

CECIL COUNTY

DEPARTMENT OF PUBLIC WORKS



STORMWATER MANAGEMENT ORDINANCE

May 4, 2010



CECIL COUNTY

DEPARTMENT OF PUBLIC WORKS STORMWATER MANAGEMENT ORDINANCE

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ARTICLE I

251-1 PURPOSE AND AUTHORITY

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. 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 (BMP's) only when absolutely necessary. This will restore, enhance, and maintain the chemical, physical, and biological integrity of streams and aquifers, minimize damage to public and private property, and reduce the impacts of land development.

The provisions of this Ordinance, pursuant to the Maryland Stormwater Act of 2007 and Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland, 2009 replacement volume, are adopted under the authority of the Cecil County Code and shall apply to all development occurring within both the unincorporated area of Cecil County and the incorporated townships which have not adopted a stormwater management ordinance of their own. The application of this Ordinance and provisions expressed herein shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other powers granted by State Statute.

The Cecil County Department of Public Works shall be responsible for the coordination and enforcement of the provisions of this Ordinance in all unincorporated areas of the county and any incorporated townships which do not have a stormwater management ordinance approved by the Maryland Department of the Environment. All previous stormwater management ordinances and/or policies relating thereto are hereby repealed and replaced with this chapter.

251-2 INCORPORATION BY REFERENCE

For the purpose of this Ordinance, the following documents are incorporated by reference:

- A. The 2000 Maryland Stormwater Design Manual, Volumes I & II, (Maryland Department of the Environment, April 2000) and all subsequent revisions, is incorporated by reference by the Cecil County Department of Public Works and shall serve as the official guide for stormwater principles, methods, and practices.
- B. USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000).

251-3 GRANDFATHERING

A. In this section, the following terms have the meanings indicated:

1. Environmental Site Design Waiver:

- a. "Environmental Site Design Waiver" means a documented decision by the Department of Public Works pursuant to this Ordinance to allow the construction of a development to be governed by the stormwater management ordinance in effect as of May 4, 2009.
- b. "Environmental Site Design Waiver" is distinct and separate from a waiver granted pursuant to section 251-7 of the Ordinance.

2. Adequately Complete:

- a. "Adequately Complete" means a documented action by the Department following a review to determine and acknowledge that the submitted material has been submitted in accordance with the current plan review checklist and deemed a feasible design.
- b. "Adequately Complete" does not apply to projects that were neither submitted in accordance with the current plan review checklist and/or are not a feasible design.

3. Final Project Approval:

- a. "Final Project Approval" means approval of the final stormwater management plan and the erosion and sediment control plan required to construct a project's stormwater management facilities.
- b. "Final Project Approval" also includes the execution of an Inspection and Maintenance Agreement, payment of inspection fees and securing bonding.

4. Adequately Complete Submittal means a review of the stormwater management plan that includes at a minimum:

- a. The number of planned dwelling units or lots;
- b. The proposed project density;
- c. The proposed size and location of all land uses for the project; inclusive of alignment, location, & construction type and standard for all roads, access ways, and areas of vehicular traffic;
- d. A plan that identifies:
 - i. The proposed drainage patterns;
 - ii. The location of all points of discharge from the site; and
 - iii. The type, location, and size of all stormwater management measures based on site specific stormwater management requirement computations; and
- e. Plans and computations in accordance with the current plan review checklist.

- B. The Department may grant an Environmental Site Design Waiver to a development that was deemed to be “Adequately Complete” prior to May 4, 2010. Environmental Site Design Waivers shall expire according to section 251-3(C) of this Ordinance and may be extended according to section 251-3(D) of this Ordinance.
- C. Expiration of Environmental Site Design Waivers:
1. Except as provided for in section 251-3(D) of this Ordinance, an Environmental Site Design Waiver shall expire on:
 - a. May 4, 2013 if the development does not receive “Final Approval” prior to that date;
 - b. May 4, 2017, if the development receives “Final Approval” prior to May 4, 2013;
 2. Substantial work, in the judgment of the Department of Public Works, has been completed for all phases of the project (i.e. stormwater measures, utilities, and roads) by May 4, 2017. At a minimum, the road subbase must be installed to be considered substantially complete. Each project shall be reviewed independently, and any mitigating factors will be taken into account by the Department of Public Works prior to rendering a decision.
- D. Extension of Environmental Site Design Waivers:
1. Except as provided in section 251-3(D) (2) of this Ordinance, an Environmental Site Design Waiver shall not be extended.
 2. An Environmental Site Design Waiver may; only be extended if, by May 4, 2010 the development:
 - a. Has a stormwater management plan submittal that has been deemed to be “Adequately Complete”; and,
 - b. Was subject to a Town Annexation Agreement.
 3. Environmental Site Design Waivers extended according to section 251-3(D) (2) of this Ordinance shall expire when the Annexation Agreement expires.
- E. Notification of approval or reasons for disapproval or modification shall be given to the Owner/developer within thirty (30) working days after submission of the completed stormwater plan by all review agencies or departments. If a decision is not made within 30 days of submission, the applicant shall be informed of the status of the review process and the anticipated completion date. The stormwater management plan shall not be considered approved without the inclusion of the signature and date of signature of the Department of Public Work on the plan. The owner/developer shall resubmit plans in a timely manner throughout the plan review process. If the Department of Public Works has not received the plan submittal addressing the Departments comments within ninety (90) working days of the May 4, 2013 deadline, the County will not guarantee approval of the project by the May 4, 2013 and thus the project will lose its grandfathering status.

ARTICLE II

251-4 DEFINITIONS

- A. For the purpose of this Ordinance, the following definitions describe the meaning of the terms used in this Ordinance:
1. “Administration” means the Maryland Department of the Environment (MDE) Water Management Administration (WMA).
 2. “Adverse Impact” means any deleterious effect on waters or wetlands, 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 interfere with the enjoyment of life or property, including outdoor recreation.
 3. “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.
 4. “Agricultural Structure” means any structure used solely for agricultural purposes in which the use is exclusively in connection with the production, harvesting, storage, drying, or raising of agricultural commodities, including the raising of livestock.
 5. “Applicant” means any person, 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.
 6. “Approved Plan” means a stormwater management plan which contains the signature and seal of the designer and a statement of approval and the signature by the Chief of the Development Services Division, Department of Public Works.
 7. “Approving Agency” means the entity responsible for the review and approval of stormwater management plans.
 8. “Aquifer” means porous water bearing geological formation generally restricted to materials capable of yielding an appreciable supply of water.
 9. “Best Management Practice (BMP)” means a structural device or nonstructural practice designed to temporarily store and/or treat stormwater runoff in order to mitigate flooding, reduce pollution, and provide other amenities.
 10. “Channel Protection Storage Volume (CP_v)” means the volume used to design Environmental Site Design and structural management practices to control stream channel erosion. Methods for calculating the channel protection storage volume are specified in the 2000 Maryland Stormwater Design Manual, Volumes I & II.
 11. “Clearing” means the removal of trees, brush or understory from the land but shall not include the ordinary mowing of grass, or the removal of dead trees and noxious weeds.

12. “Concept Plan” means the first of three required plan approvals that includes the information necessary to allow an initial evaluation of the stormwater management and erosion and sediment control bmp’s for any proposed development subject to this ordinance (See Section 251 – 13 A for plan content requirements). The Concept Plan must be reviewed and approved prior to submittal of the Concept Plat to the Office of Planning and Zoning.
13. “Coastal Plain Region” means those areas south of the Chesapeake and Delaware Canal, not including the Elk Neck Peninsula.
14. “Department of Public Works” means the Cecil County Department of Public Works.
15. “Design Manual” means the 2000 Maryland Stormwater Design Manual, Volumes I & II and subsequent revisions that serves as the official guide for stormwater management principles, methods and practices.
16. “Detention Structure” means a permanent structure for the temporary storage of runoff, which is designed so as not to create a permanent pool of water.
17. “Developer” means the property owner or other party who plans or executes the development of land.
18. “Develop Land” means to change the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial, or institutional construction or alteration.
19. “Direct discharge” means the concentrated release of stormwater to tidal waters or vegetated tidal wetlands from new development or redevelopment projects in the Critical Area.
20. “Disturb” means the grading, moving, or digging of soils, the removal of grass and other ground covers, placement of fill or surface material (such as stone, concrete, asphalt), or the removal of stumps.
21. “Drainage Area” means that area contributing runoff to a single point measured in a horizontal plane, which is enclosed by a ridgeline.
22. “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.
23. “Environmental Site Design (ESD)” means using small scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources. Methods for designing ESD practices are specified in the Design Manual.
24. “Exemption” means those land development activities that are not subject to the stormwater management requirements contained in this Ordinance.

