

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



Board of County Commissioners for Washington County, Maryland

Adopted: Date
Effective: May 4, 2010

Updated January 31, 2010

This page intentionally left blank

Table of Contents

Section	Title	Page
Article 1 – General Provisions.		
1.1	Title	5
1.2	Authority	5
1.3	Purpose	5
1.4	Applicability	6
1.5	Minimum Standards	6
1.6	Transitional (Grandfathering) Provisions	6
1.7	Effect of Previous Regulations	7
1.8	Rules for Construction of Language	7
1.9	Conflict with Other Laws and Regulations	8
1.10	Severability	8
1.11	Incorporation by Reference	8
1.12	Definitions	8
1.13	Effective Date	8
Article 2 – Administration.		
2.1	Board of County Commissioners	19
2.2	Soil Conservation District	19
2.3	Director, Division of Public Works	19
2.4	Director, Department of Permits and Inspections	20
2.5	General Application Procedures	21
Article 3 – Stormwater Management.		
3.1	Exemptions	22
3.2	Alternative Compliance Options	22
3.3	Redevelopment	24
3.4	Right of Entry	25
3.5	Stormwater Management Criteria	25
3.6	Stormwater Management Measures	27
3.7	Stormwater Management Plans	31
3.8	Preparation of Stormwater Management Plans	36
3.9	Easements	36
3.10	Permits	38
3.11	Public Works Agreement and Private Development Agreement	40
3.12	Performance Security	40
3.13	Maintenance Agreement	41
3.14	Construction Inspection	42
3.15	As-Built Submissions	49
3.16	Inspection for Conditional Acceptance	49
3.17	Maintenance Responsibilities	51

3.18	Post Construction Maintenance	52
3.19	Enforcement	54
3.20	Appeals	55
3.21	Penalties	55

Article 4 – Grading.

4.1	Scope	57
4.2	Exemptions.	57
4.3	Alternative Compliance	
4.4	Grading Criteria	58
4.5	Grading Plans	61
4.6	Preparation of Grading Plans	64
4.7	Grading Permit Requirements	64
4.8	Modifications to Grading Plans	65
4.9	Construction Responsibilities	66
4.10	Inspections and Notices	67
4.11	Certifications	67
4.12	Enforcement	68

Article 5 – Soil Erosion and Sediment Control:

5.1	Scope	69
5.2	Exemptions	69
5.3	Review and Approval of Soil Erosion and Sediment Control Plans	69
5.4	Contents of the Soil Erosion and Sediment Control Plan (Grading Plan/Site Plan) for disturbance greater than or equal to 5,000 square feet or 100 cubic yards	70
5.5	Modifications to Soil Erosion and Sediment Control Plan	72
5.6	Right of Entry	72
5.7	Construction Responsibilities	72
5.8	Inspections and Notices	73
5.9	Remedies	74
5.10	Complaints	75
5.11	Enforcement	75
5.12	Appeals	76
5.13	Penalties	76

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. The provisions of this Ordinance, pursuant to Article 66B §10.01, 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. The provisions of this Ordinance, pursuant to the Environmental Article, §4-101, et seq.; and §4-201, et seq. Annotated Code of Maryland, 2009 replacement volume, is adopted under the authority of the Board of County Commissioners for Washington County, MD.
- 1.2.3. The provisions of this Ordinance, 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 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. 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 best management practices (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 goal is to minimize soil erosion and off-site sedimentation to minimize damage to public and private property, and to assist in the attainment and maintenance of water quality.

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 stormwater management measures that control or manage runoff from such developments, except as provided within this Ordinance. Stormwater management 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, 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. 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. Plans that have received final approval from the District for Soil Erosion and Sediment Control and final approval for stormwater management from the Division by May 4, 2010 shall be grandfathered in accordance with the following:
 - a. Active construction sites meeting the requirements of subsection A. above may proceed through construction completion provided they continually proceed with construction activity without interruptions in operations, excepting intermittent weather conditions and winter shutdown approved by the District and the Division.
 - b. Projects meeting the requirements of subsection (A.) above, that have not initiated construction as of the date of the respective plan expiration/renewal date, shall meet the requirements of this Ordinance.
 - c. Projects meeting the requirements of subsection (A.) above, that initiate construction after May 4, 2010, but do not complete the construction before the plan expiration/renewal date, may renew their plan and continue construction, provided the Developer/Property Owner continually proceeds with construction activity without interruptions in operations, excepting intermittent weather conditions and winter shutdowns approved by the District and the Division.
- B. Projects submitted for review, but have not obtained final soil erosion and sediment control approval from the District and final stormwater management approval from the Division, as of May 4, 2010 shall comply with the provisions of this Ordinance.
 - a. Phased projects previously having preliminary or final plat approval are only grandfathered for the actual phases meeting the requirements of subsection (A.) above.
 - b. Nothing in this Section is intended to prevent a phased project from seeking approval of an alternative compliance measure to satisfy the requirements of this Ordinance.

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.

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 stormwater management 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.

1.12 Definitions.

- 1.12.1. 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.

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.

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 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.

Alternative Compliance. Means the relinquishment from stormwater management requirements by the Division for a specific development on a case by case review basis. Qualitative stormwater management waiver includes water quality volume and recharge volume design parameters. Quantitative stormwater management waiver includes channel protection storage volume, overbank flood protection volume, and extreme flood volume design parameter.

Applicant. Means any person (engineer, surveyor, developer, 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.

Approving Agency. Means the entity responsible for the review and approval of stormwater management 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 from the land but 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 Stormwater Management 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 stormwater management principals, methods, and practices.

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.

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.

