

Chapter 60

STORMWATER MANAGEMENT

ARTICLE I

General Provisions

§60-1. Intent.

The purpose of this chapter is to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control the adverse impacts associated with 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, sedimentation, and local flooding, and use appropriate structural best management practices (BMP) 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.

§60-2. Authority; explanation of provisions.

The provisions of this chapter, pursuant to the Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland, 2009-replacement volume, are adopted under the Municipal Corporation Charter of the Town of Millington, Maryland and shall apply to all development or redevelopment occurring within the incorporated area of the Town of Millington. The application of this chapter and the 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 Town of Millington shall be responsible for the coordination and enforcement of the provisions of this chapter.

§60-3. Incorporation by reference.

- A. The 2000 Maryland Stormwater Design Manual, Volumes I & II (Maryland Department of the Environment, April 2000 and as may be amended), shall be incorporated by reference and shall serve as the official guide for stormwater management principles, methods, and practices.
- B. The USDA Natural Resources Conservation Service Maryland Conservation Practice Standard Pond Code 378 (January 2000 and as may be amended) shall be incorporated by reference.

§60-4. Title.

This chapter shall be known and may be cited as the “Millington Stormwater Management Ordinance”.

ARTICLE II Terminology

§60-5. Definitions.

For the purpose of this chapter, the following definitions describe the meaning of the terms used in this chapter.

ADMINISTRATION – The Maryland Department of the Environment (MDE), Water Management Administration

ADVERSE IMPACT – For purposes of stormwater management, any deleterious effect on waters or wetlands, including their quality, quantity, surface area, species, 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.

AGRICULTURAL LAND MANAGEMENT – Those methods and procedures used in the cultivation of land in order to further crops or livestock production and conservation of related soil and water resources. Logging and timber removal operations shall not be considered a part of this definition.

APPLICANT – Any person, firm, or government agency who executes the necessary forms to procure official approval of a project or a permit to carry out construction of a project.

APPROVING AGENCY – The Town of Millington or the agency, department, person, or firm designated by the Town to administer and enforce the provisions of this chapter.

AQUIFER – A porous water-bearing geologic formation generally restricted to materials yielding an appreciable supply of water.

BEST MANAGEMENT PRACTICE (BMP) – A structural device or nonstructural practice designed to temporarily store or treat stormwater runoff in order to mitigate flooding, reduce pollution, and provide other amenities.

CHANNEL PROTECTION STORAGE VOLUME – 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 2000 Maryland Stormwater Design Manual, Volumes I and II.

CLEARING – The removal of trees and/or brush from the land but which shall not include the ordinary mowing of grass.

CONCEPT PLAN – For stormwater management purposes: the first of three plan approvals that includes information necessary to allow an initial evaluation of a proposed project.

DESIGN MANUAL – The 2000 Maryland Stormwater Design Manual, and all subsequent revisions, that serves as the official guide for stormwater management principles, methods, and practices.

DETENTION STRUCTURE – A permanent structure for the temporary storage of runoff that is designed so as not to create a permanent pool of water.

DEVELOP LAND – To change the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial, or institutional construction or alteration.

DIRECT DISCHARGE – The concentrated release of stormwater to tidal waters or vegetated tidal wetlands from new development or redevelopment projects in the Chesapeake Bay Critical Area.

DRAINAGE AREA – That area contributing runoff to a single point measured in a horizontal plane which is enclosed by a ridge line.

EASEMENT – A grant or reservation by a property owner of the right to use an identifiable piece of land or right for a specified purposes or purposes, and which must be included in the conveyance of land affected by such easement.

ENVIRONMENTAL SITE DESIGN (ESD) – Using small-scale stormwater management practices, nonstructural techniques, and site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources. Methods for designing practices are specified in the Design Manual.

EXEMPTION – Those land development activities that are not subject to the stormwater management requirements contained in this chapter.

EXTENDED DETENTION – 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 – The storage volume required to control those infrequent but large storm events in which overbank flows reach or exceed the boundaries of the one-hundred-year floodplain.

FINAL STORMWATER MANAGEMENT PLAN – The last of three plan approvals that includes the information necessary to allow all approvals and permits relating to stormwater management to be issued by the approving agency.

FLOW ATTENUATION – Prolonging the flow time of runoff to reduce the peak discharge.

GRADING – Any act by which soil is cleared, stripped, stockpiled, excavated, scarified, filled, or any combination thereof.

IMPERVIOUS SURFACE – Any surface that does not allow stormwater to infiltrate into the ground.

INFILTRATION – The passage or movement of water into the soil surface.