25. “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 BMP’s are specified in the Design Manual.
26. “Extreme Flood Volume (Q_e)” 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.
27. “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 (See Section 251 – 13 C for plan content requirements). The final plat will not be recommended by the Department of Public Works for approval by the Planning commission until the final stormwater management plan has been approved.
28. “Flow Attenuation” means prolonging the flow time of runoff to reduce the peak discharge.
29. “Grading” means any act by which soil is cleared, stripped, stockpiled, excavated, scarified, filled or any combination thereof.
30. “Impervious Area” means any surface that does not allow stormwater to infiltrate into the ground.
31. “Infiltration” means the passage or movement of water into the soil surface.
32. “Narrative” means a document prepared and submitted with each plan approval phase which describes how ESD will be implemented to the MEP. The document must describe each ESD element which will be used, justify any proposed structural practices and must incorporate a list of all comments received from all of the reviewing agencies/departments and how each comment was satisfactorily addressed.
33. “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.
34. “Off-site Stormwater Management” means the design and construction of a system necessary to control stormwater from more than one development.
35. “On-site Stormwater Management” means the design and construction of systems necessary to control stormwater within an immediate development.
36. “Overbank Flood Protection Volume (Q_p)” means the volume controlled by structural practices to prevent an increase in the frequency of out of bank flooding generated by development. Methods for calculating the overbank flood protection volume are specified in the Design Manual.

37. "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.
38. "Planning Technique" means a combination of strategies employed early in project design to reduce the environmental impact from development and to incorporate natural features into a stormwater management plan.
39. "Piedmont Region" means those areas north of Interstate I-95.
40. "Preliminary Plan" means the second of three required plan approvals that includes the information necessary to allow a detailed evaluation of a proposed project (See Section 251 – 13 B for plan content requirements). The preliminary plan must be reviewed and approved by the required agencies prior to the submittal of the "Preliminary Plat" to the Office of Planning and Zoning.
41. "Recharge Volume (Re_v)" means that portion of the water quality volume used to maintain groundwater recharge rates at development sites. Methods for calculating the recharge volume are specified in the Design Manual.
42. "Redevelopment" means any construction, alteration, or improvement performed on sites where the existing land use is commercial, industrial, institutional or multifamily residential and the existing impervious area exceeds forty (40) percent of the site.
43. "Retention Structure" means a permanent structure that provides for the storage of runoff by means of a permanent pool of water.
44. "Retrofitting" means the implementation of ESD practices, the construction of a structural BMP or the modification of an existing structural BMP in a previously developed area to improve water quality over current conditions.
45. "Sediment" means soils or other surficial materials transported or deposited by the action of wind, water, ice or gravity as a product of erosion.
46. "Site" means:
 - a. for "new development" 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 is to be performed as part of a unit, subdivision, or project.
 - b. for "redevelopment" the area of new construction as shown on an approved site plan; or the original parcel. Final determination of the applicable area shall be made by the Department of Public Works.
47. "Small development project" means any development which meets all of the limitations, conditions and requirements contained within the standard stormwater management plan and the standard erosion and sediment control plan for minor earth disturbances.

48. “Stabilization” means the prevention of soil movement by any of various vegetative and/or structural means.
49. “Stormwater” means water that originates from a precipitation event.
50. “Stormwater Management” means:
- a. for quantitative control, a system of vegetative and structural measures that control the increased volume and rate of surface runoff caused by man-made changes to the land; and
 - b. for qualitative control, a system of vegetative, structural, and other measures that reduce or eliminate pollutants that might otherwise be carried by surface runoff.
51. “Stormwater Management Plan” means a set of drawings or other documents submitted by a person as a prerequisite to obtaining a stormwater management approval, which contain all of the information and specifications pertaining to stormwater management for the site.
52. “Stormwater Management System” means natural areas, ESD practices, stormwater management measures, and any other structure through which stormwater flows, infiltrates, or discharges from a site.
53. “Stripping” means any activity that removes the vegetative surface cover including tree removal, clearing, grubbing and storage or removal of topsoil.
54. “Transition Region” means those areas north of the Chesapeake & Delaware Canal and South of Interstate I-95 including the Elk Neck Peninsula.
55. “Variance” means the modification of the minimum stormwater management requirements for specific circumstances such that strict adherence to the requirements would result in unnecessary hardship and not fulfill the intent of the Ordinance.
56. “Waiver” means the reduction of stormwater management requirements by the Cecil County Department of Public Works for a specific development on a case-by-case review basis.
- a. “Qualitative Stormwater Management Waiver” includes water quality volume and recharge volume design parameters.
 - b. “Quantitative Stormwater Management Waiver” includes channel protection storage volume, overbank flood protection volume, and extreme flood volume design parameters.
57. “Watercourse” means any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, or wash, in and including any adjacent area that is subject to inundation from overflow or flood water.
58. “Watershed” means the total drainage area contributing runoff to a single point.
59. “Water Quality Volume (WQ_v)” means the volume needed to capture and treat the runoff from 90 percent of the average annual rainfall volume at a development site. Methods for calculating the water quality volume are specified in the Design Manual.

ARTICLE III – APPLICABILITY

251-5 SCOPE

No person shall develop any land for residential, commercial, industrial, or institutional uses without having provided stormwater management measures that control or manage runoff from such developments, except as provided within this section. The 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 251-7 for redevelopment.

251-6 EXEMPTIONS

The following development activities are exempt from the provisions of this Ordinance and the requirements of providing stormwater management:

- A. Agricultural land management practices;
- B. Additions or modifications to existing single family detached residential structures if they comply with Subsection C below;
- C. Developments that do not disturb more than 5,000 square feet of land area; excluding new house construction or projects which involve the redirection of runoff.
- D. Land development activities that the Administration determines will be regulated under specific State of Maryland laws, which provide for managing stormwater runoff;
- E. Utility construction projects in which there is no change to drainage patterns or increase in impervious area.

251-7 WAIVERS/WATERSHED MANAGEMENT PLANS

- A. **Except as provided in section 251-7(D),** the Cecil County Department of Public Works shall grant stormwater management quantitative control waivers only to those projects within areas where watershed management plans have been developed consistent with Section 251-7(F) of this Ordinance. Written requests for quantitative stormwater management waivers shall be submitted that contain sufficient descriptions, drawings, and any other information that is necessary to demonstrate that ESD has been implemented to the MEP. A separate written waiver request shall be required in accordance with the provisions of this section if there are subsequent additions, extensions, or modifications to a development receiving a waiver.
- B. **Except as provided in section 251-7(D),** if watershed management plans consistent with section 251-7(F) of this Ordinance have not been developed, stormwater management quantitative control waivers may be granted to the following projects provided that it has been demonstrated that ESD has been implemented to the MEP:
 - 1. That have direct discharges to tidally influenced receiving waters; or
 - 2. **That are in-fill development located in a Priority Funding Area where the economic feasibility of the project is tied to the planned density, and where implementation of the 2009 regulatory Environmental site design requirements would result in a loss of planned development density provided that:**

