
 2. Of locations of any borrow or disposal sites that will be utilized prior to commencement of Earthwork;
 3. When Earthwork is completed or temporarily or permanently suspended;
 4. Of any communication with and/or regulatory action of the Ohio EPA; and
 5. Of any proposed deviations from the originally approved plans.

Failure to notify the **Enforcing Official** of any of these milestones may be subject to enforcement action.

- O. Fill Sites: An Earthwork in unincorporated Hamilton County accepting fill that is not covered under Improvement Plans or a Building Permit is a Fill Site. An Earthwork Permit for a Fill Site shall be valid for one (1) year from the date of approval. If Earthwork at the Fill Site is expected to continue beyond the expiration date, a renewal permit shall be obtained prior to expiration. A renewal permit requires a status report from the Owner, and a signed statement from the Owner that the project will precede in accordance with the previously approved plans and Earthwork Permit. A yearly Earthwork Permit renewal is mandatory for all Fill Sites. A modification of the Earthwork Permit for a Fill Site requires the submittal and approval of a revised grading plan defining recommended Erosion and Sediment Pollution Controls before the work as modified may proceed. The project shall be in compliance with all provisions of these Earthwork Regulations before a renewal will be granted.
- P. The **Enforcing Official** may accept submittals for non-structural, fill sites from the Owner in instances where the Enforcing Official determines that the intent and purpose of these Earthwork Regulations can be met and the interests of the public reasonably protected. These submittals shall be handled on a case-by-case basis. Acceptance and approval shall be at the discretion of the Enforcing Official.

309 EARTHWORK REQUIREMENTS FOR IMPROVEMENT PLANS

- A. Earthwork Requirements: The Improvement Plans submitted with the application for Earthwork Permit shall describe in detail how the Erosion and Sediment Pollution Control Requirements, Geotechnical Requirements, and Non-Sediment Pollution Control Requirements of these Earthwork Regulations shall be fulfilled. The Improvement Plans will also describe in detail how the quantity and quality of stormwater will be managed before, during, and after construction is complete for discharge from the site and/or into a water resource, as defined in Article V of these Regulations and the stormwater

quantity control regulations of the Local Jurisdiction. The portion of the Improvement Plans addressing Article III shall:

1. Describe in detail the type, location, and dimensions of structural and non-structural Erosion and Sediment Pollution Controls, Geotechnical Controls, and Non-Sediment Pollution Controls - including applicable pre-treatment, outlet and inlet protection - incorporated into the site design to address the requirements of these Earthwork Regulations and provide the rationale for their selection:
 - a. The rationale must identify how these Erosion and Sediment Pollution Controls Geotechnical Requirements, and Non-Sediment Pollution Control Requirements ~~and Post-Construction Controls~~ will address flooding within the site as well as flooding that may be caused by the development upstream and downstream of the site, as required under the stormwater quantity control regulations of the Local Jurisdiction.
 - b. The rationale must demonstrate that these Erosion and Sediment Pollution Controls, Geotechnical Requirements, and Non-Sediment Pollution Control Requirements ~~Non-Sediment Pollution Controls, and Post-Construction Controls~~ minimize anticipated impacts on the channel and floodplain morphology, hydrology, and water quality of the water resource and its floodplain.
- B. Preparation by Professional Engineer: The Improvement Plans shall be prepared and sealed by a Professional Engineer and include supporting calculations, plan sheets, and design details. To the extent necessary, as determined by the **Enforcing Official**, a site survey shall be performed by a Professional Surveyor to establish boundary lines, measurements, or land surfaces.
- C. Erosion and Sediment Pollution Controls Manual: The most recent edition of the [Ohio Environmental Protection Agency \(Ohio EPA\) Rainwater & Land Development Manual \(RLDM\)](#) shall be the basis for standards and specifications for erosion prevention and sediment control. The HCSWD and/or the **Enforcing Official** may prepare and maintain design criteria manuals or procedures that provide guidance for designing the site Earthwork, including a description of acceptable Erosion and Sediment Pollution Controls that meet the criteria of these Earthwork Regulations. The design manual or procedures may be updated from time to time based on improvements in engineering, science, monitoring, and local maintenance experience.
- D. Total Maximum Daily Load (TMDL) allocations per OHQ000004. Where a TMDL is applicable for any waterbody into which a site discharges and requires specific BMPs or inspection frequencies for construction sites, Improvement Plans and SWP3 will comply with these requirements.
- E. Contents of Improvement Plans: The Improvement Plans shall include the following:
 1. Site Location Map: USGS 1:24,000 or equivalent map showing the Site Name, the boundary of the project site, the name and location of major existing roadways, and the name and location of the immediate receiving water resource(s) within 500 feet of the boundary of the project site and the first subsequent named water resource(s).

2. Site Description and Information: The following information shall be included in the general notes, project specifications and/or an attached narrative report:
 - a. The Name and the location of the Site, including the complete Site address or Parcel Identification Number, and individual lot addresses if known and applicable.
 - b. Contact information: Provide the Company name and contact information and the contact names, addresses, phone numbers, ~~facsimile numbers~~, and e-mail address for the following:
 - i. The Professional Engineer responsible for the preparation of the Improvement Plans.
 - ii. The site Owner, and if applicable the agent or designee.
 - iii. The Earthwork Contractor and all applicable subcontractors, when identified.
 - c. A description of the nature and type of the construction activity (e.g., residential, shopping mall, fill site, etc.)
 - d. 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, excavated material disposal areas, and off-site project construction support activities).
 - e. A table for each phase of construction listing each on-site and off-site catchment
 - i. Each table will include the start and completion the construction phase and any significant points during the construction phase where drainage patterns/components change significantly.
 - ii. Each catchment listed on the table shall be delineated on the Site Map(s) required per Section ~~309510 (E)~~(3).
 - iii. Catchments will be delineated to each proposed:
 - B. a. Erosion & Sediment Pollution Control required under [Section 310 of Article III Earthwork Regulation](#),
 - C. b. Existing and proposed Runoff Reduction Practice, Post-Construction Control, and associated Pre-Treatment Practice required under [Section 510 of Article V Post-Construction Regulations](#), and
 - D. c. Existing and proposed stormwater conveyance and detention facility required the stormwater quantity control regulations of the Local Jurisdiction.

catchment:

- A measure of the on-site and off-site catchment area;
 - A measure of the existing impervious area;
 - A measure of the impervious area to be constructed by the Owner;
 - An estimate of the impervious area that may be constructed by subsequent Owners under current zoning; and
 - The overall imperviousness of the catchment.
- f. The table, Project Site Map(s) and associated Improvement Plans will need to be modified or supplemented if changes in drainage areas and/or impervious areas affect the size of Erosion and Sediment Pollution Controls, Runoff Reduction Practice, and/or Post-Construction Controls.
- g. Existing data describing the soils throughout the site, including the soil series, soil association, and hydrologic soil group. At the request of the **Enforcing Official**, additional geotechnical data to support the design of each proposed Erosion and Sediment Pollution Control, Runoff Reduction Practice, and Post-Construction Control whose effectiveness depends upon site-specific data about the porosity, infiltration characteristics, depth to groundwater, depth to bedrock, and any impermeable layers may be required.
- h. Existing data, if available, describing the quality of any discharge from the site as well as a description or other documentation of the condition of any on-site streams.
- i. A description of prior land uses at the site (e.g., zoning, land-use codes).
- j. A description of the methods, locations, size and extent of practice used to preserve, enhance, and/or restore natural conditions as much as feasible, including but not limited to desired vegetation; permeable, uncompacted soil profiles and topsoil; designated tree preservation areas; and protective grubbing and clearing practices.
- k. An implementation schedule, including BMPs, which describes the sequence of major construction operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion, sediment and stormwater management practices or facilities to be employed during each operation of the sequence, including the phasing of construction operations to minimize disturbed land at any one time.
- l. The name and/or location of the immediate receiving water resource(s) and the first subsequent named water resource(s) and the aerial extent and description of wetlands or other special aquatic features at or near the Site which will be disturbed or which will receive discharges from

disturbed areas of the Site.