MAXIMUM EXTENT PRACTICABLE (MEP) – Designing stormwater management systems so that all reasonable opportunities for using ESD planning techniques and treatment practices are exhausted and only where necessary a structural BMP is implemented.

OFF-SITE STORMWATER MANAGEMENT – The design and construction of a facility necessary to control stormwater from more than one development.

ON-SITE STORMWATER MANAGEMENT – The design and construction of systems necessary to control stormwater within an immediate development.

OVERBANK FLOOD PROTECTION VOLUME – 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.

PERSON – The Federal Government, the State, any County, Municipal corporation, or other political subdivision of the State, or any of their units, or any 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 – For stormwater management purposes; a combination of strategies employed early in the project design to reduce the impact from development and to incorporate natural features into a stormwater management plan.

RECHARGE VOLUME – 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.

REDEVELOPMENT – Any construction, alteration, or improvement exceeding 5,000 square feet of land disturbance performed on sites where existing land use is commercial, industrial, institutional, or multifamily residential and existing site impervious area exceeds 40%

RETENTION STRUCTURE – A permanent structure that provides for the storage runoff by means of a permanent pool of water.

RETROFITTING – 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.

SEDIMENT – Soils or other surficial materials transported or deposited by the action of wind, water, or artificial means.

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

SITE DEVELOPMENT PLAN – The second of three plan approvals that includes the information necessary to allow a detailed evaluation of a proposed project.

STABILIZATION – The prevention of soil movement by any of various vegetative and/or structural means.

STORMWATER – Water that originates from a precipitation event.

STORMWATER MANAGEMENT SYSTEM – Natural areas, ESD practices, stormwater management measures, and any other structure through which stormwater flows, infiltrates, or discharges from a site.

STRIPPING – Any activity which removes the vegetative surface cover, including tree removal, clearing, grubbing, and storage or removal of topsoil.

VARIANCE – 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 this chapter.

WAIVER – The reduction of stormwater management requirements by Millington for a specific development on a case-by-case review basis.

WATER QUALITY VOLUME – The volume needed to capture and treat 90% of the average annual rainfall events at a development site. Methods for calculating the water quality volume are specified in the Design Manual.

WATERCOURSE and/or DRAINAGEWAY – Any natural or artificial watercourse (including but not limited to streams, rivers, creeks, ditches, channels, canals, conduits, culverts, drains, waterways, gullies, ravines, or washes) in which waters flow in a definite direction or course, either continuously or intermittently; and including any area adjacent thereto which is subject to inundation by reason of overflow or floodwaters.

WATERSHED – The total drainage area contributing runoff to a single point.

ARTICLE III

Applicability

§60-6. Scope.

No person shall develop any land for residential, commercial, industrial, or institutional uses or redevelop land without having provided for appropriate stormwater management measures that control or manage runoff from such developments, except as provided in this section. Stormwater management measures must be designed consistent with the Design Manual and constructed according to an approved plan for new development or policies as stated in Article V, §60-12, of this chapter for redevelopment.

§60-7. Exemptions.

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

- A. Normally accepted agricultural land management activities, including crop-production practices, and installation of BMPs, i.e. waterways, ponds, etc.
- B. Additions or modifications to existing single-family detached residential structures, provided that these additions or modifications do not disturb over 5,000 square feet of land.
- C. Developments that do not disturb over 5,000 square feet of land.
- D. Land development activities that the Maryland Department of the Environment determines will be regulated under specific state laws which provide for managing stormwater runoff.

§60-8. Waivers.

- A. The Town of Millington may grant a waiver of the quantitative stormwater management requirements for individual developments based on a case-by-case review. A written waiver request shall be submitted by the applicant containing descriptions, drawings, and any other information that is necessary to evaluate the proposed development and demonstrate the ESD has been implemented to the maximum extent practicable. A separate written 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. Waivers of stormwater quantitative control may be granted only to those projects that can conclusively demonstrate that:

- a. The project is within an area where a watershed management plan has been developed consistent with this chapter.
 - b. If the project is not in an area where a watershed management plan has been developed consistent with this chapter, waivers may be granted to proposed development projects, provided the applicant has demonstrated that environmental site design has been implemented to the maximum extent practicable;
 - i. That have direct discharges to tidally influenced receiving waters.
 - ii. When the Town determines that circumstances exist that prevent the reasonable implementation of quantity control practices.
- C. Waivers of stormwater management qualitative control may be granted only to those projects that can conclusively demonstrate that:
- a. The project is an in-fill development where ESD has been implemented to the MEP and other BMPs are not feasible;
 - b. The project is a redevelopment that satisfies the requirements of this chapter; or
 - c. Sites where the Town determines that circumstances exist that prevent the reasonable implementation of ESD to the MEP.
- D. Waivers shall only be granted when it has been demonstrated that ESD has been implemented to the MEP and shall:
- a. Be on a case-by-case basis;
 - b. Consider the cumulative effects of the Millington waiver policy;
 - c. Reasonably assure the development will not adversely impact stream quality.
- E. Millington may develop quantitative waiver and redevelopment provisions for stormwater management that differ from the requirements of this chapter as a part of an overall watershed management plan. Watershed management plans developed for this purpose shall, at a minimum;
- a. Include detailed hydrologic and hydraulic analyses to determine hydrographic timing;
 - b. Evaluate both quantity and quality management and opportunities;
 - 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 determined by the Town;

- f. Specify where on-site or off-site quantitative and qualitative stormwater management practices are to be implemented; and
- g. Be approved by the Maryland Department of the Environment.

§60-9. Variances.

- A. The Town of Millington may grant, upon application, a written variance from the stormwater requirements found in Article V of this chapter. A written request for variance shall be provided to the town and shall state the specific variances sought and reasons for their granting.
- B. The variance shall comply, as nearly as possible, in every respect to the spirit, intent, and purpose of this chapter; it being the purpose of this provision to authorize the granting of variance only for reasons of demonstrable unwarranted hardship as distinguished from variances sought by applicants for purposes or reasons of convenience, profit, or caprice.
- C. Before granting a variance, the Town shall evaluate the cumulative effects of other developments that are relinquished from the requirements of stormwater management.
- D. In order to grant a variance, the Town of Millington must find the following:
 - a. Exceptional circumstances exist applicable to the site such that strict adherence to the provisions of this chapter will result in unnecessary hardship and not fulfill the intent of the chapter.
 - b. Implementation of ESD to the MEP has been investigated thoroughly.
- E. The decision granting or denying the variance shall be in writing and shall be signed by the Town. Millington shall mail a copy of the decision to the applicant. The decision shall be made a part of the public record of the proceedings on file in Millington.
- F. After the Town has granted a variance, the variance so granted shall lapse after the expiration of one year if no substantial construction has taken place in accordance with the approved plan for which such variance was granted or if the decision does not specify a period longer than one year for good cause shown.
- G. The procedure for amendment of a variance already approved or a request for a change of conditions attached to an approval shall be the same as for a new application.
- H. Within 30 days of the decision, any person aggrieved by the decision of the town may appeal the decision to the Millington Board of Appeals.

ARTICLE IV Redevelopment

§60-10. Redevelopment requirements.

This section applies to 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 40%.

- A. Stormwater management plans are required by Millington for the redevelopment, unless otherwise specified by a watershed management plan developed according to this chapter. Stormwater management measures shall be consistent with the Design Manual.
- B. All redevelopment designs shall:
 - a. Reduce impervious surface area within the limit of disturbance (LOD) by at least 50% according to the Design Manual.
 - b. Implement ESD to the MEP to provide water quality treatment for at least 50% of the existing impervious surface area within the limit of disturbance; or
 - c. Use a combination of Subsection B(1) and (2) for at least 50% of the existing site impervious area.
- C. Alternative stormwater management measures may be used to meet the requirements of Subsection B of this section if the applicant satisfactorily demonstrates to the Town 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 best management practice;
 - b. An off-site BMP to provide water quality treatment for an area equal to or greater than 50% 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% of the existing site impervious surface area within the limit of disturbance.
- D. Millington may develop separate policies for providing water quality treatment for redevelopment projects if the requirements of Subsections A and B of this section cannot be met. Any separate redevelopment policy shall be reviewed and approved by the Maryland Department of the Environment and may include but not be limited to:
 - a. A combination of ESD and an on-site or off-site structural BMP;

- b. Retrofitting, including existing BMP upgrades, filtering practices and off-site ESD implementation;
 - c. Stream restoration in the same twelve-digit watershed as the proposed development and an area restored equivalent to the area required for treatment;
 - d. Pollution trading with another entity;
 - e. Payment of a fee in lieu; or
 - f. A partial waiver of the treatment requirements if ESD is not practicable.
- E. The determination of alternatives available may be made by the Town at the appropriate stage in the development review process. The Town shall consider the prioritization of alternatives in Subsection D of this section after it has been determined that it is not practicable to meet the 2009 regulatory requirements using ESD. In deciding the alternatives that may be required, the Town may consider factors, including but not limited to the following:
- a. Whether the project is in an area targeted for development incentives such as a priority funding area;
 - b. Whether the project is necessary to accommodate growth consistent with the Comprehensive Plan; or
 - c. Whether bonding or other financing mechanisms have been secured based on an approved development plan.
- F. Stormwater management shall be addressed according to the new development requirements in the Design Manual for any net increase in impervious areas.