Develop Land. Means to 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 from new development or redevelopment projects.

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

District. Means the Washington County Soil Conservation District.

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 stormwater management practices, non-structural 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.

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 Stormwater Management Plan. Means the last of three required plan approvals that 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 Planning and Community Development.

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.

Highly Erodible Soils. Means those soils with a slope greater than 15 percent; or those soils with a K (erosivity) 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.

Land Clearing. Means any activity that removes the vegetative ground cover.

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.

Maximum Extent Practicable (MEP). Means designing stormwater management 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 24-hour 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.

Permittee. Means any person 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 stormwater management 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.

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, 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.

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 a 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.

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 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 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.

Stabilization. Means the prevention of soil movement by any of various vegetative and/or structural means.

Standard Grading Plan. Means a plan, prepared by a qualified professional 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 $\geq 5,000$ square feet or 100 cubic yards of volume (excavation or fill), but does not exceed 15,000 square feet or 500 cubic yards of volume (excavation or fill), when SWM has been exempted.

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 $\geq 5,000$ square feet or 100 cubic yards of volume (excavation or fill), but does not exceed 15,000 square feet or 500 cubic yards of volume (excavation or fill), when SWM has been exempted.

Steep Slope. Means slopes of twenty-five (25) percent or more, or slopes greater than fifteen (15) percent when the soil erodability coefficient or K factor 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, stormwater management 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, 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, 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 24-hour distribution.

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 stormwater management practices have been constructed in accordance with the approved construction plans.

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, MD - Stormwater Management, Grading, Soil Erosion and Sediment Control Ordinance, as amended, is hereby adopted on this _____ day of _____, 20__, and shall become effective on the 4th day of May, 2010.

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 stormwater management 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 issued 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, stormwater management approvals, and shall have the following duties and responsibilities:

- A. To review, comment, approve or disapprove modifications and written requests for waivers and alternative compliance from the provisions of this Ordinance, where specifically authorized;
- B. To provide professional recommendations and technical assistance to the County Commissioners, Planning Commission, Board of Zoning Appeals, Soil Conservation District, the Division of Planning and Community Development, the

- Department of Permits and Inspections and/or other boards and commissions upon request;
- C. To provide expertise regarding the adequacy of public facilities with respect to stormwater management, drainage conveyance, grading operations and adequate outfall;
 - D. To establish and track appropriate surety/bonding levels, collection of fees, exercising of surety/bonds, and schedules for the ESD planning techniques and practices and structural stormwater management measurers, issuance of grading permits and sediment control measures;
 - E. To maintain records of all applicable plans and permits reviewed, issued and inspections conducted under this Ordinance, subject to records retention policies by the County Commissioners;
 - F. To make recommendations to the County Commissioners regarding improvements or revisions to the Ordinance as may be deemed necessary;
 - G. To establish interim standards for construction and to recommend to the County Commissioners, for adoption, standards for construction;
 - H. To review, comment, approve or disapprove plans, calculations, specifications, and professional recommendations and reports necessary to obtain approval for stormwater management and grading;
 - I. To perform ESD planning techniques and practices and structural stormwater management inspections and secure the performance of corrective action(s) if maintenance is not performed by the property owner(s) and/or developer;
 - J. 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
 - K. 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 stormwater management 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 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, Department of Permits and Inspections.

- 2.4.1. The Director of the Department of Permits and Inspections shall administer the provisions of this Ordinance governing building, grading permit approvals, 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, if required under this Ordinance, an application for a grading permit or 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 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 Planning and Community Development. 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 Planning and Community Development.

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 stormwater management:
- 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 cumulatively disturb 5,000 square feet or more of total land area;
 - D. Developments that cumulatively disturb 5,000 square feet or more of total land area but there is not a permanent physical change to the ground cover that results in an increase to the Runoff Curve Number (RCN). The RCN shall be determined in accordance with the requirements of USDA, SCS, Technical Release No. 55 (TR-55).
 - E. Land development activities regulated under specific State laws, which provide for managing stormwater runoff.
- 3.1.2. Nothing in this section shall prohibit the Director 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 stormwater management plan, any development shall be consistent with that existing plan.

3.2. Alternative Compliance Options.

- 3.2.1. The Director may grant approval for an alternative compliance for stormwater management 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. If a watershed management plan consistent with Section 3.2.7. of this Article has not been developed, alternative compliance to stormwater management quantitative control may be granted provided that it has been demonstrated that ESD has been implemented to the MEP, and a determination is made by the Director that existing circumstances prevent the reasonable implementation of quantity control BMPs and all requirements of Section 3.5.1.B through 3.5.1.M and Section 3.6.2. of this Article have been satisfied.
- 3.2.3. Alternative compliance to stormwater management qualitative control 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 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.M and Section 3.6.2 of this Article have been satisfied.
- 3.2.5. An owner/developer or a person seeking an alternative compliance for stormwater management quantitative or qualitative control must submit a written request to the Director containing descriptions, drawings, calculations, and any other information that is necessary to evaluate the proposed alternative compliance sought in accordance with the Division's Checklist for an Alternative Compliance Request. Requests for alternative compliance shall not be deemed granted until authorized by the Division, in writing, on a form approved by the Director. The Division may charge a fee for processing an Alternative Compliance Request. If there are subsequent additions, extensions, or modifications to a site after an alternative compliance request has been granted, a separate written alternative compliance request and processing fee must be submitted and authorization obtained in accordance with the provisions of this section.
- A. Alternative compliance 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 alternative compliances 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.
- 3.2.6. 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. Any alternative compliance of stormwater management does not relieve the applicant of providing an adequate storm drainage system. This policy may be applied to correct an existing inadequate outfall, and may aid in meeting the requirement for adequate drainage.
- 3.2.7. If the County establishes or approves an overall watershed management plan for a specific watershed, then the Director may develop quantitative alternative compliance and redevelopment provisions that differ from Sections 3.2.2. and 3.3, respectively. A watershed management plan developed for the purpose of implementing different stormwater management policies for alternative compliances 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 stormwater management practices are to be implemented;
- G. Include any other conditions not specifically addressed herein but considered necessary by the Director in order to fully evaluate the study area;
- H. Be consistent with the General Performance Standards for Stormwater Management in Maryland found in the Design Manual; and
- I. Be approved by the MDE.

3.3. Redevelopment.

3.3.1. Applicability. Stormwater management 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 stormwater management measures may be used to meet the requirements in Section 3.3.1. of this Article upon approval by the Division if the owner/developer satisfactorily demonstrates to the Division that impervious area reduction has been maximized and ESD has been implemented to the MEP. Alternative stormwater management 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. Should any of these requirements be considered necessary, the Director will determine the appropriate level of control.
- 3.3.4. Where conditions prevent impervious area reduction or on-site stormwater management, practical alternatives shall be implemented, upon approval by the Division, to mitigate the effects of an equivalent discharge in the same watershed. Alternative stormwater management measures include but are not limited to:
- A. Retrofit of an existing ESD planning technique or practice or structural stormwater measure;
 - B. Performance of a stream or watershed restoration (on an approved watershed or stream);
 - C. Payment of a fee-in-lieu of stormwater management (based on the stormwater volume generated by the proposed development) to the County dedicated exclusively for stormwater management.
- 3.3.5. Stormwater management 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 District and the MDE upon submission of a development plan for stormwater management 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.

3.5. Stormwater Management Criteria.

- 3.5.1. Minimum Stormwater Management Control Requirements. The minimum stormwater management 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. Stormwater management 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 stormwater management 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 stormwater management 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 and MDE approval. The Division 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. Unless approved by the AHJ, sensitive areas shall not be disturbed. 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. Sensitive areas and their required buffers shall be protected in perpetuity via a conservation easement. All sensitive areas and their required buffers and associated conservation easement shall be shown on an approved construction plan, site plan, grading plan and/or subdivision plat and recorded on an approved subdivision plat or easement plat in the land records of Washington County. Isolated active sinkholes that are not associated with other sensitive area features may be excluded from the sensitive area designation if approved by the AHJ.
- F. Proposed site imperviousness shall be minimized using all applicable appropriate methods described in Table 5.2 and Chapter 5 of the Design Manual.
- G. 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.
- H. A minimum 15' setback from the limit (toe of fill or top of cut) of ESD planning techniques and practices and structural stormwater measures and a minimum 25' setback from its associated outfall protection to nearest property lines or sensitive areas shall be maintained.
- I. The Director 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 an analysis of the impacts of stormwater flows downstream in the watershed, in accordance with the documents incorporated by reference in this Article.

- J. The Director may require more than minimum control requirements referenced in this Article in watersheds where a federally approved TMDL has been established or where a Tier II waterbody has been designated by MDE.
- K. Stormwater management 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.
- L. For those sites that have previously received stormwater management 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 prior to the original effective date of the applicable version of the Article (July 28, 1984 for the 1984 version of this Ordinance; and July 27, 2001 for the 2001 version of this Ordinance). This requirement shall not apply to redevelopment. Redevelopment shall comply with the provisions found in Section 3.3.
- M. 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 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 stormwater management measures established in this Article shall be used, either alone or in combination, in a stormwater management 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 stormwater management 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 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:
- (k.) Disconnection of rooftop runoff;
 - (l.) Disconnection of non-rooftop runoff;
 - (m.) Sheetflow to conservation areas;
 - (n.) Rainwater harvesting;
 - (o.) Submerged gravel wetlands;
 - (p.) Landscape infiltration;
 - (q.) Infiltration berms;
 - (r.) Dry wells;
 - (s.) Micro-bioretenion;
 - (t.) Rain gardens;
 - (u.) Swales;
 - (v.) Enhanced filters; and
 - (w.) Any practices approved by the Director 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 located within a karst area, as determined by a geotechnical engineering analysis prepared by a Qualified Professional, shall be lined with a natural or man-made liner. The geotechnical engineering analysis for the purpose of this Section shall be in accordance with the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction. The liner design shall be in accordance with the Design Manual and the latest adopted version of the Washington County Standards and Specifications for Public Works Construction, and shall be at the recommendation of the Qualified Professional.

- 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 stormwater management 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.) Stormwater management ponds;
 - (a.) Stormwater management wetlands;
 - (b.) Stormwater management infiltration;
 - (c.) Stormwater management filtering systems; and
 - (d.) Stormwater management 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 stormwater management practices.
 - c. Structural stormwater management 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 stormwater management. 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 stormwater management 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 plan approval to run with the land and be recorded in the land records of Washington County. ESD planning techniques and treatment practices and structural stormwater management 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 shall be obtained before any stormwater management 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 and the MDE. Practices used for redevelopment projects shall be approved by the Director.

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 100-year 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; and,
 - b. The design storm shall be site specific and shall be determined by the Director. 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.
 - 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 may require an off-site 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 reduce the limits of the sensitive area that have been identified as a potential sinkhole, the Division may require a geotechnical engineering analysis to be submitted for approval. At a minimum, the geotechnical analysis shall include the identification of sinkhole-related, non-buildable areas, 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). This non-buildable area shall follow the limits of the sinkhole in most cases. However, the non-buildable area may be expanded or contracted as determined by the Director 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. No buildings or other structures shall be permitted within the sinkhole related, non-buildable area. The sinkhole related non-buildable area shall be incorporated into the sensitive area and be protected with the required conservation easement.
- H. Within a sinkhole drainage area, the lowest point of entry of any structure shall be higher in elevation than at least 1 foot above the 100 year 24-hour storm assuming no outflow from the sinkhole.

3.7. Stormwater Management Plans.

3.7.1. Review and Approval of Stormwater Management Plans.

- A. For any proposed development, the owner/developer shall submit phased stormwater management plans to the Division, the District, and the Division of Planning and Community Development. At a minimum, plans shall be submitted for the concept, site development and final stormwater management construction phases of project design. 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. A comprehensive review of the plans submitted for each phase of the site design will be performed in accordance with the policies and procedures of the Division

of Planning and Community Development, and the Division plan approval process, 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 Planning and Community Development,
 - 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,
- C. Any final stormwater management plan shall not be considered approved without the inclusion of the signature and date of signature of the Director on all original mylar plan sheets.
- D. Plan approval by the Director does not constitute or grant any other approval(s) that may be required by any other local, state or federal agency.
- E. Should permission of adjacent property owners be required by the Director, in accordance with Section 3.9, plan approval will not be granted until suitable evidence of this permission 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 Planning and Community Development, 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 stormwater management 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's Checklist for concept plan/preliminary consultation plan and shall include, at a minimum:
- a. A map at the scale specified by the Director showing site location, existing natural features, water and other sensitive resources, 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 stormwater management 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.
- B. Preliminary Plan Approval. For subdivision plans and plans proposing publicly owned infrastructure, following concept or preliminary consultation plan approval by the Division, the owner/developer shall submit a preliminary subdivision plat in accordance with the policies and procedures of the Division of Planning and Community Development, 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'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 stormwater management measure; and,
 - g. Any other information required by the Division.
- 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 stormwater management construction drawings or a site plan, or site specific grading plan, in accordance with the policies and procedures of the Division of Planning and Community Development and the Division plan approval process, the Subdivision Ordinance and the Zoning Ordinance that reflect the comments received during the previous review phase. 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 stormwater management construction drawings shall be submitted according to the Division's Checklist, Construction Drawings for Preliminary/Final Subdivision Plat;
 - b. Site Plan drawings shall be submitted according to the Division's Checklist, Site Plan;
 - c. 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 stormwater management 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 stormwater management construction drawings and site plans shall be submitted according Washington County Sensitive Areas Element of the Comprehensive Plan;.
 - f. Final erosion and sediment control plans and stormwater management construction drawings and site plans shall be submitted according to COMAR 26.17.01.05; and
 - g. Stormwater management construction drawings shall be accompanied by a report that includes sufficient information to evaluate that effectiveness of the proposed runoff control design in accordance with the requirements of the Division's Checklist, Site Plan or the Division's Checklist, Construction Drawings for Preliminary/Final Subdivision Plat.
- D. Reports submitted for final erosion and sediment control plans and stormwater management construction drawings and site plan approval shall include, at a minimum:
- a. All items required per the Division's Checklist, Site Plan or the Division'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 stormwater management 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 stormwater management 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 stormwater management measures to be used;
 - g. A narrative that supports the final stormwater management 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 stormwater management construction drawings and site plan approval shall include all requirements of:
- a. The Division's Checklist, Site Plan or the Division'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
 - l. 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 stormwater management plan.
- G. Approval of a final erosion and sediment control plans and stormwater management construction drawing and site plan 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 stormwater management 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 shall require the design be prepared by a Qualified Professional.

3.9. Easements.

- 3.9.1. Drainage Easements. If a development plan depicting required stormwater management 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. Onsite 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 closed conveyance systems, a drainage easement is required to be provided, a minimum width equal to the outer diameter of the storm drain pipe plus two (2) feet for every foot of depth, conforming substantially to the center line of any storm drain pipe for the purpose of maintaining and protecting such drainage conveyance system. The minimum drainage easement width shall be twenty (20) feet.
 - 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. Offsite Drainage Easement.
- a. The developer must employ the best available stormwater management technology to meet the conditions identified in Section 3.6.2.C. If 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.
 - b. 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).

- c. 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.
- d. All necessary offsite drainage easements are to be obtained 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 stormwater management measures in a manner such as not to hinder, impede, or restrict the Division from making necessary inspections, visual observations, measurements, 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 stormwater management measures. The purpose of this easement is to provide access to the facility at reasonable times for regular inspections by the Division to ensure the facility is maintained in proper working condition to meet design standards. For onlot ESD planning techniques and treatment practices and structural stormwater management 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 are to be recorded in the land records of Washington County prior to final plat or site development approval. If off-site construction and easements are required, a grading permit will not be issued until the easement has been obtained.

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 stormwater management plans have been approved by the District and the Division 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. An alternative compliance, Grading Plan, Final Plat with Road Construction Drawings, or Site Plan has been approved by the District and Division 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. Plats clearly showing and describing the easements/fee simple property for the ESD planning techniques and practices and structural stormwater management measures, drainage system(s), and adequate access for inspection and maintenance from a public right-of-way have been recorded in the land records of Washington County, Maryland;
 - d. The stormwater management 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. Stormwater management plan approval shall be valid for two (2) years from the date of signature approval from the Division on the original mylar plans. The stormwater management plan approval may be renewed at the discretion of the Division and the District based on practices and policies in effect at the time of renewal. In order to continue construction without interruption, application for renewal of the stormwater management 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 stormwater management 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 case-by-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 stormwater management plan approval.
 - b. Changes in site characteristics upon which an approval or alternative compliance was granted.
 - c. Construction is not in accordance with the approved final soil erosion and sediment control plan or final stormwater management plan.
 - d. Noncompliance with correction notice(s) or stop work order(s) issued for the construction of any stormwater management 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.
- B. A revocation or suspension of such permits will only be released upon correcting all deficiencies to the satisfaction of the Director.

3.10.4. Permit Conditions. In granting a permit for any phase of site development, the Director 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 stormwater management 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 stormwater management, 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 stormwater management. 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 stormwater management plan for all ESD planning techniques and practices and structural stormwater management measures. The estimate shall be prepared by the Design Engineer for the developer and subject to the approval of the Director. 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, 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 others to construct and/or complete the ESD planning techniques and practices and structural stormwater measures in accordance with the conditions and requirements of the security and approved stormwater management plan. This property agreement shall be in a form approved by the Division.
- 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 case-by-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 stormwater management is required, the Director 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 stormwater management 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 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 stormwater management 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 Planning and Community Development (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 sediment and 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.
- (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.
 - (i.) 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, Micro-bioretention:

- (a.) Excavation of Facility – Prior to excavation, verify sediment and 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. 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 sediment and 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.
 - (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.
 - (h.) 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 sediment and 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. 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 banded 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, 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 sediment and 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.
 - (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 banded to prevent tearing. Verify uphill fabric roll overlaps two (2) feet over downhill roll.
 - (c.) 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 sediment and 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 banded to prevent tearing. Verify uphill fabric roll overlaps two (2) feet over downhill roll.
 - (c.) 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 Stormwater Management Certification” completed by the Verifying Professional shall be submitted to the Division 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’s As-Built Checklist for Stormwater Management. The “Engineer’s Stormwater Management Certification” shall be of a form approved by the Director 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 stormwater management 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 stormwater management plans consisting of non-structural ESD planning techniques and practices and stormwater measures 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 stormwater management 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;
 - 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 technique and practice 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;
 - B. The “as-built” plans including the completed “Engineer’s Stormwater Management Certification” in conformance with Section 3.14.3. have been submitted to the Division for review and have been approved by the Director and the District;
 - C. The maintenance security for publicly owned infrastructure in conformance with Section 3.17.2. has been provided;
 - D. The stormwater management 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 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 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 stormwater management 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.
- 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 on an as-needed basis following acceptance of the infrastructure by the County.

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 stormwater management 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 stormwater management and soil erosion and sediment control plan(s) noncompliance is identified;
 - B. A stop work order shall be issued by the Director 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 Stormwater Management 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 Stormwater Management 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 any 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.
- 3.20.1. 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.
- 3.20.2. 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".
- 3.20.3. 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 Five Thousand Dollars (\$5,000.00) or imprisonment not exceeding one (1) year or both for each violation with costs imposed in the discretion of the court not to exceed Fifty Thousand Dollars (\$50,000.00). 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.

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 Department of Permits and Inspections.
- 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 Planning and Community Development and the Planning Commission or a grading plan is approved by the Division 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 prior to issuance of a building permit by the Department of Permits and Inspections.
- 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. Emergency 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 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.

4.3 Alternative Compliance.

- 4.3.1 The Director may grant approval for an alternative compliance for grading activities subject to the provisions of this Article.
- 4.3.2 An owner/developer or a person seeking an alternative compliance under this Article must submit a written request to the Director containing descriptions, drawings, calculations, and any other information that is necessary to evaluate the proposed alternative compliance sought in accordance with the Division's Checklist for an Alternative Compliance Request. Requests for alternative compliance shall not be deemed granted until authorized by the Division, in writing, on a form approved by the Director. The Division may charge a fee for processing an Alternative Compliance Request. If there are subsequent additions, extensions, or modifications to a site after an alternative compliance request has been granted, a separate written alternative compliance request and processing fee must be submitted and authorization obtained in accordance with the provisions of this section.
- A. Alternative compliance 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 alternative compliances 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. The maximum graded slope of any private driveway shall be fifteen percent (15%). Any driveway with a graded slope greater than twelve percent (12%) shall be stabilized with adequate material to prevent erosion and adverse impacts from surface water runoff.
- 4.4.6. No fill or other material may be placed into a sinkhole without prior approval from the Division and the District in accordance with the provisions of Article 3 of this Ordinance, and, if appropriate the DNR, per Maryland Cave Law.
- 4.4.7. 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 and District.
- 4.4.8. 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.
- 4.4.9. 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.

4.4.10. 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.

4.4.11. 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 and the District; and,
 - d. The slope is not within the limits of a stormwater management structure.
- B. Where unique conditions exist, the Division or District may require the fill be constructed with an exposed surface with a grade flatter than two (2) 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 and the District approves such slope.

4.4.12. 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) foot vertical, unless approved by the Division and the District. The Division or the District may require such other measures as it deems necessary for stability, vegetative establishments, and safety.

4.4.13. 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 shall be a minimum width of six (6) feet and shall drain to a stable outlet.
- C. Cuts and fills on slopes three (3) feet horizontal to one (1) feet vertical or steeper shall be set back from property lines, a minimum distance of ten (10) or as required under Article 3 or Article 5 of this Ordinance..
- D. The setbacks established by this Section are minimum, and depending on soil conditions, may be increased by the Division 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.

4.4.14. 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 area with a slope of flatter than two (2) feet vertical and one (1) foot horizontal shall receive a minimum of four (4) inches.

4.4.15. 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.

4.4.16. 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. The ponding of water shall not be permitted above the cut or fill slopes or on drainage terraces or above retaining walls. Adequate drainage facilities shall be provided to prevent such ponding.

- 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 is required for a disturbance on a single residential 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 fifteen thousand (15,000) square feet area or five hundred (500) cubic yards of volume, and where such disturbance is determined to be exempt from stormwater management per the Division.
- B. Standard Grading Plan Requirements. A Standard Grading Plan shall be approved by the Division and the District prior to issuance of a grading permit by the Department of Permits and Inspections. 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 stormwater management 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).
- l. 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 Department of Permit and Inspections (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 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. 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;
 - b. 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; or
 - c. For any clearing or grading where disturbance is greater than or equal fifteen thousand (15,000) square feet of area or five-hundred (500) cubic yards of volume.
- B. Site Specific Grading Plan Requirements. A site specific grading plan shall be approved by the Division and the District prior to issuance of a building permit by the Department of Permits and Inspections. 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 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 stormwater management measures as required by this Ordinance.
- l. 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 Department of Permits and Inspections.
- 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 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 Department of Permits and Inspections 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 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 Department of Permits and Inspections with approval from the Division and the District. 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 Department of Permits and Inspections 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, 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 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 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 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 Department of Permits and Inspections, the Division, and the District before continuing with construction.

Upon authorization by the Department of Permits and Inspections, the Division 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 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 concurred 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 preconstruction 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 close-out 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 may not be submitted with exceptions. If the Verifying Professional determines the project has not been graded in accordance with the approved plan, or is no longer in compliance with the approved plan or permit, the site must either be regraded in reasonable compliance with the plan or the plan must be revised and submitted to the Division and District for review and approval.
 - D. Reasonable compliance shall mean grades within one-foot (1.0') vertically of those shown on the approved plan.
 - E. The letter of grading certification shall be signed and sealed by a Qualified Professional.
 - F. The letter of grading certification shall be received by the Division prior to use-and 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 4.6.6., Section 4.9.3. and Section 4.10.2. 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.

- 5.1.1. No person shall clear or grade land without implementing soil erosion and sediment controls in accordance with the requirements of this Ordinance except as provided within this Article.

5.2 Exceptions.

- 5.2.1. The following activities shall be exempt from this Article:
- A. Agricultural land management practices 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;
 - C. Clearing or grading activities for State or Federal projects that are subject exclusively to State approval and enforcement under State law and regulations.

5.3 Review and Approval of Soil Erosion and Sediment Control Plans.

- 5.3.1. Building and/or Grading Permits may not be issued until a Soil Erosion and Sediment Control Plan has been approved by the District.
- 5.3.2. A person may not clear or grade land without first obtaining a soil erosion and sediment control plan approved by the District.
- 5.3.3. The applicant shall submit soil erosion and sediment control plan and any supporting computations to the District for review and approval. The soil erosion and sediment control plan shall contain sufficient information and notes to describe how soil erosion and off-site sedimentation will be minimized. The District shall review the plan to determine compliance with this Ordinance, District requirements and the Standards and Specifications prior to approval. The plan shall serve as a basis for all subsequent grading and stabilization.
- 5.3.4. In approving the plan, the District may impose such conditions thereto as may be deemed necessary to ensure compliance with the provisions of this Ordinance, District requirements, and the State Sediment Control Regulations (COMAR – MDE (26.17.01.07)), the Standards and Specifications, or the preservation of public health and safety.
- 5.3.5. The District shall notify the applicant of approval or reasons for the disapproval or modifications within 30 days after submission of the completed soil erosion and sediment control plan. The soil 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.

- 5.3.6. Approved plans may remain valid for 2 years from the date of approval, except surface mines and landfill plans, which remain valid for 5 years from the date of approval, unless renewed by the District.
- 5.3.7. The District may suspend or revoke its approval of any approved soil erosion and sediment control plan if the District deems it necessary in order to protect the environment, public health, and safety.
- 5.3.8. If the District suspends or revokes its approval of a soil erosion and sediment control plan, all grading and building permits associated with the site shall also be suspended or revoked until the site is brought into compliance with soil erosion and sediment control requirements.

5.4 Contents of the Soil Erosion and Sediment Control Plan (Grading Plan/Site Plan) for disturbances greater than, or equal to, 5,000 square feet or 100 cubic yards.

- 5.4.1. The applicant is responsible for submitting a soil erosion and sediment control plan which meets the requirements of the District, this Ordinance, the State Sediment Control Regulations (COMAR MDE 26.17.01.07) and the Standards and Specifications for Soil Erosion and Sediment Control. The plan 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. The applicant shall certify on the drawings, all clearing, grading, drainage, construction, and development shall be conducted in strict accordance with the plan.
- 5.4.2. Soil erosion and sediment control plans shall be prepared to ensure compatibility with proposed ESD practices.
- 5.4.3. Soil erosion and sediment control plans shall be prepared to ensure compatibility with any applicable Federal, State, or Local permits, ordinances, or requirements.
- 5.4.4. The Soil Erosion and Sediment Control Plan shall address site activities during all phases of construction and shall show the following:
 - A. A letter of transmittal;
 - B. A vicinity sketch indicating north arrow, scale, and other information necessary to easily locate the property;
 - C. Name, address, electronic mail address, and telephone number of the owner and developer and the applicant;