- a. Public water and sewer and adequate stormwater conveyance exist;
 - b. The quantitative waiver is applied to the project for the impervious cover that previously existed on the site only;
 - c. ESD to the MEP is used to meet full water quality treatment requirements for the entire development; and
 - d. ESD to the MEP is used to provide full quality control for all new impervious surfaces; or
3. When the Cecil County Department of Public Works determines that site conditions exist that prevent the reasonable implementation of quantity control practices.
- C. Except as provided in section 251-7(D) stormwater management qualitative control waivers apply only to:
1. In-fill development projects where ESD has been implemented to the MEP and it has been demonstrated that additional BMP's are not feasible.
 2. Sites where the Cecil County Department of Public Works has determined that site conditions exist that prevent the reasonable implementation of ESD to the MEP; or ,
 3. Redevelopment projects if the requirements of section 251-8 of this Ordinance are satisfied.
- D. Stormwater management quantitative and qualitative control variances may be granted for phased development projects if the stormwater management facility designed to meet the 2000 regulatory requirements and the Cecil County Ordinance for multiple phases has been constructed by May 4, 2010. If the 2009 regulatory requirements cannot be met for future phases constructed after May 4, 2010, all reasonable efforts to incorporate ESD in future phases must be demonstrated.
- E. Waivers shall only be granted when it has been demonstrated that ESD has been implemented to the MEP and must:
1. Be on a case by case basis;
 2. Consider the cumulative effects of the Cecil County Department of Public Works waiver policy within the watershed; and
 3. Ensure the development will not adversely impact stream quality and/or impact adjacent or downstream properties.
- F. A watershed management plan developed by the developer/engineer for the purpose of implementing different stormwater management policies for waivers and redevelopment for a particular watershed shall:
1. Include detailed hydrologic and hydraulic analyses to determine hydrograph timing;
 2. Evaluate both quantity and quality management;
 3. Include a cumulative impact assessment of watershed development which incorporates historic and current development impacts as well as impacts from the proposed development project;
 4. Identify existing flooding and receiving stream channel conditions;

5. Be conducted at a reasonable scale (as determined by Department of Public Works);
6. Specify where on-site or off-site quantitative and qualitative stormwater management practices are to be implemented using ESD to the MEP;
7. Be consistent with the General Performance Standards For Stormwater Management in Maryland found in Section 1.2 of the Design Manual; and
8. Be approved by the Administration.

251-8 REDEVELOPMENT

- A. The Department of Public Works defines a Redevelopment project as any commercial, industrial, institutional or multifamily residential development where the existing site impervious area exceeds forty (40) percent. The plan review and approval process shall be in accordance with section 251-13 Stormwater Management Plans.
- B. Stormwater management plans are required by the County, for all redevelopment projects, unless otherwise specified by a watershed management plan developed in accordance to section 251-7(F) of this Ordinance. All stormwater management measures must be consistent with the Design Manual.
- C. All redevelopment designs shall:
 1. Reduce impervious area within the limit of disturbance (LOD) by at least fifty (50) percent according to the Design Manual;
 2. Implement ESD to the MEP to provide water quality treatment for at least fifty (50) percent of the existing impervious area within the LOD; or
 3. Use a combination of section 251-8(c) (1) and (2) of this Ordinance for at least fifty (50) percent of the existing site impervious area; and shall
 4. Exclude the recharge volume, channel protection storage volume and overbank flood protection volume requirements unless specified by the Department of Public Works.
- D. Alternative stormwater management measures may be used to meet the requirements in section 251-8C of this Ordinance if the owner/developer satisfactorily demonstrates to the Department of Public Works that impervious area reduction has been maximized and ESD has been implemented to the MEP. Alternate stormwater management measures include, but are not limited to:
 1. An on-site structural BMP;
 2. An off-site structural BMP to provide water quality treatment for an area equal to or greater than fifty (50) percent of the existing impervious area; or
 3. A combination of impervious area reduction, ESD implementation, and an on-site or off-site BMP for an area equal to or greater than fifty (50) percent of the existing site impervious area within the LOD.
- E. Stormwater management for any net increase in impervious area shall be addressed according to the new development requirements in the Design Manual and reflect woods in good condition.

- F. Where conditions prevent impervious area reduction or on-site stormwater management, and ESD to the MEP has been implemented, practical alternatives may be considered; inclusive of a fee in lieu of \$2.00 per square foot for 50% of existing and/or 100% of new impervious area.
- G. Money collected as fees in lieu under this subsection shall be deposited in a separate account and shall be specified to be used only to fund the investigation, design, construction and/or maintenance of stormwater management facilities and/or for stream restoration projects.

251-9 VARIANCES

The Department of Public Works may grant a written variance from any requirement of section 251-9 of this Ordinance, if there are existing site constraints such that strict adherence will result in unnecessary hardship and not fulfill the intent of this Ordinance. Economic reasons alone will not be considered as an obstacle to meeting the MEP requirements. A written request for a variance shall be provided to the Department of Public Works and shall state the specific variances sought and the reasons for their granting. The Department of Public Works shall only grant a variance after determining that sufficient justification has been provided by the applicant developing the land and that the implementation of ESD to the MEP has been investigated completely.

ARTICLE IV – STORMWATER MANAGEMENT CRITERIA

251-10 MINIMUM CONTROL REQUIREMENTS

- A. The minimum control requirements established in this section and the Design Manual are as follows:
 - 1. The Department of Public Works shall require that the planning techniques, nonstructural practices, and design methods specified in the Design Manual 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 Ordinance shall be designed using ESD sizing criteria, recharge volume, water quality volume, and channel protection storage volume criteria according to the Design Manual. 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.
 - 2. In the Coastal Plain, the following minimum control requirements apply in accordance with the Design Manual and must be addressed utilizing ESD to the MEP:
 - a. Water Quality Volume;
 - b. Recharge Volume;
 - c. Channel Protection Storage Volume; and
 - d. Overbank Flood Protection Volume for the two year frequency storm event (structural practices may be considered only if ESD measures implemented to the MEP cannot provide the necessary volume).

3. In the Piedmont Region, the following minimum control requirements apply in accordance with the Design Manual and must be addressed utilizing ESD to the MEP:
 - a. Water Quality Volume;
 - b. Recharge Volume;
 - c. Channel Protection Storage Volume; and
 - d. Overbank Flood Protection Volume for the ten year frequency storm event. (structural practices may be considered only if ESD measures implemented to the MEP cannot provide the necessary volume).
 4. Except as provided below, in the Transition Region the minimum control requirements shall be those as specified for the Piedmont Region. If an applicant demonstrates that the site to be developed within the Transition Region contains predominantly Coastal Plain characteristics for topography and soils, then the minimum control requirements shall be that of the Coastal Plain. To be considered predominantly Coastal Plain topography the average slope on the site to be developed, from the highest elevation to the lowest elevation, must be eight (8) percent or lower. To be considered predominantly Coastal Plain soils, a soils report indicating that the site to be developed contains greater than fifty (50) percent of soils determined by a Geotechnical Engineer to be classified as Coastal Plain. The soils report must be certified and sealed by a MD certified geotechnical engineer (See Section 251-14(A) (6) for the minimum information required in a soils report).
 5. In addition to the applicable requirements above, all development and redevelopment activities that take place in the Intensely Developed Areas (IDA) of the Chesapeake Bay Critical Area shall result in a reduction of pollutant loadings from the site by at least ten (10) percent. The process for determination of pollutant loading reduction shall be as outlined by the Critical Areas Commission in "A Framework for Evaluation of Compliance With the 10% Rule in the Critical Area", April 1987 or a comparable methodology as approved by the Department of Public Works.
 6. The Department of Public Works may require more than the minimum control requirements specified in this Ordinance if hydrologic or topographic conditions warrant or if flooding, stream channel erosion, or water quality problems exist downstream from the proposed project.
- B. Stormwater management and development plans where applicable, shall be consistent with adopted and approved watershed management plans or flood management plans as approved by the Maryland Department of the Environment in accordance with the Flood Hazard Management Act of 1976.

251-11 STORMWATER MANAGEMENT MEASURES

The ESD planning techniques and practices and structural stormwater management measures established in this Ordinance and Design Manual 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.