ARTICLE V

Stormwater Management Controls and Measures

§60-11. Stormwater minimum control standards.

Stormwater management shall be accomplished for all new development according to the minimum requirements established in this section and the Design Manual as follows:

- A. All planning techniques, nonstructural practices, and design methods specified in the Design Manual shall be used to implement ESD to the MEP. The use of ESD planning techniques and treatment practices shall be exhausted before any structural BMP is implemented. Stormwater management plans for development projects subject to this chapter 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.
- B. Control of the ten-year frequency storm event is required according to the Design Manual if the Town determines that additional stormwater management is necessary because historical flooding problems exist, and downstream floodplain development and conveyance system design cannot be controlled.
 - C. Millington may require more than the minimum control requirements specified in this chapter if hydrologic or topographic conditions warrant or if flooding, stream channel erosion, or water quality problems exist downstream from a proposed project.
 - D. Alternate minimum control requirements may be adopted subject to approval by the Maryland Department of the Environment. The Maryland Department of the Environment 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. 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.

§60-12. Stormwater management measures.

The ESD planning techniques and practices and structural stormwater management measures established in this chapter and the Design Manual shall be used, either alone or in combination in a stormwater management plan. The applicant 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 techniques and practices.
 - a. The following planning techniques shall be applied according to the Design Manual to satisfy the applicable minimum control requirements established in §60-11 of this chapter:
 - i. Preserving and protecting natural resources;

- ii. Conserving natural drainage patterns;
 - iii. Minimizing impervious areas;
 - iv. Reducing runoff volume; and
 - v. Using ESD practices to maintain 100% of the annual predevelopment groundwater recharge volume.
- b. The following ESD practices shall be designed according to the Design Manual to satisfy the applicable minimum control requirements established in §60-11 of this chapter:
- i. Disconnection of rooftop runoff;
 - ii. Disconnection of non-rooftop runoff;
 - iii. Sheetflow to conservation areas;
 - iv. Rainwater harvesting, including rain barrels, rainwater tanks, and cisterns;
 - v. Submerged gravel wetlands;
 - vi. Landscape infiltration;
 - vii. Infiltration berms;
 - viii. Dry wells;
 - ix. Micro bioretention;
 - x. Rain gardens;
 - xi. Swales;
 - xii. Enhanced filters; and
 - xiii. Any practice approved by the Maryland Department of the Environment.
- c. 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. The town shall modify ordinances and codes to eliminate any impediments to implementing ESD to the MEP according to the Design Manual.

B. Structural stormwater management measures.

- a. The following structural stormwater management practices shall be designed according to the Design Manual to satisfy the applicable minimum control requirements established in §60-11 of this chapter:
- i. Stormwater management ponds;
 - ii. Stormwater management wetlands;
 - iii. Stormwater management infiltration;
 - iv. Stormwater management filtering systems; and
 - v. Stormwater management open channel systems.

- b. When selecting structural stormwater management practices, the applicant shall consider the performance criteria specified in the Design Manual with regard to general feasibility, conveyance, pretreatment, treatment and geometry, environment and landscaping, and maintenance.
 - c. Structural stormwater management practices shall be selected to accommodate the unique hydrologic or geologic regions of the state.
- C. Alternative practices and measures. Alternative ESD planning techniques and treatment practices and structural stormwater measures may be used for new development runoff control if the practices and measures meet the performance criteria in the Design Manual and all subsequent revisions and are approved by the Maryland Department of the Environment. Practices used for redevelopment projects shall be approved by the Town.
- D. Recordation of practices and measures. ESD techniques and treatment practices and structural stormwater management measures used to satisfy the minimum requirements in §60-11 of this chapter must be recorded in the land records of Kent County/Queen Anne's County and remain unaltered by subsequent property owners. Prior approval from the Town shall be obtained before any stormwater management practice is altered.
- E. Modification. For purposes of modifying the minimum control requirements or design criteria, the applicant shall submit an analysis to the Town of the impacts of stormwater flows downstream in the watershed. The analysis shall include hydrologic and hydraulic calculations necessary to determine the impact of hydrographic timing modifications of the proposed development upon a dam, highway, structure, or natural point of restricted stream flow. The point of investigation shall be established with the concurrence of the Town downstream of the first downstream tributary whose drainage area equals or exceeds the contributing area to the project or stormwater management facility.
- F. Specific design criteria. The basic design criteria, methodologies, and construction specifications, subject to the approval of Millington and the Maryland Department of the Environment, shall be those of the Design Manual.

