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Stormwater Management And
Sediment Control Ordinance

Horry County

South Carolina

2008
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ARTICLE I. GENERAL PROVISIONS

SECTION A. Title, purpose, objectives, application

Title

The provisions of this Ordinance shall constitute and be known as the "Stormwater Management and Sediment Control Ordinance for Horry County, South Carolina".

Purpose

The purpose of this Ordinance is to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased stormwater runoff associated with both future land development and existing developed land within the County. Proper management of stormwater runoff will minimize damage to public and private property, ensure a functional drainage system, reduce the effects of development on land and stream channel erosion, assist in the attainment and maintenance of water quality standards, enhance the local environment associated with the drainage system, reduce local flooding, maintain as nearly as possible the pre-developed runoff characteristics of the area, and facilitate economic development while mitigating associated flooding and drainage impacts.

Objectives

The objectives of this Ordinance include the following.

1. Protect, maintain, and enhance the short-term and long-term public health, safety, and general welfare. This objective will be achieved by:
   a. establishing minimum requirements and procedures to control the adverse effects of increased stormwater runoff associated with both future land development and existing developed land within Horry County;
   b. providing proper management of stormwater runoff to minimize damage to public and private property and reduce the effects of land disturbing activities on land and stream channel erosion;
   c. protecting, preserving, and enhancing water quality and fish and wildlife habitat within Horry County and in downstream receiving waters; and,
   d. alleviate street and property flooding and its adverse impacts caused by urban development.

2. Comply with State and Federal (EPA) stormwater regulations developed pursuant to the Clean Water Act. These requirements include:
   a. control pollutants from stormwater discharges associated with commercial and industrial activity and the quality of stormwater discharge from residential, commercial and industrial developments;
   b. prohibit illicit connections to the stormwater drainage system;
c. control discharges to the stormwater drainage system from spills and dumping or disposal of materials other than stormwater;

d. control, through intergovernmental agreements, contribution of pollutants from one municipal system to another.

3. Require plans to minimize the transport of pollutants to the local stormwater drainage system by requiring approval and implementation of Stormwater Management and Sediment Control Plans for activities which may have an adverse impact on Horry County waters.

4. Establish procedures, which minimize damage from flooding caused by development, while recognizing that natural fluctuations in water levels are beneficial.

5. Require construction, where possible, of drainage facilities/systems, which aesthetically and functionally approximate natural systems.

6. Establish procedures for the planning and implementation of stormwater improvements using a basin-wide or sub-basin approach which considers the total stormwater basin system, or major portions of the basin system, beyond individual subdivisions and developments.

7. To design, construct, and maintain stormwater management facilities to minimize mosquito-related problems.

8. To protect the water quality of the ocean and the physical characteristics of the beach area by minimizing the rates, volumes, and velocities of stormwater entering drainage systems discharging to the beach.

**Application**

The application of this Ordinance 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. In addition, if site characteristics indicate that complying with these minimum requirements will not provide adequate designs or protection for local property or residents, it is the designer's responsibility to exceed the minimum requirements as necessary. The County Engineer or designee shall be responsible for the coordination and enforcement of the provisions of this Ordinance.

**SECTION B. Definitions**

For the purpose of this Ordinance, the following terms, phrases and words, and their derivatives, shall have the meaning given herein.

1. **Accidental Discharge** shall mean a discharge prohibited by this Ordinance into the drainage system, which occurs by chance and without planning or consideration prior to occurrence.

2. **Adequate channel** shall mean a natural or man-made channel or pipe which is capable of conveying the runoff from the design storm events without flooding existing structures or causing property damage.
3. **As-built plan** shall mean a set of engineering or site drawings that delineate the specific permitted stormwater management facility (ies) and BMPs as actually constructed, as outlined in the Horry County Stormwater Design Criteria Manual.

4. **Berm** shall mean a mound of soil, either natural or man-made, intended to buffer land uses or limit access.

5. **Best management practices (BMPs)** shall mean a wide range of management procedures, schedules of activities, prohibitions on practices and other management practices which have been demonstrated to effectively control the quality and/or quantity of stormwater runoff and which are compatible with the planned land use.

6. **Board of Zoning Appeals** shall mean the Horry County Board of Zoning Appeals established pursuant to the South Carolina Planning Enabling Act of 1994.

7. **Buffer** shall mean an area within a property or site, generally adjacent to and parallel with the property line, either consisting of natural existing vegetation or created by the use of trees, shrubs, and/or berms, designed to continuously limit the view of and sound from the site to adjacent sites or properties.

8. **County** shall mean Horry County, South Carolina.

9. **County Council** shall mean the duly elected council within Horry County.

10. **County Engineer** shall mean the County Engineer of Horry County, South Carolina.

11. **Clean Water Act** shall mean the Federal Water Pollution Act, as amended (33 U.S.C. 1251 et.seq).

12. **Conveyance** shall mean stormwater features designed for the movement of stormwater through the drainage system, such as concrete pipes, ditches, depressions, swales, channels etc.

13. **Culvert** shall mean a structure designed to convey a watercourse under a roadway, railway, pedestrian walk, or through an embankment.

14. **Design report** shall mean the report that accompanies the Stormwater Management and Sediment Control Plan and includes data used for engineering analysis, results of all analysis, design and analysis calculations (including results obtained from computer programs), and other engineering data that would assist the County Engineer in evaluating proposed stormwater management facilities.

15. **Design storm events** shall mean the frequency storm used for the design of stormwater management facilities (ten-year through twenty-five year frequency storms).

16. **Designer** shall mean a registered professional who is permitted to prepare plans and studies required by this Ordinance.

17. **Detention structure** shall mean a permanent stormwater management structure whose primary purpose is to temporarily store stormwater runoff and release the stored runoff at controlled rates.
18. **Developed land use conditions** shall mean the land use conditions according to the current County Land Use Map or proposed site plan. Also the conditions which exist following the completion of the land disturbing activity in terms of topography, vegetation, land use and rate, quality, volume or direction of stormwater runoff.

19. **Developer** shall mean the legal or beneficial owner(s) of a lot of any land included in a proposed development. Also, the holder of an option or contract to purchase, or any other person having enforceable proprietary interest in such land.

20. **Development activity** should generally mean any of the following actions undertaken by a public or private individual or entity:
   a. the division of a lot, tract or parcel of land into two (2) or more lots, plots, sites, tracts, parcels or other divisions by plat or deed;
   b. the construction, installation or alteration of a structure, impervious surface, or drainage facility;
   c. any land change, including, without limitation, clearing, tree removal, grubbing, stripping, dredging, grading, excavating, transporting and filling of land; and,
   d. adding, removing, exposing, excavating, leveling, grading, digging, burrowing, dumping, piling, dredging, or otherwise disturbing the soil, vegetation, and mud, sand or rock of a site.

21. **Drainage System** shall mean all structures used to convey stormwater runoff.

22. **Easement** shall mean a grant of one (1) or more property rights by a property owner to or for use by any person, firm, corporation, the general public, or another person or entity. Not inclusive of fee simple ownership.

23. **Erosion** shall mean the wearing away of land surface by the action of wind, water, gravity, ice, or any combination of those forces.

24. **Erosion and sediment control** shall mean the control of solid material, both mineral and organic, during a land disturbing activity to prevent its transport out of the disturbed area by means of air, water, gravity, or ice.

25. **Exemption** shall mean those land disturbing activities that are not subject to the sediment and stormwater requirements contained in this Ordinance.

26. **Existing land use conditions** shall mean the land use conditions shown on the March 1998 aerial photographs available from the County. Engineering hydrologic coefficients to be used for existing land use conditions are contained in the Horry County Stormwater Design Criteria Manual.

27. **Filter strips** shall mean vegetated sections of land designated to accept runoff as overland sheet flow from upstream developments.

28. **Flood** shall mean a general and temporary condition of partial or complete inundation of land areas from the overflow of inland waters, tidal conditions, or the unusual and rapid accumulation of runoff of surface waters from any source.

29. **Grading** shall mean excavating, filling (including hydraulic fill) or stockpiling of earth material or any combination thereof, including the land in its excavated or filled condition.
30. **Illicit connection** shall mean a connection to the drainage system of any discharge that is not composed entirely of stormwater runoff and is expressly prohibited by this Ordinance.

31. **Impervious** shall mean the condition of being impenetrable by water.

32. **Imperviousness** shall mean the degree to which a site is impervious.

33. **Impervious surface** shall mean a surface that has been highly compacted or covered with a layer of material so that it is highly resistant to infiltration by water.

34. **Infiltration** shall mean the passage or movement of water through the soil profile.

35. **Land disturbing activity** shall mean any use of the land by any person that results in a change in the physical characteristics or topography that may cause erosion and contribute to sediment and alter the quality and/or quantity of stormwater runoff.

36. **Linear Projects** shall mean any project that is over 1,000 linear feet.

37. **Lot** shall mean a piece, parcel, tract or plot of land intended as a unit for building development or other purpose, for purposes of sale, rent, or lease.

38. **Maintenance** shall mean any action necessary to preserve stormwater management facilities in proper working condition, in order to serve the intended purposes set forth in this Ordinance and to prevent structural failure of such facilities. Maintenance shall not include actions taken solely for the purpose of enhancing the aesthetics aspects associated with stormwater management facilities and BMPs.

39. **Minor Subdivision** shall mean the division of land as defined in the current Horry County Land Development Regulations.

40. **Non-erodible** shall mean a material, e.g., natural rock, riprap, concrete, plastic, etc., that will not experience surface wear due to natural forces of wind, water, ice, gravity or a combination of those forces.

41. **Nonpoint source pollution** shall mean pollution contained in stormwater runoff from undefined, diffuse sources.

42. **One hundred-year frequency storm** shall mean a storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 100 years. It also may be expressed as an exceedance probability with a 1 percent chance of being equaled or exceeded in any given year.