- m. Location and description of any stormwater associated with asphalt, concrete plants, staging yards, material storage areas, excavated material disposal areas, and/or borrow areas on or contiguous with the project site and dedicated to Site construction, and the Non-Sediment Pollution Controls to address pollutants in these stormwater discharges.
 - n. For subdivided developments, a detail drawing of individual parcels with their erosion, sediment, or stormwater control practices and/or typical individual lot showing standard individual lot erosion and sediment control practices. A typical individual lot drawing does not remove the responsibility to designate specific erosion and sediment control practices in the Improvement Plans for critical areas such as steep slopes, stream banks, drainage ways and riparian zones.
3. Project Site Map(s): One or more site maps of the Project shall be created for each phase of construction. The map or series of maps shall be drawn at a scale of at least 1-inch equals 50-feet. The site is to be referenced using the State Plane coordinates and shall indicate the datum used. It is preferred that the entire site be shown on a single 24"x36" (architectural D-size drawing) plan sheet to allow a complete view of the site during plan review. Each map shall identify the phase of the project, if applicable, in relation to the overall development plan and include a north arrow, elevation datum and date of preparation. The map or series of maps shall extend 200 feet beyond the Site boundary and shall indicate for that area, at a minimum the following:
- a. Limits of Earthwork on the Site for each phase of the project, including any off-site borrow or spoil areas including those not addressed by a separate NOI and associated Improvement Plan.
 - b. Soils types for the entire site, including the location and extent of visibly evident existing excavations or fills, slope instability, erosion and water seepage or wet conditions, unstable or highly erodible soils, other areas with potentially serious existing or future erosion problems, areas with known contaminated soils; and/or areas where soils will be protected, enhanced or restored.
 - c. Existing and proposed two-foot (2') contours, unless site conditions require more detailed topography to depict site drainage conditions.
 - d. The location of proposed Erosion and Sediment Pollution Controls, existing and proposed Runoff Reduction Practices, and existing and proposed Post-Construction Controls and associated Pre-Treatment Practices within, entering, and exiting the site. **Include any areas of the controls that are likely to require temporary stabilization during site development.**
 - e. Site drainage patterns and any existing and/or constructed combined and separate stormwater drainage collection, conveyance and detention facilities within the site, beyond the site, and/or within the larger common plan of development if utilized for the Site, including but not limited to,

catch basins, culverts, ditches, swales, surface inlets and outlet structures For discharges to an MS4, the point of discharge to the MS4 and location where the MS4 ultimately discharges to a stream or surface water of the state shall be included. A delineation of on-site and off-site drainage catchments tributary to each proposed Erosion and Sediment Pollution Control, each existing and proposed Runoff Reduction Practice, Post-Construction Control, and associated Pre-Treatment Practice, and each existing and proposed stormwater conveyance and detention facility, including before, during, and after major grading activities as well as the total off-site and on-site size of each catchment in acres and the pre-construction and post-construction runoff coefficient for each area.

- f. Location of existing and proposed utilities including appurtenances, structures and outfalls. The approximate depths of all utilities shall be indicated.
- g. Water resource locations including known springs, wetlands, streams, lakes, water wells on or within 200 feet of the site, including boundaries of wetlands or stream channels and first subsequent named receiving water(s) that the permittee intends to fill or relocate for which the permittee is seeking approval from Army Corps of Engineers and/or Ohio EPA.
- h. Locations of delineated associated Stream Corridor Protection Zones as defined under the Stream Corridor Regulations (Article IV of the Rules and Regulations of the HCSWD), required riparian or other setbacks, conservation easements or areas designated as open space, preserved vegetation, or otherwise protected from earth disturbing activities on or within 200 feet of the site; and a description of any associated temporary or permanent fencing or signage designating the boundary of these areas.
- i. Existing and proposed locations of buildings, roads, and parking facilities.
- j. The location of any in-stream activities including known temporary or permanent stream crossings, floodplain fill, floodplain excavation, and stream restoration, including the boundaries of wetlands or streams and any first subsequent named receiving water resource(s) intending to be filled or relocated under an approval from the Army Corps of Engineers and/or Ohio EPA.
- k. Existing and proposed property boundaries and individual lot numbers.
- l. The location of any existing or proposed easements or other restrictions placed on the use of the property and the responsible party(ies) under such easement or restriction.
- m. On-site and off-site areas vulnerable to erosion and sediment damage.
- n. 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.

- o. The location of designated construction entrances where the vehicles will access the construction site.

4. Information Regarding Preservation Methods: (formerly Non-Structural Controls) The Improvement Plans will include descriptions, locations, size and extent of any methods used to preserve natural conditions as much as feasible, including but not limited to:
 - a. Preserving existing vegetation, vegetative buffer strips and existing soil profile and topsoil.
 - b. Phasing of construction operations to minimize disturbed land at any one time.
 - c. Designation of tree preservation areas or protective grubbing and clearing practices.

5. Information Regarding Erosion and Sediment Pollution Controls: A complete description of the measures proposed to satisfy the performance standards of these Earthwork Regulations shall be provided in the Improvement Plans for each phase of the Project in a professionally prepared document which, at a minimum, includes the following appropriate Earthwork principles, techniques, methods, operations and work sequences:
 - a. One or more site maps for each phase of construction showing the location and extent of each Erosion and Sediment Pollution Control that will be installed.
 - b. A drawing of each structural Erosion and Sediment Pollution Control providing contributing drainage areas, sufficient dimensions, construction details, and design calculations.
 - i. Details for sediment traps and ~~basins settling ponds~~ noting their sediment storage and dewatering (detention) volume and contributing drainage area. Note that sediment ~~basins settling ponds~~ are required for all areas of collected or concentrated stormwater runoff.
 - ii. Locations and details for inlet protection.
 - iii. See the [Ohio EPA's Rainwater and Land Development Manual](#) and website for example data sheets to include. Within the data sheets provide data for all sediment traps and ~~basins settling ponds~~ noting their inputs to design and resulting parameters such as their contributing drainage area, disturbed area, detention volume, sedimentation volume, practice surface area, dewatering time, outlet type and dimensions.
 - c. Standards and specifications for the installation and maintenance of all Erosion and Sediment Pollution Controls.
 - d. Temporary and permanent stabilization requirements and timelines for

specific areas of the site. Standards and specifications shall be provided for all vegetative practices including seeding, mulching, and fertilizing rates. Standards and specifications shall be included for any turf reinforcement matting or other stabilization practices as required under these Earthwork Regulations or by the **Enforcing Official**.

- e. Areas of the site that do not drain to primary Erosion and Sediment Pollution Controls such as sediment settling ponds and traps shall be indicated. Notes shall be included on the plans indicating the appropriate Erosion and Sediment Pollution Controls, standards and specifications for all Erosion and Sediment Pollution Controls, including those Erosion and Sediment Pollution Controls that will be provided for use by successor owners of individual lots, and those that shall be implemented by successor owners within their individual lots.
- f. An indication of areas where soil stockpiles are to be located and a narrative procedure for the stabilization of these areas immediately after the soil stockpile is completed. If the specific locations cannot be addressed in the design stage, direction shall be provided regarding the location of the soil stockpiles by indicating areas of concern and outlining the stabilization requirements.
- g. Estimated schedule indicating the anticipated sequence of Earthwork and other construction activities, along with the Erosion and Sediment Pollution Controls and Non-Sediment Pollution Controls to be employed during each sequence, including the time of exposure of each area prior to the completion of approved Erosion and Sediment Pollution Controls.
- h. A written narrative that describes the overall Erosion and Sediment Pollution Control plan and highlights specific areas of concern. The narrative shall indicate stabilization requirements, inspection and maintenance guidelines, and direct the developer to contact the **Enforcing Official** for a pre-construction meeting prior to commencing with any Earthwork.
- i. For subdivided developments where a centralized Erosion and Sediment Pollution Control capable of controlling multiple individual lots is not provided, a detailed drawing of a typical individual lot showing standard individual lot Erosion and Sediment Pollution Controls.

~~6. Information Regarding Post-Construction Controls: For each non-structural and structural Post-Construction Control to be employed on the site, the Improvement Plan shall include the following:~~

- ~~a. Site maps showing the location and size of new and existing Post-Construction Controls, Runoff Reduction Practices, Pretreatment Practices, Inlet/Outlet Protection and other storm water facilities.~~
- ~~b. Storm water calculations, shall include the area-weighted volumetric runoff coefficients and resulting water quality volume under both the pre-construction and post-construction site conditions for each catchment tributary to an Erosion and Sediment Pollution Control or Post-~~

~~Construction Control (per Section 510 of Article V Post-Construction Regulations) and, storm water conveyance facility.~~

- ~~7. Detailed drawings drawn to scale with dimensions and elevations, and design calculations of Post-Construction Controls showing storage volumes and sizes of contributing drainage areas, capacities, pretreatment practices, forebays and micropools for dry basins, velocity dissipation devices/practices, outlet details including outlet protection, drain times; and, if applicable, an explanation of the use of existing post-construction facilities including documentation of ability to meet current water quality and quantity requirements and provision for long-term maintenance. The use of Ohio EPA data sheets is recommended (see Ohio's Rainwater and Land Development manual and Ohio EPA resources for examples).~~
 - ~~c. Soil and subsurface conditions, including tests of infiltration rates for native and amended soils underlying each Post-Construction Control, borings or equivalent data indicating seasonal high groundwater levels, top of bedrock elevations, and perched groundwater elevations, and an assessment of the suitability of soil and subsurface conditions for the Post-Construction Control.~~
 - ~~d. Specifications for materials used to construct each Post-Construction Control, including vegetation, amended soil composition, and structural materials.~~
 - ~~e. Identification of any proposed Alternative Post-Construction Controls—those practices not identified in Article V, Table 510-B—with a rationale for their selection; all related information required under Article III, Section 309.D including calculations and detailed drawings; and that meet the minimum treatment criteria and testing requirements in Article V, Section 511.~~
 - ~~f. Post-Construction Control operations and maintenance requirements during and after construction.~~
 - ~~g. Any supplemental information requested by the **Enforcing Official**.~~
 - ~~h. The **Enforcing Official** may require calculations to be presented in specific formats and/or incorporated into spreadsheets with embedded, pre-checked calculations to facilitate **Enforcing Official** review and Ohio EPA approvals.~~
8. Calculations: Calculations shall be presented as a separate report provided with the Improvement Plans for projected stormwater runoff flows, volumes, and timing into and through all Erosion and Sediment Pollution Controls. Calculations required under Article III shall address the following topics:
 - a. Calculations shall include the underlying assumptions and hydrologic and hydraulic methods and parameters, under pre- and post-construction land use conditions, for flood control, water resource protection, and water quality, as required in Section 310 EROSION AND SEDIMENT POLLUTION PREVENTION PERFORMANCE STANDARDS, Section

311 GEOTECHNICAL PERFORMANCE STANDARDS, and Section 312 NON-SEDIMENT POLLUTION CONTROL PERFORMANCE STANDARDS of these Earthwork Regulations.