ARTICLE VI
Stormwater Management Plans

§60-13. Review and approval.

- A. For any proposed development a phased stormwater management plan shall be submitted to the Town for review and approval. Unless otherwise determined by the Town, plans shall be submitted for the concept, site design, and final stormwater management construction. When deemed appropriate by the Town due to minor cumulative impacts of the development and when the applicant has demonstrated that ESD standards have been met to the MEP, the site design and final stormwater management construction phases may be combined. Site plans, subdivisions, and building permits with a total proposed lot coverage of 15% and total land disturbance less than 20,000 square feet may combine all review phases when the applicant has demonstrated that ESD standards have been met to the MEP using the standard plan.
- B. Conceptual stormwater management plans should be submitted with conceptual/sketch site or subdivision plans and shall include sufficient information for an initial assessment of the proposed project and proposed stormwater. The concept review process will review at a conceptual level the feasibility, design and environmental characteristics of the proposal with a goal to ensure that significant natural areas are protected and to determine if stormwater management can be provided according to the stormwater management measures identified in Article V, §60-12, of this chapter.
- C. Following conceptual approval and where applicable in conjunction with the preliminary site or subdivision plan, the applicant shall submit a site development plan. The site development plan shall include detailed designs for stormwater management and erosion and sediment control. The site development plan progress will review the plan to ensure that all options for implementing ESD have been exhausted and comments received during conceptual review have been incorporated into the site development plan.
- D. Following site development plan approval and where applicable in conjunction with the final site or subdivision plan and the sediment and erosion control plan, the applicant shall submit a final stormwater management plan. The final stormwater management plan shall include stormwater construction drawings accompanied by a report that includes sufficient information to evaluate the effectiveness of the proposed runoff

- control design. The final stormwater management plan process will review the plan and supporting documents for compliance with all applicable regulations and ensure that, when structural practices are used, all reasonable options for implementing ESD have been exhausted.
- E. The Town shall perform a comprehensive review of the stormwater management plans for each phase of the site design. Coordinated comments will be provided for each plan phase that reflects input from all appropriate agencies, including but not limited to Millington Planning Commission and Millington Utilities. All comments shall be addressed and reflected in the next phase of project design.
 - F. The stormwater management plan shall not be considered approved with the inclusion of the signature and date of the signature of the Town of Millington designee for approval of stormwater management plans.

§60-14. Contents.

- A. Concept Plan. A concept stormwater management plan shall include:
 - a. Scale of one-inch equals 100 feet or greater detail;
 - b. Vicinity map with site location clearly marked;
 - c. North arrow;
 - d. Existing natural features, water and other sensitive resources;
 - e. Topography;
 - f. Natural drainage patterns;
 - g. Anticipated location of all proposed impervious areas, buildings, roadways, parking, sidewalks, utilities, and other site improvements;
 - h. Location of the proposed limit of disturbance, erodible soils, steep slopes, and areas to be protected during construction;
 - i. Preliminary estimates or stormwater management requirements, the selection and location of ESD practices to be used, and the location of all points of discharge from the site.
 - j. A narrative that supports the concept design and describes how ESD will be implemented to the MEP; and
 - k. Any other information required by the Town.
- B. Site development plan. A site development plan shall include:
 - a. Scale of one-inch equals 100 feet or greater detail;
 - b. Vicinity map with site location clearly marked;
 - c. North arrow;
 - d. All the information provided in the concept stormwater management plan;

- e. Final layout;
 - f. Exact impervious are locations and acreages;
 - g. Proposed topography;
 - h. Delineated drainage areas at all points of discharge from the site;
 - i. Stormwater volume computations for ESD and quantity control;
 - j. Preliminary erosion and sediment control plan that contains the construction sequence, any phasing necessary to limit earth disturbances and impacts to natural resources and an overly showing the types and locations of ESD and erosion and sediment control practices to be used;
 - k. 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 measures; and
 - l. Any other information required by the Town.
- C. Final stormwater plan. A final stormwater plan shall be of sufficient detail to permit all stormwater management approvals and permits to be issued and shall include:
- a. Final erosion and sediment control plan submitted according to COMAR 26.17.01.05;
 - b. Include construction drawings;
 - c. A report that includes sufficient information to evaluate the effectiveness of the proposed runoff and control design. The report shall include but is not limited to the following:
 - i. Geotechnical investigations, including soil maps, borings, site specific recommendations, and any additional information necessary for the final stormwater management design;
 - ii. Drainage area maps depicting predevelopment and post development runoff flow path segmentation and land use;
 - iii. Hydrologic computations of the applicable ESD and unified sizing criteria according to the Design Manual for all points of discharge from the site;
 - iv. Hydraulic and structural computations for all ESD practices and structural stormwater management measures to be used;
 - v. Narrative that supports the final stormwater management design; and
 - vi. Any other information required by the Town.