43. **On-site stormwater management** shall mean the design and construction of a facility necessary to control stormwater runoff within and for a single development.

44. **Owner** shall mean the person in who is vested the fee ownership, dominion, or title of the property. This term may also include a tenant, if chargeable under his lease for the maintenance of the property, and any agent of the owner or tenant including a developer.

45. **Person** shall mean any association, company, corporation, firm, individual, organization, or
partnership, singular or plural, of any kind.

46. **Person responsible for the land disturbing activity** shall mean the:
   a. person who has or represents having financial or operational control over the land disturbing activity; and/or
   b. landowner or person in possession or control of the land who directly or indirectly allowed the land disturbing activity or has benefited from it or who has failed to comply with any provision of this Ordinance.

47. **Pollution** shall mean the contamination or other alteration of any water’s physical, chemical or biological properties, including change in temperature, taste, color, turbidity, or odor of such waters or the discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters that is harmful, detrimental or injurious to the public health, safety or welfare or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life.

48. **Preliminary plat** shall mean the preliminary plat pursuant to the current Horry County Land Development Regulations.

49. **Private** shall mean property or facilities owned and maintained by individuals, corporations, and other organizations and not by Horry County.

50. **Procedure** shall mean a procedure adopted by Horry County to implement a regulation or regulations adopted under this Ordinance, or to carry out other responsibilities as may be required by this Ordinance or other codes, ordinances, or resolutions of Horry County.

51. **Regional stormwater management** shall mean the design and construction of a facility necessary to control stormwater runoff within or outside a development and for one or more developments.

52. **Registered Civil Engineer** shall mean a registered professional engineer in good standing with the South Carolina Board of Registration for Professional Engineers and Land Surveyors.

53. **Registered Land Surveyor** shall mean a professional registered land surveyor in good standing with the South Carolina Board of Registration for Professional Engineers and Land Surveyors.

54. **Registered Landscape Architect** shall mean a landscape architect properly registered and licensed to conduct work in South Carolina.

55. **Responsible personnel** shall mean any foreman, superintendent, or similar individual that is the on-site person in charge of land disturbing activities.

56. **Retention structure** shall mean a permanent structure whose primary purpose is to permanently store a given volume of stormwater runoff. Release of the given volume is by infiltration, overflow structures, and/or evaporation.

57. **Sediment** shall mean solid particulate matter, both mineral and organic, that has been or is being transported by water, air, ice, or gravity from its site of origin.

58. **Site** shall mean any lot, plot, parcel or tract of land.
59. Single family residence – separately built shall mean a noncommercial dwelling that is occupied exclusively by one family and not part of a residential subdivision development.

60. Stabilization shall mean the installation of vegetative or structural measures to establish a soil cover to reduce soil erosion by stormwater runoff, wind, ice and gravity.

61. Stage work or stage construction shall mean a plan for the staged construction of stormwater facilities where portions of the facilities will be constructed as different stages of the proposed development are started or completed.

62. Stop-work order shall mean an order directing the person responsible for the land disturbing activity to cease and desist all or any portion of the work which violates the provisions of this Ordinance.

63. Stormwater Concept Plan shall mean the overall proposed concept for a storm drainage system to serve the entire development including future phases. The concept plan shall include stormwater management structures and BMPs, and supporting documentation as specified in this Ordinance and the Horry County Stormwater Management Design Manual, for each proposed private or public development to the extent permitted by law. Also included are the supporting engineering calculations and results of any computer analysis, if necessary.

64. Stormwater management shall mean, for: quantitative control, a system of vegetative or structural measures, or both, that control the increased volume and rate of stormwater runoff caused by manmade changes to the land; qualitative control, a system of vegetative, structural, or other measures that reduce or eliminate pollutants that might otherwise be carried by stormwater runoff.

65. Stormwater Management and Sediment Control Plan shall mean the set of drawings and other documents that comprise all of the information and specifications for the drainage systems, structures, concepts and techniques that will be used to control stormwater and sediment as required by this Ordinance and the Horry County Stormwater Design Criteria Manual. Also included are the supporting engineering calculations and results of any computer analysis.

66. Stormwater Design Criteria Manual (Horry County) shall mean the current version of the manual of design, performance, and review criteria for stormwater management practices, prepared under the direction of the County Engineer. The original of this manual may be inspected at the office of the County Engineer, and copies may be obtained from the County Stormwater Department, in payment of a reasonable fee. Those persons seeking reliance on the manual shall assume the burden of ensuring that the manual to which they refer is the most current version.

67. Stormwater management facilities shall mean those structures and facilities that are designed for the collection, conveyance, storage, treatment and disposal of stormwater runoff into and through the drainage system. In most cases stormwater management facilities will refer to facilities whose primary purpose is related to the quantity of stormwater while BMPs primary purpose will be related to water quality concerns of stormwater.

68. Stormwater runoff shall mean the direct response of a watershed to precipitation and includes the surface and subsurface runoff that enters a ditch, stream, storm drain or other concentrated flow during and following the precipitation.

69. Subdivision shall mean a division, whether by deed, plat, or other recorded or unrecorded
instrument, of a tract or parcel of land into two (2) or more lots, building sites, or other divisions. The land is divided for sale, lease, mortgage, or building development, whether immediately or in the future. The definition includes all land divisions involving a new street or change in existing streets. It includes re-subdivisions involving the further division or relocation of lot lines of any lot lines of any lot or lots within a previously approved or recorded subdivision as well as combinations of recorded lots. The following exceptions are included within this definition only for the purpose of requiring that Horry County be informed and have a record of the subdivisions.

a. Combining or re-combining portions of previously platted lots where the total number of lots is not increased and the resultant lots are equal to the ordinance standards.

b. Dividing land into parcels of five (5) acres or more where no new street is involved. The Planning Commission must receive plats of these exceptions as information and indicate that fact on the plats.

c. Combining or re-combining entire lots of record where no new street or change of existing street in involved.

70. **Swale** shall mean a structural measure with a lining of grass, riprap or other materials, which can function as a detention structure or BMP and convey stormwater runoff without causing erosion.

71. **Ten-percent point** is the location in the drainage system downstream from the proposed development, where the proposed development represents less than ten (10) percent of the total watershed draining to this location.

72. **Ten-year frequency storm** shall mean a storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 10 years. It may also be expressed as an exceedance probability with a 10 percent chance of being equaled or exceeded in any given year.

73. **Twenty-five year frequency storm** shall mean a storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 25 years. It may also be expressed as an exceedance probability with a 4 percent chance of being equaled or exceeded in any given year.

74. **Variance** shall mean the modification of the minimum stormwater management requirements for specific circumstances where strict adherence of the requirements would result in unnecessary hardship and not fulfill the intent of this Ordinance.

75. **Waiver** shall mean the relinquishment from stormwater management requirements by the County Engineer for a specific land disturbing activity on a case-by-case review basis, based on detailed engineering analysis submitted by the owner or his/her representative.

76. **Water quality** shall mean those characteristics of stormwater runoff from a land disturbing activity that relate to the physical, chemical, biological, or radiological integrity of water.

77. **Water quantity** shall mean those characteristics of stormwater runoff that relate to the rate and volume of the stormwater runoff within the development and to downstream areas resulting from land disturbing activities.

78. **Watershed** shall mean the drainage area contributing stormwater runoff to a single point.

79. **Wetland** shall mean those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include
swamps, marshes, bogs, and similar areas as determined by the Army Corps of Engineers.

SECTION C. Scope of Ordinance

1. No person shall conduct any land disturbing activities without having provided for appropriate stormwater management measures that control or manage runoff, in compliance with this Ordinance, unless exempted in Article I, Section E below.

2. The provisions of this Ordinance shall apply throughout the unincorporated areas in Horry County, South Carolina.

3. The County Stormwater Department shall be responsible for the coordination and enforcement of the provisions of this Ordinance, and shall have the authority to issue Summons for violations hereof.

4. The Horry County Stormwater Design Criteria Manual shall give guidance to persons preparing Stormwater Management and Sediment Control Plans, and designing or operating stormwater management systems.

5. The application of this Ordinance and the provisions expressed herein shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other local requirements authorized by State statute. Where other requirements are more stringent those shall apply. This Ordinance does not eliminate the necessity for obtaining other permits as may be required by other governmental entities.

6. The same design standards will be used for drainage systems, stormwater management facilities, and BMPs that will be either privately or publicly owned or maintained.

7. No person shall conduct any land disturbing activity that will displace sediment onto adjacent lot(s) or roads both during and after construction. The property must be designed to account for all grading and drainage issues that will keep the stormwater from running off their property and creating a nuisance.

SECTION D. Powers of the Department

1. The County Stormwater Department shall have the power to administer and enforce all regulations and procedures adopted to implement this Ordinance, including the right to maintain an action or procedure in any court of competent jurisdiction to compel compliance with or restrain any violation of this Ordinance, and to issue Summons pursuant to the provisions of the County Summons Ordinance, Chapter 1 § 1.12(a), which shall be amended to include reference to the authority of the County Stormwater Department to issue Summons in this regard.

2. The County Stormwater Department can:

   a. administer, coordinate and oversee, design, construction, and operation and maintenance of County stormwater facilities and conveyances;
b. establish or oversee establishment of development standards and guidelines;

c. determine the manner in which stormwater facilities should be operated;

d. inspect private systems which discharge to a public drainage system;

e. require compliance with maintenance requirements;

f. advise the other County Departments on issues related to stormwater;

g. protect facilities and properties controlled by the County and prescribe how they are used by others;

h. require proposed developments, not exempt from this Ordinance, to comply with the terms of this Ordinance;

i. develop programs or procedures to control the discharge of pollutants into the public drainage system; and

j. implement the stormwater management program for Horry County, South Carolina.

