Washington County Stormwater Management, Grading, Soil Erosion and Sediment Control Ordinance



Board of County Commissioners for Washington County, Maryland

Approved by the MDE: October 19, 2010 Adopted by the BCC: November 30, 2010 Effective: May 4, 2010 Repealed and Reenacted with Amendments (*Revision 1*): Adopted December 18, 2012, effective January 9, 2013 Revision 1 amended February 26, 2013, effective February 26, 2013

Washington County, Maryland Stormwater Management, Grading, Soil Erosion and Sediment Control Ordinance

This page intentionally left blank

Table of Contents

ARTICL	E 1 – GENERAL PROVISIONS	1
11	TITI F	1
1.2	AUTHORITY	1
1.3.	PURPOSE	1
1.4.	APPLICABILITY	
1.5.	MINIMUM STANDARDS	3
1.6.	TRANSITIONAL (GRANDFATHERING) PROVISIONS.	3
1.7.	EFFECT ON PREVIOUS REGULATIONS.	4
1.8.	RULES FOR CONSTRUCTION OF LANGUAGE	4
1.9.	CONFLICT WITH OTHER LAWS AND REGULATIONS	5
1.10.	Severability	5
1.11.	INCORPORATION BY REFERENCE.	5
1.12.	Definitions	6
1.13.	Effective Date	
ARTICL	E 2 ADMINISTRATION	18
		10
2.1.	BOARD OF COUNTY COMMISSIONERS.	
2.2.	SOIL CONSERVATION DISTRICT.	
2.3.	DIRECTOR, DIVISION OF PUBLIC WORKS	
2.4.	DIRECTOR, DIVISION OF PLAN REVIEW AND PERMITTING.	
2.5.	GENERAL APPLICATION PROCEDURES	
ARTICL	E 3 - STORMWATER MANAGEMENT	
31	EXEMPTIONS	22
3.2	WAIVER OPTIONS	22
33	REDEVELOPMENT	24
34	RIGHT OF ENTRY	25
3.5	STORMWATER MANAGEMENT CRITERIA	26
3.6	STORMWATTER MANAGEMENT MEASURES	27
3.7.	STORMWATER MANAGEMENT PLANS	
3.8.	PREPARATION OF STORMWATER MANAGEMENT PLANS	
3.9.	Easements	
3.10.	PERMITS	
3.11.	PUBLIC WORKS AGREEMENT AND PRIVATE DEVELOPMENT AGREEMENT.	
3.12.	Performance Security.	
3.13.	Maintenance Agreement.	
3.14.	CONSTRUCTION INSPECTION.	
3.15.	AS-BUILT SUBMISSIONS.	
3.16.	INSPECTION FOR CONDITIONAL ACCEPTANCE.	
3.17.	MAINTENANCE RESPONSIBILITY.	
3.18.	POST CONSTRUCTION MAINTENANCE.	
3.19.	ENFORCEMENT.	
3.20.	Appeals	
3.21.	Penalties	
ARTICI	F 4 – GRADING	50
A		
4.1.	SCOPE	
4.2.	EXEMPTIONS. A GRADING PERMIT SHALL NOT BE REQUIRED FOR THE FOLLOWING:	
4.3.	WAIVER.	60
4.4.	GRADING CRITERIA	60
4.5.	GRADING PLANS	64

Washington County, Maryland Stormwater Management, Grading, Soil Erosion and Sediment Control Ordinance

4.6.	PREPARATION OF GRADING PLANS	
4.7.	GRADING PERMIT REQUIREMENTS.	
4.8.	MODIFICATIONS TO GRADING PLANS.	
4.9.	CONSTRUCTION RESPONSIBILITIES	
4.10.	INSPECTIONS AND NOTICES	
4.11.	CERTIFICATION.	
4.12.	Enforcement.	
ADTICI	E 5 SOIL EDOSION AND SEDIMENT CONTROL	73
AKIICL	E 5 – SUIL ERUSION AND SEDIVIENT CONTROL.	
5.1.	Scope	
5.2.	EXEMPTIONS.	
5.3.	VARIANCES.	
5.4.	EROSION AND SEDIMENT CONTROL PLANS.	
5.5.	Permits	
5.6.	INSPECTION	
5.7.	Enforcement	
5.8.	Severability	
5.9.	Penalties	

Article 1 – General Provisions.

1.1. Title.

1.1.1. This document shall be known as the "Washington County Stormwater Management, Grading, Soil Erosion and Sediment Control Ordinance," (the Ordinance), and may also be referred to as the "Stormwater Management Ordinance", "Soil Erosion and Sediment Control Ordinance," or the "Grading Ordinance."

1.2. Authority.

- 1.2.1. Pursuant to Land Use § 7-101 of the Annotated Code of Maryland, the County Commissioners are granted authority and encouraged to enact ordinances or laws providing for the planning, staging, or provision of adequate public facilities.
- 1.2.2. Pursuant to the Environmental Article, Title 4, Subtitle 1 of the Annotated Code of Maryland, the County Commissioners are required to adopt grading and building ordinances pertaining to all land grading occurring within Washington County. The application of this Ordinance and the provisions expressed herein shall be the minimum soil erosion and sediment control requirements and shall not be deemed a limitation or repeal of any other powers granted by State statute.
- 1.2.3. Pursuant to Article 25 §169 of the Annotated Code of Maryland, the County Commissioners are granted authority to establish public watershed associations for the purpose of constructing, operating, maintaining and carrying out works of improvement for watershed protection, flood prevention, recreation, soil conservation, drainage and/or development, storage, utilization and disposal of water for beneficial purposes.

1.3. Purpose.

- 1.3.1. The purpose of this Ordinance is to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures that control the adverse impacts associated with increased stormwater runoff, grading activities, soil erosion and sedimentation. This Ordinance requires the implementation of best management practices (BMPs) of environmental site design (ESD) to the maximum extent practicable (MEP), to minimize potential associated water quality impacts when land is disturbed by development, construction or earth moving activities.
 - A. Stormwater Management (SWM). The purpose of this Article is to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control storm water runoff and any potential adverse impacts. The goal is to manage stormwater by using environmental site design (ESD) to the maximum extent practicable (MEP) to maintain after development as nearly as possible, the predevelopment runoff

characteristics, and to reduce stream channel erosion, pollution, siltation and sedimentation, and local flooding, and use appropriate structural BMPs only when necessary. This will restore, enhance, and maintain the chemical, physical, and biological integrity of streams, minimize damage to public and private property, and reduce the impacts of land development.

- B. Grading. The goal is to manage the clearing, cutting, filling, and excavation of the land associated with development and/or redevelopment activity and other activities meeting the requirements of this Ordinance to protect watercourses and waterways, prevent soil erosion, and sediment transport, pollution, and adverse impacts on waterways and properties.
- C. Soil Erosion and Sediment Control. The purpose of this Ordinance is to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control the adverse impacts associated with land disturbances. The goal is to minimize soil erosion and prevent off-site sedimentation by using soil erosion and sediment control practices designed in accordance with the Code of Maryland Regulations (COMAR) 26.17.01, the 2011 Maryland Standards and Specifications (Standards and Specifications), and the Stormwater Management Act of 2007 (Act).

Implementing this Ordinance will help reduce the negative impacts of land development on water resources, maintain the chemical, physical, and biological integrity of streams, and minimize damage to public and private property. The application of this Ordinance and the provisions expressed herein shall be the minimum soil erosion and sediment control requirements and shall not be deemed a limitation or repeal of any other powers granted by State statute.

1.3.2. These measures and programs will restore, enhance, and maintain the chemical, physical and biological integrity of streams, minimize damage to the public and private property, and reduce the impacts of land development.

1.4. Applicability.

- 1.4.1. The provisions of this Ordinance shall apply to the development, redevelopment and use of all land within the unincorporated County, unless expressly and specifically exempted or provided otherwise in this Ordinance or by State law. No development or redevelopment shall be undertaken without prior authorization pursuant to this Ordinance. All development and/or redevelopment shall comply with the standards, criteria, and procedures of this Ordinance.
- 1.4.2. No person shall develop or redevelop any land for residential, commercial, industrial, or institutional uses without providing SWM measures that control or manage runoff from such developments, except as provided within this Ordinance. SWM measures must be designed consistent with the Design Manual and constructed according to an approved

plan for new development or the policies stated in Section 3.3 of this Ordinance for redevelopment.

1.4.3. No person shall clear or grade land without implementing soil erosion and sediment controls in accordance with the requirements of this Ordinance, and the Standards and Specifications, except as provided herein.

1.5. Minimum Standards.

1.5.1. The provisions of this Ordinance are minimum standards necessary to accomplish the purposes of this Ordinance, and nothing herein is intended to prevent any development or land use from exceeding the minimums. Should the interpretation and application of any requirements in this Ordinance be found to be in conflict with those imposed by other provisions of law, the more restrictive or higher standards shall prevail.

1.6. Transitional (Grandfathering) Provisions.

- 1.6.1. Stormwater Management Transitional Provisions. The following "Grandfathering" provisions are hereby adopted to provide for the continuance of certain development activities that would otherwise be subject to the requirements of this Ordinance:
 - A. The Division of Plan Review and Permitting may grant an administrative waiver to a development that received a preliminary plan review prior to May 4, 2010. Administrative waivers must be applied for in accordance with Section 1.6.1.C. Administrative waivers expire according to Section 1.6.1.C. of this Ordinance and may be extended according to Section 1.6.1.D. and 1.6.1.E. of this Ordinance. Plans that have received final approval from the District for soil erosion and sediment control and final approval for SWM from the Division of Plan Review and Permitting by May 4, 2010 shall automatically be granted an administrative waiver and thus grandfathered for compliance with the Ordinance in effect on May 4, 2009.
 - B. Unless an Administrative Waiver has been granted, projects submitted for review, but have not obtained final SWM and soil erosion and sediment control approval from the Division of Plan Review and Permitting and the District, as of May 4, 2010 must comply with this Ordinance.
 - C. Projects that have been submitted for review but have not obtained final approval for SWM and soil erosion and sediment control prior to May 4, 2010, may apply for an administrative waiver. Upon receiving a request for an administrative waiver by a Developer (or Agent for the Developer) and subject to a review for compliance with the requirements of Section 1.2.D. (4) of the Maryland Model Stormwater Management Ordinance, June 2009 and April 2010, and regulations established by the Division of Plan Review and Permitting and the District; the Director of the Division of Plan Review and Permitting may grant an

administrative waiver for preliminary SWM plan review prior to May 4, 2010. Such a request must be filed and post-marked no later than six months from the date that MDE's emergency regulations became effective which was April 7, 2010. This provision does not affect the Developer's option under the Waiver provisions of this Ordinance.

- a. An administrative waiver shall expire on May 4, 2013, if the development does not receive final project approval prior to that date; or
- b. May 4, 2017, if the development receives final project approval prior to May 4, 2013.
- c. All construction authorized pursuant to an administrative waiver must be completed by May 4, 2017 or, if the waiver is extended as provided herein, by the expiration date of the waiver extension.
- D. An administrative waiver shall not be extended, except:
 - a. When the development has received a preliminary project review by May 4, 2010; and
 - b. Was subject to a development Rights and Responsibilities Agreement, a Tax Incremental Financing approval, or an Annexation Agreement.
- E. Administrative waivers extended according to Section 1.6.1.D. shall expire when the Development Rights and Responsibilities Agreement, the Tax Increment Financing approval, or the Annexation Agreement expires.
- F. A development plan revised in accordance with this Ordinance shall not forfeit its previously granted administrative waiver unless the functional use, density, development intensity land cover characteristics and intent has been changed significantly as deemed by the Director of Plan Review and Permitting.
- G. The dates contained in this Section are those codified as of the writing of this Ordinance. The dates in this Section may be modified by future State regulations and statues.

1.7. Effect on Previous Regulations.

1.7.1. To the extent that projects are grandfathered under this Article, the provisions of the Ordinance in effect at the time of plan approval shall remain in full force and effect until the grandfathering period is extinguished in accordance with 1.6.1. above.

1.8. Rules for Construction of Language.

1.8.1. A reference to days is to calendar days unless otherwise indicated in this Ordinance, or specified by State law. If a deadline falls on a weekend or County holiday, the time for performing an act is extended to the next working day. A working day is defined as any that is not a Saturday, Sunday or official County holiday.

- 1.8.2. Use of "shall", "will" or "must" is mandatory; "should" is directive, but not binding, and "may" is permissive.
- 1.8.3. Use of "including", "includes", "such as", "additional", or "supplemental" is illustrative and not intended as an exhaustive listing, unless the context clearly indicates the contrary.

1.9. Conflict with Other Laws and Regulations

1.9.1. Where a conflict occurs between this Ordinance and a State statute or another County Ordinance or regulation, the more restrictive provision shall control.

1.10. Severability.

1.10.1. If a court of competent jurisdiction holds any portion of the Ordinance invalid or unconstitutional, such portion shall not affect the validity of the remaining portions of this Ordinance. It is the intent of the Board of County Commissioners that this Ordinance shall stand, even if a section, subsection, sentence, clause, phrase, or portion may be found invalid.

1.11. Incorporation by Reference.

- 1.11.1. For the purpose of this Ordinance, the following documents are incorporated by reference:
- 1.11.2. The 2000 Maryland Stormwater Management Design Manual, Volume I & II (Maryland Department of the Environment, April 2000), and all subsequent revisions, is incorporated by reference by the County Commissioners and shall serve as the official guide for SWM principals, methods, and practices.
 - A. USDA Natural Resource Conservation Service, Maryland Conservation Practice Standard Pond Code 378, latest edition.
 - B. Washington County Standards and Specifications for Public Works Construction, latest edition.
 - C. Subdivision Ordinance, Washington County, MD, latest edition.
 - D. Policy on Construction of Infrastructure for Acceptance and Ownership by Washington County (S-3), latest edition.
 - E. Washington County, MD Sensitive Areas Element of the Comprehensive Development Plan, latest edition.
 - F. Washington County Floodplain Management Ordinance, latest edition.
 - G. Washington County Forest Conservation Ordinance, latest edition.
 - H. Geoffrey M. Bonnin, et.al., 2006. NOAA Atlas 14, Precipitation-Frequency Atlas of the United States, Volume 2, Version 3.0: Delaware, District of Columbia,

Illinois, Indiana, Kentucky, Maryland, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Silver Spring, MD.

I. 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control (Maryland Department of Environment, Water Management Administration), and all subsequent revisions.

1.12. Definitions.

1.12.1. Where a term is not defined therein, refer to the most recent published version of *Merriam-Webster's Collegiate Dictionary*. For the purpose of this Ordinance, the following definitions describe the meaning of the terms used in this Ordinance:

AASHTO. Means the American Association of State Highway and Transportation Officials.

Acceptable/Adequate Outfall. Means the natural or man-made conveyance system or watercourse which has the capacity and stability to convey the stormwater runoff from a site. An adequate outfall may include, but is not limited to, a drainage channel in a public right-of-way, a public storm drain pipe, or a defined floodplain.

Act. Means the Maryland Stormwater Act of 2007.

Administrative Fee. Means a fee equal to fifteen percent (15%) of the sum of the total cost of construction, to be retained by the County for administrative services, engineering, construction administration, material testing and inspections services performed or contracted by the County in the event a claim is made against the surety for a project.

Administrative Waiver. Means a decision by the Director of DPRP pursuant to this Ordinance to allow the construction of a development to be governed by the SWM Ordinance in effect prior to May 4, 2010 in Washington County, Maryland.

Adverse Impact. Means any deleterious effect on waters, wetlands, floodplains or conveyance systems, including their quality, quantity, surface area, species composition, aesthetics or usefulness for human or natural uses which are or may potentially be harmful or injurious to human health, welfare, safety or property, to biological productivity, diversity, or stability or which unreasonably interface with the enjoyment of life or property, including outdoor recreation.

Agricultural Best Management Practices. Means a conservation or pollution control practice that manages soil loss due to farming practices or manages animal wastes or agricultural chemicals so as to minimize movement into surface or ground waters.

Agricultural Land Management Practices. Means those methods and procedures used in the cultivation of land in order to further crop and livestock production and conservation of related soil and water resources. Logging and timber removal operations are not to be considered a part of this definition.

Agricultural Structures. Means a building or structure associated with an agricultural operation, and the primary use of which is (i) the production, storage, distribution or sale of products associated with Agriculture; (ii) the keeping, grazing, breeding, or feeding of animals; or (iii) the storage, repair or maintenance of vehicles, equipment, tools or materials associated with Agriculture.

Applicant. Means any person (engineer, surveyor, developer, and/or owner), firm or governmental agency that executes the necessary forms to procure official approval of a project or a permit to carry out construction of a project or disturbance of land.

Approval. Means a documented action by the Division and/or the District following a review to determine and acknowledge the sufficiency of submitted material to meet the requirements of a specified stage in a local development review process. "Approval" does not mean an acknowledgement by the Division and/or the District that submitted material has been received for review.

Approving Agency. Means the entity responsible for the review and approval of SWM plans.

Aquifer. Means a porous water bearing geologic formation generally restricted to materials capable of yielding an appreciable supply of water.

Authority Having Jurisdiction (AHJ). Means the organization, office, or individual responsible for reviewing, approving or disapproving plans and specifications for construction, development, redevelopment or other activities covered under this Ordinance.

Base Flood. Means the 100-year frequency flood event as indicated in the Flood Insurance Study, as amended, the elevation of which is used for regulatory purposes.

Bench Terraces. Means a relatively flat area (i.e. less than a 3% grade) constructed on sloping land to designed dimensions and grades. Bench terraces are applied along the contour with the length and width controlled by the natural terrain and required soil erosion and sediment controls.

Best Management Practices (BMP). Means a structural device or non-structural practice designed to temporarily store or treat stormwater runoff in order to mitigate flooding, reduce pollution, and provide other amenities.

Building Code. Means the most recently adopted Building Code for Washington County, MD.

Buffer. Means strips of grass or other close-growing vegetation that separate a waterway (ditch, stream, creek) from an intensive land use area (subdivision, farm); also referred to as filter strips, vegetated filter strips, and a grassed buffer.

Cave. Means a natural underground chamber or series of chambers open to the surface.

Certification. Means a signed written statement that specific construction, inspections or tests (where required) have been performed and that such comply with applicable requirements of this Ordinance.

Channel Protection Storage Volume (C_{pv}). Means the volume used to design structural management practices to control stream channel erosion. Methods for calculating the channel protection storage volume are specified in the Design Manual.

CIP. Means the Capital Improvements Program for Washington County, Maryland.

Clear/Clearing. Means the removal of trees and brush, and vegetative ground cover from the land while leaving the root mat intact; shall not include the ordinary mowing of grass.

COMAR. Means the Code of Maryland Regulations promulgated pursuant to various statutory authorities by agents of the State.

Concept Plan. Means the first of three plans submitted under the comprehensive review and approval process required by the Act and described in COMAR 26.17.02 and shall include the information necessary to allow an initial evaluation of a proposed project.

Concept SWM Plan. Means the first of three required plan approvals that includes the information necessary to allow an initial evaluation of a proposed project.

Construction. Means land clearing, grubbing, topsoil stripping, soil movement, grading, excavation, cutting and filling, transporting or otherwise disturbing land for any purpose.

County. Means Washington County, Maryland.

County Commissioners. Means the body politic, Board of County Commissioners for Washington County, MD.

Design Engineer. Means a currently licensed/registered and authorized professional by the State of Maryland responsible for the preparation and submission of a design, plans and plats on behalf of a owner/developer.

Design Manual. Means the 2000 Maryland Stormwater Design Manual, Volume I & II, and all revisions thereto, that serves as the official guide for SWM principals, methods, and practices.