- d. Construction drawings that include but are not limited to the following:
- i. Vicinity map;
 - ii. North arrow;
 - iii. Existing and proposed topography;
 - iv. Proposed drainage area, including areas necessary to determine downstream analysis for proposed stormwater management facilities;
 - v. Proposed improvements, including the location of buildings and other structures, impervious surfaces, storm drainage facilities, and all grading;
 - vi. Location of existing and proposed structures and utilities;
 - vii. Existing and proposed easements and rights-of-way;
 - viii. Delineation of one-hundred-year floodplains and on-site tidal and nontidal wetlands, where applicable;
 - ix. Structural and construction details, including representative cross sections for all components of the proposed drainage system or systems and stormwater management facilities;
 - x. All necessary construction specifications;
 - xi. Sequence of construction;
 - xii. Data for total site area, disturbed area, new impervious areas, and total impervious areas;
 - xiii. Table showing the ESD and unified sizing criteria volumes required in the Design Manual;
 - xiv. Table of materials to be used for stormwater management facility planting;
 - xv. All soil boring logs and locations;
 - xvi. Inspection and maintenance schedule;
 - xvii. Owner's certification that all stormwater management construction will be done according to the approved stormwater management plan;
 - xviii. As-built certification signature block to be executed after project completion; and
 - xix. Any other information required by the Town.
- e. When the stormwater management plan involves direction of some or all runoff off the site, it is the responsibility of the applicant to obtain from the adjacent property owners any easements or other necessary property interests concerning flowage or water. Approval of a stormwater management plan does not create or

affect any right to direct runoff onto adjacent property without the property owner's permission.

§60-15. Preparation of plans.

- A. Stormwater management plans shall be prepared by a professional engineer, professional land surveyor, or landscape architect licensed by the State of Maryland.
- B. If a stormwater BMP requires either a dam safety permit from the Maryland Department of the Environment or shall pond approval by the Town, the stormwater management plan shall be prepared by a professional engineer licensed in the State of Maryland.

ARTICLE VII
Permits and Plan Approval

§60-16. Permits.

A grading or building permit may not be issued for any parcel or lot unless the final erosion and sediment control and stormwater management plan has been approved by the Town as meeting all of the requirements of this chapter and the Design Manual. Where appropriate, a 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 the public right-of-way;
- B. A recorded stormwater management maintenance agreement as described in Article X, §60-26, of this chapter;
- C. A performance bond, an irrevocable letter of credit, or other surety as described in this chapter;
- D. Permission from adjacent property owner as may be required.

§60-17. Permit fees and review fees.

- A. The Mayor and Council of the town of Millington shall establish a schedule of fees and collection procedure for stormwater management review and permits. Permit fees will be based on the relative complexity of the project and may cover the cost of the plan review, administration, and management of the permit process, and inspection of all projects subject to this chapter.

- B. No permits shall be issued, nor action taken on amendments or other matters pertaining to this chapter until the fee has been paid in full.

§60-18. Suspension and revocation.

Any grading or building permit issued by Millington 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 plan approval;
- B. Changes in site runoff characteristics upon which an approval or waiver was granted;
- C. Construction is not in accordance with the approved plans;
- D. Noncompliance with correction notice(s) or stop-work order(s) issued for the construction of the stormwater management practice;
- E. An immediate danger exists in a downstream area in the opinion of the Town.

§60-19. Conditions for approval.

In granting the plan approval, the Town may impose such conditions thereto as may be deemed necessary to ensure compliance with the provision of this chapter and the preservation of the public health and safety.

ARTICLE VIII
Sureties

§60-20. Performance bonds or other surety.

The developer is required to obtain a surety, irrevocable letter of credit, or other means of security acceptable by the Town and payable to the appropriate party as designed by the Mayor and Council of Millington, prior to the issuance of any building and/or grading permit for construction of a development requiring stormwater management. The amount of the security shall not be less than 125% of the total estimated construction cost of all stormwater management facilities and practices. The security so 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 the provisions of this section and other applicable laws and regulations, and any time limitations. The security shall not be fully released without a final inspection of the completed work by the Town, submission of as-built plans, and certification of completion by the Town that all stormwater management facilities and practices are being in compliance with the approved plan and the provisions of this chapter. A provision may be made for

partial release of the amount of the bond pro rata upon completion and acceptance of the various stages of development as specifically delineated, described, and scheduled on the required plans and specifications. The provision for partial release of the surety shall be specified by the Town, in writing, prior to stormwater management plan approval. The developer shall notify the Town upon completion of each stage that is ready for inspection.