SECTION E. Exemptions from requirements

The following land disturbing activities are exempt from the provisions of the Ordinance and the requirements of providing stormwater management measures. Even if exempt from this Ordinance, the following, as well as all land disturbing activity is not allowed to divert water to adjacent property to cause a nuisance and/or property damage and should comply with the intent of this ordinance. These activities are also not exempt from implementing proper sediment and erosion control best management practices.

1. Construction or improvement of a single-family residence (single family residence – separately built) or their accessory buildings, or mobile home, that is separately built and not part of multiple construction or a subdivision development approved under this Ordinance. If included in a subdivision plan, all land disturbing activities must follow the stormwater management and sediment control plan that has been approved for the subdivision.

2. Minor land disturbing activities that do not disturb more than one half (0.5) acre of land area.

3. Any maintenance or renovation of an existing structure or system not materially changing or affecting the rate, concentration or volume of stormwater runoff.

4. Land disturbing activities for agricultural uses.

5. Land disturbing activities undertaken on forest land for the production and harvesting of timber and timber products under the condition that the practices included in the South Carolina Forestry Commission’s “Best Management Practices for Forestry” are implemented.
To assist in the design and evaluation of stormwater management facilities in Horry County, a Stormwater Design Criteria Manual has been developed. Design procedures and criteria are presented for conducting hydrologic and hydraulic evaluations and evaluation of Best Management Practices (BMPs). Although the intention of the manual is to establish uniform design practices, it neither replaces the need for engineering judgment nor precludes the use of information not presented. Other accepted engineering procedures may be used to conduct hydrologic and hydraulic studies if approved by the County. This Stormwater Design Criteria Manual is adopted by Horry County by reference in this Ordinance. The Horry County Stormwater Design Criteria Manual will be reviewed and updated annually, if necessary, by the County Engineer and any changes adopted by the Horry County Council by resolution.

ARTICLE II. STORMWATER CONCEPT AND STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLANS

SECTION A. Scope of plans

1. The following items relate to the general scope of plans required by this Ordinance.

   a. In developing plans for subdivisions, individual lots in a residential development shall not be considered to be separate land disturbing activities and shall not require individual permits. Instead the subdivision development, as a whole, shall be considered to be a single land disturbing activity. Hydrologic parameters that reflect the ultimate subdivision development shall be used in all engineering calculations.

   b. If individual lots or sections in a subdivision are being developed by different property owners, all land disturbing activities related to the subdivision shall be covered by the approved Stormwater Management and Sediment Control Plan for the subdivision. A statement shall be included on the final plat that all activities, including activities by individual lot owners, will be carried out in accordance with the approved Stormwater Management and Sediment Control Plan for the subdivision.

   c. For developments that have different planned phases of development, if all phases are covered by the approved Concept or Stormwater Management and Sediment Control Plan, one permit will be given for the entire development so that new permits will not be needed for each phase of development. A detailed phasing plan shall be required that demonstrates the sequencing of sediment controls and the stormwater management facilities will be adequate for each phase.

   d. Subdivisions, which received preliminary plat or final Planned Development District (PDD) approval prior to the effective date of this Ordinance, are exempt from these requirements. Development of new phases of existing subdivisions shall comply with the provisions of this Ordinance.

2. In subdivisions, the following requirements apply.

   a. The design surface runoff across lots shall not have erosive velocities.
b. Quantities of surface runoff greater than 3 cfs that flow through lots shall be collected and conveyed in a system of open channels, closed conduits, or a combination of both.

c. Lots should generally be graded in such a manner that surface runoff does not cross more than two lots before it is collected in a system of open channels, closed conduits, or a combination of both.

3. General Grading Guidelines:

a. Must also meet Horry County’s most recent Flood Damage and Control Ordinance, or building Code whichever is more strict.

b. The first floor elevation of all structures shall be at least 12 inches above the center of the road in front of the structure. Garages shall be a minimum of 9 inches above the centerline of the road and have a minimum of 6 inches of fall away from the structure. In all cases, positive drainage shall be established away from the structure. This regulation does not apply to sheds, barns, and other auxiliary buildings.

c. If a crawlspace is proposed the bottom of the floor structure shall be a minimum of 24” above the finished grade.

d. In cases where the lot is designed to be lower than the road and is intended to drain away from the road to a rear or side lot swale, ditch, pond or water course, the first floor shall be at least 12 inches above all surrounding ground at a distance of 10 feet around the structure.

4. For all land disturbing activities, concentrated stormwater runoff leaving a development site must be discharged directly into a well-defined, natural or man-made offsite receiving channel or pipe. If the receiving channel is found to be inadequate, the developer must incorporate measures to either improve the receiving channel to an adequate condition, or detain (retain) runoff on the site to a level that can be accommodated by the receiving channel. Newly constructed channels shall be designed as adequate channels. Velocity dissipation devices and/or erosion control measures shall be placed at the outfall of all stormwater management facilities as necessary to provide a protected flow path(s). If a stormwater system is discharged into existing wetlands, the proposed water surface elevation, within and adjacent to the wetlands, must be determined for design conditions.

The development site should be designed to maximize the amount of rainfall that infiltrates into the soils and minimize the amount of direct flow into public drainage facilities, adjoining streets, waterbodies, watercourses, and wetlands, to the extent feasible.

5. Design configurations, which create stagnant water conditions, such as hydraulically dead end canals, are prohibited regardless of the type of development.

6. Concentrated stormwater shall not be discharged directly into wetlands without first routing through some type of approved water quality BMP.

7. Linear projects shall require a detailed Erosion and Sediment control plan as well as a SWPPP as required under DHEC regulations.
8. For redevelopment sites show the ten (10) and twenty five (25) – year flood elevations for any Special Flood Hazard Areas on or within one hundred (100) feet of the property. The source of these elevations shall also be shown on the plans.

9. A 10% downstream analysis shall be performed to determine the effects from the project downstream and any potential flooding issues. The analysis shall include but not limited to the following:

- Develop hydrographs for the design storms at the discharge point(s) from the proposed development. The proposed developed land use conditions within the development should be used to develop these hydrographs.
- Route these hydrographs through the downstream drainage system to a point downstream where the size of the proposed development represents 10-percent or less of the total drainage area that contributes runoff to this point. This point is called the 10-percent point.
- For all points of interest in the downstream drainage system, between the exit of the proposed development to the 10-percent point, develop hydrographs from the contributing areas. Existing land use conditions should be used for this analysis for all areas not included in the proposed development. Points of interest would include locations where drainage from sub-watersheds intersects, where known drainage and flooding problems exist, where structures might be affected by storm runoff, etc. As a minimum, hydrographs at the 10-percent point should be developed with and without the proposed development. The point of interest shall be noted in the narrative and on a map detailing the flow path.
- A comparison of the routed hydrograph from the proposed development with the other downstream hydrographs should indicate whether or not the proposed development will increase downstream peak flows or have little or no affect on these peak flows.
- If major constructions (e.g., storage facilities, undersized culverts) are present in the downstream analysis area that will affect the general characteristics of the hydrographs, the associated engineering parameters of these constructions should be included in the analysis.
- In most cases, general topographic maps, soils information, and a field check of the drainage system will provide the data needed for this analysis.
- Detailed survey information may be required.

SECTION B. Stormwater Concept and Stormwater Management and Sediment Control Plans and Approval Process

1. Unless granted an exemption from this Ordinance, a Stormwater Concept Plan for each land disturbing activity shall be submitted for review by the County Engineer prior to submission of the Stormwater Management and Sediment Control Plan and construction plans for the entire land disturbing activity, or any portion thereof.

2. The Stormwater Concept Plan may be reviewed, if needed, with the designer, after County review, where it will be approved, approved with changes, or rejected. If rejected, changes, additional analysis, or other information needed to approve the next submittal of the Concept Plan shall be identified. The County review of the Stormwater Concept Plan will be completed within fifteen
(15) working days from and after the receipt of the plan.

3. Upon approval of the Concept Plan, the applicant may proceed with the development of the Stormwater Management and Sediment Control Plan, prepared in accordance with the Horry County Stormwater Design Criteria Manual (as part of the construction plans).

4. All plans which are subject to approval by the Horry County Planning Commission shall be submitted to the Planning Department and shall be subject to the review and approval time frames established by the Planning Commission. The required set of plans will correspond to those established by the Planning Department. These plans shall not be forwarded to the Horry County Planning Commission for their review and consideration until the Stormwater Management and Sediment Control Plans have been approved by the Stormwater Department.

5. All other Stormwater Management and Sediment Control Plans as required by this Ordinance shall be submitted to the Horry County Stormwater Department for review and approval. The applicant shall submit two (2) copies (unless the plans are submitted digitally) of the final plans in accordance with the Horry County Stormwater Design Criteria Manual. Within thirty (30) calendar days from and after receipt of the plans, the County Engineer shall issue a decision approving, rejecting, or conditionally approving the plans with modifications. The review and approval time frames for all subsequent submittals on the same plans, if required, shall also be thirty (30) calendar days.

6. The County Engineer may accept and submit into the review process a Stormwater Concept Plan if it identifies the location and type of facilities to be constructed in sufficient detail to accurately estimate construction costs and the County Engineer determines that a Stormwater Management and Sediment Control Plan is not needed. If accepted under this provision, the Stormwater Concept Plan then becomes the Stormwater Management and Sediment Control Plan for this land disturbing activity.

7. All preliminary plats of the development shall be consistent with the Stormwater Concept Plan required in Paragraph 1 above.

8. Should any Stormwater Management and Sediment Control Plan involve any stormwater management facilities or land to be dedicated to public use, the same information shall also be submitted for review and approval to the department having jurisdiction over the land or other appropriate departments or agencies identified by the County Engineer for review and approval. This Stormwater Management and Sediment Control Plan shall serve as the basis for all subsequent construction.