- b. Calculations shall demonstrate compliance with local stormwater quantity management requirements and demonstrate that the runoff from upper watershed areas have been considered in the calculations and indicate that no adverse impacts are conveyed downstream of the Site.
 - c. An investigation of immediate downstream conditions as defined by the **Enforcing Official** is required to support development of a rationale for Erosion and Sediment Pollution Control selection addressing anticipated impacts on the water resource and floodplain morphology, hydrology, and water quality. If the downstream property owner(s) refuse to allow access a letter must be submitted by the downstream property owner(s) stating the refusal.
 - d. Stormwater calculations shall include the area-weighted volumetric runoff coefficients and resulting water quality volume under both the pre-construction and post-construction site conditions for each catchment tributary to an Erosion and Sediment Pollution Control ([per section 310 of the Article III Earthworks Regulations](#)).
9. Other Approvals and Permits:
- a. Ohio EPA NPDES Permit Number and other applicable state and federal permit numbers or approvals shall be provided if available, or the status of permit applications shall be provided if final approvals have not been received.
 - b. The parcel number, address, contact information, and Earthwork Approval shall be provided for any off-site borrow areas and excavated material disposal areas.
10. Construction-Phase Inspection and Maintenance Plan: The Improvement Plans shall include a Construction-Phase Inspection and Maintenance Plan for the Erosion and Sediment Pollution Controls and Non-Sediment Pollution Controls employed on the property. This Plan shall address the inspection and maintenance frequency and requirements listed in [Section 314 Inspection and Maintenance of Erosion and Sediment Pollution Controls](#) and [Section 316 Inspection and Maintenance of Non-Sediment Pollution Controls](#) of these Earthwork Regulations.
11. The Improvement Plans may be required to contain additional information when requested by the **Enforcing Official**, including but not limited to:
- a. A report from a Professional Engineer qualified in geotechnical engineering showing the results of surface and subsurface exploration, conditions of the land, procedures for performing the grading operations, maximum slope to satisfy stability, and other geotechnical design requirements;

- b. A description of the borrow material, its source, the construction methods to be used and the specified minimum degree of compaction;
 - c. The preparation of existing ground surface to receive fill; and
 - d. Subsurface drainage where necessary for stability.
- F. Substantial change in site conditions: The **Enforcing Official** shall be notified whenever unforeseen Site conditions emerge (e.g., unforeseen water resources such as unknown springs) during the course of construction that affects the Earthwork.
- G. A notation shall be placed on the plans that the Owner is responsible for notifying the Ohio Utilities Protection Service (OUPS) of the location of the excavation or fill site, per [Section 3781.25 to 3781.32 of the ORC](#).
- H. Continuation of Controls for Individual Lot Development: Improvement Plans for single family homes and/or individual structures that will disturb less than one (1) acre but are part of a larger common plan of development shall describe planned Erosion and Sediment Pollution Controls for the individual lot, including the location of any Erosion and Sediment Pollution Controls, and the appropriate standards and specifications for their installation, maintenance, and final stabilization, as well as a timeline for completion. Where seasonal conditions prevent permanent stabilization, alternative temporary stabilization practices shall be specified in the Improvement Plans. Detailed specifications for Erosion and Sediment Pollution Controls shall be included for lots that do not drain to a sediment settling pond or trap, or for areas needing special attention, such as steep slopes and areas within 50' of water resources. The Owner of the individual lot shall inform the future owner of the lot of any Erosion and Sediment Pollution Control Requirements that will carry over to the new lot (home) owner, and notify the **Enforcing Official** within seven (7) days of the date of transfer of the lot(s).
- I. Improvement Plans Update Required: The approved Improvement Plans shall be modified whenever there is a change in design, construction, operation or maintenance which has or is likely to have a significant effect on the potential for the discharge of pollutants, or if the recommended controls prove to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity. Revised Improvement Plans shall be provided to the **Enforcing Official** for review and approval prior to implementing any proposed changes.

310 EROSION AND SEDIMENT POLLUTION CONTROL PERFORMANCE STANDARDS

- A. The Improvement Plan shall be a professionally prepared document which includes appropriate Earthwork principles, techniques, methods, operations and work sequences. The Earthwork Control Performance Standards contained in this Section shall be followed unless a variance is approved by the **Enforcing Official** consistent with these Earthwork Regulations according to criteria in [paragraph 310\(O\)](#). Erosion and Sediment Pollution Controls must be maintained in good operational condition until permanent Runoff Reduction Practices and Post-Construction Controls compliant with the Post-Construction Regulations ([Article V of the Rules and Regulations of the HCSWD](#)) are installed and operational and all areas disturbed during construction have been stabilized.

- B. Duty to Inform Contractors and Subcontractors: The Owner shall inform all contractors and subcontractors who will be involved in the implementation of the Earthwork controls about the terms and conditions of the Earthwork Permit. The Owner shall maintain a written document containing the signatures of all contractors and subcontractors involved in the implementation of the Earthwork controls, acknowledging that they have reviewed, understand and will follow the conditions and responsibilities of the Earthwork Permit and the Improvement Plans. Improvement Plans shall be created and signatures shall be obtained prior to commencement of any Earthwork. A copy shall be provided to the **Enforcing Official** prior to commencing with the project.
- C. ~~Post-Construction Controls and Erosion and Sediment Pollution Controls~~: Improvement Plans shall show temporary and permanent methods, features and facilities to control runoff as required under these Earthwork Regulations ~~and under the Post-Construction Regulations (Article V of the Rules and Regulations of the HCSWD)~~. Erosion and Sediment Pollution Controls must be designed, installed, and maintained to control stormwater volume and velocity within the Site to minimize soil and stream erosion, the amount of soil exposed during construction activity, the amount of soil compaction and preserved topsoil (unless infeasible), and the disturbance of steep slopes. The design, installation, and maintenance of Erosion and Sediment Pollution Controls shall address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.
- D. Preservation Methods: The Improvement Plans must clearly delineate on the document and indicate methods of preventing disturbance of any water resources, riparian areas, unstable or highly erodible soils, steep slopes, or other areas that are protected under local, State, or Federal law Improvement Plans shall also identify any riparian setbacks, green space preservation, conservation buffers, and other stream protection measures required under the Stream Corridor Regulations ([Article IV of the Rules and Regulations of the HCSWD](#)) and/or required by conditions of development set by the County and/or Local Jurisdiction related to stream protection. The Project shall also incorporate practices that preserve the natural condition in all other areas that are not integral to the proposed development activity. Such practices may include: preserving riparian areas adjacent to surface water resources, preserving vegetation and vegetative buffer strips, and existing soil profile and topsoil; and 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.
- E. Phased Installation: The installation of the Erosion and Sediment Pollution Controls shall be done progressively as the project is constructed. Sediment settling ponds, and/or sediment traps shall be constructed, and the skimmer or equivalent dewatering device and emergency overflow shall be functioning before clearing activity begins in the contributing watershed draining to controls. Sediment basins and perimeter sediment barriers shall be implemented prior to grading and seven (7) days from the start of grubbing. They shall continue to function until the upslope development area is stabilized with permanent cover. All other measures to trap sediment shall be constructed and completed before upslope clearing and grading activities are permitted to take place. Earthen structures such as dams, dikes and diversions shall be stabilized within seven (7) days after installation is complete. Where slow growing or dormant seasons occur, alternate or temporary solutions as required under these Earthwork Regulations shall be utilized. The Erosion and Sediment Pollution Controls sequencing, installation, and seasonal alternatives shall be a part of the Site Description portion of the Improvement

Plans. As construction progresses and the topography is altered, appropriate Erosion and Sediment Pollution Controls must be constructed, or existing controls altered to address the changing drainage patterns and shall be provided until final permanent stabilization of the site.