Detention Structure. Means a permanent structure for the temporary storage of surface water runoff, which is designed so as to not create a permanent pool of water.

Developer. Means a property owner involved in developing land, or an individual or corporation with a contractual relationship with the property owner who is developing land and is authorized to act on the property owner's behalf.

Develop Land. Means to grade or change the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial or institutional construction or alteration.

Direct Discharge. Means the concentrated release of stormwater to tidal waters or vegetated tidal wetlands from new development or redevelopment projects in the Critical Area.

Director of DPW. Means the Director of the Division of Public Works (DPW) for Washington County, Maryland or the appropriately-designated individual within the Division of Public Works, delegated authority to act on the Director's behalf.

Director of DPRP. Means the Director of the Division of Plan Review and Permitting (DPRP) for Washington County, Maryland or the appropriately-designated individual within the Division of Plan Review and Permitting, delegated authority to act on the Director's behalf.

District. Means the Washington County Soil Conservation District. The Washington County Soil Conservation District constitutes a political subdivision of the State and, as a public body, exercises public powers.

Division. Means the Division of Public Works and the departments within the Division of Public Works for Washington County, MD.

DNR. Means the Maryland Department of Natural Resources.

Drainage Area. Means the area contributing runoff to a single point measured in a horizontal plane, which is enclosed by a ridgeline or drainage divide.

Easement. Means a grant or reservation by the owner of land for the use of such land by others for a specific purpose or purposes, and which must be included in the conveyance of land affected by such easement.

Environmental Permit. Means a permit issued, or to be issued, by the County, State or Federal government(s) authorizing work of any type in resource protection zones and sensitive areas.

Environmental Site Design (ESD). Means using small-scale SWM practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources. Methods for designing ESD practices are specified in the Design Manual.

Erosion. Means the process by which the ground surface is degraded or worn away by the action of wind, water, ice or gravity.

Erosion and Sediment Control. Means a system of structural and vegetative measures that minimizes soil erosion and off-site sedimentation.

Excavation. Means any act by which soil or rock is cut into, dug, quarried, uncovered, removed, displaced, or relocated including the conditions resulting there from.

Exemption. Means those land development activities that are not subject to the provisions or a portion of the provisions contained in this Ordinance.

Existing Grade. Means the vertical location of the existing ground surface prior to excavation, filling, or redevelopment.

Extended Detention. Means a stormwater design feature that provides gradual release of a volume of water in order to increase settling of pollutants and protect downstream channels from frequent storm events. Methods for designing extended detention BMPs are specified in the Design Manual.

Extreme Flood Volume (Q_f) . Means the storage volume required to control those infrequent but large storm events in which overbank flows reach or exceed the boundaries of the 100-year floodplain.

Fill. Means a deposit of materials of any kind placed by artificial means.

Final project approval. Means approval of the final SWM plan and Soil Erosion and Sediment Control Plan required to construct a project's SWM facilities. "Final project approval" also includes securing bonding or financing for final development plans if either is required as a prerequisite for approval.

Final Soil Erosion and Sediment Control Plan. Means, along with the final stormwater management plan, the last of three plans submitted under the comprehensive review and approval process required by the Act and described in COMAR 26.17.02. Final Soil Erosion and Sediment Control Plans shall be prepared and approved in accordance with the specific requirements of the District and this Ordinance and designed in accordance with the Standards and Specifications.

Final Stormwater Management Plan. Means the last of three required plan approvals which includes the information necessary to allow all approvals and permits to be issued by the approving agency.

Finished Grade. Means the final grade or elevation of the ground surface conforming to the proposed design.

Floodplain. Means the land typically adjacent to a body of water or intermittent waterway with ground surface elevations that are inundated by the base flood or the designated local flood event.

Flow Attenuation. Means prolonging the flow time of runoff to reduce the peak discharge.

Format Guidelines. Means the format for development plan submittals established by the Division and the Division of Plan Review and Permitting.

Grade/Grading. Means to cause disturbance of the earth. This shall include, but is not limited to, any excavating, filling, stockpiling of earth materials, grubbing, root mat or top soil disturbance, or any combination of them.

Grading Permit. Means a permit issued to authorize work to be performed under the provisions of this Ordinance.

Grading Unit. Means the maximum contiguous area allowed to be graded at a given time. For the purpose of this Ordinance, a grading unit is 20 acres or less.

Highly Erodible Soils. Means those soils with a slope greater than 15 percent; or those soils with a K_w (erosivity K-factor, whole soil) value greater than 0.35 and on slopes greater than 5 percent.

Impervious Surface(s). Means any surface that does not allow stormwater to infiltrate into the ground.

In-fill Development. Means the development of vacant land, restoration or rehabilitation of existing buildings, structures or infrastructure where a storm drainage system is already in-place and the development takes advantage of the existing storm drainage infrastructure, and the project does not meet the definition of redevelopment.

Infiltration. Means the passage or movement of water into the soil surface.

Inspection Agency. Means the appropriate Authority Having Jurisdiction (AHJ) to inspect any given element of work within the applicability of this Ordinance.

Karst. Means a type of topography that is formed over limestone or dolomite by dissolving or solution of the carbonate rocks, characterized by sinkholes, closed depressions, caves, solution channels, internal drainage and irregular bedrock surfaces.

Landscaping/Residential. Means modify or slightly alter the existing plant cover and vegetation on a residential property, including gardening.

Limit of Disturbance. Means the perimeter boundary of an enclosed space where clearing, grading, excavation, filling or any combination thereof is anticipated to occur.

Local Flood. Means the 100-year frequency flood event generated from a drainage area of forty (40) or more acres of land that does not meet the definition of the base flood.

Major modifications. Means a development plan change required as a result of a field inspection, change in actual site characteristics as compared to those expected at the time of design preparation or requested by the developer, which affects the intent of the design, density and/or intensity of the development, direction, characteristic and duration of surface water flow leaving the site, land cover characteristics that in the opinion of the AHJ that the modification changes the previously approved plan as it relates to SWM, grading and/or soil erosion and sediment control activities on the project.

Maximum Extent Practicable (MEP). Means designing SWM systems so that all reasonable opportunities for using ESD planning techniques and treatment practices are exhausted and only where absolutely necessary, a structural BMP is implemented.

MDE. Means the Maryland Department of the Environment, Water Management Administration.

Off-site Stormwater Management. Means the design and construction of a facility necessary to control stormwater from one or more development(s) on a parcel of land different from that which is being developed or redeveloped.

One-Year Design Storm. Means the one-year frequency precipitation value established by the Precipitation-Frequency Atlas referenced herein, distributed in a SCS, Type II 24hour distribution.

One Hundred-Year Design Storm. Means the one hundred-year frequency precipitation value established by the Precipitation-Frequency Atlas referenced herein, distributed in a SCS, Type II 24-hour distribution.

On-Site Stormwater Management. Means the design and construction of systems necessary to control stormwater within an immediate development.

Overbank Flood Protection (Q_p) . Means the volume controlled by structural practices to prevent an increase in the frequency of out of bank flooding generated by development or redevelopment. Methods for calculating the overbank protection volume are specified in the Design Manual.

Owner/Developer. Means a person undertaking, or for whose benefit, activities covered by this Ordinance are carried on. General contractors or subcontractors, or both, without a proprietary interest in a project are not included within this definition. Permittee. Means any person to whom a permit is issued pursuant to the provisions of this Ordinance.

Person. Means the federal government, the State, any County, municipal corporation, or other political subdivision of the State, or any of their units, or an individual receiver, trustee, guardian, executor, administrator, fiduciary, or representative of any kind, or any partnership, firm, association, public or private corporation, or any other entity.

Planning Techniques. Means a combination of strategies employed early in project design to reduce the impact from development and to incorporate natural features into a SWM plan.

Pollution. Means the contamination or other alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or the discharge or deposit of any organic matter, harmful organisms, liquid, gaseous, solid, radioactive, or other substance into any waters of the state that will render the waters harmful, detrimental, or injurious to: public health, safety or welfare; domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or livestock, wild animals, birds, fish, or other aquatic life.

Preliminary Plan Review. Means a submission to the AHJ where review comments have been issued by the respective AHJ, as part of the local preliminary development or planning review process that includes, at a minimum: the number of planned dwelling units or lots; proposed project density; proposed size and location of all land uses for the project; a plan that identifies: proposed drainage patterns; location of all points of discharge from the site; and the type, location and size of all SWM measures based on site-specific SWM requirement computations; and any other information deemed necessary by the Division of Plan Review and Permitting and/or the District, including, but not limited to: the proposed alignment, location and construction type and standards for all roads, highways, access ways and areas of vehicular traffic; a demonstration that the methods by which the development will be supplied with water and wastewater service are adequate; and the size, type, and general location of all proposed wastewater and water system infrastructure.

Private Development Agreement (PDA). Means a written agreement between the developer/property owner covering work on a privately owned property.

Privately Owned and Maintained Infrastructure. Means ESD planning techniques and practices and structural stormwater measures serving commercial, industrial, institutional, agricultural or residential developments consisting of multi- family dwellings, or a single residential lot for either a detached or semi-detached dwelling.

Public Works Agreement (PWA). Means a written agreement between the Developer and the County covering works within the public right of way or lands to become public.

Publicly Owned and Maintained Infrastructure. Means ESD planning techniques and practices and structural stormwater measures serving multi-lot residential developments consisting of detached, semi-detached or townhouse dwellings.

Qualified Professional. Means the "Design Engineer" or "Verifying Professional".

Recharge Volume (Rev). Means that portion of the water quality volume used to maintain groundwater recharge rates at development or redevelopment sites. Methods for calculating the recharge volume are specified in the Design Manual.

Redevelopment. Means any construction, alteration or improvement performed on sites where existing land use is commercial, industrial, institutional, or multifamily residential and existing site impervious area exceeds forty (40) percent.

Responsible personnel. Means any foreman, superintendent, or project engineer who is in charge of on-site clearing and grading operations, or the implementation and maintenance of a Soil Erosion and Sediment Control Plan.

Retention Structure. Means a permanent structure that provides for the storage of runoff by means of a permanent pool of water.

Retrofitting. Means the construction of an ESD practice or structural BMP in a previously developed area, the modification of an existing structural BMP, or the implementation of a non-structural practice to improve water quality over current conditions.

Responsible Personnel. Means any foreman, superintendent or project engineer who is in charge of on-site clearing and grading operations or sediment control associated with earth changes or disturbances.

Rights and Responsibilities Agreement. Means to include Public Works Agreements, Adequate Public Facilities Ordinance Mitigation Agreements, and other agreements between the County and a Developer executed for the purpose of establishing responsibilities and obligations in association with a development project.

Security. Means valuable consideration pledged or deposited for the purpose of assuring performance of the obligations imposed under this Ordinance and other County Policies in a form acceptable to the Director of DPW and the County Attorney, including an irrevocable stand-by letter of credit, performance bond, or certified check. Sureties must be of AM Best Rating, listed as U.S. Treasury approved, licensed and certified to conduct business in the state of Maryland. The County may also require the surety to produce a Summary Balance Sheet prior to acceptance of a bond. All security shall be drawn on a Maryland bank branch. Performance bonds shall be subject to automatic renewal.

Sediment. Means soils or other surface materials transported or deposited by the action of wind, water, ice, or gravity as a product of erosion.

Sensitive Area. Means natural resources, including but not necessarily limited to, perennial and intermittent streams, buffers, wetlands, sinkholes, caves, floodplains, steep slopes, highly erodible soils or other areas designated by the Division of Plan Review and Permitting and/or the District where environmental conservation is essential.

Sinkhole. Means a closed, localized land subsidence, generally a funnel-shaped or steep sided depression, caused by the dissolution of underlying carbonate rocks or the subsidence of the land surface into a subterranean passage, cavity or cave.

Site. Means any tract, lot or parcel of land or combination of tracts, lots, or parcels of land, which are in one ownership, or are contiguous and in diverse ownership where development or redevelopment is to be performed as part of a unit, subdivision or project.

Site Development Plan. Means the second of three required plan approvals that includes the information necessary to allow a detailed evaluation of a proposed project.

Soil Conservation and Water Quality Plans. Means land use plans for farms that show farmers how to make the best possible use of their soil and water resources while protecting and conserving those resources for the future.

Soil Erosion and Sediment Control. Means a system of structural and vegetative measures that minimize soil erosion and off-site sedimentation.

Soil Erosion and Sediment Control Plan. Means a soil erosion and sediment control strategy or plan designed to minimize soil erosion and prevent off-site sedimentation.

Stabilization. Means the protection of exposed soils from erosion by the application of seed and mulch, seed and matting, sod, other vegetative measures, and/or structural means.

Standard Grading Plan. Means a standard plan of requirements for a single residential lot, depicting requirements for the proposed grading, and incorporates a standard soil erosion and sediment control plan, that may be used for development when the proposed disturbance area is greater than or equal to 5,000 square feet or 100 cubic yards of volume (excavation or fill), but does not exceed 30,000 square feet or 1,000 cubic yards of volume (excavation or fill)."

Standard Soil Erosion and Sediment Control Plan. Means a standard plan of requirements for soil erosion and sediment control that may be used for disturbance on a single residential lot when the proposed disturbance area is \geq 5,000 square feet or 100 cubic yards of volume (excavation or fill), but does not exceed 30,000 square feet or 1,000 cubic yards of volume (excavation or fill).

Standard Stormwater Management Plan. Means a standard plan of requirements for stormwater management that may be used for disturbance on a single residential lot when the proposed disturbance area is \geq 5,000 square feet or 100 cubic yards of volume (excavation or fill), but does not exceed 30,000 square feet or 1,000 cubic yards of volume (excavation or fill).

Steep Slope. Means slopes of twenty-five (25) percent or more, or slopes greater than fifteen (15) percent when the soil erodibility coefficient or K_w factor (erosivity K-factor, whole soil) as determined by the most current soil survey for Washington County, MD is 0.35 or greater.

Stormwater. Means water that originates from a precipitation event.

Stormwater Management. Means natural areas, ESD practices, SWM measures, and any other structure through which stormwater flows, infiltrates, or discharges from a site.

Stormwater Management Plan. Means an engineered drawing, calculations and specifications, prepared in accordance with this Ordinance, depicting the methods of compliance, construction techniques and details of the ESD practices, SWM measures, and any other structure through which stormwater flows, infiltrates, or discharges from a site.

Stormwater Management System. Means natural areas, ESD practices, stormwater management measures, and any other structure through which stormwater flows, infiltrates, or discharges from a site.

Stripping. Means any activity that removes the vegetative surface cover including tree removal, clearing, grubbing and storage or removal of topsoil.

Structure. Means anything constructed or erected, other than a fence or retaining wall, which requires location on the ground or if attached to something having a location on the ground.

Study Point. Means the point, subject to approval by the Director of DPRP, for which all hydrologic, hydraulic and photographic studies are to be performed.

Ten-Year Design Storm. Means the ten-year frequency precipitation value established by the Precipitation-Frequency Atlas referenced herein, distributed in a SCS, Type II 24-hour distribution.

Topography. Means the existing configuration of the earth's surface including the relative relief, elevation, and position of land features.

Transitional Provisions. Means the policies adopted by the County Commissioners for accommodating projects that span the adoption and implementation phase of this Ordinance.

Two-Year Design Storm. Means the two-year frequency precipitation value established by the Precipitation-Frequency Atlas referenced herein, distributed in a SCS, Type II 24hour distribution.

Variance. Means the modification of the minimum soil erosion and sediment control requirements for exceptional circumstances such that strict adherence to the requirements would result in unnecessary hardship and not fulfill the intent of this Ordinance.

Verifying Professional. Means a currently licensed/registered and authorized professional by the State of Maryland who is responsible to attest to the fact that the public road infrastructure, grading, soil erosion and sediment control, public/private ESD planning and management techniques and structural SWM practices have been constructed in accordance with the approved construction plans.

Waiver. Means the reduction of SWM requirements by the Division of Plan Review and Permitting for a specific development on a case-by-case review basis.

Watercourse. Means any natural or artificial stream, river, creek, ditch, swale, channel, conduit, culvert, drain, waterway, gully, ravine or wash, in and including any adjacent area that is subject to inundation from overflow or flood water.

Watershed. Means the total drainage area contributing runoff to a single point.

Watershed Management Plan. Means a written and adopted document that sets forth strategies, goals, objectives and management alternatives toward obtaining and maintaining an environmentally and economically healthy watershed that benefits all who have a stake in it.

Water Quality Volume (WQv). Means the volume needed to capture and treat the runoff from ninety (90) percent of the average annual rainfall at a development site. Methods for calculating the water quality volume are specified in the Design Manual.

Workday. Means a non-holiday, regular workday of Washington County Government.

1.13. Effective Date.

1.13.1. The Washington County Stormwater Management, Grading, Soil Erosion and Sediment Control Ordinance, as amended, is hereby adopted on this 18th day of December, 2012 and effective January 9, 2013.

Article 2. Administration.

2.1. Board of County Commissioners.

- 2.1.1. Powers and Duties. In addition to any authority granted by general or special law, the Board of County Commissioners shall have the following powers and duties under the provisions of this Ordinance:
 - A. To initiate, review, hear, consider and approve or disapprove the adoption of an Ordinance to amend the text of this Ordinance;
 - B. To maintain and approve fee schedule(s) for plan review submissions, inspections, approvals and to ensure the appropriate levels of security are obtained; and
 - C. To work with the Soil Conservation District in ensuring the local Ordinance meets the intent of the Annotated Code of Maryland and applicable federal regulations.

2.2. Soil Conservation District.

- 2.2.1. Powers and Duties. The District shall administer the provisions of this Ordinance governing Soil Erosion and Sediment Control and have the following powers and duties under the provisions of this Ordinance:
 - A. Review and approval of soil erosion and sediment control plans prior to the County's issuance of grading or building permits;
 - B. To apply the provisions of the most current Maryland Standards and Specifications for Soil Erosion and Sediment Control, as amended;
 - C. To administer reviews and approval of SWM ponds requiring small pond approval for Dam Safety as delegated by the MDE;
 - D. To coordinate with the MDE to inspect sites and provide technical assistance to ensure compliance with the applicable provisions of this Ordinance; and
 - E. The District shall keep records of all applicable soil erosion and sediment control plans reviewed and approved under this Ordinance.

2.3. Director, Division of Public Works.

- 2.3.1. The Director of the Division of Public Works shall administer the provisions of this Ordinance governing public highways, subdivision streets, drainage systems, grading, SWM approvals, and shall have the following duties and responsibilities:
 - A. To provide professional recommendations and technical assistance to the County Commissioners, Planning Commission, Board of Zoning Appeals, the District, the Department of Planning and Zoning, the Division of Plan Review and Permitting, and/or other boards and commissions upon request;
 - B. To provide expertise regarding the adequacy of public facilities with respect to SWM, drainage conveyance, grading operations and adequate outfall;

- C. To track appropriate surety/bonding levels and the exercising of surety/bonds;
- D. To maintain records of all applicable inspections conducted under this Ordinance, subject to records retention policies by the County Commissioners;
- E. To make recommendations to the County Commissioners regarding improvements or revisions to the Ordinance as may be deemed necessary;
- F. To establish interim standards for construction and to recommend to the County Commissioners, for adoption, standards for construction;
- G. For CIP projects that do not require site plan approval by the Planning Commission, to review, comment, approve or disapprove plans, calculations, specifications, and professional recommendations and reports necessary to obtain approval for SWM and grading;
- H. To perform ESD planning techniques and practices and structural SWM inspections and secure the performance of corrective action(s) if maintenance is not performed by the property owner(s) and/or developer;
- I. To inspect the progress and elements of work completed to meet the requirements of this Ordinance and review material type, source and test results necessary to ensure quality construction within the applicable infrastructure requirements; and
- J. To ensure compliance with this Ordinance and other relevant laws, ordinances and regulations through administrative, negotiation and legal procedures. To assure compliance the Director may post "Stop Work" orders on any lots, parcel, site, structure or property which is in violation of applicable sections of this Ordinance or any other code relating to SWM and/or grading, on behalf of the County Commissioners to:
 - a. Require that all work and activity shall immediately cease on the designated premises;
 - b. Remove and suspend, with the concurrence of the Director of DPRP, any approval under this Ordinance issued for the project until the violation is rectified;
 - c. To investigate inquiries and complaints relating to the subjects of this Ordinance and to take action when appropriate; and
 - d. To produce statistical reports regarding the activities under this Ordinance.

2.4. Director, Division of Plan Review and Permitting.

- 2.4.1. The Director of DPRP shall administer the provisions of this Ordinance governing building, grading permit approvals, and stormwater management, land development and land use plan approval, zoning administration, site plan approval, subdivision plan approval and shall have the following duties and responsibilities:
 - A. To receive applications for and issuance of grading permits after having obtained concurrence from the Division;
 - B. To confirm the Building Permit application includes evidence of a previously issued and current grading permit.
 - C. To confirm that any application for a Building Permit includes all required approvals from all appropriate agencies before the permit is issued;

- D. To review, comment, approve or disapprove modifications and written requests for Waiver from the provisions of this Ordinance, where specifically authorized;
- E. To establish appropriate surety/bonding levels, track collection of fees, schedules for the ESD planning techniques and practices and structural SWM measures, and issuance of grading permits and sediment control measures;
- F. To maintain records of all applicable plans and permits reviewed, issued under this Ordinance, subject to records retention policies by the County Commissioners;
- G. To make recommendations to the County Commissioners regarding improvements or revisions to the Ordinance as may be deemed necessary;
- H. To recommend to the Director of DPW interim and permanent standards for construction;
- I. To review, comment, approve or disapprove plans, calculations, specifications, and professional recommendations and reports necessary to obtain approval for SWM and grading, except for CIP projects that do not require site plan approval by the Planning Commission.
- J. To ensure compliance with this Ordinance and other relevant laws, ordinances and regulations through administrative, negotiation and legal procedures. To assure compliance, the Director of DPW or the Director of DPRP may post "Stop Work" orders on any lot, parcel, site, structure or property which is in violation of applicable sections of this Ordinance or any other code relating to SWM and/or grading, on behalf of the County Commissioners to:
 - a. Require that all work and activity shall immediately cease on the designated premises;
 - b. Remove and suspend, with the concurrence of the Director of DPW, any approval under this Ordinance issued for the project until the violation is rectified;
 - c. To investigate inquiries and complaints relating to the subjects of this Ordinance and to take action when appropriate; and
 - d. To produce satisfied reports regarding the activities under this Ordinance..
- K. To confer with appropriate agencies and ensure that all requirements of this Ordinance and other applicable codes and regulations have been met prior to issuance of a Building Permit and/or Certificate of Occupancy.

2.5. General Application Procedures.

- 2.5.1. All submittals for approval and applications required by the provisions of this Ordinance shall be processed in accordance with the following procedures:
 - A. Determination of Completeness of Submittal/Application. Submittals/Applications for development approvals shall be submitted on the appropriate forms and methods set forth in this Ordinance and operational policies of the Division, the District and the Division of Plan Review and Permitting. After receipt of a submittal/application, the applicable AHJ shall determine whether the

submittal/application is complete. The review of a submittal/application shall not begin until the submittal/application is determined to be complete. Once the submission/application is deemed incomplete, the applicant shall be notified within seven (7) days, specifying the deficiencies of the application, the additional information that must be supplied, and advising the applicant that no further action will be taken by the County or District on the application until the deficiencies are corrected.

- B. Remedy of Deficiencies. If the applicant fails to correct the specified deficiencies within ten (10) days of the notification of deficiency, the submittal/application for development approval shall be deemed withdrawn and will be returned to the applicant.
- C. Fees. All applications shall be accompanied by all required fees in accordance with the schedule(s) established by the approving AHJ.
- D. Plan reviews, commenting and approval or disapproval shall follow the procedures set forth in this Ordinance and the operational policies of the Division, the District and the Division of Plan Review and Permitting.

Article 3 - Stormwater Management

3.1. Exemptions.

- 3.1.1. The following development activities are exempt from the provisions of this Article and the requirement of providing SWM:
 - A. Agricultural land management activities;
 - B. Additions or modifications to existing single family detached residential structures if they comply with Subsection 3.1.1.C of this Article;
 - C. Developments that do not singularly or cumulatively disturb 5,000 square feet or more of total land area;
 - D. Land development activities that the Administration determines will be regulated under specific State laws, which provide for managing stormwater runoff.
- 3.1.2. Nothing in this section shall prohibit the Director of DPRP from requiring ESD planning techniques and practices and structural stormwater measures based upon an evaluation of the cumulative effects of previous exemptions. Similarly, if the site in question falls within the exemptions identified in Section 3.1.1. and said site is covered under an existing SWM plan and/or watershed management plan, any development shall be consistent with that existing plan.

3.2. Waiver Options.

- 3.2.1. The Director of DPRP may grant approval for a Waiver for SWM quantity control only to those projects within areas where a watershed management plan has been developed consistent with Section 3.2.7. of this Article.
- 3.2.2. Except as provided in Section 3.2.8. of this Article, if watershed management plans consistent with Section 3.2.7. of this Article have not been developed, stormwater management quantitative control waivers may be granted to the following projects provided that it has been demonstrated that ESD has been implemented to the MEP:
 - A. That have direct discharges to tidally influenced receiving waters;
 - B. That are in-fill development located in a Priority Funding Area where the economic feasibility of the project is tied to the planned density, and where implementation of the 2009 regulatory requirements would result in a loss of the planned development density provided that:
 - a. Public water and sewer and stormwater conveyance exist;
 - b. The quantitative waiver is applied to the project for the impervious cover that previously existed on the site only;
 - c. ESD to the MEP is used to meet the full water quality treatment requirements for the entire development; and
 - d. ESD to the MEP is used to provide full quantity control for all new impervious surfaces; or

- C. When the approving agency determines that circumstances exist that prevent the reasonable implementation of quantity control practices.
- 3.2.3. A waiver to SWM qualitative control shall apply only to:
 - A. In-fill development projects where ESD has been implemented to the MEP and it has been demonstrated that other BMPs are not feasible;
 - B. Redevelopment projects if the requirements of Section 3.3. of this Article are satisfied; or
 - C. Sites where the Director of DPRP determines that circumstances exist that prevent the reasonable implementation of ESD to the MEP and all requirements of Section 3.5.1.B through 3.5.1.N. and Section 3.6.2. of this Article have been satisfied.
- 3.2.4. An owner/developer or a person seeking a Waiver for SWM quantitative or qualitative control must submit a written request to the Director of DPRP containing descriptions, drawings, calculations, and any other information that is necessary to evaluate the proposed Waiver sought in accordance with the provisions of this Article. Requests for Waivers shall not be deemed granted until authorized by the Division of Plan Review and Permitting in writing, on a form approved by the Director of DPRP. The Division of Plan Review and Permitting may charge a fee for processing a Waiver Request. If there are subsequent additions, extensions, or modifications to a site after a Waiver request has been granted, a separate written Waiver request and processing fee must be submitted and authorization obtained in accordance with the provisions of this section.
 - A. Waiver requests shall only be granted when it has been demonstrated that ESD has been implemented to the MEP and must:
 - B. Be considered on a case-by-case basis;
 - C. Consider the cumulative effects of prior exemptions and Waivers granted for other sites within the impacted affected drainage area or watershed; and
 - D. Reasonably ensure that the development will not adversely impact stream quality, increase known undesirable flooding, or fail to address downstream drainage deficiencies in a reasonable manner.
- 3.2.5. Any Waiver of SWM does not relieve the applicant of providing an adequate storm drainage system. Any existing on-site or off-site storm drainage systems that are considered inadequate to accommodate the proposed development must be improved prior to development. This policy may be applied to correct an existing inadequate outfall, and may aid in meeting the requirement for adequate drainage.
- 3.2.6. A watershed management plan developed for the purpose of implementing different SWM policies for Waivers and redevelopment shall:

- A. Include detailed hydrologic and hydraulic analyses to determine hydrograph timing;
- B. Evaluate both quantity and quality management and opportunities for ESD implementation;
- C. Include cumulative impact assessment of current and proposed watershed development;
- D. Identify existing flooding and receiving stream channel conditions;
- E. Be conducted at a reasonable scale;
- F. Specify where on-site or off-site quantitative and qualitative SWM practices are to be implemented;
- G. Include any other conditions not specifically addressed herein but considered necessary by the Director of DPRP in order to fully evaluate the study area;
- H. Be consistent with the General Performance Standards for SWM in Maryland found in the Design Manual; and
- I. Be approved by the MDE.
- 3.2.7. Stormwater management quantitative and qualitative control waivers may be granted for phased development projects if a system designed to meet the 2000 regulatory requirements and the 2001 Washington County Stormwater Management Ordinance for multiple phases has been constructed by May 4, 2010. If the 2009 regulatory requirements cannot be met for future phases constructed after May 4, 2010, all reasonable efforts to incorporate ESD in future phases must be demonstrated.

3.3. Redevelopment.

- 3.3.1. Applicability. SWM plans are required by Washington County for all redevelopment, unless otherwise specified by watershed management plans developed according to Section 3.2.7. of this Article. ESD planning techniques and practices and structural stormwater measures must be consistent with the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction. All redevelopment designs shall:
 - A. Reduce impervious area within the limit of disturbance (LOD) by at least 50 percent according to the Design Manual;
 - B. Implement ESD to the MEP to provide water quality treatment for at least 50 percent of the existing impervious area within the LOD; or
 - C. Use a combination of the provisions set forth in Section 3.3.1.A. or 3.3.1.B. of this Article for at least 50 percent of the existing site impervious area.
- 3.3.2. Alternative SWM measures may be used to meet the requirements in Section 3.3.1. of this Article upon approval by the Division of Plan Review and Permitting if the owner/developer satisfactorily demonstrates to the Division of Plan Review and Permitting that impervious area reduction has been maximized and ESD has been implemented to the MEP. Alternative SWM measures include, but are not limited to:

- A. An on-site structural BMP;
- B. An off-site structural BMP to provide water quality treatment for an area equal to or greater than 50 percent of the existing impervious area; or
- C. A combination of impervious area reduction, ESD implementation, and an on-site or off-site structural BMP for an area equal to or greater than 50 percent of the existing site impervious area within the LOD.
- 3.3.3. The overbank flood protection volume and extreme flood volume requirements specified in the Design Manual do not apply to redevelopment projects unless required by the Director of DPRP. Should any of these requirements be considered necessary, the Director of DPRP will determine the appropriate level of control.
- 3.3.4. Washington County Division of Plan Review and Permitting may develop separate policies for providing water quality treatment for redevelopment projects if the requirements of Section 3.3.1. and Section 3.3.2. of this Article cannot be met. Any separate redevelopment policy shall be reviewed and approved by the MDE and may include, but not be limited to:
 - A. A combination of ESD and an on-site or off-site structural BMP;
 - B. Retrofitting including existing BMP upgrades, filtering practices and off-site ESD implementation;
 - C. Participation in a stream restoration project;
 - D. Pollution trading with another entity;
 - E. Payment of a fee-in-lieu; or
 - F. A practical waiver of the treatment requirements if ESD is not practicable
- 3.3.5. SWM shall be addressed according to the new development requirements in the Design Manual for any net increase in impervious area.

3.4. Right of Entry.

- 3.4.1. Right of entry will be granted to the Division, the Division of Plan Review and Permitting, the District and the MDE upon submission of a development plan for SWM approval for the purposes of assessing on-site conditions as part of the plan review process and conducting site assessments during and after construction.
- 3.4.2. In the discharge of duties delegated by the State of Maryland and the Board of County Commissioners, pursuant to the provisions of this Article, the person or persons with the authority for performing the functions shall have the authority to enter onto any tract or parcel of land in the jurisdiction to enforce the provisions of this Article. However, those persons who are delegated with the administrative function shall not enter any dwelling or structure without the consent of the property owner.

3.4.3. Right of entry will be granted to the Division, the Division of Plan Review and Permitting, the District and the MDE upon approval of a SWM and/or soil erosion and sediment control plan for the purposes of inspecting, making visual observations, taking measurements, conducting tests, construction, reconstruction and/or maintenance of any ESD planning technique(s), treatment practice(s) and structural SWM measure(s).

3.5. Stormwater Management Criteria.

- 3.5.1. Minimum SWM Control Requirements. The minimum SWM control requirements established under this Article and in the Design Manual are as follows:
 - A. The planning techniques, nonstructural practices, and design methods specified in the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction are to be used to implement ESD to the MEP. The use of ESD planning techniques and treatment practices must be exhausted before any structural BMP is implemented. SWM plans for development projects subject to this Article shall be designed using ESD sizing criteria, recharge volume, water quality volume, and channel protection storage volume criteria according to the Design Manual and latest adopted version of the Washington County Standards and Specifications for Public Works Construction. The MEP standard is met when channel stability is maintained, predevelopment groundwater recharge is replicated, nonpoint source pollution is minimized, and structural SWM practices are used only if determined to be absolutely necessary.
 - B. The overbank flood protection volume shall be managed for all new development sites in accordance with the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
 - C. All SWM control measures shall be designed and constructed in accordance with the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
 - D. Alternate minimum control requirements may be adopted subject to Division of Plan Review and Permitting and MDE approval. The Division of Plan Review and Permitting and the MDE shall require a demonstration that alternative requirements will implement ESD to the MEP and control flood damages, accelerated stream erosion, water quality, and sedimentation. Comprehensive watershed studies may also be required.
 - E. Sensitive areas shall be delineated on the concept plan submission and all subsequent plan submissions. At a minimum, all sensitive area protection requirements regulated by local, State and federal law shall be implemented. The project narrative shall identify the strategies proposed to protect sensitive areas.
 - F. Natural resources determined to be high value, such as those under state and federal authority as defined by Chapter 5 of the MDE Design Manual, may be required to be located within an established conservation easement, as determined by the AHJ.

- G. Proposed site imperviousness shall be minimized using all applicable appropriate methods described in Table 5.2 and Chapter 5 of the Design Manual.
- H. The overbank flood protection volume shall be calculated in accordance with the Design Manual using the 10-year frequency storm event. The extreme flood volume calculated for the 100-year frequency storm event shall only be used as sizing criteria if so directed by the Director of DPRP.
- I. Where a structural stormwater measure having an embankment, as defined by MD 378 or as required to be MD 378 compliant by state regulations, is intended to become publicly owned and maintained infrastructure, a minimum 10-ft from the top of cut or 15-ft. from the toe of the embankment setback from the closest site property line to the limit of the BMP (toe of fill or top of cut) shall be provided to the maximum extent practicable.
- J. The Director of DPRP may require more than the minimum control requirements specified in this Article if hydrologic or topographic conditions warrant or if flooding, stream channel erosion, or water quality problems exist downstream from a proposed project. For such cases, the owner/developer shall submit to the Director of DPRP an analysis of the impacts of stormwater flows downstream in the watershed, in accordance with the documents incorporated by reference in this Article.
- K. When a project is located within a watershed where a state or federally developed TMDL has been established or the waterway has been designated as a Tier II water by the MDE; the Director of DPRP may, to the maximum extent practicable, require water quality and quantity measures consistent with the improvement strategies established for that respective watershed. In some cases those requirements may exceed the minimum criteria contained herein, but shall be consistent with the state or federally approved improvement strategy.
- L. SWM and soil erosion and sediment control plans, where applicable, shall be consistent with adopted flood management plans that have been approved by the MDE in accordance with the Flood Hazard Management Act of 1976.
- M. For those sites that have previously received SWM exemptions and or waivers under the 1984 or 2001 version of this Ordinance, their pre-development condition under this Article shall be that which existed on the site at the time of the original approval. This requirement shall not apply to redevelopment. Redevelopment shall comply with the provisions found in Section 3.3.
- N. Pursuant to the requirements of the Design Manual, developers of land uses that generate higher concentrations of hydrocarbons, trace metals, or toxicants than are found in typical stormwater runoff shall be required to prepare and submit to the Division of Plan Review and Permitting for review and approval a Stormwater Pollution Prevention Plan to reduce the generation of pollutants from the site or prevent contact of rainfall with the pollutants.

3.6. Stormwater Management Measures.

3.6.1. The ESD planning techniques and practices and structural SWM measures established in this Article shall be used, either alone or in combination, in a SWM plan. A developer

shall demonstrate that ESD has been implemented to the MEP before the use of a structural BMP is considered in developing the SWM plan.

- A. ESD Planning Techniques and Practices.
 - a. The following ESD planning techniques shall be applied according to the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction to satisfy the applicable minimum control requirements established in Section 3.5. and Section 3.6.2. of this Article:
 - (a) Preserving and protecting natural resources;
 - (b) Conserving natural drainage patterns;
 - (c) Minimizing impervious area;
 - (d) Reducing runoff volume;
 - (e) Using ESD practices to maintain 100 percent of the annual predevelopment groundwater recharge volume;
 - (f) Using green roofs, permeable pavement, reinforced turf, and other alternative surfaces;
 - (g) Limiting soil disturbance, mass grading, and compaction;
 - (h) Clustering development;
 - (i) All requirements of the MDE General Permit for Stormwater Associated with Construction Activity (NPDES Number MDR10, State Discharge Permit Number 09GP), and;
 - (j) Any practices approved by the Director of DPRP and the MDE.
 - b. The following ESD treatment practices shall be designed according to the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction to satisfy the applicable minimum control requirements established in Section 3.5. and Section 3.6.2. of this Article:
 - (a) Disconnection of rooftop runoff;
 - (b) Disconnection of non-rooftop runoff;
 - (c) Sheet flow to conservation areas;
 - (d) Rainwater harvesting;
 - (e) Submerged gravel wetlands;
 - (f) Landscape infiltration;
 - (g) Infiltration berms;
 - (h) Dry wells;
 - (i) Micro-bioretention;
 - (j) Rain gardens;
 - (k) Swales;
 - (l) Enhanced filters; and
 - (m) Any practices approved by the Director of DPRP and the Maryland Department of the Environment.

- c. ESD planning techniques and practices and structural stormwater measures that entail infiltration, filtration, detention and/or retention that are suspected of being located within a karst area require a karst investigation. Such an investigation, also referred to as a geotechnical engineering analysis, shall be prepared by a Qualified Professional. Where a liner system (natural or man-made) is recommended by a karst investigation (geotechnical analysis), the BMP shall be lined with a natural or man-made liner. The geotechnical analysis, karst investigation and liner design shall be prepared in accordance with the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
- d. The use of ESD planning techniques and practices and structural stormwater measures specified in this section shall not conflict with existing State law or local ordinances, regulations, or policies.
- B. Structural Stormwater Management Measures.
 - a. The following structural SWM practices shall be designed according to the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction to satisfy the minimum control requirements established in Section 3.5. and Section 3.6.2. of this Article:
 - (a) SWM ponds;
 - (b) SWM wetlands;
 - (c) SWM infiltration;
 - (d) SWM filtering systems; and
 - (e) SWM open channel systems.
 - b. The performance criteria specified in the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction with regard to general feasibility, conveyance, pretreatment, treatment and geometry, environment and landscaping, and maintenance shall be considered when selecting structural SWM practices.
 - c. Structural SWM practices shall be selected to accommodate unique hydrologic or geologic regions of Washington County, Maryland. Special attention is directed to the existence of significant areas of karst geology within Washington County, Maryland, and the influence these areas have on acceptable means of SWM. Dry and wet ponds, infiltration and filtration practices in areas of karst geology will be required to be lined with a natural or man-made liner in accordance with the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
- C. ESD planning techniques and treatment practices and structural SWM measures used to satisfy the minimum requirements in Section 3.5. and Section 3.6.2. of this Article must be covered under a maintenance agreement in accordance with Section 3.13. of this Article to be signed by the property owner at the time of

grading permit application to run with the land and be recorded in the land records of Washington County. ESD planning techniques and treatment practices and structural SWM measures used to satisfy the minimum requirements in Section 3.5.and Section 3.6.2. of this Article must remain unaltered by subsequent property owners. Prior approval from the Division of Plan Review and Permitting shall be obtained before any SWM practice is altered beyond what is considered routine maintenance.

- D. Alternative ESD planning techniques and treatment practices and structural stormwater measures may be used for new development runoff control if they meet the performance criteria established in the Design Manual and all subsequent revisions and are approved by the Director of DPRP and the MDE. Practices used for redevelopment projects shall be approved by the Director of DPRP.
- 3.6.2. Specific Design Requirements. The specific design criteria, methodologies, and construction specifications shall be those of the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction, and shall include, but not necessarily be limited to the following:
 - A. ESD planning techniques and treatment practices and structural stormwater measures shall not be constructed within the mapped or calculated FEMA 100year flood plain, or within a stream buffer or wetland, forest conservation easement area or any sensitive area as defined by this Ordinance.
 - B. Flow from any ESD planning techniques and treatment practices and structural stormwater measures shall be at non-erosive velocities in accordance with the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
 - C. Stormwater runoff from a site shall discharge into an adequate outfall. The design storm post-development flow rate shall not exceed the pre-development flow rate. Location of the discharge for the design storm shall not change from pre-development conditions. Any adverse change in these characteristics from pre-development conditions or adverse impact on downstream property(ies) may require a down stream offsite drainage easement. In addition, the following criteria must be met:
 - a. The location of the site outfall shall not change from pre-development conditions, unless approved by the Director of DPRP; and,
 - b. The design storm shall be site specific and shall be determined by the Director of DPRP. The design storm will be at a minimum the 2 and 10-year 24-hour frequency storm event. A site located in a known flooding problem area may need to include the 100-year 24-hour frequency storm event as an additional site design storm, as determined by the Director of DPRP.
 - c. A determination shall be made of conditions in the watershed downstream of each development site. It is important to identify any existing structures that are subject to an unacceptable flooding hazard. In the event that a

known downstream flooding condition or erosion condition exists under the pre-development condition, the Director of DPRP may require an offsite drainage easement be provided or improvements be made.

- D. Special consideration for safety shall be made during the design of any ESD planning techniques and treatment practices and structural stormwater measures. Safety considerations shall include fencing, slope benching, access roads, flattened side slopes, buffering, trash rack installation and setbacks provided in accordance with the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
- E. The maintenance impact of ESD planning techniques and treatment practices and structural stormwater measures is considered to be a primary concern to the County, to the future operations of these facilities, and to the protection of receiving waters. Applicants shall include maintenance and operation of all ESD planning techniques and treatment practices and structural stormwater measures as one of the primary design considerations per the requirements of the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
- F. Landscaping shall be required for all ESD planning techniques and treatment practices and structural stormwater measures per the requirements of the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
- G. Should the applicant wish to eliminate or reduce the limits of the sensitive area that have been identified as a potential sinkhole, the Division of Plan Review and Permitting may require a geotechnical engineering analysis to be submitted for approval. At a minimum, subject to review and approval by the AHJ, the geotechnical analysis shall include the identification of sinkhole-related, nonbuildable areas (if any exists based on professional judgment), and proposed measures to mitigate cover collapse, sinkhole propagation based upon the topography, geology, soils, and known history of an existing sinkhole (such as past filling). Unless recommended otherwise in the geotechnical analysis, the nonbuildable area shall follow the limits of the sinkhole. However, the non-buildable area may be expanded or contracted as determined by the Director of DPRP or the District due to the nature of the specific sinkhole, the underlying geology, soils, drainage, and any related information such as depth to bedrock. Unless specifically recommended by a Qualified Professional, no building(s) or other structure(s) shall be permitted within the sinkhole related, non-buildable area. Sinkhole related non-buildable areas, not mitigated by the recommendations contained in a geotechnical engineering analysis, shall be incorporated into the sensitive area and be protected. The approach for protection shall follow the following order of preference: avoidance, minimization and mitigation.

3.7. Stormwater Management Plans.

3.7.1. Review and Approval of Stormwater Management Plans.

- For any proposed development, the owner/developer shall submit phased SWM A. plans to the Division, the District, and the Division of Plan Review and Permitting. At a minimum, plans shall be submitted for the concept, site development and final SWM construction phases of project design. The Division of Plan Review and Permitting may exempt single lot residential projects that disturb less than 30,000 square feet of land from the concept phase review if a Standard Stormwater Management Plan is submitted by the applicant and approved by the County and if the County has obtained an approved Standard SWM Plan and Program from the MDE. Each plan submittal shall include the minimum content specified in Section 3.7.2. of this Article and the appropriate latest adopted Washington County plan submittal checklist, and shall meet the requirements of the Design Manual, the latest adopted version of the Washington County Plan Submittal Checklist, and Section 3.5. and Section 3.6.2. of this Article. Each plan submittal shall ensure compatibility with any applicable federal, State, or local permits, ordinances, or requirements.
- B. Combined Plan Applications.
 - a. The Director of DPRP may allow certain project types with minor impacts, including, but not limited to, those listed below in subsection B.b., to submit combined plan applications, provided that:
 - i. Compliance with ESD to the MEP standard is demonstrated;
 - ii. All of the information required for each plan review phase is included.
 - b. Project types that may be considered for combined plan applications include, but are not limited to, the following:
 - i. Plat applications or grading plans proposing no more than five (5) lots, a common driveway, road layback, frontage improvements, utility work, or entrance/road widening improvements;
 - ii. Bridge repair and rehabilitation projects;
 - iii. Road widening and repair projects;
 - iv. Minor building additions disturbing less than 1 acre of total area;
 - v. Utility projects which do not propose any additional impervious area;
 - vi. Certain redevelopment projects where the SWM concept plan requirement to identify natural resources could be combined with the SWM development plan requirements;
 - vii. Residential projects consisting of 1 lot and disturbing less than 1 acre of total area; and
 - viii. Projects designated as fast track projects, based on criteria approved by the Board of County Commissioners.
- C. A comprehensive review of the plans submitted for each required phase of the site design will be performed in accordance with the policies and procedures of the Division of Plan Review and Permitting, the Washington County Subdivision Ordinance and the Washington County Zoning Ordinance. Coordinated comments
will be provided to the applicant for each plan submittal that reflect input from all applicable agencies including, but not limited to:

- a. the Washington County Soil Conservation District,
- b. the Washington County Division of Plan Review and Permitting,
- c. the Washington County Division of Public Works,
- d. the Washington County Division of Environmental Management,
- e. the Washington County Division of Fire and Emergency Services,
- f. the Washington County Board of Education,
- g. the Washington County Health Department,
- h. the appropriate Municipality,
- i. the appropriate entity within State or Federal government.
- D. Any final SWM plan shall not be considered approved without the inclusion of the signature and date of signature of the Director of DPRP on all original mylar plan sheets.
- E. Plan approval by the Director of DPRP does not constitute or grant any other approval(s) that may be required by any other local, state or federal agency.
- F. Plan approval will not be granted until suitable evidence of any required permission from adjacent property owners in accordance with Section 3.9, is provided to the Division. This evidence of permission and plan approval shall not create or affect any property rights afforded to the property owner under Maryland law.
- 3.7.2. Contents and Submission of Stormwater Management Plans.
 - A. Concept Plan Approval. The owner/developer shall submit a concept plan or preliminary consultation plan in accordance with the policies and procedures of the Division of Plan Review and Permitting, and the Division plan approval process, the Washington County Subdivision Article and the Washington County Zoning Article that provides sufficient information for an initial assessment of the proposed project and whether SWM can be provided according to Section 3.5 and Section 3.6.2 of this Article and the Design Manual. Plans submitted for concept or preliminary consultation approval shall be in accordance with the latest adopted version of the Division of Plan Review and Permitting's Checklist for Concept Plan/Preliminary Consultation Plan and shall include, at a minimum:
 - A map at the scale specified by the Director of DPRP showing site location, existing natural features, water and other sensitive areas, topography, and natural drainage patterns, property boundaries, property ownership, existing public and private roads and right-of-way;
 - b. The anticipated location of all proposed impervious areas, buildings, roadways, parking, sidewalks, utilities, and other site improvements;
 - c. The location of the proposed limit of disturbance, erodible soils, steep slopes, and areas to be protected during construction;

- d. Preliminary estimates of SWM requirements, the selection, size and location of ESD planning techniques and treatment practices and structural stormwater measures to be used, and the location of all points of discharge from the site;
- e. A narrative that supports the concept design and describes how ESD will be implemented to the MEP; and,
- f. Any other information required by the Division of Plan Review and Permitting.
- B. Site Development Plan Approval. For subdivision plans and plans proposing publicly owned infrastructure, following concept or preliminary consultation plan approval by the Division of Plan Review and Permitting, the owner/developer shall submit a preliminary subdivision plat in accordance with the policies and procedures of the Division of Plan Review and Permitting, and the Division plan approval process, the County Subdivision Ordinance and the County Zoning Ordinance that reflects comments received during the previous review phase. Plans submitted for preliminary subdivision plat approval shall be of sufficient detail and shall meet the minimum requirements of the Division of Plan Review and Permitting's Checklist, Preliminary Subdivision Plat. At a minimum, the preliminary subdivision plat submission shall include the following:
 - a. All information provided during the concept plan/preliminary consultation plan review phase;
 - b. Final site layout, exact impervious area locations and acreages, proposed topography, delineated drainage areas at all points of discharge from the site, and stormwater volume, discharge rate, and velocity computations for ESD planning techniques and treatment practices and structural stormwater measures and quantity control structures;
 - c. Proposed off-site easements, SWM access easements, SWM parcels, lot lines, public right-of-way, drainage easements;
 - d. Proposed public road improvement limits and plan view layout including drainage conveyance systems;
 - e. A proposed soil erosion and sediment control plan that contains the construction sequence, any phasing necessary to limit earth disturbances and impacts to natural resources and an overlay plan showing the types and locations of ESD planning techniques and treatment practices and structural stormwater measures and erosion and sediment control practices to be used;
 - f. A narrative that supports the site development design, describes how ESD will be used to meet the minimum control requirements, and justifies any proposed structural SWM measure; and,
 - g. Any other information required by the Division of Plan Review and Permitting.
- C. Final Plan Approval. Following preliminary plat approval by the County, or concept plan approval for plans not requiring preliminary plat approval, the owner/developer shall submit final soil erosion and sediment control and SWM

construction drawings or a site plan, or site specific grading plan, in accordance with the policies and procedures of the Division of Plan Review and Permitting and the Division plan approval process, the Subdivision Ordinance and the Zoning Ordinance that reflect the comments received during the previous review phase. Projects disturbing less than 15,000 square feet of land may be exempt from the final plan approval process if the County has obtained an approved Standard SWM Plan and Program from the MDE. Plans submitted for final approval shall be of sufficient detail to allow all approvals and permits to be issued according to the following:

- a. Final soil erosion and sediment control plans and SWM construction drawings shall be submitted according to the Division of Plan Review and Permitting's Checklist, Construction Drawings for Preliminary/Final Subdivision Plat;
- b. Site Plan drawings shall be submitted according to the Division of Plan Review and Permitting's Checklist, Site Plan;
- Final soil erosion and sediment control plans and site plans shall be submitted according Washington County Policy on Construction of Infrastructure for Acceptance and Ownership by Washington County (S-3);
- d. Final soil erosion and sediment control plans and SWM construction drawings and site plans shall be submitted according Washington County Standards and Specifications for Public Works Construction;
- e. Final soil erosion and sediment control plans and SWM construction drawings and site plans shall be submitted according to the Washington County Sensitive Areas Element of the Comprehensive Plan;
- f. Final erosion and sediment control plans and SWM construction drawings and site plans shall be submitted according to COMAR; and
- g. SWM construction drawings shall be accompanied by a report that includes sufficient information to evaluate the effectiveness of the proposed runoff control design in accordance with the requirements of the Division of Plan Review and Permitting's Checklist, Site Plan or the Division of Plan Review and Permitting's Checklist, Construction Drawings for Preliminary/Final Subdivision Plat.
- D. Reports submitted for final erosion and sediment control plans and SWM construction drawings and site plan approval shall include, at a minimum:
 - All items required per the Division of Plan Review and Permitting's Checklist, Site Plan or the Division of Plan Review and Permitting's Checklist, Construction Drawings for Preliminary/Final Subdivision Plat;
 - b. All items required per the Washington County Standards and Specifications for Public Works Construction;
 - c. Geotechnical investigations including soils maps, borings, site specific recommendations, and any additional information necessary for the final SWM design;
 - d. Drainage area maps depicting predevelopment and post development runoff flow path segmentation and land use;

- e. Hydrologic computations of the applicable planning techniques and practices and structural SWM measures and unified sizing criteria according to the Design Manual for all points of discharge from the site;
- f. Hydraulic and structural computations for all ESD planning techniques and treatment practices and structural SWM measures to be used;
- g. A narrative that supports the final SWM design;
- h. All items necessary to satisfy the requirements of the Maryland General Permit for Stormwater Associated with Construction Activity (NPDES Number MDR10, State Discharge Permit Number 09GP); and
- i. Any other information required by the County, and/or the District.
- E. Plans submitted for final soil erosion and sediment control plans and SWM construction drawings and site plan approval shall include all requirements of:
 - a. The Division of Plan Review and Permitting's Checklist, Site Plan or the Division of Plan Review and Permitting's Checklist, Construction Drawings for Preliminary/Final Subdivision Plat;
 - b. All items required per the Washington County Standards and Specifications for Public Works Construction;
 - c. A vicinity map;
 - d. Existing and proposed topography and proposed drainage areas, including areas necessary to determine downstream analysis for proposed ESD planning techniques and practices and structural stormwater measures;
 - e. Any proposed improvements including location of buildings or other structures, impervious surfaces, storm drainage facilities, and all grading;
 - f. The location of existing and proposed structures and utilities;
 - g. Any easements and rights-of-way;
 - h. The delineation, if applicable, of the 100-year floodplain and any on-site wetlands;
 - i. Structural and construction details including representative cross sections for all components of the proposed drainage system or systems, and ESD planning techniques and practices and structural stormwater measures;
 - j. All necessary construction specifications;
 - k. A sequence of construction;
 - 1. Data for total site area, disturbed area, new impervious area, and total impervious area;
 - m. A table showing the ESD and unified sizing criteria volumes required in the Design Manual;
 - n. A table of materials to be used for planting of ESD planning techniques and practices and structural stormwater measures;
 - o. All soil boring logs and locations;
 - p. An inspection and maintenance schedule;
 - q. Certification by the owner/developer that all ESD planning techniques and practices and structural stormwater measures construction will be done according to this plan;
 - r. An as-built certification signature block to be executed after project completion;

- s. All items necessary to satisfy the requirements of the Maryland General Permit for Stormwater Associated with Construction Activity (NPDES Number MDR10, State Discharge Permit Number 09GP); and
- t. Any other information required by the County, and/or the District.
- F. A maintenance schedule shall be developed for the life of all ESD planning techniques and practices and structural stormwater measures and shall state the maintenance to be completed, the time period for completion, and who shall perform the maintenance. This maintenance schedule shall be printed on the approved final SWM plan.
- G. Approval of a final erosion and sediment control plans and SWM construction drawings and site plans does not create or affect any right to direct runoff onto adjacent property without that property owner's permission.

3.8. Preparation of Stormwater Management Plans.

- 3.8.1. All phases of the SWM design shall be prepared by a Qualified Professional, authorized to provide the scope of services required to meet this Article. Items to be considered for this determination will include but will not be limited to: complexity of the ESD planning techniques and practices and structural stormwater measures being proposed; potential for on-site and off-site damage from failed designs; and unique geologic and /or topographic features of the area.
- 3.8.2. If an ESD planning technique and practice and/or structural stormwater measure requires either a dam safety permit from the MDE or small pond approval from the District, the Director of DPRP shall require the design be prepared by a Qualified Professional.

3.9. Easements.

- 3.9.1. Drainage Easements. If a development plan depicting required SWM involves direction of some or all of the stormwater runoff through the site or off-site, it is the responsibility of the developer/owner to obtain from property owner(s) (on-site or off-site) any easements or other necessary property interests concerning flowage of water, in accordance with the following:
 - A. On-site Drainage Easement.
 - a. Where topography or other conditions are such as to make impractical the inclusion of drainage facilities within road rights-of-way, perpetual unobstructed drainage easements with adequate width for such drainage facilities shall be provided across property outside the road right-of-way and with satisfactory access to the road.
 - b. Where a natural or man-made drainage course, stream, channel or swale traverses a development site with a drainage area of forty (40) acres or more, there shall be provided a drainage easement, a minimum width

equal to the design water surface elevation, conforming substantially with the center line of such watercourse for the purpose of maintaining, improving and protecting such drainage-course or stream. This easement area shall be designed to convey the 100-year rainfall event runoff or as determined by the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.

- c. Where a natural or man-made drainage course, stream, channel or swale is proposed to convey a drainage area greater than one (1) acre and less than forty (40) acres, there shall be provided a drainage easement, a minimum width equal to the design water surface elevation, conforming substantially with the center line of such watercourse for the purpose of maintaining, improving and protecting such drainage-course or stream. This easement area shall be designed to convey the 10-year rainfall event runoff or as determined by the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
- d. For a proposed open and/or closed conveyance system, a public drainage easement shall be required when it conveys water received from a drainage area upstream of the site under development or consideration. Where a proposed open and/or closed conveyance system crosses multiple properties, the components of the system shall be included in the easement. Where required, the minimum easement width shall be twenty feet (20'). Where the depth of pipe and other site constrains dictate, the easement width may be increased as deemed appropriate by the AHJ.
- e. All required drainage easements shall be identified on a plat or site plan and/or construction drawing and shall be recorded in the land records of Washington County prior to issuance of a grading permit.
- B. Off-site Drainage Easement.
 - a. The developer must employ the best available SWM technology to meet the conditions identified in Section 3.6.2.C. If the surface water flow characteristics leaving the site have a materially adverse impact on the downstream properties as determined by the Director of DPRP and one or more of the conditions identified in Section 3.6.2.C. cannot be achieved, the developer shall obtain a recorded off-site drainage easement from all downstream property owners to one of the following:
 - (a) The point at which the site outfall discharges into the first adequately sized public storm drain system;
 - (b) The first point of confluence where the drainage area to the site outfall is joined by another drainage area equal to or greater than the drainage area of the site outfall;
 - (c) A FEMA floodplain or a recorded floodplain easement; or,
 - (d) An existing recorded drainage easement, SWM easement, or public right-of-way as deemed adequate by the Director of DPRP.
 - b. The Director of DPRP may waive the off-site drainage easement requirement provided a well documented effort by the Developer fails to acquire the needed easements. At a minimum, documentation must

include copies of drawings and correspondence to all property owners from which the easements were to be acquired, responses to the correspondence from the respective property owner and other information deemed necessary by the Director. Correspondence to the property owners, from which the easement(s) must be acquired, must include a narrative summary of the drainage flow characteristics and other information necessary to fully inform the off-site property owner(s) of the potential conditions that should be expected in a post development condition.

- c. For conveyance systems draining 40 acres or more, the off-site drainage easement must contain the 100-year water surface elevation (WSE). For conveyance systems draining 1 to 40 acres, the off-site drainage easement must contain the 10-year water surface elevation (WSE).
- d. In the event that an off-site drainage easement is needed, it must be prepared in a format that can be recorded in the land records of Washington County by Plat.
- e. All necessary offsite drainage easement agreements, descriptions and plats must be acceptable to the AHJ and submitted to the Division of Plan Review and Permitting prior to final plat or site plan approval, or grading plan approval if no plat or site plans are required. Where a drainage easement is directly recorded by the Developer, the easement shall be recorded in the Land Records Office of Washington County prior to final plat or site plan approval, or grading plan approval if no plat or site plans are required. If off-site construction and easements are required, a grading permit will not be issued until the easement has been obtained.

3.9.2. Access Easement.

- A. The property owner shall construct and maintain all ESD planning techniques and treatment practices and structural SWM measures in a manner such as not to hinder, impede, or restrict the Division of Plan Review and Permitting from making necessary inspections, visual observations, measurements, actual construction, performing maintenance, or from performing tests.
- B. An access easement shall be provided from a public right of way across the property to and around the limits of the ESD planning techniques and treatment practices and structural SWM measures. The purpose of this easement is to provide access to the facility at reasonable times for regular inspections by the Division of Plan Review and Permitting to ensure the facility is maintained in proper working condition to meet design standards. For on lot ESD planning techniques and treatment practices and structural SWM measures, this easement can be provided as a blanket easement recorded on the Subdivision Plat or if a Plat does not exist, recorded as part of the Maintenance Agreement in accordance with Section 3.13 of this Article.
- C. All access easements should be prepared in a format that can be recorded in the land records of Washington County.

D. All necessary access easements shall be platted and recorded in the Land Records Office of Washington County along with the respective maintenance agreement. If off-site construction and easements are required, a grading permit for the project may not be issued until the easement plat has been approved and the easement has been acquired.

3.10. Permits.

- 3.10.1. Permit Requirements.
 - A. A grading or building permit shall not be issued for any parcel or lot until, as applicable:
 - a. Final soil erosion and sediment control and SWM plans have been approved by the District and the Division of Plan Review and Permitting as meeting all the requirements of the Design Manual, this Article and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction;
 - b. A Waiver, Grading Plan, Final Plat with Road Construction Drawings, or Site Plan has been approved by the District and Division of Plan Review and Permitting as meeting all the requirements of the Design Manual, this Ordinance and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction; and,
 - c. An easement plat showing and describing the required easements and/or fee simple real estate for the ESD planning techniques and practices and structural SWM measures, drainage system(s), and access easements has been received by the Division of Plan Review and Permitting and is ready for recordation in the Land Records Office of Washington County, Maryland. For single lot ESD planning techniques and practices and structural stormwater measures the maintenance agreement shall include a provision to authorize a blanket right of entry onto the property to construct, reconstruct, inspect, and maintain the BMP, including lot-wide access;
 - d. The SWM maintenance agreement in conformance with Section 3.13 has been provided;
 - e. An executed performance security in conformance with Section 3.12 has been provided to the County; and
 - f. A public works agreement in conformance with Section 3.11 and the Washington County Policy on Construction of Infrastructure for Acceptance and Ownership by Washington County (S-3), has been executed by the applicant and Washington County.
 - B. Nothing in this Article shall prohibit the issuance of a grading permit prior to issuance of a building permit.

C. SWM plan approval shall be valid for two (2) years from the date of signature approval from the Division of Plan Review and Permitting on the original mylar plans. The SWM plan approval may be renewed at the discretion of the Division of Plan Review and Permitting and the District based on practices and policies in effect at the time of renewal. Renewals for projects that have been granted an administrative waiver may continue to meet the Ordinance in effect as of May 4, 2009, until the expiration date of May 4, 2017. In order to continue construction without interruption, application for renewal of the SWM plan approval should be made at least 2 months prior to the approval expiration date.

3.10.2. Permit Fee.

- A. A non-refundable permit fee will be collected at each phase of SWM plan submittal. Permit fees will provide for the cost of plan review, administration, and management of the permitting process, and inspection of all projects subject to this Article. The permit fee schedule shall be established by the County Commissioners based upon the relative complexity of the project and may be amended from time to time.
- B. The County Commissioners may waive the non-refundable permit fee on a caseby-case basis.
- 3.10.3. Permit Suspension and Revocation.
 - A. Any grading or building permit issued by the County may be suspended or revoked after written notice is given to the permittee for any of the following reasons:
 - a. Any violation(s) of the conditions of the final soil erosion and sediment control plan or final SWM plan approval.
 - b. Changes in site characteristics upon which an approval or Waiver was granted.
 - c. Construction is not in accordance with the approved final soil erosion and sediment control plan or final SWM plan.
 - d. Noncompliance with correction notice(s) or stop work order(s) issued for the construction of any SWM practice;
 - e. Noncompliance with the provisions of this Article; or
 - f. An immediate danger exists on-site or in a downstream area in the opinion of the Director of DPW.
 - B. A suspension of such permits will only be released upon correcting all deficiencies to the satisfaction of the Director of DPW.
 - C. A revoked permit may be reissued upon correcting all deficiencies to the satisfaction of the Director of DPW. The permit fee shall be collected by the AHJ prior to reissuance of the permit.

3.10.4. Permit Conditions. In granting a permit for any phase of site development, the Director of DPRP or the Director of DPW may impose such conditions that may be deemed necessary to ensure compliance with the provisions of this Article and the preservation of the public health and safety.

3.11. Public Works Agreement and Private Development Agreement.

- 3.11.1. Prior to issuance of any grading or building permits, projects that employ ESD planning techniques and practices and structural SWM measures shall have an executed written Public Works Agreement (PWA) or Private Development Agreement (PDA) between the developer and the Division serving as the County's authorized agent.
- 3.11.2. The PWA or PDA shall be as prescribed by the Division setting forth the terms under which the plans for construction are to proceed and the conditions of acceptance.
- 3.11.3. The PWA or PDA in no way releases the developer or its successors or permitted assigns from potential or future land development permitting, including but not limited to obligations relating to SWM, grading, environmental management, soil erosion and sediment control, as they may arise pertaining to additions and/or modifications of the development.

3.12. Performance Security.

- 3.12.1. The Division shall require from the developer a performance security prior to the issuance of any building and/or grading permit for the construction of a development requiring SWM. The amount of the security shall be equal to 100% of the construction cost (including all soil erosion and sediment control and grading) of any ESD planning technique and practice and structural stormwater measure and associated stormwater conveyance system, plus an additional 15% administrative fee. The administrative fee may be used for, but is not limited to, costs for engineering, inspection, as-built plan preparation, document processing, and administrative services necessary to complete the work. The construction cost estimate shall be based on a detailed take-off from the approved final soil erosion and sediment control plan and final SWM plan for all ESD planning techniques and practices and structural SWM measures. The estimate shall be prepared by the Design Engineer for the developer and subject to the approval of the Director of DPRP. The security shall be either an irrevocable standby letter of credit or performance bond, both on forms approved by the County, or a certified check.
- 3.12.2. The Division will require re-evaluation of the amount of the security every twenty-four (24) months, based on the outstanding work and/or the construction market cost index at the time of the re-evaluation. The developer will cause corresponding adjustments to be made to said security, as required by the Director of DPW, whether increase, decrease or no change, for the duration of the infrastructure construction.

- 3.12.3. The performance security requirements of this Article shall not apply to those ESD planning techniques and practices and structural stormwater measures built by the County. Performance security for such projects is addressed separately within the contract documents.
- 3.12.4. Included with and considered part of the performance security shall be a property agreement granting the Division and the District the ability to enter onto the property owned by the Developer and/or others to construct, complete and/or maintain the ESD planning techniques and practices and structural stormwater measures in accordance with the conditions and requirements of the security and approved SWM plan. This property agreement shall be in a form approved by the Division. The rights of the Division and the District shall survive the termination of the security and shall run with the land.
- 3.12.5. The performance security may be released for those projects that were never started, provided all existing local permits associated with the ESD planning techniques and practices and structural stormwater measures are withdrawn or revoked and all development intended to be served by these ESD planning techniques and practices and structural stormwater measures are withdrawn or revoked and closed and/or voided.
- 3.12.6. Should the Division need to act on the performance security provided for a project, the Division shall address construction, ownership and /or maintenance concerns on a caseby-case basis in a manner that not only protects the interests of the Division but also preserves the spirit and intent of this Article.

3.13. Maintenance Agreement.

- 3.13.1. Prior to the issuance of any building or grading permit for which SWM is required, the Director of DPRP or the Director of DPW shall require the land owner to execute an inspection and maintenance agreement for all ESD planning techniques and practices to be privately owned and maintained after construction completion. This inspection and maintenance agreement shall be binding on the current and all subsequent owners of the land on which the privately owned ESD planning techniques and practices and structural stormwater measures are located. Such agreement shall provide for access to the facility from a public road at reasonable times for regular inspections by the Division and the District to ensure the facility is maintained in proper working condition to meet design standards. The agreement shall be of a form and type approved by the County.
- 3.13.2. The agreement shall be recorded by the County for the land owner in the land records for Washington County.
- 3.13.3. The agreement shall also require, after notice is given by the Division to correct a violation, the owner shall provide within ninety (90) days to the Division for review and approval a plan of corrective action detailing the method of correction and when the corrective action shall be complete. If after approval by the Division, satisfactory

corrections are not made by the owner within one-hundred and fifty (150) days, the County may perform all necessary work to place the ESD planning techniques and practices and structural stormwater measures in proper working condition. The owner of the ESD planning techniques and practices and structural stormwater measures may be assessed the cost of the work and any penalties. This may be accomplished in any manner determined appropriate by the County in accordance with Maryland law.

3.14. Construction Inspection.

3.14.1. Construction Inspection Schedule and Reports.

- A. The developer shall notify the Division and the District at least five (5) days before commencing any work in conjunction with the approved final soil erosion and sediment control plan or final SWM plan and upon completion of the project when a final inspection will be conducted.
- B. Regular inspections shall be made and documented for each structural ESD planning technique and practice and structural stormwater measures every 2 weeks and at the required critical inspection stages identified in Section 3.14.2 of this Article.
- C. All non-structural ESD practices shall be inspected, at a minimum, upon completion of final grading, the establishment of permanent stabilization, and a Grading Certification shall, in accordance with Article 4, be provided to the Division before issuance of use and occupancy permit.
- D. Inspections shall be conducted by the Division, the MDE (as applicable), and by the Verifying Professional. Inspections performed by the Division are not to be considered a substitute for those inspections required by the Verifying Professional. Written inspection reports shall be prepared by the Verifying Professional during construction of ESD planning techniques and practices and structural stormwater measures to ensure compliance with the approved plans. Copies of all inspection reports shall be provided to the Division by the person performing the inspection and kept on file with the Division.
- E. Written inspection reports shall be submitted in a manner consistent with the Public Works Agreement and this Article and in a format approved by the Division, and shall include, at a minimum:
 - a. The date and location of the inspection;
 - b. Work observed;
 - c. Photos;
 - d. Tests performed;
 - e. Whether construction was in compliance with the approved SWM plan;
 - f. Any variations from the approved construction specifications;
 - g. Any violations that exist;

- h. Signature and date of Verifying Professional.
- F. Failure to perform the required inspections and/or verification could result in disapproval of the facility, delays of final acceptance and permit release.
- G. The developer, Division, the MDE, Verifying Professional, and on-site personnel shall be notified in writing when violations are observed. Written notification shall be made by the person discovering the violation and shall describe the nature of the violation and the required corrective action. No further work affected by the violation shall proceed until the corrective action is inspected and approved in writing by the Verifying Professional, the Division, MDE (as applicable), and the District (as applicable).
- H. The Division may require adjustments to address items overlooked or inappropriately addressed by the plans. Such adjustments may be required during construction or at the final inspection.
- I. The County and/or the District may require a revision to the approved construction drawings or site plans be submitted and approved by the Division, the Division of Plan Review and Permitting (as applicable), the MDE (as applicable) and the District prior to continuation of construction activity.
- J. No work shall proceed beyond the construction stages specified in Section 3.14.2 until the Division and the Verifying Professional inspect and approve the work previously completed and the Verifying Professional furnishes the Division and developer with the results of the inspection reports as soon as possible after completion of each required inspection.
- 3.14.2. Construction Inspection Requirements
 - A. Construction inspections shall be required for all ESD planning techniques and practices and structural stormwater measures listed in this Section. It is the responsibility of the Verifying Professional to determine the full extent of the inspection effort required for the ESD planning techniques and practices and structural stormwater measures under construction. However, regular inspections shall be made and documented upon completion of final grading, the establishment of permanent stabilization, and before issuance of use and occupancy approval and per the following, at a minimum:
 - a. Retention, Extended Detention or Detention Ponds
 - (a) Site Preparation And Excavation Prior to excavation, verify soil erosion and sediment control features are in place to prevent sediment inflow. Verify all flagging required in the area for sensitive area protection. Verify grading is accurately staked-out and re-staked as needed.

Verify objectionable material removed from immediate area.

- (b) Cut-Off (Core) Trench Excavation Verify location at centerline of embankment. Verify length, depth, width, side slopes. Verify sub grade is dry and stable. Verify area beneath embankment has been stripped of all vegetation, topsoil and organic matter.
- (c) Core Trench Backfill Verify material free of large stones, roots, etc., Verify layers placed in 8 inch lifts continuous for entire trench length. Verify compaction of each lift. Geotechnical engineer to test compaction and moisture content.
- (d) Principal Spillway Construction and Backfilling Verify principal spillway pipe placed prior to construction of embankment. Verify spillway material, size, type. Metal pipes 54 inches or greater require flowable fill for backfill and bituminous coating. Verify soil compaction under and adjacent to pipe. Verify cradle and anti seep collar bottom installed as monolithic pour. Verify anti-seep collar location and size. Verify water tight connectors on pipes.
- (e) Spillway Weir Verify footing excavated on stable subgrade.
- (f) Embankment Construction Verify embankment material, compaction, moisture content and elevations. Verify installation of impervious core. Verify embankment side slopes. Verify top width of embankment. Verify emergency spillway constructed in natural ground. Verify no equipment is driven within four (4) feet of principal spillway structure.
- (g) Pond Excavation Verify pond bottom topography. Verify pond side slopes and bench widths and locations. Verify maintenance access location, width and slope.
- (h) Spillway Outfall Protection Verify outfall protection channel excavated to design cross section. Verify filter fabric in place. Verify stone size.
- Stabilization and Landscaping Verify site top soiled, seeded and mulched. Verify embankment top soiled and seeded. Verify location, size, type and number of planted landscape material (per approved plans and MD378). Verify installation location, size, material type of fencing or other safety barriers.
- b. Sand filters, Bioretention, Rain Gardens, Enhanced Filters, Microbioretention:
 - (a) Excavation of Facility Prior to excavation, verify soil erosion and sediment control features are in place to prevent sediment inflow. Verify all flagging required in the

area for sensitive area protection. Verify grading is accurately staked-out and re-staked as needed. Facility dimensions shall be verified and soils checked for infiltration. Verify contributing area is permanently stabilized. Verify water is not present. Ensure roughening of side walls if sheared and sealed by heavy equipment. Verify compaction of facility base is minimized.

- (b) Placement of Filter Cloth (Trenches) Ensure filter fabric is overlapping six (6) inches between strips of cloth. Ensure tree roots or other obstacles are removed from facility walls or sides and base to prevent tearing. Verify uphill fabric roll overlaps two (2) feet over downhill roll.
- (c) Placement of Sand Filter Layer or Gravel Diaphragm -Verify depth and width of sand and/or diaphragm layer. Verify fill material.
- (d) Placement of Filtering Media Verify bottom layer material and thickness. Verify sand and/or filter media layer material and thickness. Verify filter fabric or pea gravel used between sand layers. Verify top filter media layer.
- (e) Placement of Under drains and Observation Wells Location, size and material of under drain and observation wells shall be verified prior to stone placement. Verify pipe ends capped. Verify three (3) inches gravel cover.
- (f) Stabilization and Landscaping Verify site top soiled, seeded and mulched. Verify embankment top soiled and seeded. Verify location, size, type and number of planted landscape material (per approved plans and MD378). Verify no more than 1/8 inch root ball exposed. Verify planting stock kept moist during on-site storage. Verify installation location, size, material type of fencing or other safety barriers.
- c. Constructed Wetlands and Submerged Gravel Wetlands
 - (a) Site Preparation and Excavation Prior to excavation, verify soil erosion and sediment control features are in place to prevent sediment inflow. Verify all flagging required in the area for sensitive area protection. Verify grading is accurately staked-out and re-staked as needed. Verify objectionable material removed from immediate area.
 - (b) Cut-Off (Core) Trench Excavation Verify location at centerline of embankment. Verify length, depth, width, side slopes. Verify sub grade is dry and stable. Verify area beneath embankment has been stripped of all vegetation, topsoil and organic matter.
 - (c) Core Trench Backfill Verify material free of large stones, roots, etc. Verify material tested and approved for use in

core. Verify layers placed in eight (8) inch lifts continuous for entire trench length. Verify compaction of each lift. Geotechnical engineer to test compaction and moisture content.

- (d) Principal Spillway Construction and Backfilling Verify principal spillway pipe placed prior to construction of embankment. Verify spillway material, size, type. Metal pipes 54 inches or greater require flowable fill for backfill and bituminous coating. Verify soil compaction under and adjacent to pipe. Verify cradle and anti seep collar bottom installed as monolithic pour. Verify anti-seep collar location and size. Verify water tight connectors on pipes. Verify installation of drain valve. Verify installation of drainage diaphragm.
- (e) Spillway Weir Verify footing excavated on stable subgrade.
- (f) Embankment Construction Verify embankment material, compaction, moisture content and elevations. Verify installation of impervious core. Verify embankment side slopes. Verify top width of embankment. Verify emergency spillway constructed in natural ground. Verify no equipment is driven within four (4) feet of principal spillway structure.
- (g) Pond Excavation Verify pond bottom topography. Verify pond side slopes and bench widths and locations. Verify maintenance access location, width and slope.
- Spillway Outfall Protection Verify outfall protection channel excavated to design cross section. Verify filter fabric in place. Verify stone size.
- (i) Construction of Appurtenant Conveyance Systems Including Diversion Structures, Inlets, Outlets, And Flow Distribution Structures – Verify location and invert and top elevations of all structures.
- (j) Stabilization Verify site top soiled, seeded and mulched. Verify embankment top soiled and seeded.
- (k) Landscaping Verify planting area scarified prior to planting. Verify nutrient amendments added to excavated zones. Verify pond drain open three (3) days prior to planting. Verify location, size, type and number of planted landscape material (per approved plans and MD378).
 Verify wetland mulch used for seeding. Verify installation location, size, material type of fencing or other safety barriers. Verify vegetation survival rate of at least 50 percent during second growing season.
- d. Infiltration Facilities including Infiltration Trenches, Infiltration Ponds, Dry Wells, Landscape Infiltration, Infiltration Berms

- (a) Excavation of Facility Prior to excavation, verify soil erosion and sediment control features are in place to prevent sediment inflow. Verify all flagging required in the area for sensitive area protection. Verify grading is accurately staked-out and re-staked as needed. Facility dimensions shall be verified and soils checked for infiltration. Verify water is not present. Ensure roughening of side walls if sheared and sealed by heavy equipment. For infiltration ponds, the initial excavation should be carried to not less than two (2) feet above the final elevation of the facility floor. Final excavation shall occur only when area draining to facility is permanently stabilized.
- (b) Placement of Filter Cloth (Trenches) Ensure filter fabric is overlapped six (6) inches between strips of cloth. Ensure tree roots or other obstacles are removed from facility walls or sides and based to prevent tearing. Verify that uphill fabric roll overlaps two (2) feet over downhill roll.
- (c) Placement of Filtering Media Verify bottom layer material and thickness. Verify stone aggregate layer material and thickness. Verify stone placement in twelve (12) inch loose lifts. Verify top filter media layer.
- (d) Placement of Under drains And Observation Wells Location, size and material of under drain and observation wells shall be verified prior to stone placement.
- (e) Installation of Final Cover Verify cover and capping of observation well. Verify permanent stabilization of basin floor, side slopes, and berm.
- (f) Pretreatment Area The slope of land draining to facility shall be verified. Verify length of grass filter strip. Verify aggregate type.
- (g) Landscaping (as required per facility type per approved plans and MD378) – Verify planting area scarified prior to planting. Verify nutrient amendments added to excavated zones (as required per plan). Verify location, size, type and number of planted landscape material. Verify mulch used for seeding. Verify vegetation survival rate of at least 50 percent during second growing season.
- e. Open Channel Systems including Dry Swales, Wet Swales, Bioswales, Swales:
 - (a) Site Preparation and Excavation Prior to excavation, verify soil erosion and sediment control features are in place to prevent sediment inflow. Verify all flagging required in the area for sensitive area protection. Verify grading is accurately staked-out and re-staked as needed.

Verify objectionable material removed from immediate area.

- (b) Placement of Filter Cloth (Dry Swale and Bioswale) Ensure filter fabric is overlapped six (6) inches between strips of cloth. Ensure tree roots or other obstacles are removed from facility walls or sides and based to prevent tearing. Verify uphill fabric roll overlaps two (2) feet over downhill roll.
- Placement of Filtering Media (Dry Swale and Bioswale) Verify bottom layer material and thickness. Verify stone aggregate layer material and thickness. Verify stone placement in twelve (12) inch loose lifts. Verify top filter media layer.
- (d) Placement of Under drains And Observation Wells (Dry Swale and Bioswale) Location, size and material of under drain and observation wells shall be verified prior to stone placement. Verify pipe ends capped. Verify three (3) inches gravel cover.
- (e) Installation Of Diaphragms, Check Dams, Forebays And/Or Weirs
- (f) Stabilization and Landscaping Verify site top soiled, seeded and mulched. Verify embankment top soiled and seeded. Verify location, size, type and number of planted landscape material (as required per plan and MD378).
- f. Permeable Pavements and Reinforced Turf
 - (a) Site Preparation and Excavation Prior to excavation, verify soil erosion and sediment erosion control features are in place to prevent sediment inflow. Verify all flagging required in the area for sensitive area protection. Verify grading is accurately staked-out and re-staked as needed. Verify objectionable material removed from immediate area. Verify subsoils are not compacted.
 - (b) Placement of Filter Cloth (per plan specifications) Ensure filter fabric is overlapped six (6) inches between strips of cloth. Ensure tree roots or other obstacles are removed from facility walls or sides and based to prevent tearing. Verify uphill fabric roll overlaps two (2) feet over downhill roll.
 - Placement of Under drains Location, size and material of under drain shall be verified prior to stone placement. Verify pipe ends capped.
 - (d) Placement of Subbase and Base Verify aggregate size and verify aggregate is clean and free of fines. Verify bottom layer material and thickness. Verify stone aggregate layer material and thickness.
 - (e) Placement of Surface Material

- (f) Stabilization and Landscaping Verify site top soiled, seeded and mulched. Verify embankment top soiled and seeded. Verify location, size, type and number of planted landscape material (as required per plan).
- g. Nonstructural Practices
 - (a) Completion of Final Grading;
 - (b) Installation of Diaphragms, Check Dams, Forebays And/Or Weirs
 - (c) Stabilization and Landscaping Verify site top soiled, seeded and mulched. Verify embankment top soiled and seeded. Verify location, size, type and number of planted landscape material (as required per plan).
- h. Rainwater Harvesting
 - (a) Completion of Final Grading Verify the top elevation of the underground storage tank is below the frost line.
 - (b) Certification Regarding The Water Tightness of the Underground Storage Tank – Verify water tightness of the underground storage tank.
- i. Other
 - (a) For all other ESD planning techniques and practices and structural stormwater measures not specifically listed in this Article, the Verifying Professional shall be required to submit a list of required inspections to the Division for approval prior to issuance of a grading permit.

3.15. As-built Submissions.

3.15.1. Once construction is complete, the as-built plans containing the "Engineer's SWM Certification" completed by the Verifying Professional shall be submitted to the Division of Plan Review and Permitting and the District (as applicable). The Verifying Professional does not need to be the design professional. However, the Verifying Professional shall be technically proficient and able to accept the professional responsibilities created by the certification statement required under Maryland law. The as-built plans shall consist of the original construction plans marked in red showing all differences between designed and constructed grades, dimensions and features, and shall meet the requirements of the Division of Plan Review and Permitting's As-Built Checklist for SWM. The "Engineer's SWM Certification" shall be of a form approved by the Director of DPW and shall verify the ESD planning techniques and practices and structural stormwater measures as constructed meet or exceed the requirements and specifications of the approved final SWM plan and the professional verifying the plan is accepting responsibility for the construction inspection performed and the as-built information shown.

- 3.15.2. As-built plan submittal will not be accepted for review until the construction of the infrastructure is complete and all necessary reporting and inspection information required of the Verifying Professional has been received by the Division and the District.
- 3.15.3. For all ESD planning techniques and practices and structural stormwater measures being deeded to the County, all property corners for the lot area to be deeded must be set and flagged on site prior to County acceptance.
- 3.15.4. For final SWM plans consisting of non-structural ESD planning techniques and practices and stormwater measures located on individual residential lots associated with a Standard SWM Plan or a Standard Grading Plan only, an as-built submission and Construction Verification Statement shall not be required. However, a grading certification per the requirements of Article 4 shall be provided to the Division prior to the issuance of a use and occupancy permit for any building covered under the SWM approval.

3.16. Inspection for Conditional Acceptance.

- 3.16.1. Upon completion of all construction subject to the requirements of this Article, and on the Developer's request, the Division and the District shall perform an Inspection for Conditional Acceptance provided the following conditions have been met:
 - A. Establishment of an acceptable layer of topsoil and required vegetation for the ESD planning techniques and practices and structural stormwater measures;
 - B. Receipt of as-built plans acceptable to the Director of DPRP;
 - C. Receipt of the Construction Verification Statement;
 - D. Receipt of all reporting and inspection documentation as required from the Verifying Professional;
 - E. Receipt of Grading Certification (per Section 3.15.4).
- 3.16.2. For ESD planning techniques and practices and structural stormwater measures to be publicly owned and maintained by the County, the Developer shall cause the following documents to be delivered to the Real Property Administrator in accordance with the Washington County Policy on Construction of Infrastructure for Acceptance and Ownership by Washington County (S-3), upon written notification from the County that the infrastructure has passed inspection for conditional acceptance:
 - A. Deeds to ESD planning techniques and practices and structural stormwater measures land area to be publicly owned and maintained, in fee simple;
 - B. Four (4) copies of any recorded easement plat;
 - C. Four (4) copies of any recorded subdivision plat;
 - D. Proof of recordation of easement and subdivision plats;
 - E. Maintenance security, in accordance with this Article.
- 3.16.3. Prior to the release of a performance security, the developer shall submit to the Division a Notice of Construction Completion (NOCC) for all structural ESD planning techniques

and practices and structural stormwater measures on a form supplied by the Division. The type, number, location, total drainage area, and total impervious area treated by all structural ESD planning techniques and practices and structural stormwater measures covered under the performance security shall be reported to the Division.

- 3.16.4. Release of Performance Security. Full release of the performance security for constructed ESD planning techniques and practices and structural stormwater measures will be made once the following conditions are met (as applicable):
 - A. A final inspection has been performed by the Division and the District or a grading certification has been received in accordance with Section 3.15.4.;
 - B. The "as-built" plans including the completed "Engineer's SWM Certification" in conformance with Section 3.14.3. have been submitted to the Division for review and have been approved by the Director of DPRP and the District;
 - C. The maintenance security for publicly owned infrastructure in conformance with Section 3.17.2. has been provided;
 - D. The SWM maintenance agreement in conformance with Section 3.13 has been recorded;
 - E. Final site close-out approval has been granted by the District and/or the Army Corps of Engineers and/or the MDE, as applicable; and,
 - F. The ESD planning techniques and practices and structural stormwater measures have been accepted by the Director of DPRP and the Director of DPW as complying with the approved plan and the provisions of this Article; and,
 - G. All additional items listed under Section 3.16.2. of this Article.

3.17. Maintenance Responsibility.

- 3.17.1. Privately Owned and Maintained Infrastructure. The owner of the property on which work has been done pursuant to this Article for privately owned and maintained infrastructure, or any other person or agent in control of such property, shall maintain all ESD planning techniques and practices and structural stormwater measures in good condition and promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures, and other protective devices. Such repairs or restoration and maintenance shall be in accordance with approved plans and good construction practices.
- 3.17.2. Maintenance Security for Publicly Owned and Maintained Infrastructure.
 - A. For those ESD planning techniques and practices and structural stormwater measures intended to become publicly owned and maintained infrastructure, the Division shall require from the developer a maintenance security prior to the release of the performance security described in Section 3.16.4.
 - B. The maintenance security shall be equal to 20% of the face value of the performance security previously posted and shall be for a minimum two (2) year maintenance period. The Director of DPW may require a longer maintenance

period if determined necessary due to unique characteristics associated with the ESD planning techniques and practices and structural stormwater measures involved. The maintenance period shall commence upon the completion of the release of the performance security per Section 3.16.4.

- C. The maintenance security shall be either an irrevocable standby letter of credit or maintenance bond, on forms approved by the County, or certified check.
- D. During the maintenance period, all maintenance responsibilities are those of the developer, including, but not limited to: mowing, replanting, reseeding, weed control, sediment accumulation removal, insect and animal control, repairs to embankment structural integrity, repairs to control structure integrity, repairs to the structural integrity of the facility side slopes or bottom, required landscaping survival, structure/fence repair and trash removal.
- E. During the maintenance period, the developer is fully responsible for any and all damage that may occur within the land area proposed for conveyance to the County and the ESD planning techniques and practices and structural stormwater measures regardless of the cause.
- F. During the maintenance period, the County shall have complete control over any public drainage easements and public SWM easements with respect to matters of public safety and welfare.
- G. The developer shall notify the Division at least sixty (60) days before the end of the maintenance period for the purpose of a final inspection by the Division. The Division will perform such inspection in accordance with the Washington County Policy on Construction of Infrastructure for Acceptance and Ownership by Washington County (S-3).
- H. The Division shall release the maintenance security at the end of the maintenance period, when:
 - a. The ESD planning techniques and practices and structural stormwater measures are found to be in good condition and in compliance with the approved SWM plan based on the results of the final inspection; and,
 - b. All deeds required for the property transfer necessary for those ESD planning techniques and practices and structural stormwater measures in accordance with this Article and the Washington County Policy on Construction of Infrastructure for Acceptance and Ownership by Washington County (S-3) have been delivered to and accepted by the Division.
- I. If, prior to the end of the maintenance period, it is determined by the Division any of the items required in Section 3.17.2.H. are not met, the Division may require, after written notice to the owner/developer, an extension of the maintenance security and maintenance period.
- J. During the maintenance period, should the ESD planning techniques and practices and structural stormwater measures require maintenance effort, the developer and the Division shall proceed in accordance with the applicable provisions of the Washington County Policy on Construction of Infrastructure for Acceptance and Ownership by Washington County (S-3).

- K. The maintenance security shall not be released until any and all outstanding issues pertaining to the subject ESD planning techniques and practices and structural stormwater measures are addressed to the satisfaction of the Director of DPW.
- L. Should the Division need to act on the maintenance security provided for a project, the Division shall address construction, ownership and/or maintenance concerns on a case-by-case basis and not necessarily consistent with the specific requirements of the Article. Such actions shall be taken to protect the interests of the County and they shall be done to preserve the spirit and intent of this Article.
- M. The maintenance security requirements of this Article shall not apply to those ESD planning techniques and practices and structural stormwater measures constructed by the County. Maintenance security requirements for such projects are addressed separately within the contract documents.

3.18. Post Construction Maintenance.

- 3.18.1. Maintenance Inspection for Publicly Owned and Maintained Infrastructure. Following acceptance of ownership of ESD planning techniques and practices and structural stormwater measures by the Division, the Division shall ensure preventative maintenance is performed by inspecting all publicly owned and maintained infrastructure. These inspections shall occur during the first year of operation and at least once every 3 years thereafter. The Division is not precluded from making more frequent maintenance inspections as appropriate.
- 3.18.2. Maintenance Inspection for Privately Owned and Maintained Infrastructure. For privately owned and maintained infrastructure, the Division shall ensure preventative maintenance is performed by inspecting these facilities during the first year of operation and at least once every 3 years thereafter, and on an as needed basis.
- 3.18.3. Maintenance Inspection Reports.
 - A. Maintenance inspection reports shall be generated and retained by the Division for all ESD planning techniques and practices and structural stormwater measures.
 - B. The Division shall include in the maintenance inspection reports the following:
 - a. BMP location and type;
 - b. BMP ownership information;
 - c. The date of inspection;
 - d. Name of inspector;
 - e. An assessment of the quality of the ESD planning techniques and practices and structural stormwater measure(s) efficiency and the control of runoff to the MEP;
 - f. The condition of:
 - (a) vegetation or filter media;
 - (b) Fences or other safety devices;
 - (c) Spillways, valves, or other control structures;

- (d) Embankments, slopes, and safety benches;
- (e) Reservoir or treatment areas;
- (f) Inlet and outlet channels or structures;
- (g) Underground drainage;
- (h) Sediment and debris accumulation in storage and fore bay areas;
- (i) Any nonstructural practices to the extent practicable;
- (j) Evidence of sinkhole formation; and
- (k) Any other item that could affect the proper function of the ESD planning techniques and practices and structural stormwater measures or system.
- g. Description of needed maintenance.
- 3.18.4. Maintenance Deficiencies for Privately Owned Infrastructure.
 - A. For privately owned infrastructure, the Division shall notify the owner of any deficiencies discovered during the maintenance inspection of the ESD planning techniques and practices and structural stormwater measures.
 - B. After notification is provided to the owner of any deficiencies discovered from a maintenance inspection, the owner shall provide within ninety (90) days to the Division for review and approval a plan of corrective action detailing the method of correction and when the corrective action shall be complete. If after approval by the Division, satisfactory corrections are not made by the owner within one-hundred and fifty (150) days, the County may perform all necessary work to place the ESD planning techniques and practices and structural stormwater measures in proper working condition.
 - C. If repairs are not deemed by the Division to be correct, enforcement procedures in accordance with Section 3.19 may be initiated by the Division.
 - D. If, after a maintenance inspection by the Division, the condition of a privately owned and maintained ESD planning technique and practice and structural stormwater measure presents an immediate danger to the public health or safety, because of an unsafe condition or improper maintenance, the Division shall take such action as may be necessary to protect the public and make the facility safe. Any cost incurred by the County shall be assessed against the owner, as provided in Section 3.13.

3.19. Enforcement.

- 3.19.1. Any step in the enforcement process may be taken at any time, depending on the severity of the violation.
- 3.19.2. Permit Suspension and Revocation. Any grading or building permit issued by the County may be suspended or revoked after written notice is given to the permittee for any of the reasons noted in Section 3.10.3 of this Article.

- 3.19.3. Enforcement During Construction. The Division may, for enforcement purposes, use any one or a combination of the following actions to assure timely and appropriate response to noted violations of the approved SWM and soil erosion and sediment control plan(s):
 - A. A notice of violation shall be issued specifying the need for a violation to be corrected if SWM and soil erosion and sediment control plan(s) noncompliance is identified;
 - B. A stop work order shall be issued by the Director of DPW for the site, inclusive of all buildings served by the affected ESD planning techniques and practices and structural stormwater measures, if a violation persists;
 - C. Claims against the security posted or referred for legal action if reasonable efforts to correct the violation(s) have not been undertaken; or
 - D. In addition to any other sanctions, a civil action or criminal prosecution may be brought against any person in violation of the SWM subtitle (Md. Code Ann., Environment Article, § 4-201, et seq.-4-215), the Design Manual, or this Article.
- 3.19.4. Enforcement After Construction. After acceptance of an ESD planning technique and practice and structural stormwater measure by the County and release of any performance or maintenance surety, the Division may, for enforcement purposes, use any one or a combination of the following actions to assure timely and appropriate response to noted violations of this Article:
 - A. A notice of violation shall be issued specifying the need for a violation to be corrected if non-compliance with the provisions of this Article is identified; or
 - B. In addition to any other sanctions, a civil action or criminal prosecution may be brought against any person in violation of the SWM subtitle (Md. Code Ann., Environment Article, §§ 4-201, et seq.-4-215), the Design Manual, or this Article.

3.20. Appeals.

- 3.20.1. Any person aggrieved by a decision of an official charged with the enforcement of this Article shall have the right to appeal to the County Commissioners, or their designee. Upon request, any oral decision to be appealed from shall be rendered in writing by the official who made the decision.
- 3.20.2. Any appeal under this Article shall be taken within thirty (30) days after the issuance of the official's written decision by filing with the County Commissioners, or their designee, a notice of appeal with a copy of the official's written decision appealed from and a clear statement of the grounds of the appeal.
- 3.20.3. The written decision of the County Commissioners, or their designee, shall be issued within thirty (30) days after completion of a public hearing held on the record. The County Commissioners' decision shall be considered final, except that any person, whether or not a party to the appeal before the County Commissioners, shall have the

right to file a petition for judicial review in the Circuit Court for Washington County pursuant to Title 7, Chapter 200 of the Maryland Rules, entitled "Judicial Review of Administrative Agency Decisions".

3.20.4. Judicial review of disputed issues of fact shall be confined to the record of the hearing before the County Commissioners in accordance with Maryland law governing judicial review of administrative decisions. No appeals shall be heard de novo.

3.21. Penalties.

- 3.21.1. Any person convicted of violating the provisions of this Article shall be guilty of a misdemeanor, and upon conviction thereof, shall be subject to a fine of not more than Ten Thousand Dollars (\$10,000.00) or imprisonment not exceeding one (1) year or both for each violation with costs imposed in the discretion of the court. Each day a violation continues shall be a separate offense. In addition, the County Commissioners may institute injunctive, mandamus or other appropriate action or proceedings of law to correct violations of this Article. Any court of competent jurisdiction shall have the right to issue temporary or permanent restraining orders, injunctions or mandamus, or other appropriate forms of relief.
- 3.21.2. The County Commissioners or their designee may bring a civil action against any person for any violation of this Article or any regulation or SWM plan adopted or approved under this Article. The court may impose a civil penalty of not more than \$10,000 against a person, an injunction to prohibit the person from continuing the violation, or both. Each day during which a violation continues constitutes a separate offense.

Article 4 – Grading.

4.1. Scope.

- 4.1.1. No person shall disturb an area greater than or equal to 5,000 square feet or a volume of 100 cubic yards without an approved grading plan, construction drawings, or site plan.
- 4.1.2. No person shall disturb an area greater than or equal to 5,000 square feet or volume of 100 cubic yards without first obtaining a grading permit from the Division of Plan Review and Permitting.
- 4.1.3. No grading permits shall be issued on a site until a site plan or construction drawings are approved by the Division of Plan Review and Permitting and the Planning Commission or a grading plan is approved by the Division of Plan Review and Permitting and the District.
- 4.1.4. Nothing in this ordinance prevents an applicant from obtaining a grading permit that covers the grading and other site work on a single lot, or on a combination of contiguous lots in a single block, or on continuous blocks.
- 4.1.5. Grading permits for construction of all buildings and dwelling units shall be approved by the Division of Plan Review and Permitting prior to issuance of a building permit by the Division of Plan Review and Permitting.
- 4.1.6. Nothing contained within Article 4 of this Ordinance shall preclude the applicant from complying with all applicable sections of the adopted Building Code.

4.2. Exemptions. A grading permit shall not be required for the following:

- 4.2.1. Repair of individual private septic system construction, which does not permanently alter the existing grade.
- 4.2.2. Grading for residential landscaping purposes provided:
 - A. The disturbance is less than or equal to fifteen thousand (15,000) square feet of area or five hundred (500) cubic yards of volume;
 - B. The disturbance is exempt or a waiver has been issued by the Director of DPRP from Article 3 of this Ordinance;
 - C. A standard soil erosion and sediment control plan has been approved under Article 5 of this Ordinance;
 - D. The grade change does not alter the drainage pattern;
 - E. All bare earth is promptly seeded, sodded or otherwise effectively protected from erosive actions within 7 days;

- F. Grading does not result in increased surface water runoff to highly erodible soils; and
- G. Proposed slopes do not exceed twenty-five (25) percent or fifteen (15) percent on highly erodible soils.
- 4.2.3. Grading for agricultural activities.

4.3. Waiver.

- 4.3.1. The Director of DPRP may grant approval for a Waiver for grading activities subject to the provisions of this Article.
- 4.3.2. An owner/developer or a person seeking an Waiver under this Article must submit a written request to the Director of DPRP containing descriptions, drawings, calculations, and any other information that is necessary to evaluate the proposed Waiver sought in accordance with the Division of Plan Review and Permitting's Checklist for a Waiver Request. Requests for a Waiver shall not be deemed granted until authorized by the Division of Plan Review and Permitting, on a form approved by the Director of DPRP. The Division of Plan Review and Permitting may charge a fee for processing a Waiver Request. If there are subsequent additions, extensions, or modifications to a site after a Waiver request has been granted, a separate written Waiver request and processing fee must be submitted and authorization obtained in accordance with the provisions of this section.
 - A. Waiver requests shall only be granted when it has been demonstrated that the provisions of Articles 3 and 5 of this Ordinance have been met and must:
 - B. Be considered on a case-by-case basis;
 - C. Consider the cumulative effects of prior exemptions and waivers granted for other sites within the impacted affected site, drainage area or watershed; and
 - D. Reasonably ensure that the development will not adversely impact stream quality, increase known undesirable flooding, or fail to address downstream drainage deficiencies in a reasonable manner.

4.4. Grading Criteria.

- 4.4.1. All grading plans and specifications shall be in accordance with the most recent version of the Maryland Standards and Specifications for Soil Erosion and Sediment Control and shall meet the following criteria:
- 4.4.2. Existing Features and Sensitive Areas. Unless approved by the AHJ, no grading or clearing activity shall occur within sensitive areas or their buffers. All sensitive areas as defined by this Ordinance shall be protected in accordance with this Ordinance.

- 4.4.3. The extent of land and land cover disturbance shall be the minimum necessary to accommodate the proposed development and shall conform to any restrictions imposed by an approved forest conservation plan. The development shall be fitted to the topography and soils so as to create the least erosion potential and the natural vegetation shall be retained and protected wherever possible.
- 4.4.4. Grading of roads and streets shall be placed as close to the existing contours as possible to minimize cutting or filling and to prevent excessive grading.
- 4.4.5. No fill or other material may be placed into a sinkhole without prior approval from the Division of Plan Review and Permitting and the District in accordance with the provisions of Article 3 of this Ordinance, and, if appropriate the DNR, per Maryland Cave Law.
- 4.4.6. With the exception of construction of swimming pools and basements, cuts and/or fills shall not exceed ten (10) feet in depth or height without a fully engineered grading plan approved by the Division of Plan Review and Permitting and District.
- 4.4.7. Fill Materials.
 - A. All fills proposed for support of roadways, roadway embankments, pavements, utility lines and structures within a public easement or right-of-way shall meet the following requirements:
 - a. All backfill material placed shall meet the requirements of latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
 - B. All common fill materials outside the limits of the public right-of-way shall meet the following requirements:
 - a. No inclusions of inorganic material, organic material, or other deleterious materials, which may be subject to decay, shall be permitted;
 - b. Unless specifically designed by a Qualified Professional, no rock or similar irreducible material with a maximum dimension greater than eight (8) inches shall be buried or placed in any fill within two (2) feet of finished grade. No stones over two (2) inches in diameter will be allowed where compacted by hand or mechanical tampers or over eight (8) inches in diameter where compacted by rollers or other equipment.
- 4.4.8. Preparation of Ground.
 - A. Unless specifically designed by a Qualified Professional, the natural ground surface shall be prepared to receive fill by removing all organic surface materials, non-complying fill and unsuitable soils.
 - B. No fill shall be placed on frozen ground.

- C. All excavated subgrades within a public easement or right of way shall meet the requirements of the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
- 4.4.9. Fill Compaction.
 - A. All fill material placed within a public easement or right of way shall be compacted in accordance with the latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
 - B. Fill outside of a public easement or right of way shall be compacted sufficiently so as to be stable and to prevent an erosion hazard. Unless specifically designed by a Qualified Professional, fill outside of the public easement or right of way shall be placed in approximately horizontal layers, each layer having a loose thickness of not more than eight (8) inches.
- 4.4.10. Maximum Slope for Fills.
 - A. Unless specifically designed by a Qualified Professional, no fill shall be made which creates an exposed surface steeper in slope than two (2) feet horizontal to one (1) foot vertical, provided:
 - a. The slope is not subject to concentrated flow of surface water runoff;
 - b. The slope is not located in an area of highly erodible soils;
 - c. The slope is approved by the Division of Plan Review and Permitting and the District; and,
 - d. The slope is not within the limits of a SWM structure.
 - B. Where unique conditions exist, the Division of Plan Review and Permitting or District may require the fill be constructed with an exposed surface with a grade flatter than two (2) feet horizontal to one (1) foot vertical.
 - C. Unless specifically designed by a Qualified Professional, fills toeing out on a natural slope steeper than three (3) feet horizontal to one (1) foot vertical shall not be made unless the Division of Plan Review and Permitting and the District approves such slope.
- 4.4.11. Maximum Slope for Cut.
 - A. Unless specifically designed by a Qualified Professional, cuts shall not be made steeper in slope than two (2) feet horizontal to one (1) feet vertical, unless approved by the Division of Plan Review and Permitting and the District. The Division of Plan Review and Permitting or the District may require such other measures as it deems necessary for stability, vegetative establishments, and safety.
- 4.4.12. Cut and Fill Slopes.

- A. Whenever the vertical interval (height) of any 2:1 slope exceeds 20 feet, or any 3:1 slope exceed 30 feet or any 4:1 exceeds 40 feet, benches or terraces shall be provided according to the Maryland Standards and Specifications for Erosion and Sediment Control.
- B. All benches required under Section 4.4.12.A. above shall be a minimum width of six (6) feet and shall drain to a stable outlet.
- C. To the maximum extent practicable, cut(s) and fill(s) slopes three (3) feet horizontal to one (1) foot vertical or steeper shall not encroach on a drainage or utility easement that runs longitudinally with or is adjacent to a property line.
- D. The setbacks established by this Section are minimum, and depending on soil conditions, may be increased by the Division of Plan Review and Permitting and/or the District based on recommendations by a Qualified Professional if deemed necessary for safety or stability or to prevent possible damage from surface water, soil or debris.
- 4.4.13. Top Soil and Stabilization Requirement.
 - A. All disturbed areas shall be permanently stabilized in accordance with the requirements of Article 5 of this Ordinance.
 - B. All disturbed areas with a slope of two (2) feet vertical and one (1) foot horizontal or steeper shall receive a minimum of two (2) inches of topsoil. All disturbed areas with a slope of flatter than two (2) feet vertical and one (1) foot horizontal shall receive a minimum of four (4) inches.
- 4.4.14. Retaining Walls. Use of retaining walls in connection with land disturbance shall be shown on the grading plan at the time of grading permit application. All proposed retaining walls over three feet high shall be designed according to the applicable Building Code and/or AASHTO standard.
- 4.4.15. Drainage. The following provisions apply to the conveyance of surface water runoff:
 - A. All drainage facilities shall be designed to convey surface water in such a manner as to prevent erosion, overflow or ponding. Said water shall be conveyed according to acceptable design criteria, standards and procedures as required by this Ordinance, the Design Manual and the Washington County Standards and Specifications for Public Works Construction.
 - B. Where a project design proposes the ponding of water above the cut or fill of a slope, on slope benches or above retaining walls an engineering analysis to be completed by a Qualified Professional may be requested to verify stability.

- C. Residential lots shall be generally graded so the discharge rate of the 10 year frequency design storm does not exceed five (5) cubic feet per second before it is collected into a retention and infiltration area or a stormwater conveyance system. The stormwater conveyance system may be an open channel, closed conduit or a combination of both, in accordance with latest adopted version of the Washington County Standards and Specifications for Public Works Construction.
- D. Lots shall be generally graded so that surface water runoff is directed along property lines and shall preclude the ponding of water on adjacent lots / parcels of record unless specifically approved otherwise. Contours of the finished surfaces are to be blended with adjacent natural terrain to achieve a consistent grade and natural appearance.

4.5. Grading Plans.

- 4.5.1. Standard Grading Plan.
 - A. Required. A Standard Grading Plan may be submitted for approval for a disturbance on a single lot where the disturbance is greater than or equal to five thousand (5,000) square feet of area or one-hundred (100) cubic yards of volume but less than or equal to thirty thousand (30,000) square feet area or one thousand (1,000) cubic yards of volume, and where such disturbance is determined to be exempt from SWM per the Division of Plan Review and Permitting.
 - B. Standard Grading Plan Requirements. A Standard Grading Plan shall be approved by the Division of Plan Review and Permitting and the District prior to issuance of a grading permit by the Division of Plan Review and Permitting. The Standard Grading Plan shall include, at a minimum, the following:
 - a. Property lines with bearings and distances (if limit of disturbance is within 200 feet of property line).
 - b. Existing easements (with bearings and distances if limit of disturbance is within 200 feet of property line).
 - c. Existing and proposed lot contours at two (2) foot intervals with spot elevations as necessary.
 - d. Existing on-site drainage swales delineated with easements as required by this Ordinance (if limit of disturbance is within 200 feet of existing easement).
 - e. Existing and proposed structures (within 200 feet of limit of disturbance).
 - f. Delineation of soil types (within 200 feet of limit of disturbance).
 - g. Forest conservation, wetlands, streams or other sensitive areas, as defined by this Ordinance, and associated buffers and conservation easements (if limit of disturbance is within 200 feet of these features).
 - h. Existing on-lot SWM structure, as applicable (within 200 feet of limit of disturbance).

- i. Building setback requirements are clearly labeled (within 200 feet of limit of disturbance).
- j. Limit of clearing and grading.
- k. Approved septic field location(s) and well location(s) (within 200 feet of limit of disturbance).
- 1. Existing and proposed retaining walls with top of wall and bottom of wall elevations shown. For all proposed walls over three (3) feet in height, a wall profile and detail section shall be included, per the requirements of the Division of Plan Review and Permitting (within 200 feet of limit of disturbance).
- m. Drawing shall be drawn to scale not exceeding 1 inch equals 50 feet (larger scale as required by AHJ).
- n. Disturbed area quantity as well as cut and fill quantity.
- o. Standard Soil Erosion and Sediment Control Plan notes and certification block (per Article 5).
- p. District and Division of Plan Review and Permitting approval blocks.
- q. North arrow.
- r. Vicinity map.
- s. Owner name and address and phone number.
- t. Tax map, parcel identification, address of parcel.
- 4.5.2. Site Specific Grading Plan.
 - A. Required. A site specific grading plan is required for the following:
 - a. Unless the AHJ establishes a Standard SWM Plan, approved by the MDE, for any clearing or grading where disturbance is greater than or equal to five thousand (5,000) square feet of area or one-hundred (100) cubic yards of volume, and SWM is required. Where the AHJ has received approval from the MDE and implemented a Standard SWM Plan, the disturbance threshold for a Site Specific Grading Plan shall be increased to thirty thousand (30,000) square feet or one thousand (1,000) cubic yards of volume;
 - b. Unless the AHJ establishes a Standard SWM Plan, approved by the MDE, Construction of all buildings and dwelling units, where disturbance is on more than one lot, is greater than or equal to five thousand (5,000) square feet of area or one-hundred (100) cubic yards of volume, and SWM is required. Where the AHJ has received approval from the MDE and implemented a Standard SWM Plan, the disturbance threshold for a Site Specific Grading Plan shall be increased to thirty thousand (30,000) square feet or one thousand (1,000) cubic yards of volume; or
 - c. For any clearing or grading where disturbance is greater than or equal thirty thousand (30,000) square feet of area or one thousand (1,000) cubic yards of volume.
 - B. Site Specific Grading Plan Requirements. A site specific grading plan shall be approved by the Division of Plan Review and Permitting and the District prior to

issuance of a building permit by the Division of Plan Review and Permitting. The site plan will constitute the site specific grading plan for commercial or industrial development sites. The construction drawings will constitute the site specific grading plans for construction covered under the Washington County Policy on Construction of Infrastructure for Acceptance and Ownership by Washington County (S-3). For all other construction, the site specific grading plan shall include all items required by the applicable Division of Plan Review and Permitting Site Specific Grading Plan Checklist. At a minimum, the grading plans shall include the following:

- a. Maryland grid coordinates to NAD83 datum.
- b. Bench mark shown on plan per NAVD88 datum.
- c. Property lines with bearings and distances.
- d. Existing and proposed easements (with bearings and distances).
- e. Existing and proposed lot contours at two (2) foot intervals with spot elevations as necessary.
- f. On-site drainage swales delineated with easements as required by this Ordinance.
- g. Existing and proposed house and garage location.
- h. Minimum first floor / basement / walk-out elevations.
- i. Spot shots around the building perimeter to demonstrate accommodations of the 10 and 100-year flows and elevations.
- j. Delineation of soil types.
- k. Location, details and specifications of any existing or proposed ESD planning techniques and treatment practices and structural SWM measures as required by this Ordinance.
- 1. Forest conservation, wetlands, streams or other sensitive areas, as defined by this Ordinance, and associated buffers and conservation easements.
- m. Limits of proposed driveway, driveway slope, culverts (length, slope, inverts, material type, end treatment and outfall protection), spot elevation at center line of driveway over culvert, spot elevation at centerline of driveway at centerline of street intersection, spot elevations to ensure positive drainage across the intersection of the driveway and the street, sight distance line of site and calculations (required when an entrance permit is required as part of the issuance of the grading permit).
- n. Building setback requirements are clearly labeled.
- o. Limit of clearing and grading.
- p. Approved septic field location(s) and well location(s).
- q. Existing and proposed retaining walls with top of wall and bottom of wall elevations shown. For all proposed walls over three (3) feet in height, a wall profile and detail section shall be included per the requirements of the Division of Plan Review and Permitting.
- r. Drawing shall be drawn to scale not exceeding 1 inch equals 50 feet (Larger scale as required by AHJ).
- s. Maximum sheet size 24" x 36".

- t. Soil Erosion and Sediment Control Plan (per the requirements of this Ordinance).
- u. District and Division of Plan Review and Permitting approval blocks.
- v. North arrow.
- w. Vicinity map (minimum scale 1 inch equals 2000 feet).
- x. Owner name and address and phone number.
- y. Tax map, parcel identification, address of parcel.
- C. Grading plans covered under this Section may not require all of the items listed under Section 4.5.2.B. at the discretion of the AHJ.

4.6. Preparation of Grading Plans.

4.6.1. The grading plans shall be prepared by a Qualified Professional. Items to be considered for this determination will include but will not be limited to: complexity of the ESD planning techniques and practices and structural stormwater measures being proposed; potential for on-site and off-site damage from failed designs; and unique geologic and /or topographic features of the area.

4.7. Grading Permit Requirements.

- 4.7.1. When a grading permit is required, an application shall be submitted at the time of building permit application.
- 4.7.2. Application Requirements. Prior to the issuance of a grading permit the applicants shall submit to the Division of Plan Review and Permitting the following:
 - A. A completed application form. A separate application shall be required for each grading permit;
 - B. A copy of the approved Standard Grading Plan or Site Specific Grading Plan, as applicable;
 - C. A copy of the approved MDE Waterway Permit(s), where applicable, and evidence of any other required wetlands permits or approvals. Any proposed disturbance of a wetland requires review by MDE and any disturbance exceeding 5,000 square feet requires a joint permit;
 - D. A copy of the application for Notice of Intent (NOI) to comply with all requirements of the MDE General Permit for Stormwater Associated with Construction Activity (NPDES Number MDR10, State Discharge Permit Number 09GP); and
 - E. The fee for plan review, permit processing and inspection as covered under this Article.
- 4.7.3. Extent. The issuance of a grading permit shall constitute an authorization to do only the work set forth in the application for the permit, or in the grading plans, site plans, construction drawings and specifications submitted and approved as part of the

application. All work performed by the person to whom the permit is issued or by his successor, shall be in accordance with the requirements of this Ordinance.

- 4.7.4. Right of Entry. Application for permits shall authorize the Division, the Division of Plan Review and Permitting, and the District to enter upon the land for inspection during application review, construction and/or restoration of the site upon default by the landowner or applicant.
- 4.7.5. Permit Expiration and Time Limitations. The grading permit shall expire 2 years from the date of issuance, at the time of grading plan expiration, or when one of the conditions in Section 4.7.6 occurs, unless extended by the AHJ. Nothing in this Ordinance shall prevent the AHJ from issuing a grading permit that expires sooner than 2 years from the date of issuance to coincide with the expiration date of the grading plan. The Applicant shall fully complete all of the work required pursuant to the grading permit within the specified time. Application for permit renewal shall be made in writing to the AHJ at least 2 months prior to the permit expiration date. A renewal fee may be established by the County Commissioners to be paid at time of application. A request for a permit renewal shall include the reasons for the requested extension. At the time of permit renewal, the grading plan and the soil erosion and sediment control plan must be resubmitted to the approving AHJ for review and re-approval prior to any additional work being undertaken by the applicant.
- 4.7.6. Permit Suspension and Revocation. Every grading permit issued shall become null and void if:
 - A. The building or work authorized by such permit is not commenced within six (6) months from the date of issuance of the permit;
 - B. The building or work authorized, by such permit, is suspended or abandoned for a period of six (6) months or more at any time after the work is commenced;
 - C. After failure on the owner/developer's part to address violations within a specified time frame identified in a "Stop Work" order or "Notice of Violation" issued by the Director of DPW, the District or the MDE.
- 4.7.7. Fees. All plan review, permit, permit renewal and inspection fees must be paid to the appropriate agencies in accordance with the current fee schedules prior to issuance of permits or authorization for additional work.

4.8. Modifications to Grading Plans.

4.8.1. The Division of Plan Review and Permitting and the District may approve modifications of the approved grading plan as necessary. Modifications may be requested by a permittee, the MDE, the Division, the Division of Plan Review and Permitting, the District, or the AHJ for inspection.
- 4.8.2. When inspection of the site indicates the approved grading plan needs modification or as noted above, the modification shall be made in compliance with the grading criteria contained in this Article and as follows:
 - A. Major modifications of the approved grading plans shall be submitted by the owner or developer to the Division of Plan Review and Permitting and the District and processed appropriately.
 - B. Any major changes to the footprint use or configuration of the building exterior, are to be resubmitted for review and approval to the Division of Plan Review and Permitting and the District before continuing with construction. Upon authorization by the Division of Plan Review and Permitting and the District, work may continue during the plan revision review and approval process.

4.9. Construction Responsibilities.

- 4.9.1. Responsibility of Applicant. During grading operations, the applicant shall be responsible for the prevention of damage to any public utilities or services within the limits of grading and along any routes of travel of equipment. Neither the County Commissioners, nor the District, shall be responsible for damage caused to downstream properties due to the owner/developers actions pursuant to this Article. No person shall grade on land so close to the property line as to endanger any adjoining public street, sidewalk, alley or any other public or private property without supporting and protecting such property from settling, cracking or other damage which might result. Grading can take place on adjacent property if grading rights or easement are secured from the property owner.
- 4.9.2. Liability. Neither the issuance of a permit under the provisions of this Article nor the compliance with the provisions hereto or with any condition imposed by the Division, the Division of Plan Review and Permitting or the Division of Public Works hereunder, shall release any person from any responsibility for damage to persons or property (including public utilities or services) otherwise imposed by law, nor impose any liability upon the County for damages to persons or property.
- 4.9.3. Removal of Debris. No debris shall be deposited in sensitive areas, watercourses, public streets, highways, sidewalks or other public thoroughfares; and the permittee shall promptly remove all soil, miscellaneous debris or other materials spilled, dumped or otherwise deposited in sensitive areas, watercourses, public streets, highways, sidewalks, or other thoroughfares during transit or operation. In the event the permittee does not promptly or properly remove the debris in sensitive areas, watercourses, on public streets, highways, sidewalks or other public facilities the permittee shall be responsible for all cost incurred by the County effecting such removal.
- 4.9.4. Maintenance of Protective Measures. The owner of any property on which grading or other work has been done pursuant to the provisions of this Article shall maintain and/or

promptly repair or restore all graded surfaces, erosion control measures, vegetative covers and/or other protective measures if disturbed or destroyed during the course of operations. Such repair and/or restoration shall be in accordance with the approved plans and specifications as required by this Ordinance until permanent measures are accepted by the Division, the District and the MDE.

4.9.5. Posting of Approved Grading Plans and Grading Permit. The approved grading plans and grading permit must be located at the job site at all times. They must be located in an obvious, readily and visible location.

4.10. Inspections and Notices

- 4.10.1. Pre-Construction Notification. The permittee shall notify the Division and the District at least five (5) days before commencing any work in conjunction with the grading permit and the grading plan and upon completion of the project when a final inspection will be conducted. A pre-construction meeting is required in accordance with the provisions of Articles 3 and 5 of this Ordinance.
- 4.10.2. Final Site Close-out Inspection. Except for work covered under a Standard Grading Plan or for all residential lot grading performed under a Site Specific Grading Plan that is not an approved Site Plan or Construction Drawing, the permittee shall notify the Division and the District when the grading operation is ready for final inspection. Final site closeout inspection approval shall be given in a timely manner when all grading work has been completed, as well as the required vegetative stabilization completed, and the required reports have been submitted.
- 4.10.3. If at any stage the work does not conform to the grading permit, or to any instructions of the Division, the District and/or the MDE, a written notice to comply shall be given to the permittee. Such notice shall set forth the nature of corrections required and the time within which corrections shall be made. Upon the failure to comply with the time specified, the permittee shall be considered in violation of this Ordinance.

4.11. Certification.

- 4.11.1. Grading Certification. A letter of grading certification shall be required on all projects completed under any Standard Grading Plan or for all residential lot grading performed under a Site Specific Grading Plan that is not an approved Site Plan or Construction Drawing. The letter of grading certification shall meet the following requirements:
 - A. The letter of grading certification shall be submitted to the Division for approval.
 - B. The letter of grading certification shall confirm all items contained on the approved grading plan.
 - C. The letter of grading certification shall be signed and sealed by a Qualified Professional.

- D. The letter of grading certification shall be received by the Division prior to useand occupancy permit.
- 4.11.2. Notification of Violation. If at any stage, the work does not conform to the grading permit, or to any instructions of the Division, the District, or the MDE, a written notice to comply shall be given to the permittee. Such notice shall set forth the nature of corrections required and the time within which corrections shall be made. Upon the failure to comply with the time specified, the permittee shall be considered in violation of this Ordinance.

4.12. Enforcement.

- 4.12.1. Any step in the enforcement process may be taken at any time, depending on the severity of the violation.
- 4.12.2. Permit Suspension and Revocation. Any grading permit issued by the County may be suspended or revoked after written notice is given to the permittee for any of the reasons noted in Section 4.7.6., Section 4.10.3. and Section 4.11.2. of this Article.
- 4.12.3. Enforcement During Construction. The Division may, for enforcement purposes, use any one or a combination of the following actions to assure timely and appropriate response to noted violations of the approved grading plan:
 - A. A notice of violation shall be issued specifying the need for a violation to be corrected if grading plan noncompliance is identified;
 - B. A stop work order shall be issued by the Division for the grading work if a violation persists; or
 - C. In addition to any other sanctions, a civil action or criminal prosecution may be brought against any person in violation of the applicable subtitle (Annotated Code of Maryland, Environment Article, § 4-101, et seq. and/or § 4-201, et seq.), the Design Manual, or this Article.

Article 5 – Soil Erosion and Sediment Control.

5.1. Scope.

No person shall disturb land without implementing soil erosion and sediment controls in accordance with the requirements of this Ordinance and the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control except as provided within this Article.

5.2. Exemptions.

The following activities are exempt from the provisions of this Ordinance:

- A. Agricultural land management practices and agricultural BMPs, and construction of agricultural structures;
- B. Clearing or grading activities that disturb less than 5,000 square feet of land area and disturb less than 100 cubic yards of earth; and
- C. Clearing or grading activities that are subject exclusively to State approval and enforcement under State law and regulations.

5.3. Variances.

The District_may only grant a variance from the requirements of the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control for exceptional circumstances when strict adherence will result in hardship and not fulfill the intent of this Ordinance. The owner/developer shall submit a written request for a variance to the District. The request must state the specific variance sought and the reasons for the request. The District_shall not grant a variance unless and until sufficient information is provided describing the unique circumstances of the site to justify the variance.

5.4. Erosion and Sediment Control Plans.

- 5.4.1. Review and Approval of Erosion and Sediment Control Plans.
 - A. A person may not grade land without an erosion and sediment control plan approved by the District.
 - B. The District shall review erosion and sediment control plans to determine compliance with this Article and the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control prior to approval. In approving the plan, the District may impose such conditions that may be deemed necessary to ensure compliance with the provisions of this Article, COMAR 26.17.01, the2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, and the preservation of public health and safety.

- C. The review and approval process shall be in accordance with the comprehensive and integrated plan approval process described in the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, Chapter 3 and 4 of this Ordinance, and the Act.
- D. At a minimum, a concept plan must include the mapping of natural resources and sensitive areas including highly erodible soils and slopes greater than 15 percent as well as information required under Chapters 3 and 4 of this Ordinance. These areas are to remain undisturbed or an explanation must be included with either the concept or site development plan describing enhanced protection strategies for these areas during construction.
- E. A site development plan submittal must include all concept plan information and indicate how proposed erosion and sediment control practices will be integrated with proposed stormwater management practices. The latter is be done through a narrative and an overlay plan showing both ESD and erosion and sediment control practices. An initial sequence of construction and proposed project phasing to achieve the grading unit restriction should be submitted at this time.
- F. An applicant shall submit a final erosion and sediment control plan to the District for review and approval. The plan must include all of the information required by the concept and site development plans as well as any information in Section 5.4.2 not already submitted.
- G. A final erosion and sediment control plan shall not be considered approved without the inclusion of the signature and date of signature of the District on the plan.
- H. With the exception of mining and landfill plans which are valid for five (5) years, approved plans remain valid for two (2) years from the date of approval unless extended or renewed by the District.
- I. Grandfathering of Approved Plans:
 - a. Any plans that receive final approval after January 9, 2013 must be in compliance with the requirements of this Article and the 2011 Maryland Standards and Specifications for Erosion and Sediment Control.
 - b. A plan that receives final approval by January 9, 2013 may be reapproved under its existing conditions if grading activities have begun on the site by January 9, 2015, with the exception of stabilization requirements.
 - c. Stabilization practices on all sites must be in compliance with the requirements of this Article and the 2011 Maryland Standards and Specifications for Erosion and Sediment Control by January 9, 2013, regardless of when an approved erosion and sediment control plan was approved.

5.4.2. Contents of Erosion and Sediment Control Plans

- A. An applicant is responsible for submitting erosion and sediment control plans that meet the requirements of the District, this Article, the 2011 Maryland Standards and Specifications for Erosion and Sediment Control, and the Act. The plans shall include sufficient information to evaluate the environmental characteristics of the affected areas, the potential impacts of the proposed grading on water resources, and the effectiveness and acceptability of measures proposed to minimize soil erosion and off-site sedimentation.
- B. At a minimum, applicants shall submit the following information:
 - a. A letter of transmittal and/or application;
 - b. Name, address, and telephone number of:
 - (a) The owner of the property where the grading is proposed;
 - (b) The developer; and
 - (c) The applicant;
 - c. A vicinity map indicating north arrow, scale, site location, and other information necessary to easily locate the property;
 - d. Drainage area map(s) at a 1" = 200' minimum scale showing existing, interim, and proposed topography, proposed improvements, standard symbols for proposed sediment control features, and pertinent drainage information including provisions to protect downstream areas from erosion for a minimum of 200 feet downstream or to the next conveyance system;
 - e. The location of natural resources, wetlands, floodplains, highly erodible soils, slopes 15 percent and steeper, and any other sensitive areas;
 - f. A general description of the predominant soil types on the site, as described by the appropriate soil survey information available through the local soil conservation district or the USDA Natural Resources Soil Conservation Service;
 - g. Proposed stormwater management practices;
 - h. Erosion and sediment control plans including:
 - (a) The existing topography and improvements as well as proposed topography and improvements at a scale between 1" = 10' and 1" = 50' with 2 foot contours or other approved contour interval. For projects with more than minor grading, interim contours may also be required;
 - (b) Scale, project and sheet title, and north arrow on each plan sheet;
 - (c) The limit of disturbance (LOD) including:
 - (i) Limit of grading (grading units, if applicable); and
 - (ii) Initial, interim, and final phases;
 - (d) The proposed grading and earth disturbance including:
 - (i) Total disturbed area;
 - (ii) Volume of cut and fill quantities; and
 - (iii) Volume of borrow and spoil quantities;

- (e) Storm drainage features, including:
 - (i) Existing and proposed bridges, storm drains, culverts, outfalls, etc.;
 - (ii) Velocities and peak flow rates at outfalls for the two-year and ten-year frequency storm events; and
 - (iii) Site conditions around points of all surface water discharge from the site;
- (f) Erosion and sediment control practices to minimize on-site erosion and prevent off-site sedimentation including:
 - (i) The salvage and reuse of topsoil;
 - (ii) Phased construction and implementation of grading unit(s) to minimize disturbances, both in extent and duration;
 - (iii) Location and type of all proposed sediment control practices;
 - (iv) Design details and data for all erosion and sediment control practices; and
 - (v) Specifications for temporary and permanent stabilization measures including, at a minimum:
 - 1. The "Standard Stabilization Note" on the plan stating: "Following initial soil disturbance or re-disturbance, permanent or temporary stabilization must be completed within:
 - a. Three (3) calendar days as to the surface of all perimeter dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and
 - b. Seven (7) calendar days as to all other disturbed or graded areas on the project site not under active grading."
 - 2. Details for areas requiring accelerated stabilization; and
 - 3. Maintenance requirements as defined in the Standards and Specifications;
- (g) A sequence of construction describing the relationship between the implementation and maintenance of controls, including permanent and temporary stabilization, and the various stages or phases of earth disturbance and construction. Any changes or revisions to the sequence of construction must be approved by the District prior to proceeding with construction. The sequence of construction, at a minimum, must include the following:
 - (i) Request for a pre-construction meeting with the appropriate enforcement authority;

- (ii) Clearing and grubbing as necessary for the installation of perimeter controls;
- (iii) Construction and stabilization of perimeter controls;
- (iv) Remaining clearing and grubbing within installed perimeter controls;
- (v) Road grading;
- (vi) Grading for the remainder of the site;
- (vii) Utility installation and connections to existing structures;
- (viii) Construction of buildings, roads, and other construction;
- (ix) Final grading, landscaping, and stabilization;
- (x) Installation of stormwater management measures;
- (xi) Approval of the appropriate enforcement authority prior to removal of sediment controls; and
- (xii) Removal of controls and stabilization of areas that are disturbed by removal of sediment controls.
- (h) A statement requiring the owner/developer or representative to contact the MDE_or its agent at the following stages of the project or in accordance with the approved erosion and sediment control plan, grading permit, or building permit:
 - (i) Prior to the start of earth disturbance;
 - (ii Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading;
 - (iii) Prior to the start of another phase of construction or opening of another grading unit; and
 - (iv) Prior to the removal of sediment control practices;
- (i) Certification by the owner/developer that any clearing, grading, construction, or development will be done pursuant to the approved erosion and sediment control plan. The certification must also require that the responsible personnel involved in the construction project have a Certificate of Training at an MDE approved training program for the control of erosion and sediment prior to beginning the project. The Certificate of Training for Responsible Personnel may be waived by the District on any project involving four or fewer residential lots. Additionally, the owner/developer shall allow right of entry for periodic on-site evaluation by the District , DPW, DPRP, and/or MDE; and
- (j) Certification by a professional engineer, land surveyor, landscape architect, architect, or forester (for forest harvest operations only) registered in the State that the plans have been designed in accordance with erosion and sediment control laws, regulations, and standards, if required by the District or the MDE.
- i. Any additional information or data deemed appropriate by the District.

- 5.4.3. Modifications to Erosion and Sediment Control Plans.
 - A. The District may revise approved plans as necessary. Modifications may be requested by the owner/developer, the inspection agency, or the DPRP_in accordance with COMAR 26.17.01.09(H) Plan Modifications.
 - B. The District_may develop a list of minor modifications that may be approved as field revisions by the inspection agency. The MDE must approve any list of minor modifications prior to its implementation.
- 5.4.4. Standard Erosion and Sediment Control Plan.
 - A. The District may adopt a standard erosion and sediment control plan for activities with minor earth disturbances, such as single-family residences, small commercial and other similar building sites, minor maintenance grading, and minor utility construction.
 - B. A standard erosion and sediment control plan must meet the requirements of this Ordinance and the Standards and Specifications.
 - C. MDE shall review and approve a standard plan prior to its adoption.

5.5. Permits.

5.5.1. Permit Requirements.

Before a grading or building permit for any site is issued by DPRP, the District must review and approve an erosion and sediment control plan for the site.

5.5.2. Permit Expiration and Renewal

The building or grading permit shall expire two (2) years from the date of issuance unless extended or renewed by DPRP. Application for permit renewal shall be made at least two (2) months prior to the permit expiration date.

5.5.3. Permit Fee

A permit fee schedule may be established by the District for the administration and management of the erosion and sediment control program. Capital improvement projects, refuse disposal areas, sanitary landfills, and public works projects may be exempt from this permit fee.

5.5.4. Permit Suspension and Revocation

The DPRP may suspend or revoke any grading or building permits after providing written notification to the permittee based on any of the following reasons:

- A. Any violation(s) of the terms or conditions of the approved erosion and sediment control plan or permits;
- B. Noncompliance with violation notice(s) or stop work order(s);
- C. Changes in site characteristics upon which plan approval and permit issuance were based; or
- D. Any violation(s) of this Article or any rules and regulations adopted under it.

5.5.5. Permit Conditions

In approving a grading or building permit, the District_may impose such conditions that may be deemed necessary to ensure compliance with the provisions of this Article or the preservation of the public health and safety.

5.6. Inspection

The MDE is responsible for the inspection and enforcement of all land disturbing activities, including those sites requiring an erosion and sediment control plan as specified by this Article. This enforcement authority may be delegated to the County through a request by the County or required as a condition of a National Pollutant Discharge Elimination System (NDPES) municipal separate storm sewer system permit. This section applies to the MDE, or, the County, if delegated enforcement authority.

- 5.6.1. Inspection Frequency and Reports
 - A. The owner/developer shall maintain a copy of the approved erosion and sediment control plan on site.
 - B. Every active site having a designed erosion and sediment control plan should be inspected for compliance with the plan on average once every two (2) weeks.
 - C. A written report shall be prepared by the inspection agency after every inspection. The report shall describe:
 - a. The date and location of the site inspection;
 - b. Whether the approved plan has been properly implemented and maintained;
 - c. Practice deficiencies or erosion and sediment control plan deficiencies;
 - d. If a violation exists, the type of enforcement action taken; and
 - e. If applicable, a description of any modifications to the plan.

- D. The inspection agency shall notify the on-site personnel or the owner/developer in writing when violations are observed, describing:
 - a. The nature of the violation;
 - b. The required corrective action; and
 - c. The time period in which to have the violation corrected.

5.6.2. Right of Entry

It shall be a condition of every grading or building permit that the inspection AHJ the Division of DPW, the Division of Plan Review and Permitting, the MDE and the District has the right to enter property periodically to inspect for compliance with the approved plan and this Article.

5.6.3. Complaints

The inspection AHJ shall accept and investigate complaints regarding erosion and sediment control concerns from any interested parties and:

- A. Conduct an initial investigation within three (3) working days from receipt of the complaint;
- B. Notify the complainant of the initial investigation and findings within seven (7) days from receipt of the complaint; and
- C. Take appropriate action when violations are discovered during the course of the complaint investigation.

5.7. Enforcement

- A. The inspection AHJ shall, through the authority of this Ordinance and COMAR 26.17.01 use enforcement action when erosion and sediment control violations occur.
- B. Enforcement actions may include, but are not limited to:
 - a. Issuance of a corrective action order;
 - b. Issuance of a stop work order, the extent of which is determined by the inspection AHJ;
 - c. Issuance of a penalty or fine as allowed; and
 - d. Referral for legal action.
- C. The DPRP_may deny the issuance of any permits to an applicant when it determines that the applicant is not in compliance with the provisions of a building or grading permit or approved erosion and sediment control plan.

D. The inspection AHJ shall stop work on a site where land disturbance is occurring without an approved erosion and sediment control plan. Measures shall be required to be implemented to prevent off-site sedimentation.

5.8. Severability

If any portion, section, subsection, sentence, clause, or phrase of this Article is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portion of this Article, it being the intent of the District_that this Article shall stand, notwithstanding the invalidity of any portion, section, subsection, sentence, clause, or phrase, hereof.

5.9. Penalties

- A. Any person who violates any provision of this Article is guilty of a misdemeanor, and upon conviction in a court of competent jurisdiction is subject to a fine not exceeding \$10,000 or imprisonment not exceeding one year or both for each violation with costs imposed in the discretion of the court. Each day upon which the violation occurs constitutes a separate offense.
- B. Any agency whose approval is required under this Article or any interested person may seek an injunction against any person who violates or threatens to violate any provision of this Article.
- C. In addition to any other sanction under this Article, a person who fails to install or to maintain erosion and sediment controls in accordance with an approved plan shall be liable to the Board of County Commissioners of Washington County_or the State in a civil action, for damages in an amount equal to double the cost of installing or maintaining the controls.
- D. Any governing authority that recovers damages in accordance with this subsection shall deposit them in a special fund, to be used solely for:
 - a. Correcting to the extent possible the failure to implement or maintain erosion and sediment controls; and
 - b. Administration of the sediment control program.

I:\Documents\Ordinance\Stormwater Management (SWM) Ordinance(New2012)\ORD\Ordinance amended with State's changes - final.doc