9. A Stormwater Management and Sediment Control Plan shall not be considered approved without the inclusion of an approval stamp with a signature and date on the plans. The stamp of approval on the plans is solely an acknowledgement of satisfactory compliance with the requirements of these regulations. The approval stamp does not constitute a representation or warranty to the applicant or any other person concerning the safety, appropriateness or effectiveness of any provision, or omission from the Stormwater Management and Sediment Control Plan.

10. Upon approval of the Stormwater Management and Sediment Control Plan an approval letter shall be issued along with the approved NOI. The approvals shall be submitted to DHEC within 1 year for a NPDES permit, if after one year the NPDES permit has not been applied for then the approvals shall become null and void. The plans shall have to be resubmitted or a variance will have to be given by the County Engineer. Upon receiving the NPDES permit from DHEC Horry County shall issue a Stormwater permit which shall remain valid for five (5) years from the date of issuance. If
the project has not been started, or completed within the required time frame another permit will have to be applied for along with a new NPDES permit.

11. A Notice of Intent (as per DHEC most recent approved forms) shall be submitted along with the Stormwater Management and Sediment Control Plans, and shall be completely filled out and signed by the owner or person financially responsible for the project.

12. A properly executed Stormwater Facility Maintenance Agreement shall be submitted with the permit application.

SECTION C. Plan Requirements

Concept Plan

Concept Plans shall include as a minimum the following:

1. A narrative description of topographic and soil conditions, hydrologic conditions of the upstream drainage basin, and the condition of the downstream drainage system (outfall) from the development site.

2. A narrative description of the stormwater management facilities to be used.
   a. A narrative of the existing tailwater conditions and any assumptions made in arriving at the tailwater conditions used in the design.
   b. An analysis and details for any streams that may be affected or within ½ mile radius of a water body listed on the 303D DHEC list or if a TMDL is established. If the project does not fall into these criteria then this shall be clearly stated in the narrative.

3. A general description of adjacent property and a description of existing structures, buildings, and other fixed improvements located on surrounding properties.

4. A plan to accompany the narrative which shall contain:
   - a vicinity map, using the appropriate USGS quadrangle sheet, showing the location of the proposed project in relation to roadways, jurisdictional boundaries, streams and rivers;
   - the maximum scale shall be 1 inch = 200 feet or other scale approved by the County Engineer in order to properly delineate the property;
   - the boundary lines of the site on which the work is to be performed;
   - all areas within the site which will be included in the land disturbing activities shall be identified and the total disturbed area calculated;
   - a topographic map of the site showing existing and proposed contours to include 25 ft outside of all property lines and further if Engineering judgment deems necessary;
   - anticipated starting and completion dates of the various stages of land disturbing activities and the expected date the final stabilization will be completed;
   - location of all existing stormwater conveyances, within the study area, such as ditches, storm pipes, easements, etc.;
the location of proposed temporary and permanent vegetative and structural stormwater management control measures, BMPs, and easements;
location and configuration of all proposed parking lot(s) and landscaping buffers;
location and configuration of existing and proposed impervious areas such as buildings, roadways, etc. (for single-family developments, road and lot layout is sufficient);
to be approved as the final Stormwater Management and Sediment Control Plan by the County Engineer, the Concept Plan must be signed and sealed by a professional as outlined in Section L of this Ordinance – Professional Registration Requirements.

9. To be approved by the County Engineer as the final Stormwater Management and Sediment Control Plan, the Concept Plan shall contain a statement that the land disturbing activity will be accomplished pursuant to the Concept Plan and that the County has the right to conduct on-site inspections.

10. Stormwater Pollution Prevention Plan consistent with DHEC guidelines. To include all elements as required by DHEC regulations.

11. Stormwater Management and Sediment Control Plans shall include designation of all easements needed for inspection and maintenance of the proposed drainage system and stormwater management facilities and BMPs. As a minimum, easements shall have the following characteristics:

- Provide adequate access to all portions of the proposed drainage system, stormwater management structures and BMPs.
- Provide sufficient land area for maintenance equipment and personnel to adequately and efficiently maintain the system.
- Prohibit all fences and structures, which would interfere with access to the easement areas and/or the maintenance function of the drainage system.
- Drainage easements for those systems or portions of systems dedicated to the County for maintenance shall be provided in accordance with the following criteria:

1) The width of piped drainage easements shall be determined using the following equation:

   Easement Width = [Pipe Depth (in feet) x 3] + [Pipe Diameter (in feet)]

   The calculated piped drainage easement shall always be rounded up to the next higher 5-foot increment. Also, the minimum width for any piped drainage easement shall be twenty (20) ft.

2) Minimum pipe size acceptable for County maintenance shall be fifteen (15) inches.

3) For multiple pipes, box culverts or multiple box culverts, the easement width shall be the outside diameter or width of the system plus ten (10) feet on one side and fifteen (15) feet on the other side of the system, but the minimum total shall not be less than thirty (30) feet.

4) For open channel easements, the following widths shall apply:

   a) When the top width of the channel is equal to or less than fifteen (15) feet, the following equation shall be used:

      Easement Width = (25-foot offset on one side) + (Channel Top Width) + (5-foot offset on the other side)

   b) When the top width of the channel exceeds fifteen (15) feet, the following equation shall be used:

      Easement Width = (25-foot offset on one side) + (Channel Top Width) + (25-foot offset on the other side)

5) For minor swales along lot lines where the side slopes are equal to or flatter than 5:1 and the depth does not exceed twenty four (24) inches, a drainage easement not less than twenty (20) feet
in width shall be provided.
6) Open ditches within street rights-of-way or along roadways shall have side slopes no steeper than 3:1. Open ditches along rear lot lines shall have side slopes no steeper than 3:1.
7) All perimeter ditches shall be cleaned and regraded for positive flow regardless of being public or private.
8) All roadside ditches deeper than thirty-six (36) inches shall be piped.
9) All Stormwater Storage facilities and Infiltration systems shall not be located within 50 feet of a potable water well.
10) For detention basins and other stormwater management facilities, a maintenance easement shall be provided around the facility and shall be 12 ft. from the top of bank or from the normal water elevation when the side slopes are 5:1 or flatter.

Stormwater Management and Sediment Control Plan

Stormwater Management and Sediment Control Plans shall include as a minimum the following.

1. A vicinity map, using the appropriate USGS quadrangle sheet, indicating a north arrow, scale, boundary lines of the site, and other information necessary to locate the development site.

2. The maximum scale shall be 1 inch = 100 feet.

3. The existing and proposed topography of the development site except for individual lot grading plans in single family subdivisions.

4. Physical improvements on the site, including present development and proposed development.

5. Location, dimensions, elevations, and characteristics of all existing and proposed stormwater management facilities.

6. All areas within the site, which will be included in the land disturbing activities, shall be identified and the total disturbed area calculated.

7. The location of BMPs for stormwater quality and sediment control including temporary and permanent vegetative and structural measures.

8. An anticipated starting and completion date of the various stages of land disturbing activities and the expected date the final stabilization will be completed.

9. A determination that no occupied first floor elevation of any structure is below the 100-year plus one foot flood elevation.

10. For subdivisions, directional arrows should be shown on the plan for each planned lot in the subdivision to show the drainage direction. The direction of flow cannot be changed without a revision to the plan.

11. Stormwater Management and Sediment Control Plans shall include designation of all easements needed for inspection and maintenance of the drainage system and stormwater management facilities and BMPs. As a minimum, easements shall have the following characteristics.
   a. Provide adequate access to all portions of the drainage system, stormwater management structures and BMPs.
b. Provide sufficient land area for maintenance equipment and personnel to adequately and efficiently maintain the system, as outlined in the Horry County Stormwater Design Criteria Manual.

c. Restriction on easements shall include prohibiting all fences, berms, and structures, which would interfere with access to the easement areas and/or the maintenance function of the drainage system.

12. To improve the aesthetic aspects of the drainage system, a landscape plan for all portions of the drainage system shall be part of the Stormwater Management and Sediment Control Plan. This landscape plan shall address the following.
   a. Tree saving and planting plan.
   b. Types of vegetation that will be used for stream bank stabilization, erosion control, sediment control, aesthetics and water quality improvement.
   c. Any special requirements related to the landscaping of the drainage system and efforts necessary to preserve the natural aspects of the drainage system.
   d. Landscaping shall not be installed within the easement unless it is a part of the drainage system (for example Low Impact Development).

13. The Stormwater Management and Sediment Control Plan shall include all engineering calculations needed to design the system and associated structures including existing and developed velocities, Hydraulic Grade Lines, peak rates of discharge, and hydrographs of stormwater runoff at all existing and proposed points of discharge from the site. A table on the grading and drainage plan page shall be utilized to provide the following information:
   a. Pre and post stormwater discharges for the 10, 25, and 100 yr storms
   b. Tailwater conditions used
   c. Rainfall intensities used
   d. Shape factors (peaking factors used)
   e. Pond information (Normal Water Level (NWL),Top of Bank (TOB), bottom of pond, 25yr and 100yr water elevations)

14. Description of site conditions around points of all surface water discharge including vegetation and method of flow conveyance from the land disturbing activity.

15. Construction and design details for structural controls.

16. If the County Engineer’s review of the Stormwater Management and Sediment Control Plan and/or design report indicates that there may be drainage or flooding problem at the exit to the proposed development or at any location between the exit point and the 10 percent downstream point, the County Engineer may require:
   a. water surface profiles plotted for the conditions of existing and developed conditions for the 25-year design storm,
   b. water surface profiles plotted for the conditions of existing and developed conditions for the 100-year design storm, and
   c. elevations of all structures potentially damaged by 25- and/or 100-year flows.