F. Sediment Controls: The Improvement Plans shall include a description of Sediment Controls that store runoff, allow sediments to settle and/or divert flow away from exposed soils or otherwise limits runoff from exposed areas. Structural Erosion and Sediment Pollution Controls shall be used to control erosion and trap sediment from a site remaining disturbed for more than 14 days. Such practices shall include: sediment settling ponds and traps, stabilized construction entrance, dust control, sediment barriers, earth diversion dikes or ditches which direct runoff to a sediment settling pond, and storm drain inlet protection, all of which are further specified below:

1. Sediment Settling Ponds and Traps: A sediment settling pond or trap is required for all concentrated or collected stormwater runoff and runoff from drainage areas that exceed the design capacity of a sediment barrier or inlet protection. Sediment settling ponds are required for all inlets receiving drainage of one or more acres. Alternative controls may be approved if it can be demonstrated to the Ohio EPA that the alternative controls are equivalent in effectiveness to a sediment settling pond or trap. The following criteria shall be used to design a sediment settling pond or trap, and calculations shall be provided in the Improvement Plans:
 - a. The sediment settling ponds /traps consist of both a dewatering zone and a sediment storage zone and are dewatered at the pond surface using a skimmer or equivalent device where feasible.
 - b. The volume of the dewatering zone shall be at least 1800 cubic feet (ft³)/acre (67 cubic yards/acre) of storage per acre of total contributing drainage area with a minimum 48-hour draw down time. 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 or trap and is not co-mingled with sediment-laden runoff.
 - c. 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 ft³ per disturbed acre within the watershed of the settling pond, 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.
 - d. The depth of the sediment settling pond must be less than or equal to five (5) feet. The configuration between the inlet and the outlet of the settling pond shall provide at least two (2) units of length for each unit of width (>2:1 length: width ratio).
 - e. Sediment shall be removed from the sediment storage zone once it

exceeds 50 percent of the minimum required sediment storage design capacity and prior to the conversion to the post-construction practice unless suitable storage is demonstrated based upon over-design. The elevation corresponding to 50 percent of the minimum required sediment storage design capacity shall be provided on the plans and staked around the perimeter of the settling pond(s) or trap(s) on-site (a minimum of 6 stakes shall be used). When the sediment reaches this elevation, the sediment shall be removed. This requirement shall be provided in Improvement Plans when detailing maintenance standards and specifications and shall be consistent with [Section 314 Inspection and Maintenance of Erosion and Sediment Pollution Controls](#).

- f. Combining multiple sediment and erosion control measures in order to maximize pollutant removal is encouraged.
 - g. When designing sediment settling ponds/traps, public safety shall be considered as a design factor, especially as it relates to children, and alternative sediment controls must be used where site limitations preclude a safe design. The use of a combination of Erosion and Sediment Pollution Controls in order to achieve maximum pollutant removal is encouraged. No temporary sediment settling ponds or traps shall be placed within a permanent stormwater quantity or quality control basin or Post-Construction Control unless it is large enough to contain the entire dewatering zone volume, sediment storage volume, water quality volume, and stormwater quantity control volume, subject to the approval of the **Enforcing Official** and the Local Jurisdiction. In addition, no temporary sediment settling ponds or traps shall be placed directly adjacent to a water resource unless prior written approval has been provided by the **Enforcing Official**.
 - h. In unincorporated townships, alternatives such as separate sediment settling ponds or traps must be considered as opposed to retrofitting existing stormwater basins. Prior approval must be obtained from the Hamilton County Planning and Development Stormwater and Infrastructure before the HCSWCD will approve retrofitting a stormwater basin. Retrofitting stormwater basins shall comply with the design criteria specified in this Section of these Earthwork Regulations.
 - i. Specific information shall be provided for the sediment settling ponds/traps, including the size and type of skimmer or equivalent dewatering device. Calculations shall demonstrate that the outlet has been designed to achieve the 48-hour drawdown time. Specifications shall be provided for the geo-textile fabric and riprap for the emergency overflows for each sediment settling pond/trap. The riser shall be wrapped first with a welded wire fencing and then with filter fabric. For approved retrofits of stormwater quantity basins, the upper orifice shall be temporarily protected to minimize sediment from entering the Post-Construction Control.
2. Off-Site Traffic: Off-site vehicle tracking of sediments and dust generation shall be minimized. All roads, storm drainage systems and sidewalks shall be kept free of sediment so as not to create a hazard. All access points shall have a stabilized

construction entrance. Periodic street sweeping and topdressing of the construction entrance shall be performed to ensure compliance with these Earthwork Regulations. Washing sediment from construction vehicles or roadways into storm drainage systems is not an acceptable practice unless the system drains to a sediment settling pond or trap. Washing of sediment directly into water resources or storm drainage systems that drain directly to water resources without passing through a properly sized and located Erosion and Sediment Pollution Controls is prohibited.

3. Dust Control: Dust from Earthwork shall be controlled using effective dust control practices for site and climatic conditions during each phase of construction.
4. Sediment Barriers and Diversions: Sheet flow runoff from Earthwork shall be intercepted by sediment barriers or diversions directed to a sediment settling pond as necessary to meet Erosion and Sediment Pollution Control objectives of these Earthwork Regulations. Where intended to provide sediment control, sediment barriers shall be placed on a level contour. These Earthwork Regulations do not preclude the use of other sediment barriers designed to control sheet flow runoff. For most applications, a standard silt fence may be substituted with a 12-inch diameter tubular filter may be used as a sediment barrier. The relationship between the maximum drainage area to sediment barrier for a particular slope range is shown in **Table 310-A**. Sediment barriers shall not be used for sediment control associated with concentrated flows. Placing sediment barriers in a parallel series does not extend the size of the drainage area.

Table 310-A Sediment Barrier Drainage Area Limits

Maximum Drainage Area to 100 Linear Feet of Sediment Barrier	Range of Slope for a Particular Drainage Area
0.5 acres	< 2%
0.25 acres	> 2% but < 20%
0.125 acres	> 20% but < 50%

5. Diversions: stormwater diversion practices shall be used to keep runoff away from Earthwork, control stormwater run-on quantities and protect steep slopes where practicable. Such devices, which include ditches, dikes or berms, may receive stormwater runoff from areas up to ten (10) acres. Earth diversion dikes or ditches alone are not considered a sediment control unless those are used to direct stormwater to a properly-designed sediment-settling pond or trap.
6. Inlet Protection: Erosion and Sediment Pollution Controls shall also be used to minimize sediment-laden water from entering active storm drain systems, even if the storm drain system drains to sediment settling ponds/traps. Inlet protection or other Erosion and Sediment Pollution Controls are required to improve the overall effectiveness of the sediment settling ponds/traps and minimize their maintenance. Hazards resulting from storm drain inlet protection as it relates to diverting stormwater runoff and causing erosion or creating flooding problems to adjacent roads or structures shall be taken into consideration. All inlets receiving runoff from drainage area of one or more acres will require a sediment settling pond or trap designed according to Paragraph 310 (F)(1). Alternative practices shall be specified if ponding cannot occur around the inlet and the inlet does not

drain to a sediment settling pond or trap.

- G. Dewatering Activities: Dewatering activities involve the disposal of waters accumulating in trenches, sediment settling ponds, sediment traps, or other locations where ground or surface waters may collect on the site. There shall be no turbid discharges to surface water resources resulting from dewatering activities. Trench, ground water, or any other dewatering activities containing sediment shall pass through a sediment settling pond or other equally effective sediment control prior to being discharged from the site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag or comparable practice. Dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. Care shall be taken when discharging groundwater or during any dewatering work to ensure that runoff does not become pollutant-laden by traversing over disturbed soils or other pollutant source and/or cause erosion in stabilized areas. The Professional Engineer shall provide specifications for de-watering activities for the project. The Professional Engineer shall provide specifications for cleaning and disposal of spoils for in-line retention systems to prevent the discharge of sediment or other pollutants, if applicable.
- H. Stream Protection: If Earthwork disturbs areas adjacent to streams, Erosion and Sediment Pollution Controls shall be designed and implemented on-site to protect all adjacent streams from the impacts of sediment laden runoff. Construction activities in surface waters may be subject to CWA Section 404 and 401 regulations and permitting and/or state isolated wetland permit requirements include, but are not limited to: sewer line crossings, grading, backfilling or culverting streams, filling wetlands, road and utility line construction, bridge installation and installation of flow control structures. Should any of these activities be planned, the appropriate U.S. Army Corps of Engineers office shall be contacted. No Erosion and Sediment Pollution Controls (e.g., the installation of sediment barrier or a sediment settling pond or trap in a stream) shall be used in a stream. Earthwork shall be performed in compliance with all applicable stream corridor protection zone or setback requirements. Specific stream corridor protection zone requirements are found in the Stream Corridor Regulations (Article IV of the Rules and Regulations of the HCSWD.) The placement of fill within FEMA regulated flood plains shall not be permitted to cause downstream erosion or other negative impacts.
- I. Groundwater Protection:
1. No Earthwork Project shall be permitted to cause the pollution or degradation of groundwater. The Professional Engineer shall design the project to control the discharge of pollution into groundwater resources.
 2. Unless otherwise authorized by Ohio EPA, only uncontaminated soil may be used as a fill material for any Earthwork in unincorporated Hamilton County constructed in an area of groundwater pollution potential with a Pollution Potential Index of 140 and greater, as defined using the methodology described in USEPA Publication EPA/600-2-87/035. Maps of this designation prepared by Ohio Department of Natural Resources Division of Water and titled "Ground-Water Pollution Potential of Hamilton County" are available from the HCSWCD or can be downloaded from the Ohio Department of Natural Resources website.
 3. All Earthwork Projects in Ground Water Protection Zones in unincorporated Hamilton County must ensure proper storage and disposal of chemicals and fuels. All spills shall be cleaned up immediately and reported as required under