ARTICLE IX

Inspections

§60-21. Inspection schedule and reports.

- A. The owner/developer shall notify the Town designee for stormwater inspection at least 48 hours before beginning any work in conjunction with site development, the stormwater management plan and completion of construction.
- B. Regular inspections shall be made and documented for each ESD planning technique and practice at the stages of construction specified in the Design Manual by Millington, its authorized representative, or a certified engineer licensed in the State of Maryland. At a minimum, all ESD and other nonstructural practices shall be inspected upon completion of final grading, the establishment of permanent stabilization, and before issuance of use and occupancy approval.
- C. Written reports shall be prepared for every inspection and shall include:
 - a. The date and location of the inspection;
 - b. Whether construction was in compliance with the approved stormwater management plan;
 - c. Any variations from the approved construction specifications; and
 - d. Any violations that exist.
- D. The owner/developer and on-site personnel shall be notified in writing when violations are observed. Written notification shall describe the nature of the violation and the required corrective action.
- E. Work shall not proceed until the work previously completed is approved by the appropriate inspector and the inspector furnishes the developer with the results of the inspection reports. The inspector should provide copies of the inspection report to the developer as soon as possible after completion of each required inspection.

§60-22. Inspection requirements during construction.

At a minimum, regular inspections shall be made and documented at the following specific stages of construction:

A. 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:
 - i. Core trenches for structural embankments;
 - ii. Inlet and outlet structures; antiseep collars or diaphragms, and watertight connectors; and
 - iii. 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, establishment of permanent stabilization.

B. Wetlands: at all stages specified for pond construction, during and after wetlands reservoir planting, and during the second growing season to verify a vegetation survival rate of at least 50%.

C. Infiltration trenches:

- a. During excavation to subgrade;
- b. During placement and backfill of underdrain systems and observation wells;
- c. During placement of geotextiles and all filter media;
- d. During construction of appurtenant conveyance systems, such as diversion structures, prefilters and filters, inlets, outlets, and flow distribution structures; and upon completion of final grading and establishment of permanent stabilization.

D. Infiltration basins: at all stages specified for pond construction, during placement of and backfill of underdrainage system.

E. Filtering systems:

- a. During excavation to subgrade;
- b. During placement and backfill of underdrain systems;
- c. During placement of geotextiles and all filter media;

- d. During construction of appurtenant conveyance systems, such as diversion structures, prefilters and filters, inlets, outlets, and flow distribution structures; and
 - e. Upon completion of final grading and establishment of permanent stabilization.
- F. Open channel systems:
- a. During excavation to subgrade;
 - b. During placement and backfill of underdrain 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.
- G. ESD practices: at the stage of construction specified in the Design Manual for each ESD planning technique and practice and, at a minimum, upon completion of final grading, the establishment of permanent stabilization and before issuance of use and occupancy approval.

§60-23. As-built plans.

Once a construction is complete, as-built plans certification shall be submitted by a professional engineer or professional land surveyor licensed in the State of Maryland to ensure the ESD techniques, treatment practices and structural stormwater management practices and conveyance systems comply with the specifications contained in the approved plan. At a minimum, as-built certification shall include a set of drawings comparing the approved plan with what was constructed. Other information shall be submitted as required by the Town.

§60-24. Notice to Maryland Department of the Environment.

Within 45 days of construction completion, the Town shall submit a notice of construction completion to the Maryland Department of the Environment on a form supplied by the Maryland Department of the Environment for each structural stormwater management practice. The type, number, total drainage area, and total impervious area treated by all ESD techniques and practices shall be reported to the Maryland Department of the Environment.

ARTICLE X

Maintenance

§60-24. Maintenance inspection.