17. All Stormwater Management and Sediment Control Plans submitted for approval shall contain a statement by the person responsible for the land disturbing activity that the land disturbing activity will be accomplished pursuant to the approved plan and that responsible personnel will be assigned to the project.
18. All Stormwater Management and Sediment Control Plans shall contain a statement by the person responsible for the land disturbing activity, of the right of the County Engineer to conduct on-site inspections.

19. A Stormwater Pollution Prevention Plan as per DHEC guidelines. To include all elements as required by DHEC regulations.

SECTION D. Plan hydrologic criteria

The hydrologic criteria to be used for the Stormwater Concept and Stormwater Management and Sediment Control Plans shall be as follows.

1. 25-year design storm for all culverts, open channels (including streams, creeks, etc.), stormwater conveyance systems and drainage designs. Culverts and other stormwater conveyance systems under arterial roads shall be designed using the 50-year design storm.

2. 10-year and 25-year design storms for all detention and retention storage facilities using procedures contained in the Stormwater Design Criteria Manual or approved by the County Engineer.

3. All drainage designs shall be checked using the 100-year storm, plus one foot, for analysis of local flooding and possible flood hazards to adjacent structures and/or property.

4. All hydrologic analysis will be based on land use conditions as specified in Section E, of this article.

5. For the design of storage facilities, a secondary outlet device or emergency spillway shall be provided to discharge the excess runoff in such a way that no danger of loss or life or facility failure is created. The size of the outlet device or emergency spillway shall be designed to pass the 100-year storm as a minimum requirement.

6. In determining downstream effects from stormwater management structures, BMPs, and the development, hydrologic-hydraulic engineering studies shall extend downstream to a point where the proposed development represents less than ten (10) percent of the total watershed. The results of the extended downstream point analysis (10 percent point) shall be included in the hydrologic-hydraulic study submitted with the Stormwater Management and Sediment Control Plan.

7. All Stormwater Best Management designs shall be in accordance with the Horry County Stormwater Management Design Manual. All calculations used to determine these designs shall be included in the design plan.

8. The precipitation values for each frequency storm to be analyzed (2, 10, 25, and 100 year) shall be the precipitation frequency estimates developed by the National Oceanic and Atmosphere Administration as set forth in the NOAA Atlas 14, Volume 2.

SECTION E. Plan land use conditions criteria

For all stormwater management facilities, a hydrologic-hydraulic study shall be done showing how the drainage system will function with and without the proposed facilities. For such studies the following land
use conditions shall be used. Existing land use data shall be taken from the March 1998 aerial photograph and field checked and updated.

1. For the design of the facility outlet structure, use developed land use conditions for the area within the proposed development and existing land use conditions for upstream areas draining to the facility.

2. For any analysis of flood flows downstream from the proposed facility, use existing land use conditions for all downstream areas.

3. All stormwater management facilities, emergency spillways shall be checked using the 100-year storm and routing flows through the facility and emergency spillways. For this analysis, developed land use conditions shall be used for all areas within the analysis.

4. The effects of existing upstream detention facilities can be considered in the hydrologic-hydraulic study if these facilities have been accepted for County maintenance.

SECTION F. Plan wetlands criteria

Wetland areas shall not be disturbed until documentation is provide to the County Engineer to show that the applicant has received approval from the U.S. Army Corps of Engineers regarding appropriate permits and approval of development activities. No stormwater shall be discharged directly into any wetlands unless first being treated through an approved water quality BMP.

SECTION G. Minimum stormwater quantity control requirements

1. The minimum stormwater quantity control requirements shall provide management measures necessary to accomplish the following.
   a. For projects greater than 5 acres install stormwater management facilities to reduce the 10-year and 25-year developed peak discharge rates by 20% from the existing peak discharge rates. Runoff calculations shall include all areas proposed to be disturbed and or regarded. The design of these facilities shall be based on procedures contained in the Stormwater Design Criteria Manual or approved by the County Engineer.

   b. Infiltration practices shall be provided that capture and infiltrate at least the first one-half inch (0.5”) inch of runoff generated by each rainfall event from all impervious areas to assure protection of ground water recharge.

   c. The requirements, or portions thereof, of item (a.) may be waived by the County Engineer if it can be shown by detailed engineering calculations and analysis supplied by the applicant which are acceptable to the County Engineer that one of the following exists:

      (1) the installation of stormwater management facilities would have insignificant effects on reducing downstream flood peaks; or

      (2) stormwater management facilities are not needed to protect downstream developments and the downstream drainage system has, or can and will be made to have, sufficient capacity to
receive any increase in runoff for the design storm; or

(3) the County Engineer determines that stormwater management facilities are not needed to control developed peak discharge rates and installing such facilities would not be in the best interest of the Horry County.

d. The requirements, or portions thereof, of item (a.) may not be waived if the County Engineer determines that not providing peak flood controls would increase known flooding problems, or exceed the capacity of the downstream drainage system.

e. A waiver of these minimum runoff quantity control requirements shall only be granted after a written request is submitted by the applicant containing descriptions, drawings, and any other information that is necessary to evaluate the proposed land disturbing activity. A separate written waiver request shall be required if there are subsequent additions, extensions, or modifications, to the development which would alter the approved stormwater runoff characteristics to a land disturbing activity receiving a waiver.

2. Stormwater management facilities may include both structural and nonstructural elements. Natural swales and other natural runoff conduits shall be retained where practicable.

3. Where additional stormwater management facilities are required to satisfy the minimum control requirements, the following measures are examples of what may be used:
   a. stormwater detention structures;
   b. stormwater retention structures;
   c. facilities designed to encourage overland flow, slow velocities of flow, and flow through vegetated facilities and buffer zones; and
   d. infiltration and filtration practices.

4. Where detention and retention structures are used, designs, which consolidate these facilities into a limited number of large structures, will be preferred over designs that utilize a large number of small structures. In addition, designs that utilize weirs to control the discharge for the 10-year and 25-year storms are preferred to multiple pipes used for outlet control; rip-rap weirs will not be acceptable.

5. Discharge velocities shall be reduced to provide a nonerosive velocity flow from a structure, channel, or other control measure as outlined in the Horry County Stormwater Design Criteria Manual.

6. Stormwater Management and Sediment Control Plans can be rejected by the County Engineer if they incorporate structures and facilities that will demand considerable maintenance, will be difficult to maintain, or utilized numerous small structures if other alternatives are physically possible.

7. The drainage system and all stormwater management structures within the County (including both public and private portions) will be designed to the same engineering and technical criteria and standards. The County Stormwater Department's review will be the same whether the portion of the drainage system will be under public or private control or ownership.

8. All stormwater management measures shall be designed in accordance with the design criteria and procedures contained in the Horry County Stormwater Design Criteria Manual or procedures approved by the County Engineer.
9. Detention facilities, detention swales, infiltration systems, and similar stormwater quantity management facilities should be located in right-of-way or common areas rather than on individually owned lots in residential areas.

10. Catch basins shall be spaced so that the spread in the street for the 25-year design flow shall not exceed the following, as measured from the face of the curb:
   a. 8 feet if the street is classified as a Collector or Arterial (for 2 lane streets spread may extend to one-half of the travel lane, for 4 lane streets spread may extend across one travel lane);
   b. 16 feet at any given section, but in no case greater than 10 feet on one side of the street, if the street is classified as a Local or Sub-Collector Street.
   c. For grated inlets located in residential areas, a clogging factor of 25% shall be used in the design of these systems.
   d. For grated inlets located in commercial areas, a clogging factor of 0% shall be used.
   e. For curb opening or open throat inlets located in either residential or commercial areas, a clogging factor of 0% shall be used.

11. Whenever feasible the reduction of impervious area should be considered as a nonstructural tool in controlling stormwater management. This can be accomplished by utilizing a variety of Best Management Procedures as outlined in the Stormwater Design Manual.

12. For Redevelopment activities one of the following minimum performance standards shall be accomplished (selection of the most appropriate standard shall be determined by the engineer and accepted by the County Engineer):
   a. Reduce the impervious cover on the site by at least twenty percent (20%), based on a comparison of existing impervious cover to proposed impervious cover, or
   b. Achieve a ten percent (10%) reduction in the total volume of runoff generated from the site by a 2-year storm event. Runoff calculations shall be based on a comparison of existing site conditions to post development site conditions, or
   c. Reduce the post development peak discharge rates by 20% of the predevelopment peak discharge rates for the 10-year and the 25 year 24-hour storm events based on a comparison of existing ground cover to post development site conditions.

13. The standard recommended maximum and minimum slopes for storm drains should conform to the following criteria:
   a. The maximum hydraulic gradient should not produce a velocity that exceeds 15 feet per second.
   b. The minimum desirable physical slope should be 0.5 percent or the slope which will produce a velocity of 3 feet per second when the storm sewer is flowing 1/2 full.
   c. The 25 yr HGL shall be calculated for all storm drains and a profile shown on the plans indicating that the 25 yr hydraulic gradient shall stay within the grate of the inlet.

14. The minimum allowable size for any culvert shall be 15 inches.
   a. Reinforced Concrete Pipe (RCP) shall be used under all roads and driveways.
b. High Density Polyethylene pipe may be used for installations that do not involve traffic bearing applications.

15. All drainage inlets shall be installed with a 12 inch sump for water quality benefits.

16. The maximum length of drainage pipe shall be based on the following criteria:
   a. If both ends of a pipe are in or next to a road, driveway, or parking lot then the pipe length can be up to 400 feet.
   b. In situations where the access point of a pipe is some distance from a road, then the maximum pipe length shall be reduced from the 400 feet maximum by the distance from the road (400 ft – distance from the road).
   c. No pipe end or outfall can be more than 400 feet from a roadway, driveway or parking lot.
   d. All pipes must have at least one access point available for cleaning purposes and all access points must be above the 25 year hydraulic grade line.