1. The following planning techniques shall be applied according to the Design Manual to satisfy the applicable minimum control requirements established in section 251-10 of this Ordinance:
 - 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, or other alternative surfaces;
 - g. Limiting soil disturbance, mass grading, compaction and placing 4" of topsoil on any area(s) which have been disturbed;
 - h. Clustering development; and
 - i. Any practices approved by the Administration.
2. The following ESD treatment practices shall be designed according to the Design Manual to satisfy the applicable minimum control requirements established in section 251-10 of this Ordinance:
 - a. Disconnection of rooftop runoff;
 - b. Disconnection of non-rooftop runoff;
 - c. Sheet flow to conservation areas;
 - d. Rainwater harvesting;
 - e. Submerged gravel wetlands;
 - f. Landscape infiltration;
 - g. Infiltration berms;
 - h. Dry wells;
 - i. Micro-bioretenion;
 - j. Rain gardens;
 - k. Swales;
 - l. Enhanced filters; and
 - m. Any practices approved by the Administration.
3. The use of ESD planning techniques and treatment practices specified in this section shall not conflict with existing State law or local ordinances, regulations, or policies. Counties and municipalities shall modify planning and zoning ordinances and public works codes to eliminate any impediments to implementing ESD to the MEP according to the Design Manual. In the event that there is a conflict between local ordinances and the Cecil County

Stormwater Management Ordinance, the Stormwater Management Ordinance shall take precedence.

B. Structural Stormwater Management Measures

1. The following structural stormwater management practices shall be designed according to the Design Manual to satisfy the applicable minimum control requirements established in section 251-10 of this Ordinance:
 - a. Stormwater management ponds;
 - b. Stormwater management wetlands;
 - c. Stormwater management infiltration;
 - d. Stormwater management filtering systems; and
 - e. Stormwater management open channel systems.
2. The performance criteria specified in the Design Manual with regard to general feasibility, conveyance, pretreatment, treatment and geometry, environment and landscaping, and maintenance shall be considered when selecting structural stormwater management practices.
3. Structural stormwater management practices shall be selected to accommodate the unique hydrologic or geologic regions of the State.

C. ESD planning techniques and treatment practices and structural stormwater management measures used to satisfy the minimum requirements in section 251-9 of this Ordinance must be contained within an easement recorded in the land records of Cecil County and remain unaltered by subsequent property owners. Whenever feasible, ESD planning techniques and treatment practices and structural stormwater management measures must be contained within common open space areas. Placing stormwater management measures within areas which will become county right-of-way should be avoided. Prior approval from the Department of Public Works shall be obtained before any stormwater management practice is altered.

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 Administration. Practices used for redevelopment projects shall be approved by the Department of Public Works.

251-12 SPECIFIC DESIGN CRITERIA

The basic design criteria, methodologies, and construction specifications, subject to the approval of the Department of Public Works and the Administration, shall be those of the Design Manual.

ARTICLE V – STORMWATER MANAGEMENT PLANS

251-13 REVIEW AND APPROVAL OF STORMWATER MANAGEMENT PLANS

- A. For any proposed development, the developer shall submit a stormwater management plan to the Department of Public Works for review and approval, unless otherwise exempted. The plans shall be submitted for concept, preliminary and final stormwater management plan approval. Each plan submittal shall include the content specified in Section 251-14 of this Ordinance, the latest stormwater management plans review checklist and meet the requirements of the Design Manual and Section 251-10 of this Ordinance.
- B. The Department of Public Works shall perform a comprehensive review of the stormwater management plans for each phase of the plan review process. In addition, the owner/developer shall submit stormwater management plans for each phase of the plan review process to all members of the Technical Advisory Committee, which includes but is not limited to; the Cecil County Office of Planning and Zoning, Cecil Soil Conservation District, Cecil County Health Department, the citizens representative, and if applicable, the Maryland State Highway Administration and the Planning Offices of the incorporated Towns in which the project is located. All comments from the Department of Public Works and the other appropriate agencies shall be addressed and approval letters received from each applicable agency or department for each phase of the project design prior to progressing to the next phase in the approval process.
- C. 1. The Cecil Soil Conservation District (CSCD) may provide stormwater management technical assistance, plan review and approval and construction inspection of projects which meet all of the following criteria:
- a. Parcel on which project occurs is assessed as Agricultural Use per the Tax Property Article of the Annotated Code of Maryland, Section 8-209;
 - b. Parcel on which project occurs is larger than 10 acres;
 - c. Parcel on which project occurs has a current Soil and Water Quality Conservation Plan which is being implemented; and,
 - d. The proposed agricultural activity meets the criteria of an agricultural structure.
2. In order for the proposed agricultural activity to be reviewed by the CSCD, a Technical Assistance Request form must be submitted by the property owner and approved by the CSCD. If the CSCD determines that the proposed agricultural activity does not meet the above criteria or that the CSCD does not have the necessary resources to provide technical assistance, the proposed agricultural activity must meet all requirements for review and approval by the Department of Public Works.
3. The CSCD has the same responsibility, powers and privileges established in **Article VIII – Inspections** and **Article XII Penalties** of this ordinance for any proposed agricultural activity which is provided technical assistance.
- D. Upon written request from the Developer, the Department of Public Works may combine the concept and/or preliminary plan approval process for small development projects. Small development projects are defined as projects which meet all of the limitations contained on the standard stormwater management plan and the standard erosion and sediment control plan.

E. The following are the submittal procedures for the three phases of the stormwater management approval process:

1. Stormwater Management Concept Plan Review and Approval

- a. The stormwater management concept plan must be submitted by the owner/developer and approved by all agencies and departments specified in Section 251-13(B) of this Ordinance prior to submitting the Concept Plat for approval to the Cecil County Planning Commission. The owner/developer must submit the conceptual stormwater management plan to all specified agencies and departments prior to or at the time of submittal of the concept plat to the Office of Planning and Zoning for Technical Advisory Committee review.
- b. In incorporated Townships in which the County is responsible for the review and approval of stormwater management plans and the inspection of stormwater facilities, it is the responsibility of the Town(s) to revise the zoning code and/or subdivision regulations to incorporate the stormwater management concept plan review process specified in this Ordinance within their development review process.
- c. In incorporated Townships in which the County is responsible for the review and approval of stormwater management plans and the inspection of stormwater facilities, the stormwater management concept plan must be submitted by the owner/developer and approved by all agencies and departments specified in section 251-13(B) of this Ordinance prior to approval of the concept plan/plat by the town.
- d. For all development projects that do not require approval by the Cecil County Planning Commission, but for which stormwater management approval is required, a conceptual stormwater management plan must be reviewed and approved by all agencies and departments as specified in section 251-13(B) of this Ordinance.
- e. For all developments located within an Incorporated Township in which the County is responsible for the review and approval of stormwater management plans and the inspection of stormwater facilities, which do not require concept plan/plat approval by the Town, a conceptual stormwater management plan must be reviewed and approved by all agencies and departments as specified in section 251-12(B) of this Ordinance.

2. Stormwater Management Preliminary Plan Review and Approval

- a. The stormwater management preliminary plan must be submitted by the owner/developer and approved by all agencies and departments specified in section 251-13(B) of this Ordinance prior to submitting the Preliminary Plat for approval to the Cecil County Planning Commission. The Owner/Developer must submit the preliminary stormwater management plan to all specified agencies and departments prior to or at the time of submittal of the Preliminary Plat to the Office of Planning and Zoning for Technical Advisory Committee review.
- b. In incorporated Townships in which the County is responsible for the review and approval of stormwater management plans and the inspection of stormwater facilities, it is the responsibility of the Town(s) to revise the Zoning Code and/or

Subdivision Regulations to incorporate the stormwater management preliminary plan review process specified in this Ordinance within their development review process.

- c. In incorporated Townships in which the County is responsible for the review and approval of stormwater management plans and the inspection of stormwater facilities, the stormwater management preliminary plan must be submitted by the owner/developer and approved by all agencies and departments as specified in section 251-13(B) of this Ordinance prior to approval of the Preliminary Plan/Plat by the Town.
- d. For all developments that do not require approval by the Cecil County Planning Commission, a preliminary stormwater management plan must be reviewed and approved by all agencies and departments as specified in section 251-13(B) of this Ordinance. At the request of the owner/developer, the preliminary stormwater management plan review process may be combined with the concept stormwater management plan review process by the Department of Public Works for small development projects and the owner/developer may proceed directly to the final stormwater management review process. Small development projects are defined as projects which meet ALL of the limitations contained on the standard stormwater management plan and the standard erosion and sediment control plan.
- e. For all developments located within an Incorporated Township in which the County is responsible for the review and approval of stormwater management plans and the inspection of stormwater facilities, which do not require preliminary plan/plat approval by the Town, a preliminary stormwater management plan must be reviewed and approved by all agencies and departments as specified in section 251-13(B) of this Ordinance. At the request of the owner/developer, the preliminary stormwater management plan review process may be waived by the Department of Public Works for small development projects and the owner/developer may proceed directly to the final stormwater management plan review process.

3. Stormwater Management Final Plan Review and Approval

- a. The final stormwater management plan must be submitted by the owner/developer and approved by all agencies and departments specified in Section 251-13(B) of this Ordinance prior to submitting the Final Plat for approval to the Cecil County Planning Commission.
- b. In incorporated Townships in which the County is responsible for the review and approval of stormwater management plans and the inspection of stormwater facilities, it is the responsibility of the Town(s) to revise the Zoning Code and/or Subdivision Regulations to incorporate the stormwater management final plan review process specified in this Ordinance within their development review process.
- c. Incorporated Townships in which the County is responsible for the review and approval of stormwater management plans and the inspection of stormwater facilities, the stormwater management final plan must be submitted by the owner/developer and approved by all agencies and departments as specified in

section 251-13(B) of this Ordinance prior to approval of the Final Plat by the Town.

- d. For all developments that do not require approval by the Cecil County Planning Commission, a final stormwater plan must be reviewed and approved by all agencies and departments as specified in section 251-13(B) of this Ordinance prior to the approval of the grading permit.
 - e. For all developments located within an incorporated Township in which the County is responsible for the review and approval of stormwater management plans and the inspection of stormwater facilities, which do not require Town approval of a Final Plat, a final stormwater management plan must be reviewed and approved by all agencies and departments as specified in section 251-13(B) of this Ordinance prior to the approval of the grading permit.
- F. Notification of approval or reasons for disapproval or modification shall be given to the owner/developer within thirty (30) working days after submission of the completed stormwater plan by all review agencies or departments, throughout the three phases of the plan review process. If a decision is not made within 30 days of submission, the applicant shall be informed of the status of the review process and the anticipated completion date. The stormwater management plan shall not be considered approved without the inclusion of the signature and date of signature of the Department of Public Works on the plan.
- G. The owner/developer shall resubmit plans in a timely manner throughout the three phases of the plan review process. If the Department of Public Works has not received the plan submittal addressing the Departments comments or a letter from the Developer or the Developers engineer requesting an extension within one hundred eighty (180) working days (from the date comments are provided), the County will purge the files and the owner/developer will be required to resubmit the project at the beginning of the stormwater management review process. All fees shall be assessed accordingly. Letters requesting an extension of the resubmission timeline shall be reviewed independently for each project and any mitigating factors will be taken into account by the Department of Public Works prior to rendering a decision; however, under no circumstances will an extension be granted for greater than an additional 180 working days.

251-14 CONTENTS OF THE STORMWATER MANAGEMENT PROCESS

The developer is responsible for submitting a stormwater management plan and a narrative for each phase of the plan review process that meets the design requirements of this Ordinance. The narrative and plans submitted shall provide the necessary information to ensure that all significant natural resources have been mapped and protected; all opportunities to enhance natural areas have been explored, impervious area minimized, nonstructural practices used, and the use of alternative surfaces explored. Micro-scale practices should be used to capture and treat runoff and structural practices may only be used when all options for the use of Environmental Site Design have been exhausted. The developer shall certify on the final stormwater management plans that all clearing, grading, drainage, construction, and development shall be conducted in strict adherence with the plan. The developer must submit a plan that under proposed development conditions maintains the existing drainage patterns for each individual drainage area. All reasonable efforts, utilizing ESD to the MEP, must be made to avoid the redirection of runoff from a particular drainage area to another drainage area. The minimum information for each phase of the stormwater management plan approval process submitted for approval shall include, but is not limited to:

A. Concept Plan Phase

The owner/developer shall submit a concept plan that provides sufficient information for an initial assessment of the proposed project and ensure compliance with section 251-11 of this Ordinance and the Design Manual. Plans submitted for concept approval shall include the minimum information:

1. A map (minimum 100' scale) showing the site location, existing natural features, wetlands, streams, sensitive resources, topography, soil boundaries, the natural drainage patterns, and the 100 year floodplain;
2. Location of all proposed impervious areas (i.e. buildings, roads, sidewalks, parking lots, driveways, etc.);
3. Location of the proposed limit of disturbance (LOD), erodible soils, existing slopes from 15% to 25%, existing slopes greater than 25% and forested areas to be protected;
4. Preliminary calculations to determine stormwater management requirements and the selection of ESD practices to be used;
5. Location of the proposed ESD practices to be used and all points of discharge from the site;
6. A soils report containing information generated from the Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>) which includes the map unit symbol, map unit name, map unit acres in the Area of Interest (AOI), percent of map unit in the AOI, the map unit description for each soil type, the hydrologic soil group, drainage class, hydric rating, depth to water table, unified soil classification and parent material name.
7. If the proposed site consists predominately of "C" and "D" soils a preliminary geotechnical study will be required to determine the location and feasibility of proposed ESD practices;
8. A narrative that supports the concept design and describes how ESD will be implemented to the MEP. Any subsequent submissions must incorporate a list of all comments received from all of the reviewing agencies/departments and how each comment was addressed;
9. Show proposed sewage areas and wells;
10. Location of existing wells and septic systems within 100 feet of the property line; and
11. Any additional information as specified in the Cecil County Department of Public Works "Stormwater Management Checklist".

B. Preliminary Plan Phase.

Following concept plan approval by the Cecil County Department of Public Works, and other appropriate departments and/or agencies, the owner/developer shall submit a preliminary plan that includes detailed designs for stormwater management and erosion and sediment control practices. To ensure that all options for implementing Environmental Site Design have been exhausted, detailed designs, computations, and grading plans must be submitted for a comprehensive review and approval. Plans submitted for review shall include the minimum information:

1. A map (minimum 50' scale) showing existing natural features, wetlands, streams, sensitive resources, existing topography, the natural drainage patterns, and 100 year floodplain;
2. Final site layout with exact impervious area locations and acreages, proposed grading (at 2' intervals), delineated drainage areas with all proposed points of discharge from the site, all

- required easements, and the location of all environmental site design practices and quantity control structures;
3. Location of the proposed limit of disturbance (LOD) Soil Classifications, erodible soils, steep slopes, and forested areas to be protected;
 4. Geotechnical investigation including soil maps, borings, site specific recommendations, and any additional information necessary to justify proposed design;
 5. Stormwater management volume computations to confirm the selection of the environmental site design and structural practices being proposed;
 6. An erosion and sediment control plan that contains the construction sequence, any phasing necessary to limit earth disturbances, impacts to natural resources, an overlay plan showing the types and locations of environmental site design and erosion and sediment control practices proposed and any additional information as required by the Cecil Soil Conservation District minimum plan requirements checklist;
 7. A narrative that supports the site development design, describes how environmental site design will be used to meet the minimum control requirements to the maximum extent practicable and justifies any proposed structural stormwater management measure. The narrative must incorporate a list of all comments received from all of the reviewing agencies/departments and how each comment was addressed;
 8. Show location of existing wells and septic tanks that are 100 feet from the property line;
 9. Show proposed wells, septic reserve areas, septic tanks, pump tanks, sewer lines, and percolation holes; and
 10. Any additional information as specified in the "Cecil County Department of Public Works Stormwater Management Checklist".

C. Final Plan Phase.

Following preliminary plan approval by the Cecil County Department of Public Works and other responsible departments and/or agencies, the owner/developer shall submit final construction drawings for sediment and erosion control and stormwater management. The stormwater management and sediment and erosion control plans must receive final plan approval prior to the issuance of the grading and building permits.

1. 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 erosion and sediment control plans in accordance to COMAR 26.17.01.05; and
 - b. Stormwater management construction plans and computations that include sufficient information to evaluate the effectiveness of the proposed design.
2. Stormwater management construction plans submitted for review and approval shall include the minimum information:
 - a. A vicinity map;
 - b. Existing and proposed topography (at 2' intervals) and drainage areas, including areas necessary to determine downstream analysis for proposed stormwater management facilities;

- c. All proposed improvements (i.e. buildings, driveways, parking lots, roads etc.);
- d. All grading and location of all non-structural and structural environmental site design practices and quantity control structures;
- e. The location of existing and proposed structures and utilities;
- f. Proposed easements and rights-of-way;
- g. The delineation, if applicable, of the 100 year floodplain and any on-site wetlands, streams, waterways and/or other sensitive environmental resources.
- h. Structural and construction details, including representative cross sections for all components of the proposed drainage system or systems, and stormwater management facilities;
- i. All necessary construction specifications and details;
- j. A sequence of construction;
- k. Data for the total site area, disturbed area, new impervious area, and total impervious area;
- l. A table showing the environmental site design and unified sizing criteria volumes required in the Design Manual;
- m. A Landscape Plan sealed by a MD registered landscape architect which meets all requirements of the SWM Landscape Plan Guidance Manual;
- n. All soil borings logs and locations shown on the plan;
- o. An inspection and maintenance schedule;
- p. Certification by the owner/developer that all stormwater management construction will be completed in accordance with the approved plan;
- q. Engineer Certification that the design is in accordance with the Ordinance and the Design Manual;
- r. An As-built Certification signature block to be executed after the project completion;
- s. Show proposed sewage areas, wells, septic tanks, pump tanks, sewer lines, percolation holes, and existing wells and septic areas 100 feet from the property line;
- t. The stormwater management computations submitted for review and approval shall include but are not limited to the following:
 - 1. Geotechnical investigations including soil maps, borings, site specific recommendations, and any additional information necessary to support the stormwater management design proposed;
 - 2. Drainage area maps depicting predevelopment and post development runoff flow path segmentation and land use;
 - 3. Hydrologic computations of the applicable environmental site design and unified sizing criteria according to the Design Manual for all points of discharge from the site;
 - 4. Hydraulic and structural computations for all environmental site design

practices and structural stormwater measures to be used; and

5. A narrative that supports the final stormwater management design. The narrative must incorporate a list of all comments received from all of the reviewing agencies/departments and how each comment was addressed.
 - u. If any stormwater management measures are proposed to act as sediment control devices during site construction, the plan must include details for the conversion from sediment control phase to stormwater management phase, with a note indicating that the timing of conversion must be approved by the Department of Public Works, but generally conversion will not be permitted between November 15th and April 1st; and,
 - v. Any additional information as specified in the Cecil County Department of Public Works "Stormwater Management Checklist".
3. If a stormwater management plan involves the direction of some or all runoff off of the site, it is the responsibility of the owner/developer to obtain from adjacent property owners any easement or other necessary property interest concerning the discharge of water prior to approval of the final stormwater management plan. Approval of a stormwater management plan does not create or affect any right to direct or concentrate runoff onto an adjacent property without that property owner's permission and the developer must secure such permission at his cost.

251-15 PREPERATION OF THE STORMWATER MANAGEMENT PLAN

- A. The design of stormwater management plans shall be prepared by any individual permitted to do so by the specific State of Maryland law(s) governing preparation of such plans. The Department of Public Works may disapprove any stormwater management plan prepared by an individual who does not provide proof of qualification and State of Maryland professional licensure to prepare said plans. If a stormwater management plan requires either a dam safety permit from Maryland Department of Environment or small pond approval from the Cecil County Soil Conservation District, the Department of Public Works shall require that the design be prepared by a professional engineer licensed in the State of Maryland.
- B. A standard stormwater management plan for development on individual single family residential lots may be utilized if the project meets all the limitations identified on the standard plan.

ARTICLE VI PERMITS

251-16 PERMIT REQUIREMENTS

A grading and/or building permit shall not be issued for any parcel or lot unless an erosion and sediment control plan has been approved by the Cecil Soil Conservation District and a stormwater management plan has been approved by the Cecil County Department of Public Works as meeting all the requirements of the Design Manual and this Ordinance. A grading and/or building permit may not be issued without:

- A. Recorded easements for the stormwater management facility and easements to provide adequate access for inspection and maintenance from a public right of way;

- B. A recorded stormwater management inspection and maintenance agreement and beneficial users plan as described in section 251-24 of this Ordinance;
- C. A performance bond as described in section 251-20 of this Ordinance; and
- D. Recorded easements from adjacent property owners if runoff is redirected off of the site, inclusive of stormwater management BMP outfalls and outfalls to tidally influenced waters or wetlands.

251-17 FEES

A non-refundable fee will be collected at each phase of the stormwater management plan review and approval process. The fee will provide for the cost of plan review, administration, and management of the approval process. A fee for inspection of all projects subject to this Ordinance will be required prior to final approval of the stormwater management plan. All fees shall be in accordance with the fee schedule adopted by the Board of County Commissioners of Cecil County, as may be amended from time to time.

251-18 PLAN AND PERMIT SUSPENSION AND REVOCATION

Any grading permit issued by the Department of Public Works, any building permit which requires Department of Public Works review and/or approval, or any plan under review or currently approved by the Department of Public Works 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 stormwater management and/or erosion and sediment control plan approval;
- B. Changes in site runoff characteristics upon which an approval was granted;
- C. Construction is not in accordance with the approved plan or permit;
- D. Noncompliance with the notice of violation(s) or stop work order(s) issued for the project/site;
- E. An immediate danger exists in a downstream area in the opinion of the Department of Public Works.

251-19 PERMIT CONDITIONS

In granting the plan approval, for any phase of the stormwater management plan review and approval process, the Department of Public Works may impose such conditions that may be deemed necessary to ensure compliance with the provisions of this Ordinance and the preservation of the public health and safety.

ARTICLE VII – PERFORMANCE GUARANTY

251-20 FINANCIAL ASSURANCE

The Department of Public Works shall require from the developer a surety or cash bond, irrevocable letter of credit, or performance bond prior to the issuance of any grading permit for the construction of a development requiring a stormwater management facility. The amount of the security shall not be less than the total estimated construction cost of the stormwater management facility, site grading, structures necessary to convey runoff to the stormwater facility and the estimated construction cost of all erosion and sediment control best management practices (including temporary and permanent stabilization). The bond required in this section shall include provisions relative to forfeiture for failure to complete work specified in the approved stormwater management plan, compliance with all of the provisions of this Ordinance, and other applicable laws and regulations, and any time limitations.

The bond shall not be fully released without a final inspection of the completed work by the Department of Public Works, submission and approval of “as-built” plans and related documentation (as required by the Department of Public Works stormwater management asbuilt checklist), and certification of completion by the Department of Public Works that the stormwater management facilities comply with the approved plan and the provisions of this Ordinance. Upon completion of the stormwater management facilities, the owner/developer may submit a written request along with the required reports and certifications for a partial release of the stormwater management bond. After review and approval, the Department of Public Works may release a portion of the bond, but in no case will the partial release exceed twenty percent of the original bond amount. The remaining eighty percent will be released upon completion of the project and the review and approval of the stormwater management asbuilt plans.

ARTICLE VIII - INSPECTION

251-21 INSPECTION ACCESS AND SITE SAFETY

- A. The Department of Public Works shall be permitted to enter and inspect sites subject to regulation under this ordinance as often as may be deemed necessary by the Department to determine compliance with this ordinance. Unreasonable delays in allowing the Department of Public Works access to a site regulated under this ordinance are a violation of this ordinance. A person who is the operator of a site regulated under this ordinance commits an offense if the person denies the Department of Public Works reasonable access to the site for the purpose of conducting any activity authorized or required by this ordinance. The Owner/Developer or their representative(s) must:
1. Allow the Department of Public Works ready access to all parts of the premises for the purposes of inspecting, sampling, monitoring and the performance of any additional duties necessary to complete activities authorized under this ordinance;
 2. Promptly remove, at the written or oral request of the Department of Public Works, any temporary or permanent obstruction that prohibits safe and easy access to the site. The obstruction shall not be replaced unless authorized by the Department. The costs of clearing such access shall be borne by the owner.

B. Search Warrants:

If the Department of Public Works has been refused access to any part of a site which is regulated or believed to be regulated under this ordinance, and the Department of Public Works is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect as part of a routine inspection and monitoring program designed to verify compliance with this ordinance, or to protect the overall public health, safety, and welfare of the community, then the Department of Public Works may seek issuance of a search warrant from any court of competent jurisdiction.