- A. The Town shall ensure that preventive maintenance is performed by inspecting all ESD treatment systems and structural stormwater management measures. Inspections shall occur during the first year of operation and then at least once every three years thereafter. A maintenance agreement between the property owner and Millington shall be executed for privately owned ESD treatment practices and structural stormwater management measures as described in §60-26 of this chapter.
- B. Inspection reports shall be maintained by the Town for all ESD treatment systems and structural stormwater management measures. Inspection reports shall include the following:
 - a. Date of inspection;
 - b. Name of inspector;
 - c. An assessment of the quality of the stormwater management system related to ESD treatment practice efficiency and the control of runoff to the MEP;
 - d. The condition of:
 - i. Vegetation or filter media;
 - ii. Fences or other safety devices;
 - iii. Spillways, valves, or other control structures;
 - iv. Embankments, slopes, and safety benches;
 - v. Reservoir or treatment areas;
 - vi. Inlet and outlet channels or structures;
 - vii. Underground drainage;
 - viii. Sediment and debris accumulation in storage or forebay area;
 - ix. Any nonstructural practice to the extent possible; and
 - x. Any other item that could affect the proper function of the stormwater management system.
 - e. Description of needed maintenance.
- C. After notification is provided to the owner of the inspection results, the owner shall have 3 days, or other time frame to which the Town and the owner mutually agree to correct the deficiencies. The Town shall then conduct an inspection to ensure completion of the repairs.

- D. Failure to complete the repairs or repairs found to be improperly completed shall be considered violations and subject to the provisions of Article XI, §60-29, of this chapter.
- E. If, after an inspection by the town, the condition of a stormwater management facility presents an immediate danger to the public health or safety, because of an unsafe condition improper construction, or poor maintenance, the Town shall take such action as may be necessary to protect the public and make the facility safe. Any cost incurred by the Town shall be assessed against the owner(s).

§60-25. Maintenance agreement.

- A. Prior to the issuance of any building permit for which stormwater management is required, the Town shall require the applicant/owner to execute an inspection and maintenance agreement binding on all subsequent owners of land served by the private stormwater management facility. Such agreement shall provide for access to the facility at reasonable times for regular inspection by the Town, and for regular or special assessments of property owners to ensure that the facility is maintained in proper working condition to meet design standards and any provision established.
- B. The agreement shall be recorded by the applicant and/or owner with the Kent County Clerk of Court. A copy of the recorded agreement shall be returned to the Town.
- C. The agreement shall also provide that if, after notice by the Town to correct a violation requirement maintenance work, satisfactory corrections are not made by the owner(s) within a reasonable period of time (30 days maximum), the town 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, and there shall be a lien on the property, which may be placed on the tax bill and collected as ordinary taxes by Millington.

§60-26. Maintenance responsibility.

- A. The owner of the property on which work has been done pursuant to this chapter for private stormwater management facilities, or nay other person or agent in control of such property, shall maintain in good condition and promptly repair and restore all ESD practices, sate 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 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 on the stormwater management plan.

ARTICLE XI

Administration and Enforcement

§60-27. Appeals.

Any person aggrieved by the action of any official charged with the enforcement of this chapter 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 chapter in regard to a specific application shall have the right to appeal the action to the Millington Board of Appeals. 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.

§60-28. Violations and penalties.

- A. Any person convicted of violating the provisions of this chapter 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 total cost not to exceed \$50,000. Each day that a violation continues shall be a separate offense. In addition, the Town may institute injunctive, mandamus, or other appropriate action or proceeding of law to correct violations of this chapter. 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.
- B. Enforcement procedures for violations of the stormwater management provisions of this chapter consist of any one or a combination of the following actions:
- a. When the inspection agency or an inspector determines that a violation of the approved stormwater management plan has occurred, the inspector shall notify the on-site personnel or the

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

- b. A stop-work order shall be issued for the site by the Town if the violation persists. If a person is working without a permit, the inspection agency shall stop work on the site except activity necessary to provide erosion and sediment control.
- c. Bonds or securities shall be withheld, or the case may be referred for legal action.
- d. A civil action or criminal prosecution may be brought against any person in violation of the stormwater provisions of this chapter or the Design Manual. Millington may deny the issuance of any permits to an applicant when it determines that the applicant is not in compliance with the provisions of a building or grading permit or approved erosion and sediment control plan.
- e. Millington may suspend or revoke any grading or building permits after providing written notification to the permittee based on any of the following reasons:
 - i. Any violation(s) of the terms or conditions of the approved erosion and sediment control plan or permit;
 - ii. Noncompliance with violation notices or stop-work orders issued;
 - iii. Changes in site characteristics upon which plan approval and permit issuance was based;
 - iv. Any violation(s) of this chapter or any rules and regulations adopted under it.
- f. Any step in the enforcement process may be taken at any time, depending upon the severity of the violation.
- g. The Town shall receive complaints and initiate enforcement procedure when violations are confirmed. Any complaint received shall be acted upon routinely within three working days, and the complainant shall be notified of any action or proposed action routinely within seven working days of receipt of the complaint.