17. The following criteria shall be required for designs of open channel systems:
   a. Channels with bottom widths greater than 10 feet shall be designed with a minimum bottom cross slope of 12 to 1.
   b. Channel side slopes shall be stable throughout the entire length and side slope shall depend on the channel material. A normal maximum for open channels should be 3:1 and a maximum of 3:1 on roadside ditches.
   c. Trapezoidal or parabolic cross sections are preferred over triangular shapes.
   d. For vegetative channels, design stability should be determined using low vegetative retardance conditions (Class D) and for design capacity higher vegetative retardance conditions (Class C) should be used. If permanent vegetation can not be established immediately then an Erosion Control Blanket (ECB) or Turf Reinforcement Mat (TRM) shall be installed, and designed to handle the maximum velocities for the channel.
   e. For vegetative channels, flow velocities within the channel should not exceed the maximum permissible velocities given in Tables 5-2 and 5-3.
   f. If relocation of a stream channel is unavoidable, the cross-sectional shape, meander, pattern, roughness, sediment transport, and slope should conform to the existing conditions insofar as practicable. Some means of energy dissipation may be necessary when existing conditions cannot be duplicated.
   g. Stream bank stabilization should be provided, when appropriate, as a result of any stream disturbance such as encroachment and should include both upstream and downstream banks as well as the local site.
   h. Open channel drainage systems are sized to handle a 25-year design storm. The 100-year design storm should be routed through the channel system to determine if the 100-year plus applicable building elevation restrictions are exceeded, structures are flooded, or flood damages increased.
i. A cross section should be obtained at each location where there are significant changes in stream width, shape, or vegetal patterns. Sections should usually be no more than 4 to 5 channel widths apart or 100 ft apart for ditches or streams and 500 ft apart for flood plains, unless the channel is very regular.

18. Infiltration Practices shall include all forms of structural controls that will incorporate recharging the ground water table through exfiltration and shall meet all requirements as determined by the most recent DHEC Stormwater Best Management Practices Handbook, Horry County Stormwater Design Manual as well as the following:
   a. During the design phase of the project soil borings shall be obtained from a third party Geotechnical Consultant and the percolation rate and seasonal high water table determined.
   b. A minimum of one soils boring is required for every 150 feet, and no less than 2 soils logs for each proposed location.
   c. Each soils boring should extend a minimum of 3 feet below the bottom of the trench, describe the NRCS series of the soil, the textural class of the soil horizon(s) through the depth of the log, and note any evidence of high ground water level, such as mottling. In addition, the location of impermeable soil layers or dissimilar soil layers should be determined.
   d. The design infiltration rate should be equal to one-half the infiltration rate found from the soil textural analysis.
   e. An observation well shall be installed for every 100 feet of trench length.
   f. The observation well should consist of perforated PVC pipe, 6 inches in diameter, located in the center of the structure, and be constructed flush with the ground elevation.
   g. Infiltration practices shall not be located with in a right of way.
   h. Infiltration systems shall not be utilized for stormwater runoff until the surrounding area is stabilized.
   i. Water Quality Infiltration systems must be preceded by a pretreatment BMP.
   j. The infiltration system shall also be designed to meet all of the design standards in the most current DHEC BMP design manual.

19. Structural Controls that do not involve infiltration shall also meet the most recent DHEC Stormwater Best Management Practices Handbook, Horry County Stormwater Design Manual as well as the following:
   a. Wet ponds:
      • Trash racks, filters, hoods or other debris control provided on riser.
      • The minimum water quality orifices shall be 3 inches.
      • Stormwater ponds and lakes shall be constructed with a vegetated aquatic bench/shelf at least ten feet (10’) wide, 6-12 inches in depth under the Normal Water Level and shall be
provided around the entire perimeter of the pond or lake, or a 5:1 slope from the top of bank to the bottom of the pond. Aquatic benches shall meet the requirements for constructed wetlands in the design manual.

- Stormwater ponds that are constructed with an aquatic shelf shall also have no greater slope than 3:1 from bottom of the pond to the top of bank.
- All proposed ponds and proposed conveyance channels shall be constructed to have 1 ft of freeboard from the 25 yr storm elevation.
- All ponds shall have a 12 ft maintenance easement that shall be established from the top of bank, or from the normal water level if the slope on the pond is 5:1 or flatter.
- A sign shall be installed at all permanent wet ponds that state as a minimum “No Swimming Allowed” along with the International symbol. This sign shall be installed at a minimum of every 250 ft of pond circumference with a minimum of 2 signs per pond and shall be installed in the pond itself and at an average height that is visible from the shoreline. The sign size shall also be at a minimum 12” by 18”.

b. Dry Detention Ponds:
- Shall have a minimum of 3:1 side slopes
- Inlet and outlet located to maximize flow length.
- One (1) foot of minimum freeboard above peak stage of the designed storm.
- Do not utilize a dry pond in an area with high water table, the seasonal high water table must be determined and stated in the project narrative.
- The outfall elevation must be a minimum of 1 foot below the outlet for the dry pond.
- The minimum water quality orifices shall be 3 inches.
- Trash racks, filters, or other debris protection devices must be provided on the outlet.
- The bottom of the pond shall have a 1% slope from the inlet to the outfall.

SECTION H. Minimum stormwater quality control requirements

1. The minimum stormwater quality requirements shall provide stormwater quality management facilities - Best Management Practices (BMPs) - necessary to accomplish the following.
   a. Provide storage volume and release rates sufficient to comply with the South Carolina Coastal Zone Management stormwater quality BMP requirements, as amended from time to time. These requirements for different BMPs recommended for use in Horry County are contained in the Horry County Stormwater Design Criteria Manual.
   b. Provide BMPs to control discharges into the local drainage system of any organic or inorganic matter that shall cause or tend to cause pollution of such waters.

2. Water Quality BMPs must be installed on all developments (regardless of size) to control the water quality of the storm runoff from the development site. Acceptable BMPs and information needed for their design and analysis are included in the Horry County Stormwater Design Criteria Manual.

3. Minimization of impervious areas within developments and minimization of impervious areas directly connected to the local drainage system is encouraged as a non-structural BMP for water quality and quantity control.
4. Stormwater shall not be released from a site without going through some form of water quality BMP.

5. Storm drainage systems that collect water runoff from parking areas and/or loading areas exceeding 10,000 square feet of impervious coverage and discharge to stormwater management systems, including surface or subsurface infiltration systems shall have a minimum of at least one (1) water quality inlet per each acre of drainage area. The purpose of water quality inlets is to remove grease, oil and heavy particulates or suspended solids, hydrocarbons and other floating substances from stormwater runoff. An alternative method may be permitted by approval from the County Engineer.

6. For all projects regardless of size, which are located within one-half (1/2) mile of a receiving water body in the coastal zone shall provide storage for the first one-half inch (1/2") of runoff from the entire site or storage of the first one inch (1") of runoff from the built upon portion of the property, whichever is greater. In addition, for those projects which are located within one thousand feet (1,000’) of shellfish beds, the first one and one-half inch (1 ½") of runoff from the built upon portion of the property must be retained on site. Receiving water bodies include all regularly tidally influenced salt and freshwater marsh areas, all lakes or ponds which are used primarily for public recreation or a public drinking supply, and other water bodies within the coastal zone (East of Highway 17 bypass), excluding wetlands, swamps, ditches and stormwater management ponds which are not contiguous via an outfall or similar structure with a tidal water body.

7. The following criteria shall be used to address stormwater management for bridges traversing saltwater and or critical areas:

   a. No treatment is necessary for runoff from bridge surfaces spanning SB or SA waters. This runoff can be discharged through scupper drains directly into surface waters. However, the use of scupper drains should be limited as much as feasibly possible.

   b. If the receiving water is either ORW (Outstanding Resource Waters) or SFH (Shellfish Harvesting Waters) then the stormwater management requirements shall be based on projected traffic volumes and the presence of any nearby shellfish beds. The following matrix lists the necessary treatment practices over the different classes of receiving waters.

   c. The Average Daily Traffic Volume (ADV) is based upon the design carrying capacity of the bridge.

<table>
<thead>
<tr>
<th>Water Quality Class</th>
<th>ADT 0-30,000</th>
<th>ADT over 30,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORW (within 1000 ft of shellfish beds)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>ORW (not within 1000 ft of beds)</td>
<td>**</td>
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</tr>
<tr>
<td>SFH (within 1000 ft of beds)</td>
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<tr>
<td>SFH (not within 1000 ft of beds)</td>
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*** - The first one inch (1") of runoff from the bridge surface must be collected and routed through to an appropriate stormwater management system or routed so that maximum overland flow occurs encouraging exfiltration before reaching the receiving body. Periodic vacuuming of the bridge surface should be considered.
** - A stormwater management plan must be implemented which may require the over treatment of runoff from associated roadways to compensate for the lack of direct treatment of runoff from the bridge surface itself. Periodic vacuuming should be considered. The use of scupper drains should be limited as much feasibly possible.

* - No treatment is required. The use of scupper drains should be limited as much as feasibly possible.