State, Federal and local laws and regulations, including the State Emergency Response Commission (SERC) set of eight (8) release reporting rules ([3750-25-01](#), [3750-25-05](#); [3750-25-10](#); [3750-25-12](#), [3750-25-13](#); [3750-25-15](#); [3750-25-20](#); [3750-25-25](#)) effective June 30, 1993. For more information contact Ohio EPA.

4. **Erosion Prevention Practices:** The Project shall make use of erosion prevention practices that are capable of providing cover over disturbed soils unless a waiver is approved in accordance with Section 310(O) of these Earthwork Regulations. A description of erosion prevention practices designed to re-stabilize the site after Earthwork is complete shall be included in the Improvement Plans.
5. **Erosion Prevention Specifications.** The Improvement Plans 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 the various times of the year. Such practices may include: temporary and permanent seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing of construction operations, use of construction entrances, and the use of alternative ground cover. Erosion prevention practices shall also comply with Section 510 (C) (4) of the Post-Construction Regulations ([Article V of the Rules and Regulations of the HCSWD](#)).
6. **When to Stabilize:** At a minimum, disturbed areas must be stabilized as specified in Tables 310-B and 310-C.

Table 310-B: Permanent Stabilization

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

Table 310-C: Temporary Stabilization

Areas Requiring Temporary Stabilization	Time Frame to Apply Erosion Prevention Practices
Any disturbed areas within fifty (50) feet of a stream and not at final grade	Within two (2) days of the most recent disturbance if the areas will remain idle for more than fourteen (14) days
For all construction activities, any disturbed areas that will be dormant for more than fourteen (14) days but less than one (1) year, and not within fifty (50) feet of a stream	Within seven (7) days of the most recent disturbance within the area For residential subdivisions, disturbed areas must be stabilized at least seven (7) days prior to transfer of permit coverage for the individual lot(s)
Disturbed areas that will be idle over winter	Prior to the onset of winter weather – follow the guidelines outlined in the Rainwater & Land Development Manual

	for dormant seeding specifications
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1. Alternative Stabilization Methods. Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques shall be employed. Approval shall be obtained from the Enforcing Official before implementing alternative stabilization techniques per Section 310(N) of these Earthwork Regulations.
2. Permanent Stabilization of Conveyance Channels/Ditches: Special measures shall be undertaken to stabilize ditches and prevent erosive flows. Measures may include seeding, dormant seeding (as defined in the latest edition of the Rainwater and Land Development Manual), mulching, erosion control matting, sodding, riprap, natural design with bioengineering techniques or rock check dams. The standards and specification shall be included in the permanent stabilization requirements.
- J. Runoff Control Practices: The Project 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.
- K. Control of Sediment-Laden Runoff to Post-Construction Controls: No stormwater shall be directed through any Post-Construction Control required under the Post-Construction Regulations ([Article V of the Rules and Regulations of the HCSWD](#)), or portions thereof, until the entire area tributary to the Post-Construction Control has reached final stabilization. Final stabilization occurs after the completion of the final grade at the site, after all of the utilities are installed, and the site is stabilized with vegetation or other appropriate methods. Documentation acceptable to the **Enforcing Official** shall be submitted to demonstrate that the site has reached final stabilization. Upon a satisfactory demonstration, the Post-Construction Control may be completed and placed into service. Upon completion of the installation of the Post-Construction Control, all disturbed areas and/or exposed soils caused by such installation must be stabilized within two (2) days of the completion of the installation unless actually precluded by weather conditions, and in such event, as soon thereafter as weather conditions permit stabilization.
- L. Removal of Controls: The Owner is responsible for the removal of Erosion and Sediment Pollution Controls upon stabilization of all disturbed areas or upon completion of the project, whichever occurs first. No required Erosion and Sediment Pollution Controls shall be removed during the permit period until the upslope areas draining to the associated controls are permanently stabilized unless the removal is approved in writing by the **Enforcing Official**.
- M. Alternative Methods: Methods of erosion prevention, sediment and stormwater runoff control, other than those specified by these Earthwork Regulations may be considered by the **Enforcing Official** on a case by case basis as provided below, and must be submitted for approval prior to use, installation or implementation.

1. The proposed alternative method shall otherwise comply with these Earthwork Regulations. Any required recalculation or redesign of any portion of the project is the sole responsibility of the Owner and shall not be provided by the reviewer.
 2. The decision of the **Enforcing Official** as to whether to permit the proposed alternative method will be based largely on the sufficiency and completeness of the information submitted with the application.
 3. The proposed alternative method will accomplish the purpose, intent and results of these Earthwork Regulations and will not otherwise cause a hazard.
 4. The alternative method must be enforceable by the **Enforcing Official**.
- N. Variances: The **Enforcing Official** may vary a requirement set forth in Section 310 Erosion and Sediment Pollution Control Performance Standards of these Earthwork Regulations if site specific conditions prevent the implementation of required Erosion and Sediment Pollution Controls as written, the implementation of the controls will result in no environmental benefit, or the project is in an isolated, self-contained area where there will be no adverse effect on adjacent public or private properties or watercourses. Under no circumstances may a variance be granted if a Hazard will be created. A request for a variance shall be submitted to the **Enforcing Official** with complete detailed supporting materials and information justifying such variance and demonstrating that no Hazard will be created if the variance should be granted.
- O. Access to Erosion and Sediment Pollution Controls: Access shall be provided to the **Enforcing Official** and other authorized personnel to maintain proper operation and function of Erosion and Sediment Pollution Controls during the project. The access must include temporary or construction easements and heavy equipment access ways. These access ways must be clear of obstructions to facilitate maintenance of the controls.

311 GEOTECHNICAL PERFORMANCE STANDARDS

- A. Geotechnical performance standards apply to unincorporated portions of Hamilton County and member municipalities which have adopted the requirements of this section.
- B. Tops and toes of all slopes related to any Earthwork shall be designed and placed so as to maintain a condition of stability and not cause any adverse impact on adjacent property and/or to applicable stream corridor protection zones under the Stream Protection Regulations ([Article IV of the Rules and Regulations of the HCSWD](#)).
- C. The tops and toes of all Earthwork shall be designed to be completely contained within the property being developed unless included in an easement or binding written agreement with an adjacent property owner. A Professional Engineer shall certify that the tops and toes of all slopes are set back from property boundaries or structures as necessary for:
 1. Stability of adjacent property.
 2. Adequacy of foundation support.
 3. Protection of adjacent property against damage from stormwater runoff.

- D. The tops and toes of any Earthwork shall be designed and constructed in a manner that will not adversely impact existing or proposed buildings or adjacent property.
- E. A complete system for proper stormwater runoff management and drainage of the site involving tops and toes of Earthwork shall be provided. Such a drainage system shall be completely contained within the property being developed unless containment is not feasible, in which case runoff flows may be diverted off-site in accordance with applicable runoff standards and requirements approvable by the **Enforcing Official**.
- F. The **Enforcing Official** may require additional geotechnical or other engineering data and site-specific designs where the tops or toes of slopes and/or the drainage system creates or may create a Hazard.
- G. The **Enforcing Official** may waive or modify requirements under this section of these Earthwork Regulations relating to cut and fill operations if the application for the Earthwork permit includes a written opinion from a Professional Engineer employed by the Owner stating that the proposed cut and fill operations will not cause a Hazard or is in an isolated, self-contained area where there will be no adverse effect on adjacent public or private property.
- H. A request for a waiver shall be submitted to the **Enforcing Official** with detailed evidence justifying such waiver and demonstrating that no hazard will be created if the waiver should be granted.
- I. Denial of a waiver may be appealed to the Hamilton County Earthwork Board of Appeals for projects in unincorporated Hamilton County, or to the body designated by the municipal jurisdiction to address appeals.

312 NON-SEDIMENT POLLUTION CONTROL PERFORMANCE STANDARDS

- A. Non-Sediment Pollution Controls: All necessary and appropriate Non-Sediment Pollution Controls shall be implemented to prevent the discharge of hazardous substances, solid waste (other than sediment) or liquid waste, including building materials from the site. The Improvement Plans shall describe the Non-Sediment Pollution Controls that will be designed, installed, implemented, and maintained for the project, including but not limited to measures that:
 - 1. Prevent prohibited wastewater from equipment and vehicle washing, wheel washing, the washout of concrete trucks, stucco, paint, form release oils, curing compounds, and other construction materials from being directly or indirectly discharged into a ditch, storm sewer or water resource. Soaps or solvents used in vehicle and equipment washing or all other waste streams which could be subject to an individual NPDES permit are prohibited. Non-prohibited wash waters shall be treated in a sediment basin or alternative control that provides equivalent or better treatment.
 - 2. Prevent the discharge of prohibited pollutants from vehicle fuel, oils, or other vehicle fluids to a storm sewer or surface waters of the state.
 - 3. Minimize exposure of waste materials - including building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides,

herbicides, detergents, and sanitary waste, and other materials present on the site - to precipitation, stormwater runoff, and snow melt.

4. Prevent and respond to chemical spills and leaks, referencing applicable plans (i.e., Spill Prevention Control and Countermeasure (SPCC) plans, spill control programs, Safety Response Plans, etc.) where appropriate, and maintaining a copy of such plans on site.
- B. All Non-Sediment Pollution Controls shall be maintained in a functional condition until all construction activities served by these Controls are complete and Post-Construction Controls are operational. The Non-Sediment Pollution Controls shall be designed to minimize maintenance requirements. The Improvement Plans shall provide a description of maintenance procedures needed for each measure and practice to ensure their continued performance.
- C. Access to Non-Sediment Pollution Controls: Access is required to maintain proper operation and function of Non-Sediment Pollution Controls during the project. The access should include temporary or construction easements and heavy equipment access ways where necessary. These access ways should be clear of obstructions and can be easily maintained.

313 FINAL INSPECTION APPROVAL AND RELEASE OF RECORD PLAT

- A. To receive final inspection and acceptance of any project, the following must be completed and provided to the **Enforcing Official**:
 1. Final stabilization must be achieved per the Improvement Plans and all Post-Construction Controls must be installed, demonstrated to be functional, and meet the criteria set forth in [Article V of the Rules and Regulations of the HCSWD](#), as determined by the **Enforcing Official**.
 2. To initiate termination of an Earthwork Permit for a project or a portion thereof and final inspection, the Owner shall submit a letter to the **Enforcing Official** certifying compliance with the permit requirements, stating the reason for termination, and indicating the portions of the site where termination is being requested. The permittee is also responsible for filing a notice of termination (NOT) with Ohio EPA.
- B. Final inspection approvals and releases of Record Plats: in unincorporated Hamilton County are subject to the following requirements:
 1. Residential & Industrial Subdivisions: All requests for Release of Record Plat and Final Inspection Approval shall be initialized through the Hamilton County Engineers Office. The **Enforcing Official** shall send written notice of the approval or denial of the request within seven (7) working days of receiving the request from the County Engineers Office. For release of the Record Plat the site shall be in compliance with all provisions of these Earthwork Regulations.
 - a. All areas for which the Record Plat release is being requested shall be temporarily or permanently stabilized according to Section 310 (K) of these Earthwork Regulations.

- b. All sediment controls shall be installed and maintained according to Section 310 (F) of these Earthwork Regulations.
 - c. The Hamilton County Engineer shall not release the Record Plat for recording until receipt of a Notice of Compliance from the Enforcing Official that the site is in compliance with all provisions of these Earthwork Regulations and has received a geotechnical certification.
2. Commercial and Industrial Developments: The Owner shall submit a letter to the **Enforcing Official** requesting a Final Inspection a minimum of 14 days before requesting a Temporary Certificate of Occupancy (TCO) or Certificate of Occupancy (CO) from the Building Department. The Building Department shall not issue a TCO or CO until the **Enforcing Official** determines that the site is in compliance with all provisions of these Earthwork Regulations. Final stabilization must be achieved; temporary Erosion and Sediment Pollution Controls removed and all Post-Construction Controls must be installed and made functional per the approved Improvement Plan, as determined by the **Enforcing Official**.
3. Fill Sites: To obtain release from an Earthwork Permit on Fill Sites the Owner shall send a written request to the **Enforcing Official** requesting final inspection. The entire site shall be permanently stabilized and all temporary Erosion and Sediment Pollution Controls removed. The Performance Bond will not be released until the site is in compliance with all provisions of these Earthwork Regulations.
- C. Municipal member jurisdictions shall not release the Record Plat, issue a certificate of occupancy, or otherwise allow a transfer of ownership to any property that is not in full compliance with these Earthwork Regulations.
- D. The Hamilton County Engineer in unincorporated townships or the local municipality in incorporated areas shall not approve and release the Record Plat for recording until receipt of a Notice of Compliance from the **Enforcing Official** that the site is in compliance with all provisions of these Earthwork Regulations, has received a geotechnical certification, if applicable, and has properly transferred or removed all approved Erosion and Sediment Pollution Controls and Non-Sediment Pollution Controls, including but not limited to proper installation, closure, and/or maintenance of sediment settling ponds and traps, sediment fence and inlet protection. All idle areas must have temporary and permanent stabilization as appropriate.

314 INSPECTION AND MAINTENANCE OF EROSION AND SEDIMENT POLLUTION CONTROLS

- A. The Construction-Phase Inspection and Maintenance Plan included in the Improvement Plans shall address all requirements of this Section.
- B. All disturbed areas and areas used for storage of materials exposed to precipitation shall be inspected for evidence of or the potential for pollutants entering the drainage system. All Erosion and Sediment Pollution Controls shall be inspected and maintained to ensure continued performance of their intended function. Discharge locations shall be inspected to ascertain whether Erosion and Sediment Pollution Controls 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.

- C. If the inspection reveals that an Erosion and Sediment Pollution Control 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 that indicates the maintenance or repair is needed. Sediment settling ponds must be repaired or maintained within ten (10) days of the inspection that indicates the maintenance or repair is needed.
- D. At a minimum, all Erosion and Sediment Pollution Controls on the site shall be inspected by the Owner's **Qualified Inspection Personnel** at least once every seven (7) calendar days and by end of the next calendar day after any storm event greater than one-half (1/2) inch of rain per 24-hour period, excluding weekends and holidays unless work is scheduled. A record shall be made of each inspection. The Owner shall assign **Qualified Inspection Personnel** to conduct these inspections to ensure that the Erosion and Sediment Pollution Controls are functional, to evaluate whether the Erosion and Sediment Pollution Controls are adequate and properly implemented or constructed in accordance with the approved Improvement Plan, and to determine whether other Erosion and Sediment Pollution Controls are required. The **Qualified Inspection Personnel** shall record and report issues and deficiencies associated with the Erosion and Sediment Pollution Controls. A Professional Engineer must determine necessary changes to the location and position each Erosion and Sediment Pollution Control.

To record the results of inspections, the **Qualified Inspection Personnel** may use the **Enforcing Official's** Self Inspection Form and Log, Ohio EPA's form and log, or develop their own. A copy of the inspection form and log that will be implemented shall be provided to the **Enforcing Official** with the Improvement Plans. The inspection reports shall be made available to the **Enforcing Official** and shall be kept on site. **Inspection reports may be prepared, signed, and kept electronically, rather than in paper form, if the records are: (a) in a format that can be read in a similar manner as a paper record; (b) legally dependable with no less evidentiary value than their paper equivalent; and (c) immediately accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.** Each inspection report shall be signed and certified by the Owner. At a minimum, the inspection report shall include:

1. The inspection date.
2. Names, titles, and qualifications of personnel making the inspection.
3. 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.
4. Approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred.
5. Weather information and a description of any discharges occurring at the time of the inspection.
6. Location(s) of discharges of sediment or other pollutants from the site.
7. Location(s) of BMPs that need to be maintained.
8. Location(s) of BMPs that failed to operate as designed or proved inadequate

for a particular location.