- D. The proposed area of development and limits of disturbance;
- E. The existing and proposed topography and volume of proposed grading;
- F. The necessary provision for drainage, soil erosion and sediment control, vegetative establishments and stormwater management facilities;
- G. How soil erosion and sediment control measures will be coordinated with the required steps in construction, and how appropriate control measures must be installed prior to the construction or development; and
- H. Increments of workable size on which adequate control of soil erosion and sediment can be provided and maintained during construction. These increments shall be included in the Sequence of Construction;
- I. How operations will be staged so the area being developed will not be exposed for a long period time without stabilization, and so the first disturbed areas are completely controlled before the next section is open; and how sequentially phased controls of erosion and sediment are scheduled;
- J. Provisions to preserve topsoil;
- K. Provisions of grading practices, consistent with Article 4, and details for structural controls;
- L. Details of temporary and permanent stabilization measures;
- M. Temporary and permanent seeding specifications, including type of seed (mixture) and application rates; type of fertilizer and application rate; mulching, application rate and method of anchoring;
- N. A sequence of construction describing the relationship between the implementation and maintenance of controls, including temporary and permanent stabilization and the various stages or phases of earth disturbance and construction. The sequence of construction shall, as a minimum include a schedule and timeframe for the following:
 - (1) Clearing and grubbing for those areas necessary for installation of perimeter controls;
 - (2) Construction of perimeter controls;
 - (3) Remaining clearing and grubbing;
 - (4) Grading activities;
 - (5) Final grading, landscaping and stabilization of the site; and
 - (6) Removal of trees
- O. Other information as required by:
 - (1) Washington County Format Guidelines for Preparation of Development Plans for Submission to the Division (“Format Guidelines”).
 - (2) The District Submittal Requirements.
 - (3) Plan requirements listed in COMAR Title 9, Subtitle 13, Professional Land Surveyors, Chapter 6 Minimum Standards of Practice.
 - (4) Any other applicable state or federal requirements.
- P. On all sites with a disturbed area in excess of two (2) acres, approval of the inspection AHJ shall be requested upon completion of installation of perimeter

soil erosion and sediment controls, but before proceeding with any other earth disturbance or grading activity.

- Q. Certification by the Developer that any clearing, grading, construction, or development, or all of the above, will be done pursuant to this plan and that responsible personnel involved in the construction project will have a Certification of Training at a state approved training program for the control of soil erosion and sediment control.

- 5.4.5. Any additional information or data deemed appropriate by the District.
- 5.4.6. Any disturbance greater than or equal to 5,000 square feet of area or 100 cubic yards of volume (excavation or fill), but less than or equal to 15,000 square feet area and/or 500 cubic yards of volume, that is exempted from stormwater management per the Division, and is a single residential lot, may apply for a Standard Grading Plan prior to grading permit issuance.

5.5 Modifications to Soil Erosion and Sediment Control Plans.

- 5.5.1. The District may request a modification to the approved plans as necessary. Modifications may also be requested by a permittee, the MDE or the AHJ for inspection.
- 5.5.2. When inspection of the site indicates the approved soil erosion and sediment control plan needs modification or as noted above, the modification shall be made in compliance with the soil erosion and sediment control criteria contained in the Standards and Specifications as follows:
- A. Major modifications to approved soil erosion and sediment control plans, such as, the addition or deletion of a sediment basin, shall be submitted by the owner or developer to the Division and the District and processed appropriately. This processing includes modifications due to plan inadequacies at controlling soil erosion and sediment as revealed through inspection.
 - B. Minor modifications of soil erosion and sediment control plans may be made in the field if approved by the MDE and the District and documented in a report.

5.6 Right of Entry.

- 5.6.1. It shall be a condition of every grading or building permit; the Inspection AHJ, the Division, the MDE, the District, and the Washington County Permits and Inspections Department has the right to enter the property periodically to evaluate the activities for compliance with this Ordinance and the approved soil erosion and sediment control plan.
- 5.6.2. Right of entry will be granted to the Division, the MDE and the District upon submission of soil erosion and sediment control plan for the purposes of assessing on-site conditions as part of the plan review process and conducting site assessments during and after construction.

5.7 Construction Responsibilities.

- 5.7.1. The applicant shall implement the measures contained in the approved soil erosion and sediment control plan, conduct the construction as specified in the sequence of construction and implement any sediment control measures reasonably necessary to control sediment run-off.
- 5.7.2. Posting of Approved Soil Erosion and Sediment Control Plans. The approved soil erosion and sediment control plan must be located at the job site at all times. They must be located in an obvious, readily accessible to the AHJ, and visible location.

5.8 Inspections and Notices.

- 5.8.1 Pre-construction Notification. The permittee shall notify the Division, the District, and when applicable, the MDE at least five (5) days before commencing any work in conjunction with the soil erosion and sediment control. A preconstruction meeting is required in accordance with the Provisions of Article 3 and 5.
- 5.8.2. Final Site Close-out Inspection. The permittee or his agent shall notify the Division, the District and, when applicable, the MDE when soil erosion and sediment control activities are complete and is ready for final inspection. Final site close-out inspection approval shall be given in a timely manner when all grading work has been completed, the required vegetative stabilization has been completed, and the required reports have been submitted.
- 5.8.3. On all sites with disturbed areas in excess of two (2) acres, the permittee shall request an inspection by the AHJ at the stages of construction specified below to ensure accordance with the approved soil erosion and sediment control plan, the grading or building permit, and this Ordinance.
 - A. Upon completion of installation of perimeter erosion and sediment controls, prior to proceeding with any other earth disturbance or grading.
 - B. Upon final stabilization before to removal of sediment controls.
 - C. Every active site having a designed soil erosion and sediment control plan should be inspected for compliance with the plan on the average once every two (2) weeks.
 - D. Inspectors shall prepare written reports after every inspection. The inspection report shall describe:
 - a. The date and location of the site inspection;
 - b. Whether or not the approved plan has been properly implemented and maintained;
 - c. Any practice deficiencies or soil erosion and sediment control plan deficiencies; and

- d. If a violation exists, the type of enforcement action taken.
 - E. The inspection AHJ shall notify the on-site personnel, owner and 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.
- 5.8.4. The Inspection Procedures for soil erosion and sediment control shall be adopted by the District and the MDE. The procedures, adopted by the respective AHJ, shall be used for all routine and required inspections.
- 5.8.5. Upon completion of permitted work authorized under this Article, the Division, the District, and/or the MDE, may require the following documentation for their files and may also require copies for the Washington County Department of Permits and Inspections:
- A. The owner/developer shall certify that all grading, drainage, soil erosion and sediment control measures and facilities and vegetative measures have been completed in conformance with the approved plans and specifications; and
 - B. A report summarizing the inspection reports, field and laboratory tests and locations of tests.
- 5.8.6. The applicant or his agent shall notify the Division and the District, when the grading operation is ready for final inspection. Final approval shall be given in a timely manner when all work (including installation of all drainage structures and erosion protective devices) has been completed, as well as the required vegetative stabilization and the required reports have been submitted.
- 5.8.7. 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 applicant. 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 applicant shall be considered in violation of this Ordinance, in which case the bond, or other security, will be forfeited.
- 5.8.8. The inspection schedule shall be as established and published by the inspection AHJ.
- 5.8.9. The requirements for notification shall be as established and published by the AHJ.

5.9 Remedies.

- 5.9.1. In the event the work does not conform to the permit or to the approved plans and specifications or to any written instructions of the Division and/or the District or violates any other term or condition, written notice to comply shall be given the permittee. Such notice shall set forth the corrective measures that must be taken and the time limit required for taking such action. If the corrective action as stipulated has not been taken within the time allotted, the Division and/or the District may suspend or revoke the permit or plan and stop work except that necessary to correct the violation.
- 5.9.2. If at any time the Division and/or the District finds all work of the permit is not completed within the time specified therein, or as otherwise provided for in this Article or violates any other term or condition, the permit may be canceled and the security shall be forfeited; or if a bond has been posted, payment in full to the County Commissioners will be ordered. The funds, so received, will be used by the County for defraying the cost of contracting, including engineering and administration, for the restoration of the site to meet the minimum requirements of this Ordinance, with particular emphasis on stability, pollution control, safety, soil erosion and sediment control.
- 5.9.3. In granting any permit pursuant to this Ordinance, the Division and/or the District may impose such conditions, as is reasonably necessary to prevent creation of a nuisance or unreasonable hazard to person or to public or private property. Such conditions may include, but need not be limited to the following:
- A. Improvement of any existing grading to meet the standards required under this Ordinance for new grading and for soil erosion and sediment control.
 - B. Designation of easements for maintenance, inspection and repair of drainage facilities and slopes.
 - C. Adequate control of dust by watering or other control methods acceptable to the Division and/or the District.
 - D. The Division and/or the District shall have the right to deny issuance of a grading permit when the proposed grading would cause hazards adverse to the public safety and welfare.

5.10 Complaints.

- 5.10.1. The inspection AHJ shall receive complaints and initiate enforcement procedures when violations are confirmed. Any complaint received shall be investigated, routinely within three (3) working days and the complainant shall be notified of any action or proposed action routinely within seven (7) working days of receipt of the complaint.

5.11 Enforcement.

- 5.11.1. When the inspection AHJ or an inspector determines a violation of the approved soil erosion and sediment control plan has occurred, the inspector shall notify the on-site

personnel or permittee in writing of the violation, describe the required corrective action and the time period in which to have the violation corrected.

- 5.11.2. If the violation persists after the date specified for corrective action in the notice of the violation, the inspection AHJ shall stop work on the site. The inspection AHJ shall determine the extent to which work is to be stopped, which may include all work on the site except that work necessary to correct the violation.
- 5.11.3. If reasonable efforts to correct the violation are not undertaken by the permittee, the inspection AHJ shall refer the violation for legal action.
- 5.11.4. Upon approval by the County Commissioners, the Washington County Department of Permits and Inspections 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 permit or grading permit or approved soil erosion and sediment control plan.
- 5.11.5. Any step in the enforcement process may be taken at any time, depending upon the severity of the violation.
- 5.11.6. If a person is working without a permit or an approved soil erosion and sediment control plan, the inspection AHJ shall stop the work on the site, except activity necessary to provide soil erosion and sediment control.
- 5.11.7. The inspection AHJ shall inform the applicant in writing when all matters relating to the violation have been satisfactorily resolved and when any previously imposed suspensions have been withdrawn.

5.12. Appeals.

- 5.12.1. Any applicant, who shall feel aggrieved by any action, or inaction of the District or the inspection AHJ, or by any action of the Division and/or the County Commissioners, may appeal to the Circuit Court of Washington County, MD, which shall hear the same de novo. Such appeal shall be filed within thirty (30) days of the action complained of and within a reasonable time after inaction complained of.

5.13. Penalties.

- 5.13.1. 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 five-thousand (\$5,000) dollars or imprisonment not exceeding one (1) 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.

- 5.13.2. 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.
- 5.13.3. In addition to any other sanction under this Article, a person who fails to install or to maintain soil erosion and sediment controls in accordance with an approved soil erosion and sediment control plan shall be liable to the County Commissioners or the state of Maryland in civil action, for damages in an amount equal to double the cost of installing or maintaining the controls.
- 5.13.4. 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 soil erosion and sediment controls, and
 - B. Administration of soil erosion and sediment control program.