12. When golf courses are constructed adjacent to receiving water the following practices shall be incorporated:
   a. Minimum setbacks from the receiving water body of 20 feet for all manicured portions of the golf course (fairways, greens and tees) are required unless other acceptable management techniques are approved and implemented to mitigate any adverse impacts.
   b. All drainage from greens and tees must be routed to interior lagoons or an equivalent stormwater management system.
   c. To prevent the conversion of the stormwater system to critical area and to maintain positive drainage at high tides, all outfalls from the lagoon system must be located at an elevation above the critical area (if the discharge is to critical area) AND above the normal water elevation a distance to allow for storage of the first one inch (1") of runoff. The volume which must be stored shall be calculated by multiplying the area of all greens and tees by one inch (1"). (Previously constructed stormwater management systems which meet all current and future storage requirements will not be required to modify outfalls.)
   d. No greens or tees shall be located on marsh hummocks or islands unless all drainage can be conveyed to the interior lagoon system or to an equivalent onsite stormwater management system.
   e. Stormwater impacts to freshwater wetlands shall be limited by providing minimum 20 foot buffers, or an accepted alternative, between manicured areas (fairways, greens and tees) and the wetlands. This buffer must be increased if land application of treated effluent is utilized in the area.
   f. An integrated pest management system designed in accordance with the current best technology practices must be employed on the course to limit the application of chemicals which, if over applied, may leach into the ground and adjacent surface waters.
   g. In accordance with S.C. Department of Health and Environmental Control requirements, a two foot (2') separation must be maintained between the surface of the golf course and the ground water table where effluent is applied.
   h. The normal ground water elevation must be established by a registered engineer or soil scientist.
   i. All projects which are within 1000 feet of shellfish bed must retain the first 1 ½ inches of runoff as otherwise described in item 7 above.
   j. If spray effluent or chemicals are applied to the turf via the irrigation system, all spray heads must be located and set to prevent any aerosols from reaching adjacent critical areas.

13. When mining or landfill projects are located within one-half (1/2) mile of receiving water bodies, pumping of ground water from the sediment basins must be done with floating intakes only. Pumping of these basins must cease whenever water levels come to within two feet (2') of the pond bottom. In addition, landfill planning must be designed on a comprehensive site basis for stormwater management and sediment/erosion control to include management practices for each separate cell as it is phased into the landfill.
SECTION I. Minimum erosion and sediment control requirements

The sediment control portion of the Stormwater Management and Sediment Control Plan shall provide effective measures to control erosion and sedimentation caused by the removal of ground surface cover. Proper design shall include measures for erosion control and provide for the establishment of vegetation that will help avoid erosion problems during and after land disturbing activities. Alignment, grades, area of disturbed soil and bank slopes shall be based on soil erodibility, climatic exposure, geology, proposed vegetative restoration and expected maintenance.

Following are some general guidelines that shall be followed.

1. Provide sediment control facilities designed using the standards in the South Carolina Stormwater Management and Sediment Control Handbook for Land Disturbance Activities, as amended from time to time.

2. For sediment basins and other BMPs for sediment control, the design must meet a removal efficiency of 80 percent suspended solids or 0.5 ml/l peak settleable solids concentration from a 10-year, 24-hour design storm. Calculations shall be provided in the stormwater report supporting the design.

3. Slopes should be protected from erosion by establishment of vegetative cover, benches or terraces slope protection structures, mulches, or a combination of these practices within 14 days from final grade or within 14 days from discontinuing any land disturbance.

4. Drainage channels should be designed to avoid erosion problems. Wide channels with flat slopes lined with grass or other vegetation should be used where practical. Where channel gradients are steep, concrete linings or grade control structures such as check dams may be required. Every effort should be made to preserve natural channels.

5. Sediment basins may be constructed to trap sediment. The basins should be constructed with a positive outfall to discharge stormwater runoff while retaining sediment loads. Sediment basins may be temporary or permanent as required by the County Engineer.

6. Detention basins may also be used to trap sediment during and after development. Where used for this purpose, the basin shall continue to detain stormwater in accordance with the hydraulic design criteria, but allow for the settlement and retention of sediment in the basin calculations shall be provided whenever detention basins are used to trap sediment. Added storage volume for stormwater shall be required to account for the volume lost to sedimentation. Sediment must be removed periodically to insure the intended performance of the basin. A clean-out elevation or maximum sediment storage volume shall be calculated for the basin and a marker installed in the basin to indicate when sediment must be removed to provide required storage for stormwater discharge control.

7. Good stands of existing vegetation adequate to control erosion shall be preserved whenever possible. Regeneration of native vegetation should be encouraged wherever possible.

8. Silt fencing, sediment tubes, or other approved BMP’s shall be placed around storm sewer inlets and at the boundaries of disturbed areas to trap sediment.
9. Contents of the sediment control portion of the Stormwater Management and Sediment Control Plan shall include as a minimum the following items.
   a. Location, scope, and manner of performing sediment and erosion control measures.
   b. Proposed construction sequence and time schedule for all earth disturbing activities and installation of provisions for sediment and erosion control. The sequence and phasing shall take into account exposing the smallest practical areas for the shortest period of time and retain as much natural vegetation as possible to prevent erosion.
   c. Design computations and applicable assumptions for all structural measures for sediment and erosion control. Volume and velocity must be given for all surface water conveyance measures and piped outfalls.
   d. All components of a Stormwater Pollution Prevention plan as outlined by DHEC.
   e. Sediment control practices shall be used around the perimeter of the site to prevent off-site sediment damage.
   f. Methods to be used for controlling dust during construction.

10. Final stabilization shall be established prior to installation or integration of any water quality BMP’s consisting of infiltration, exfiltration or bioretention.

SECTION J. Approval and permit requirements

1. No site development or subdivision plan approval shall be issued or modified without the following items.
   a. An approved Stormwater Concept Plan or Stormwater Management and Sediment Control Plan, as appropriate.
   b. An approved NPDES permit issued by DHEC.
   c. Right of entry given to Horry County for County personnel to enter property for emergency maintenance if necessary.
   d. Any off-site easements needed.

2. No final occupancy permit shall be issued without the following items.
   a. Recorded easements for stormwater drainage systems, management facilities, and BMPs.
   b. Receipt of an as-built plan, signed and sealed by a registered professional (as outlined in Article II, Section L) stating that the project was built in compliance with the permitted stormwater plan.

3. In addition to the plans and permits required from Horry County, applicants shall obtain all state and Federal permits required for the proposed development.

SECTION K. Issuance of stop-work orders

A stop-work order may be issued if one or more of the following violations have been committed:

1. violation(s) of the conditions of the Stormwater Management and Sediment Control Plan approval;
2. construction not in accordance with the intent of the approved plans;
3. approval of a Stormwater Management and Sediment Control Plan has not been obtained;
4. non-compliance with correction notice(s); or
5. the existence of an immediate danger in a downstream area in the judgment of the County Engineer.

If one or more of these conditions are found, a written notice of violation shall be served upon the owner or authorized representative and the time in which to correct the deficiencies shall be specified. The notice shall set forth the measures necessary to achieve compliance with the plan. Correction of these violations must be started immediately or the owner shall be deemed in violation of this Ordinance. The County Engineer may determine if all other inspections for the site shall be discontinued until the deficiencies are addressed and field verified.

If appropriate remedial actions as outlined in the written notice are not completed within the specified time period, a stop-work order will be issued within 7 days. The stop-work order will then be in force until the development is in compliance with this Ordinance.

If a violation of this Ordinance is occurring that the County Engineer determines in his/her judgment will cause significant damage to downstream property or structures, the County Engineer can issue an immediate stop-work order.

SECTION L. Professional registration requirements

Stormwater Concept and Stormwater Management and Sediment Control Plans and design reports that are incidental to the overall or ongoing site design shall be prepared, and stamped/sealed by a qualified registered Professional Engineer, Tier 2B Land Surveyor or Landscape Architect, using acceptable engineering standards and practices. All other Stormwater Concept and Stormwater Management and Sediment Control Plans and design reports shall be prepared, and stamped/sealed by a qualified registered Professional Engineer, using acceptable engineering standards and practices.

The engineer, surveyor, or landscape architect shall perform services only in areas of his/her competence, and shall undertake to perform engineering or land surveying assignments only when qualified by education and/or experience in the specific technical field. In addition, the engineer, surveyor, or landscape architect must verify that the plans have been designed in accordance with this Ordinance and the standards and criteria stated or referred to in this Ordinance.

SECTION M. Fees

The initial fees associated with the operation of this Ordinance shall be set annually by County Council as part of the Annual Budget Ordinance, or by an amendment thereto. If no amendment to the prior year’s fees is proposed or adopted by County Council as part of the Budget Ordinance, then the prior year’s fees shall continue in full force and effect. A list of the fees proposed at the enactment of this Ordinance for plan review and other fees associated with this Ordinance may be obtained from the County Stormwater Department.

ARTICLE III OWNERSHIP AND COUNTY PARTICIPATION
SECTION A. **Ownership of stormwater management facilities and BMPs**

1. All stormwater management facilities and BMPs shall be privately owned and maintained unless the County accepts the facility for County ownership and maintenance.

2. All stormwater management measures relying on designated vegetated areas or special site features shall be privately owned and maintained as defined on the Stormwater Management and Sediment Control Plan.

3. Most regional stormwater management facilities may be publicly owned and/or maintained, but nothing in this Ordinance shall be deemed to require such manner of ownership.

SECTION B. **County participation**

When the County Engineer determines that additional storage capacity beyond that required by the applicant for on-site stormwater management is necessary in order to enhance or provide for the public health, safety and general welfare, to correct unacceptable or undesirable existing conditions or to provide protection in a more desirable fashion for future development, the County Engineer may:

1. require that the applicant grant any necessary easements over, through or under the applicant's property to provide access to or drainage for such a facility;

2. require that the applicant attempt to obtain from the owners of property over, through or under where the stormwater management facility is to be located, any easements necessary for the construction and maintenance of same (and failing the obtaining of such easement the County may, at its option, assist in such matter by purchase, condemnation, dedication or otherwise, and subject to (c) below, with any cost incurred thereby to be paid by the County); and/or

3. participate financially in the construction of such facility to the extent that such facility exceeds the required on-site stormwater management as determined by the County Engineer.

To implement these provisions both the County and developer must be in agreement with the proposed facility that includes the additional storage capacity and jointly develop a cost sharing plan which is agreeable to all parties.

ARTICLE IV **CONSTRUCTION, INSPECTION AND MAINTENANCE**

SECTION A. **Construction and inspection**

1. Prior to the approval of the Stormwater Management and Sediment Control Plan, the applicant shall submit a proposed staged construction and inspection control schedule. This plan shall indicate a phase line for approval; otherwise the construction and inspection control schedule will be for the entire drainage system.