9. Location(s) where additional BMPs are needed that did not exist at the time of inspection.
 10. Corrective action required including any changes to the Improvement Plan necessary and implementation dates.
- E. All Erosion and Sediment Pollution Controls designed for sediment control shall be maintained in a functional condition until all up-slope areas they control are permanently stabilized and Post-Construction Controls are operational. The Erosion and Sediment Pollution Controls shall be designed to minimize maintenance requirements. The Improvement Plans shall provide a description of maintenance procedures needed for each measure and practice to ensure their continued performance.
- F. If the inspection reveals that an Erosion and Sediment Pollution Control fails to perform its intended function and that another, more appropriate Erosion and Sediment Pollution Control is needed to be effective, the Professional Engineer shall amend the Improvement Plans. The new Erosion and Sediment Pollution Control shall be installed or implemented within ten (10) days of the inspection.
- G. If the inspection reveals that an Erosion and Sediment Pollution Control has not been installed or implemented in accordance with the schedule contained in the approved plan, the Erosion and Sediment Pollution Control must be implemented within ten (10) days from the date of the inspection. If the inspection reveals that the planned Erosion and Sediment Pollution Control is not needed, the inspection record must contain a statement of explanation as to why the Erosion and Sediment Pollution Control is not needed.
- H. The Owner shall maintain the inspection records and logs for three years following the termination of the Earthwork permit. The inspection records shall include all of the items listed in Section 314(D) above and must include names(s) and qualifications of personnel making the inspection, date(s) of the inspection, statement whether the facility is in compliance with the Improvement Plans and the permit at the time of the inspection, any incidents of non-compliance and any observations that significantly impact the implementation of the Improvement Plans.

315 GEOTECHNICAL MONITORING AND MAINTENANCE OF CERTAIN EARTHWORK

- A. Earthwork covered under Section 311 Geotechnical Performance Standards of these Earthwork Regulations may be required by the **Enforcing Official** to obtain a permit and or be monitored by or under the direction of a Professional Engineer qualified in geotechnical engineering. In such case, the Professional Engineer shall certify to the **Enforcing Official** that the requirements under the approved plans and permit have been completed. The **Enforcing Official** may also require that Geotechnical and Erosion and Sediment Pollution Controls Declaration Contracts be signed and submitted before commencing with the any Earthwork.
- B. A geotechnical Earthwork permit may be required where a succession of small excavations or fills constitutes a continuing operation and the accumulation of such excavations or fills will exceed one or both of the following conditions within the area of Earthwork:

1. Five (5) feet in vertical depth; or
 2. 350 cubic yards per each 5,000 square feet.
- C. A geotechnical Earthwork permit shall be required in all cases where grading is proposed on existing terrain with a known history of, or showing visible evidence of, active or dormant landslides.
- D. A geotechnical Earthwork permit may be required where the site is situated partially or wholly over terrain with a “high” landslide potential.
- E. Any excavating or filling performed pursuant to the exemptions in Section 306 Exceptions of these Earthwork Regulations which creates a hazard and / or contributes to water quality degradation shall be subject to the provisions of these Earthwork Regulations as they relate to the specific hazard.
- F. Work that meets the following provisions may be exempted from the requirement for Geotechnical Monitoring or geotechnical Earthwork permit.
1. Any excavation for a basement of a building, or other structure, either privately or publicly owned, authorized by a valid Building Permit, provided:
 - a. The excavation does not exceed the following:
 - i. Twelve (12) feet in vertical depth at its deepest point; or
 - ii. One (1) cubic yard per each eleven (11) square feet of work area;
 - b. The excavation is made within an area described as the upper 25% of the vertical distance between the top of slope and toe of slope with a slope not greater than four (4) feet horizontal to one (1) foot vertical (4:1), or in the lower 75% of the vertical distance between the top of slope and toe of slope with a slope not greater than five (5) feet horizontal to one (1) foot vertical (5:1).
 2. The subsequent use of excavated material as fill on the same site, provided the fill, excluding building backfill material, does not exceed:
 - a. Five (5) feet in vertical depth at its deepest point; or one (1) cubic yard per each eleven (11) square feet of work area;
 - b. The fill is placed on site area with a slope not greater than five (5) feet horizontal to one (1) foot vertical (5:1) and
 - c. The fill does not result in a finished slope steeper than three (3) feet horizontal to one (1) foot vertical (3:1).
 3. Any other excavation or fill:
 - a. That does not exceed: five (5) feet in maximum vertical depth; or one (1) cubic yard per each fourteen (14) square feet of work area; and

- b. Is made within an area with a slope not steeper than five (5) feet horizontal to one (1) foot vertical (5:1); and
 - c. Does not result in a finished slope steeper than four (4) feet horizontal to one (1) foot vertical (4:1); and
 - d. Does not necessitate any adjustment, relocation, addition or other modification to any existing storm sewer system.
- G. Excavating and filling operations subject to geotechnical monitoring shall be conducted under the direction of and monitored by the Owner and a Professional Engineer qualified in geotechnical engineering employed by the Owner. The Professional Engineer shall certify to the **Enforcing Official**, the completion of the requirements of the geotechnical report/plan and Permit. The Professional Engineer shall certify the existing, proposed, and long-term stability of all cuts and fills subject to geotechnical monitoring to the **Enforcing Official**. Waivers or modifications shall be made pursuant to Section 311 (H) of these Earthwork Regulations

316 INSPECTION AND MAINTENANCE OF NON-SEDIMENT POLLUTION CONTROLS

- A. The Construction-Phase Inspection and Maintenance Plan included in the Improvement Plans shall address all requirements of this Section.
- B. All areas used for storage of materials that are exposed to stormwater shall be inspected for evidence of or the potential for pollutants entering the drainage system. All Non-Sediment Pollution Controls shall be inspected and maintained to ensure continued performance of their intended function. Discharge locations shall be inspected to ascertain whether Erosion and Sediment Pollution Controls are effective in preventing significant impacts to the receiving waters.
- C. If the inspection reveals that a Control is in need of repair or maintenance, it must be repaired or maintained within three (3) days of the inspection that indicates the maintenance or repair is needed.
- D. At a minimum, all Non-Sediment Pollution Controls on the site shall be inspected by the Owner's **Qualified Inspection Personnel** at least once every seven calendar days and by the end of the next calendar day, excluding weekends and holidays unless work is scheduled, after any storm event greater than one-half inch of rain per 24-hour period and a record be made of the inspection. The Owner shall assign **Qualified Inspection Personnel** to conduct these inspections to ensure that the Non-Sediment Pollution Controls are functional, to evaluate whether the Non-Sediment Pollution Controls are adequate and properly implemented or constructed in accordance with the approved Improvement Plan, and to determine whether other measures or practices are required. The **Qualified Inspection Personnel** shall record and report issues and deficiencies associated with the controls. A Professional Engineer must determine necessary changes to the location and position each Non-Sediment Pollution Control.
- E. To record the results of inspections, the **Qualified Inspection Personnel** may use the **Enforcing Official's** Self Inspection Form and Log, Ohio EPA's form and log or develop their own. A copy of the inspection form and log that will be implemented shall be provided to the **Enforcing Official** with the Improvement Plans. The inspection reports

shall be made available to the **Enforcing Official** and shall be kept on site. Each inspection report shall be signed and certified by the Owner.

- F. If the inspection reveals that a Non-Sediment Pollution Control fails to perform its intended function and that another, more appropriate Non-Sediment Pollution Control is needed to be effective; the Professional Engineer shall amend the Improvement Plans to include the appropriate new Non-Sediment Pollution Control. The new Non-Sediment Pollution Control shall be installed or implemented within ten (10) days of the inspection.
- G. If the inspection reveals that a Non-Sediment Pollution Control has not been installed or implemented in accordance with the schedule contained in the approved plan, the Non-Sediment Pollution Control must be implemented within ten (10) days from the date of the inspection. If the inspection reveals that the planned Non-Sediment Pollution Control is not needed, the inspection record must contain a statement of explanation as to why the Non-Sediment Pollution Control is not needed.
- H. The Owner shall maintain the inspection records and logs for three (3) years following the completion of the project. The inspection records shall include the names(s) and qualifications of personnel making the inspection, date(s) of the inspection, statement whether the facility is in compliance with the Improvement Plans at the time of the inspection, any incidents of non-compliance and any observations that significantly impact the implementation of the Improvement Plans.

317 FEES

- A. All fees required to enforce these Earthwork Regulations shall be established by legislative action of the Board of County Commissioners for unincorporated portions of Hamilton County, or by the legislative body of the appropriate municipal jurisdiction. Fees may be charged for processing Earthwork permit applications; reviewing Initial Plans and Improvement Plans; inspecting sites before, during, or after construction; taking enforcement action; or responding to other requests pertinent to the project.

318 PERFORMANCE BOND

- A. An Erosion and Sediment Pollution Controls Performance Bond (“Performance Bond”) shall be posted to an agency of the controlling jurisdiction designated by the **Enforcing Official** for Earthwork that disturbs one (1) acre or more. The Performance Bond shall be obtained by the Owner prior to the recording of the Record Plat.
- B. The Performance Bond shall be posted for the benefit of the County and/or Local Jurisdiction, for the purpose of assuring that the work shall be undertaken and completed in accordance with the approved plans and specifications of the Earthwork Permit.
- C. The Performance Bond amount, as calculated by the **Enforcing Official**, shall be based on the cost associated with the performance of maintenance of all sediment control practices. The Bond amount for maintenance of sediment control practices shall be calculated at a current rate, in dollars per cubic yard, based on the combined designed volume of all sediment control practice. The Enforcing Official may increase the Bond amount for sediment control practice maintenance when access to said practices will require additional work to perform the maintenance due to the location of said control.

- D. The **Enforcing Official** shall release the Performance Bond for sediment settling pond and trap maintenance upon acceptance of the Record Plat.
- E. In the event the Owner is also subject to a Building Permit, all requirements of the site plans and Earthworks permit shall be certified as complete by the Owner's Professional Engineer prior to the issuance of a permanent Certificate of Occupancy. The bonding of uncompleted work in this situation will not be permitted.
- F. Where Earthwork is left abandoned and/or a hazard is created, and no bond is in effect, the **Enforcing Official** may seek to mitigate the situation as provided in Section 319 ENFORCEMENT.

319 ENFORCEMENT

- A. It shall be unlawful for any Owner to fail to comply with any of the requirements of these Earthwork Regulations or any lawful order issued by the **Enforcing Official** pursuant thereto, including the failure to pay any authorized civil penalty lawfully issued hereunder.
- B. The **Enforcing Official** shall have all such rights and powers in interpreting and enforcing these Earthwork Regulations as may be accorded to such officials by law, rule, or regulation.
- C. The **Enforcing Official** bearing proper credentials and identification shall be permitted at all reasonable times to enter upon all properties to inspect, survey, test, photograph or videotape an Earthwork to determine compliance with these Earthwork Regulations. The **Enforcing Official** shall be granted access without unreasonable delay. Any obstruction preventing safe and easy access to the Earthwork shall be promptly removed or cleared upon request of the **Enforcing Official**. The cost of removing or clearing obstructions shall be the responsibility of the Owner. The **Enforcing Official** shall be entitled to examine and copy any records required to be prepared and maintained under these Earthwork Regulations or applicable permit.
- D. The **Enforcing Official** may issue an immediate Stop Work Order (SWO) if Earthwork requiring an Earthwork Permit, local permit, state permits, or federal Permit necessary for Erosion and Sediment Pollution Controls, earth movement, clearing, or cut and fill activity is being done without the required permit.
- E. If the **Enforcing Official** determines that any Earthwork has become a hazard and/or causes or contributes to a violation of any provision of these Earthwork Regulations, the **Enforcing Official** may issue a Notice of Violation (NOV) directing the Owner to correct or alleviate the hazard and/or water quality degradation within thirty (30) days and/or issue a Notice of Intent to Revoke Performance Bond.
- F. If after a period of thirty (30) days after the original NOV, the violation continues the **Enforcing Official** shall issue a second Notice of Violation (NOV) directing the owner to correct or alleviate the hazard and/or water quality degradation within fifteen (15) days.
- G. If after a period of fifteen (15) days after the second NOV, the violation continues the **Enforcing Official** shall proceed with enforcement as provided under these Earthwork Regulations, including (1) issuing a stop work order under Section 319(H) and (2) proceeding to revoke the Performance Bond according to Section 319(K) of these

Earthwork Regulations. Earthwork stopped, abandoned by the Owner, or otherwise left un-stabilized for a period of fifteen (15) consecutive days after issuance of the second NOV for a particular infraction shall cause the Earthwork Permit to expire and become invalid. The Owner shall complete all necessary precautions, as determined by the **Enforcing Official**, which in his sole judgment are required to ensure that the stopped, abandoned or unstable Earthwork does not become a hazard or nuisance to human health or the environment.

- H. In addition to any other enforcement authorized herein, the **Enforcing Official** may issue an SWO whenever:
1. Permitted Earthwork is being done contrary to the terms and conditions of the permit and the **Enforcing Official** has issued two NOVs (30 and 15 days respectively) and the **Enforcing Official** has obtained written approval from the Hamilton County Prosecuting Attorney or prosecuting attorney for the local member jurisdiction whichever is applicable if, in the opinion of the prosecuting attorney, the violation is egregious;
 2. Permitted Earthwork is causing or threatens to cause a hazardous condition or imminent and substantial degradation of a water resource and the **Enforcing Official** has issued two Notice of Violations (30 and 15 days respectively) and has obtained written approval from the Hamilton County Prosecuting Attorney or prosecuting attorney for the member Local Jurisdiction whichever is applicable if, in the opinion of the prosecuting attorney, the violation is egregious;
 3. Earthwork is being performed or has been performed that is not in compliance with applicable Flood Plain Regulations. The **Enforcing Official** may order that all fill placed within the regulated flood plain without approval be removed from the flood plain until all applicable Approvals for the fill have been obtained.
- I. Once an SWO has been issued, the Enforcing Official shall request, in writing, the Hamilton County Prosecuting Attorney or the prosecuting attorney for the local member jurisdiction to seek an injunction or other appropriate relief to abate excessive erosion or sedimentation and secure compliance with the Earthwork Regulations.
- J. An SWO shall remain in effect until (1) all required local, state, and or federal permits are issued; (2) the hazardous condition and/or water quality degradation is remedied to the satisfaction of the **Enforcing Official**; or (3) the violative work is remedied and performed in full accordance with the Earthwork Permit and these Earthwork Regulations.
- K. Notwithstanding these Earthwork Regulations, if the **Enforcing Official** finds that any Earthwork poses an imminent and substantial endangerment to any property, or an imminent and substantial degradation of a water resource, the **Enforcing Official** may seek to secure such relief as may be necessary and appropriate to abate such danger or threat, to ensure compliance with these Earthwork Regulations and that public health and the environment is protected.
- L. If a proceeding to revoke a Performance Bond is initiated under Section 319(G) of these Earthwork Regulations, the **Enforcing Official** shall give the Owner five (5) business days following issuance of a SWO to resolve the violation and the **Enforcing Official** shall inform the Owner that the Performance Bond shall thereafter be revoked in the

event of continuing non-compliance. The **Enforcing Official** shall meet with the Owner at the conclusion of the five (5) day period, and if the violations still exist at that time, the **Enforcing Official** shall proceed with the liquidation of the Performance Bond and undertake with the proceeds to complete the work to resolve the violation.

320 APPEALS

- A. Any Owner who believes that there is an error in any order, requirement, decision or determination of the **Enforcing Official** in the relation to these Earthwork Regulations, a condition of an issued Earthwork Permit, a NOV, or other action of the **Enforcing Official** shall have fifteen (15) calendar days from the date of receipt of such written decision to file a written appeal. Appeals for projects within the unincorporated townships are required to be filed with the Hamilton County Board of Earthwork Appeals in accordance with [Section 307.56 of the ORC](#) and the rules of the Board of Earthwork Appeals. Appeals for projects in local member municipal jurisdictions shall be filed in accordance with the local municipality's appeal procedures and rules adopted by the municipality. The municipality appeals procedures shall afford the same basic protections as provided in the standards and rules of the Hamilton County Board of Earthwork Appeals. A copy of the appeal shall be served on the **Enforcing Official**.
- B. Any aggrieved Owner shall set forth in a written notice of appeal the interpretation, ruling or order appealed from, and the provisions of these Earthwork Regulations and related laws and ordinances involved and shall state wherein the interpretation, ruling or order is unlawful or erroneous.

321 PENALTY

- A. Any person, whether Owner, agent of the Owner, or person having control of any property, who violates any of the Earthwork provisions of these Earthwork Regulations, or fails to conform to any of the provisions thereof, or fails to obey any order covered by this Permit and issued by the **Enforcing Official**, shall be subject to a such civil or criminal penalties as may be provided under applicable law, including a civil fine of not less than one hundred dollars (\$100) nor more than five hundred dollars (\$500) in accordance [Section 307.79 of the ORC](#). Each day of violation of these Earthwork Regulations or an order issued under the Earthwork Regulations shall be considered a separate violation subject to a civil fine.
- B. The imposition of any penalties or the use of other enforcement mechanisms shall not preclude the **Enforcing Official** from instituting an action in a Court of proper jurisdiction to prevent an unlawful development, or to restrain, enjoin, correct, or abate a violation, or to require compliance with the provisions of these Earthwork Regulations or other applicable laws, ordinances, rules, or regulations, or the orders of the **Enforcing Official** where authorized by applicable law.
- C. A lawfully issued Stop Work Order issued under these Earthwork Regulations shall remain in effect until (1) all required local, state, and or federal permits are issued, (2) the hazardous condition and/or water quality degradation is remedied to the satisfaction of the **Enforcing Official**, or (3) the faulty work is remedied and executed in full accordance with the Permit and these Earthwork Regulations, or for such other period as may be allowed by applicable law, rule or regulation.

322 REPORTING TO THE HCSWD

- A. The ***Enforcing Official*** shall provide the HCSWD with periodic reports of their activities to enforce these Earthwork Regulations in a format provided by the HCSWD and of sufficient content to support the Local Jurisdiction's compliance with the pertinent terms of the HCSWD's permit with Ohio EPA.
- B. Compliance with the permit enforcement and reporting requirements under this Section are the responsibility of the member Local Jurisdiction.

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