C. Site Safety:

The Contractor must, on a daily basis, evaluate potential work hazards and the appropriate safety measures necessary to insure the safe performance of all work regardless of schedule or cost implications. All appropriate measures must be taken to ensure the safety of contractor employees, County personnel, and the public.

The Federal Occupational Safety and Health Act of 1970 (OSHA) and the Maryland Occupational Safety and Health Act of 1973 (MOSHA) provide job safety and health protection for workers through the promotion of safe and healthful working conditions throughout the workplace. All work performed shall be consistent with the following guidelines and references and in compliance with all applicable local, state, and federal regulations and standards including, but not limited to:

1. Occupational Safety and Health Administration (OSHA) Construction Industry Standards, 29 CFR1926, and General Industry Standards, 29 CFR 1910.
2. National Fire Protection Association (NFPA), 327

In the case that these requirements are conflicting, the one which offers the greatest protection shall be followed.

251-22 INSPECTION SCHEDULE AND REPORTS

- A. The developer shall notify the Department of Public Works 48 hours prior to commencing any work in conjunction with the site development and the stormwater management plan. Work may not begin at a site regulated under this ordinance until a preconstruction meeting is held with or waived by the Department of Public Works. The Department of Public Works must also be contacted upon completion of the project to request a final inspection of the project/site.
- B. Routine inspections shall be conducted and documented by the Department of Public Works, or its authorized representative. Inspection reports shall be made of the periodic inspections necessary during construction of stormwater management systems to ensure compliance with the approved plans. If the Department of Public Works observes that the materials and/or methods of construction of the stormwater management measures is not in accordance with the approved plan, enforcement actions shall be pursued in accordance with Section 251-28(A).
- C. Inspections shall be conducted and documented by the owner/developers geotechnical engineer or authorized representative to ensure that construction of all stormwater management measures is in accordance with the approved plans. The individual(s) responsible for verification of the construction methods and materials and the individual(s) responsible for submission of the stormwater management asbuilt plan must be identified and present at the

site preconstruction meeting. Written inspection reports shall be submitted to the Department of Public Works by the developer's geotechnical engineer or authorized representative on a weekly basis and following each inspection stage specified in Section 251-22 (A) during construction of stormwater management systems to ensure compliance with the approved plans.

- D. Inspection reports shall include:
 - 1. The date and location of the inspection;
 - 2. Whether construction was in compliance with the approved stormwater management plan;
 - 3. Any variations from the approved construction specifications; and
 - 4. Any violations that exist.
- E. The owner/developer and on-site personnel shall be notified in writing by the owner/developers geotechnical engineer or authorized representative when violations are observed. Written notification shall describe the nature of the violation(s) and the corrective actions required.
- F. The owner/developer and on-site personnel shall be issued a Notice of Violation by the Department of Public Works when violations are observed. The Notice of Violation shall describe the nature of the violation(s) and the corrective action(s) required.
- G. The owner/developer or authorized representative must contact the Department of Public Works to request an inspection following completion of all required remedial repairs contained in the notice of violation.
- H. No additional site work shall proceed until the Department of Public Works inspects and approves the remedial repairs contained in the notice of violation. The Department of Public Works shall furnish the owner/developer and on-site personnel the results of the inspection as soon as possible after completion of the inspection.
- I. Under no circumstance whatsoever shall verbal permission, given at any time by any person, be considered as a justification for any work to be accomplished or any deviation from approved plans be made which violates any of these regulations.

251-23 INSPECTION REQUIREMENTS DURING CONSTRUCTION

- A. The developer shall engage the services of a professional engineer, a professional geotechnical engineer licensed in the State of Maryland or a qualified soil scientist to be present on the site and prepare reports of findings at the following specified stages of construction. Failure of the developer, engineer, geotechnical engineer or their authorized representative to notify the Department of Public Works inspector when "specified stages" of construction will occur and failure to have a qualified representative present during the construction of these "specified stages" may result in the County requiring reconstruction of the facility and or additional testing. The stormwater management measures below must be inspected by an authorized representative of the developer at the following "specified stages":

1. For ponds:
 - a. Upon completion of excavation to sub-foundation and, when required, installation of structural supports or reinforcement for structures, including but not limited to:
 1. Core trenches for structural embankments;
 2. Inlet and outlet structures, anti-seep collars or diaphragms, and watertight connectors on pipes; and
 3. Trenches for enclosed Storm drainage facilities.
 - b. During placement of structural fill, concrete, and installation of piping and catch basins;
 - c. During backfill of foundations and trenches;
 - d. During embankment construction; and
 - e. Upon completion of final grading and establishment of permanent stabilization.
2. For wetlands:
 - a. At the stages specified for pond construction in 251-23(A) (1) of this section
 - b. During and after wetland reservoir area planting; and
 - c. During the second growing season to verify a vegetation survival rate of at least 50%.
3. For infiltration trenches:
 - a. During excavation to subgrade;
 - b. During placement and backfill of under drain systems and observation wells;
 - c. During placement of geotextiles and all filter media;
 - d. During construction of appurtenant conveyance systems such as diversion structures, pre-filters and filters, inlets, outlets, and flow distribution structures; and
 - e. Upon completion of final grading and establishment of permanent stabilization.
4. For infiltration basins:
 - a. At the stages specified for pond construction in 251-23(A) (1) of this section; and
 - b. During placement and backfill of under drain systems.
5. For filtering systems:
 - a. During excavation to subgrade;
 - b. During placement and backfill of under drain systems;
 - c. During placement of geotextiles and all filter media;
 - d. During construction of appurtenant conveyance systems such as flow diversion structures, pre-filters and filters, inlets, outlets, orifices and flow distribution structures; and
 - e. Upon completion of final grading and establishment of permanent stabilization.

6. For open channel systems:
 - a. During excavation to subgrade;
 - b. During placement and backfill of under drain systems for dry swales;
 - c. During installation of diaphragms, check dams, or weirs; and
 - d. Upon completion of final grading and establishment of permanent stabilization.
7. For nonstructural practices:
 - a. During excavation to subgrade;
 - b. During placement of backfill of under drain systems (if applicable);
 - c. During placement of geotextiles and all filter media (if applicable);
 - d. During construction of appurtenant inlet and outlet conveyance systems;
 - e. Upon completion of final grading and establishment of permanent stabilization.
(except as provided for in Ordinance 248 of the Cecil County Code regarding letters of intent applicable to final seeding during non-growing seasons); and
 - f. Prior to issuance of certificate of use and occupancy approval.
- B. Once construction is complete, as-built plan certification shall be submitted by either a professional engineer or professional land surveyor licensed in the State of Maryland, except as limited by 251-15A of this Ordinance, to ensure that constructed stormwater management practices, conveyance systems, site grading and landscape plantings (if applicable) comply with the specifications contained in the approved plans. At a minimum, as-built certification shall include a set of drawings comparing the approved stormwater management plan and/ or approved final grading plan with what was constructed. The as-built plan certification shall be accompanied by the geotechnical certification required in 251-14(C) (t) (1). The Department of Public Works may require additional information to assure compliance with the approved plans. For individual residential lot construction, the as-built certification shall also be submitted by either a professional engineer or professional land surveyor licensed in the State of Maryland, prior to approval of the certificate of occupancy. For stormwater management landscape plans, the asbuilt certification shall be submitted by a registered landscape architect licensed in the State of Maryland.
- C. The Department of Public Works shall submit notice of construction completion form to the Administration on a form supplied by the Administration for each stormwater management practice within 45 days of construction completion. The type, number, total drainage area, and total impervious area treated by all ESD techniques and practices shall be reported to the Administration on a site by site basis. If stormwater management BMP's requiring SCD approval are constructed, a notice of construction completion shall also be submitted to the Cecil Soil Conservation District.

ARTICLE IX MAINTENANCE

251-24 MAINTENANCE INSPECTION

- A. The Department of Public Works shall ensure that preventative maintenance is performed by inspecting all ESD treatment systems and structural stormwater management measures. Inspection shall occur during the first year of operation and at least once every three years thereafter. In addition, an inspection and maintenance agreement between the owner and the Department of Public Works shall be executed for privately owned ESD treatment practices and structural stormwater management measures as described in 251-25.
- B. Inspection reports shall be maintained by the Department of Public Works for all stormwater management systems.
- C. Inspection reports for stormwater management systems shall include the following:
 1. The date of inspection;
 2. Name of inspector;
 3. 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 forebay areas;
 - i. Any nonstructural practices to the extent practicable; and
 - j. Any other item that could affect the proper function of the stormwater management system.
 4. Description of needed maintenance.
- D. After notification is provided to the owner of any deficiencies discovered from an inspection of a stormwater management system, the owner shall have 30 days, or other time frame mutually agreed to between the Department of Public Works and the owner, to correct the deficiencies. The Department of Public Works shall then conduct a subsequent inspection to ensure completion of the repairs.
- E. If repairs are not undertaken or are not found to be done properly, then enforcement procedures following 251-29 shall be followed by the Department of Public Works.
- F. If, after an inspection by the Department of Public Works, the condition of a stormwater management facility presents an immediate danger to the public health or safety, because of an unsafe condition or improper maintenance, the Department of Public Works 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(s) as provided in 251-25C.

251-25 INSPECTION & MAINTENANCE AGREEMENT AND BENEFICIAL USERS PLAN

- A. Prior to the issuance of a grading permit for which stormwater management approval is required, the Department of Public Works shall require the applicant or owner to execute an inspection and maintenance agreement binding on all subsequent owners of land served by a private stormwater management facility. Such agreement shall provide for access to the facility at reasonable times for regular inspections by the Department of Public Works or its authorized representative to ensure that the facility is maintained in proper working condition to meet design standards. **In addition the owner shall prepare a beneficial users plan in accordance with the latest stormwater management plan review checklist to be recorded along with the Inspection and Maintenance Agreement in the Cecil County Courthouse.**
- B. The agreement shall be recorded by the applicant and/or owner in the land records of Cecil County.
- C. The agreement shall also provide that if, after notice by the Department of Public Works to correct a violation requiring maintenance work, satisfactory corrections are not made by the owner(s) within 30 days, the Department of Public Works may perform all necessary work to place the facility in proper working condition. The owner(s) of the facility shall be assessed the cost of the work and any penalties. This may be accomplished by placing a lien on the property, which may be placed on the tax bill and collected as ordinary taxes by the County.

251-26 MAINTENANCE RESPONSIBILITY

- A. The owner of the property on which work has been done for private stormwater management facilities, or any other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all ESD practices, grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures, and other protective devices in perpetuity. Such repairs or restoration and maintenance shall be in accordance with previously approved plans or newly submitted plans.
- B. A maintenance schedule shall be developed for the life of any stormwater management facility or system of ESD practices 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 stormwater management plan.
- C. If at any time the Department of Public Works or any designated Code Enforcement Officer of the County determines that an owner, builder or developer has failed to perform maintenance activities for an existing stormwater management facility or has failed to finalize the required asbuilt plans for a stormwater management facility (for which they are still responsible), notice shall be sent advising said owner, builder or developer of noncompliance with the approved stormwater management plan, maintenance schedule or inspection and maintenance agreement. Until the required corrective actions have been completed or the necessary documentation submitted to the Department of Public Works' satisfaction, the Department of Public Works and/or any appropriate Code Official of the County shall have the power to suspend review of any applications, permits or plans submitted by said builder or developer, suspend any of the permits issued to said builder or developer, withdraw or revoke any permits or plans issued to said owner, builder or developer and/or deny further permits or plan approvals requested by said owner, builder or developer.

ARTICLE X APPEALS

251-27 RIGHT TO APPEAL

Any person aggrieved by the action of any official charged with the enforcement of this Ordinance, as the result of the disapproval of a properly filed application for a permit, issuance of a written notice of violation, or an alleged failure to properly enforce the Ordinance in regard to a specific application, shall have the right to appeal the action to the Circuit Court for Cecil County. The appeal shall be filed in writing within 30 days of the date of official transmittal of the final decision or determination to the applicant and shall state clearly the grounds on which the appeal is based, and be processed in the manner prescribed for hearing administrative appeals under the provisions of the Circuit Court for Cecil County.

ARTICLE XI SEVERABILITY

251-28 SEVERABILITY

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

ARTICLE XII PENALTIES

251-29 VIOLATIONS AND PENALTIES

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this ordinance. Any person who has violated or continues to violate the provisions of this ordinance, may be subject to the enforcement actions outlined in this section or may be restrained by injunction or otherwise abated in a manner provided by law.

- A. The Department of Public Works may, for enforcement purposes, use any one or a combination of the following actions:
 1. A notice of violation shall be issued specifying the nature of the violation(s) and the corrective actions required if stormwater management plan or ordinance noncompliance is identified;
 2. A stop-work order shall be issued for the site by the Department of Public Works for:
 - a. Failure to begin corrective actions identified in a notice of violation within 48 hours;
 - b. Failure to complete corrective actions identified in a notice of violation within 96 hours;
 - c. Construction which is not in accordance with the approved stormwater management plan;
 - d. Any violation(s) of the conditions of the stormwater management plan approval;
 - e. Failure to adhere to the sequence of construction contained on the approved stormwater management and/or erosion and sediment control plan;
 - f. Failure to adhere to the requirements contained in Section 251-21;
 - g. Failure to adhere to the requirements contained in Section 251-22;

- h. Failure to adhere to the requirements contained in Section 251-23; and or,
 - i. A violation is of an immediate and serious nature, as determined by the Department of Public Works.
 - 3. Bonds or securities may be withheld or the case may be referred for legal action if reasonable efforts to correct the violation have not been undertaken;
 - 4. At any time that the Department of Public Works or any designated Code Enforcement Officer of the County determines that an owner, builder or developer has failed to execute grading, roadway, utility or building construction in accordance with the approved erosion and sediment control or stormwater management plans, notice shall be sent advising said owner, builder or developer of noncompliance with the Cecil County Code. The notice shall be presumed received three days after being mailed to the address provided on the building permit, grading permit or approved construction plans. Until corrective actions have been completed to the Department of Public Works' satisfaction, the Department of Public Works and/or any appropriate Code Official of the County shall have the power to suspend review of any applications, permits or plans submitted by said builder or developer, suspend any of the permits issued to said builder or developer, withdraw or revoke any permits or plans issued to said owner, builder or developer and/or deny further permits or plan approvals requested by said owner, builder or developer.
 - 5. 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, the Design Manual, or this Ordinance.
- B. Any step in the enforcement process may be taken at any time, depending on the severity of the violation.
- C. Any person convicted of violating the provisions of this Ordinance shall be guilty of a misdemeanor and, upon conviction thereof, shall be subject to a fine of not more than \$5,000 or imprisonment not exceeding one year, or both, for each violation, with costs imposed in the discretion of the court. Each day that a violation continues shall be a separate offense. In addition, the Board of County Commissioners of Cecil County and /or the Department of Public Works may institute injunctive, mandamus or other appropriate action or proceedings of law to correct violations of this Ordinance. 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.
- D. For purposes of this section, "builder or developer" shall be defined to mean the party to whom the building permit or grading permit was issued (and its heirs, successors and assigns) or to whom approval was granted for the construction plans and shall also include any party actually performing the work of construction therein. The builder or developer shall also include any officer of any corporation, any partner of any partnership or any related corporation, partnership, limited-liability company or limited-liability partnership owned in whole or in part by any aforementioned party.
- E. Any dispute between property owners regarding redirection of runoff is a civil liability issue between the two parties and must be resolved between the parties or by a court of competent jurisdiction.

ARTICLE XIII EFFECTIVE DATE

251-30 EFFECTIVE DATE

And be it further enacted that this Ordinance shall take effect on May 4, 2010.

ARTICLE XIV PRIOR STORMWATER MANAGEMENT PLANS

251-31 CONTINUED EFFECT OF PRIOR APPROVALS

Stormwater management submittals (including exemptions, waivers, variances, computations and stormwater management plans) submitted prior to the effective date of this Ordinance shall be exempt from Environmental Site Design requirements so long as the project meets the **conditions specified in section 251-3 of this Ordinance.**

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