2. The applicant shall notify the County Engineer before commencing any work for a preconstruction
meeting prior to implementing the Stormwater Management and Sediment Control Plan for all projects greater than one (1) acre.

3. The County Engineer shall maintain a file of inspection reports and provide copies of all inspection reports to the applicant that includes the following.
   a. The date and location of the site inspection.
   b. Whether the approved plan has been properly implemented.
   c. Any approved plan deficiencies and any actions taken.

4. Any portion of the work, which does not comply with the Stormwater Management and Sediment Control Plan, shall be promptly corrected by the applicant.

5. The County Engineer will notify the person responsible for the land disturbing activity in writing when violations are observed describing the following.
   a. Nature of the violation.
   b. Required corrective actions.
   c. The time period for violation correction.

6. A final inspection shall be conducted by the County Engineer upon completion of the work included in the approved Stormwater Management and Sediment Control Plan to determine if the completed work is constructed in accordance with the plan. Prior to inspection the stormwater system shall be cleaned of all sediment and debris and all lids shall be removed for inspection.

7. The applicant shall provide an "as-built" plan signed and sealed by a registered professional (as outlined in Article II, Section L) to be submitted upon completing of the stormwater management facilities included in the Stormwater Management and Sediment Control Plan. The registered professional shall state that:
   a. the facilities have been constructed as shown on the "as-built" plan, and
   b. the facilities meet the approved Stormwater Management and Sediment Control Plan and specifications or achieve the function for which they were designed.

Also, the minimum information to be provided on the "as-built" plans shall include the following:

1) Boundary, phase and lot lines.
2) Lot numbers and street names.
3) Easements.
4) Road locations with centerline stationing and curve data.
5) Road centerline elevations at 100-foot intervals.
6) Drainage structures with elevations.
7) Drainage pipes with size, material, length, slope and invert elevations.
8) Ponds or lakes with average bottom and water surface elevations, storage capacity in acres feet, and any control structures shall be shown in detail.
9) Drainage ditches and swales, with elevations at 100-foot intervals.
10) Water and sewer as-built information as required by the appropriate utility company.

8. No stage work, related to the construction of stormwater management facilities and BMPs, shall proceed until the next preceding stage of work, according to the sequence specified in the approved staged construction and inspection control schedule, is inspected and approved.
9. The owner shall be responsible for conducting their onsite erosion control inspections as per the SWPP plan with a Certified Inspector as outlined in the SCDHEC regulations. Reports for the inspections shall be kept on site and made available to the County upon request.

SECTION B. Maintenance responsibility

All temporary and permanent on-site stormwater management facilities and BMPs required by this Ordinance shall be maintained by the owner during and after site development, unless the facility is officially accepted by Horry County for County maintenance. The owner shall provide adequate ingress and egress for Horry County personnel to inspect the premises at reasonable times. For purposes of this section, the term owner shall also mean Homeowner Association or other collective member organizations.

No property owner shall obstruct or alter the flow, location or carrying capacity of a stream, channel or drainage swale to the detriment of any other property owner, whether upstream or downstream. All subdivision and/or land development plans containing streams, channels, drainage swales, storm sewers or other conveyance systems that cross property boundaries shall contain a note stating the above.

SECTION C. Failure to maintain

Should the owner fail to properly maintain the drainage system, stormwater management facilities, and BMPs as required by this Ordinance, the County Engineer shall give written notice to the owner of record as appears on the latest property tax rolls, by certified mail, of the nature of the violation and order the corrective action necessary. Should the owner fail, within thirty (30) days from the date of the notice, to take corrective action to the satisfaction of the County Engineer or appeal the notice and order, the County may enter upon the lands, take corrective action as the County Engineer may deem necessary, and place a lien on the property of the owner for the costs thereof.

SECTION D. County maintenance

Certain off-site systems as may be identified by the County Engineer, which are to provide general public benefits, may be accepted by the County for maintenance. All areas and/or structures to be maintained by the County must be dedicated to the County by plat or separate instrument.

ARTICLE V. MISCELLANEOUS PROVISIONS

SECTION A. Off-site drainage facilities

The County Engineer may allow stormwater runoff that otherwise is of unacceptable quality or which would be discharged in volumes or at rates in excess of those otherwise allowed by this Ordinance, to be discharged into drainage facilities off site of the development, provided the applicant has demonstrated:

a. off-site drainage facilities and channels leading to them are designed, constructed and maintained in accordance with requirements of this Ordinance; and

b. adequate provisions are made for sharing of construction, maintenance and operating cost of
facilities as a condition to receiving approval of the Stormwater Management and Sediment Control Plan; and,
c. it is not feasible to completely manage runoff on site in a manner that meets the design and performance standards found in the Horry County Stormwater Design Criteria Manual.

SECTION B.  Prohibitions and Illicit Connections

Prohibitions

1. It is unlawful for any person, company, corporation, etc., to throw, drain, run, or otherwise discharge to any component of the County’s stormwater system, including streets, highways, right-of-ways, or to cause, permit or suffer to be thrown, drain, run, or allow to seep or otherwise discharge into such system, any organic or inorganic matter that shall cause or tend to cause pollution or blockages to such waters, as provided for in this Ordinance.

2. The County exempts the following from the prohibition provision above.
   a. Water line flushing performed by a government agency, diverted stream flows, rising ground waters, and polluted ground water infiltration.
   b. Unpolluted pumped ground water.
   c. Discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, and street wash water.
   d. Discharges or flows from fire fighting.
   e. Other unpolluted water.

3. In the event of an accidental discharge to the County drainage system of any material or substance other than stormwater runoff, the person concerned shall inform the County Stormwater Department immediately of the nature, quantity and time of occurrence of the discharge. The person concerned shall take immediate steps to contain, treat or take other actions to minimize the effects of the discharge on the County drainage system and receiving streams. The person shall also take immediate steps to ensure no recurrence of the discharge.

Illicit Connections

1. It is unlawful for any person, company, corporation, etc., to connect any pipe, open channel, or any other conveyance system to the County drainage system that discharges anything except stormwater discharges that are identified on the approved Stormwater Management and Sediment Control Plan.

2. Improper connections in violation of this Ordinance must be disconnected and redirected to an acceptable outlet, as approved by the County Engineer.

SECTION C.  Variances from requirements

1. The Zoning Board of Appeals may grant a variance from the requirements of this Ordinance if there are exceptional circumstances applicable to the site such that strict adherence to the provisions of the
Ordinance will result in unnecessary hardship and not fulfill the intent of the Ordinance.

2. A written request for a variance shall be required and shall state the specific variance sought and the reasons, with supporting data, for their granting. The request shall include descriptions, drawings, calculations and any other information that is necessary to evaluate the proposed variance.

3. Any substantial variance from the Stormwater Management and Sediment Control Plan or Concept Plan shall be referred to all agencies, which reviewed the original plan.

4. The County Engineer will conduct a review of the request for a variance and submit a report to the Zoning Board of Appeals.

5. The Zoning Board of Appeals may grant a variance from the requirements of this Ordinance if the proposed development activity will not:
   - change the rate or volume of runoff significantly;
   - have a significant, negative impact on wetland, watercourse, or water body; or
   - contribute to degradation of water quality.

SECTION D. Appeals

Any person who may have a substantial interest in any decision of the Zoning Board of Appeals may appeal from any decision of the Board to the Circuit Court in and for the County of Horry by filing with the clerk of court a petition in writing setting forth plainly, fully, and distinctly wherein such decision is contrary to law. Such appeal shall be filed within thirty (30) days after the decision of the Board is rendered.

SECTION E. Penalties

1. Any person violating this Ordinance or any part thereof, including failing to stop-work upon order, shall be punished as set forth in Chapter 1 § 1.8 of the County Code of Ordinances, as amended from time to time.

2. In addition to any proceedings under the foregoing provision of this Ordinance, the County Attorney may institute injunctive, mandamus or other appropriate action or proceedings at law or equity for the enforcement of this Ordinance or to correct violations of this Ordinance, and any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus or other appropriate forms of remedy or relief.

SECTION F. Conflict with other laws

Whenever the provisions of this Ordinance impose more restrictive standards than are required in or under any other ordinance, the regulations herein contained shall prevail. Whenever the provisions of any other ordinance require more restrictive standards than are required herein, the requirements of such shall prevail.

SECTION G. Severability
If any term, requirement or provision of this Ordinance or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Ordinance or the application of such terms, requirements and provisions to persons or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby and each term, requirement or provision of this Ordinance shall be valid and be enforced to the fullest extent permitted by law.

SECTION H. Amendments

This Ordinance may be amended in the manner as prescribed by law for its original adoption. Before the Horry County Council amends this Ordinance, it must seek the advice of the County Engineer who will make a recommendation for each amendment within thirty (30) days of this request.

SECTION I. Liability

Neither the approval of a plan under the provisions of this Ordinance nor the compliance with the provisions of this Ordinance shall relieve any person from the responsibility for damage to any person or property otherwise imposed by law nor shall it impose any liability upon the County for damage to any person or property.

SECTION J. Effective date

The Ordinance shall be effective upon the third reading.
Dated this _______ day of ____________ , 2008.

HORRY COUNTY COUNCIL

__________________________________________  _________________________________
Liz Gilland, Chairman

Harold G. Worley, District 1    Brent Schultz, District 2
Marion Foxworth III, District 3    Michael L. Ryan, District 4
Howard D. Barnard III, District 5    Bob Grabowski, District 6
James R. Frazier, District 7    Carl Schwartzkopf, District 8
W. Paul Prince, District 9    Kevin J Hardee, District 10

__________________________________________
Al Allen, District 11

ATTEST

______________________________
Patricia S. Hartley, Clerk to Council

FIRST READING:
SECOND READING:
THIRD READING: