

## Stormwater Management Regulations

### Section 605. Stormwater Management. 605.1.

#### Findings. 605.1.1.

Requiring the provision of stormwater management facilities in development promotes the health, safety and welfare of the community.

605.1.2. Construction, alteration and/or improvement of real property in the City generally increases the impervious surface area of the site.

605.1.3. Construction and development activities can change or alter the natural topography of the land and disturb natural habitats.

605.1.4. Construction and development activities change the hydrologic condition of the land, alter the natural pattern of surface water, increase stormwater runoff flow and increase the potential for flooding. 605.1.5.

Stormwater runoff, if not properly controlled, causes soil erosion, sedimentation and siltation of soils, decreases groundwater recharge and damages wetlands.

605.1.6. Urban stormwater runoff potentially carries pollutants and thereby may degrade water quality.

605.1.7. Stormwater runoff, if not properly managed, affects the ecodynamic system of natural resources (land, water, biological habitats).

605.1.8. On-site retention and detention of surface waters when allowed to percolate into the soil reduces saltwater intrusion.

605.2. Purpose and Intent. The intent of this section is to protect and maintain the chemical, physical and biological integrity of groundwaters and surface waters, maintain and restore groundwater levels, minimize runoff pollution and prevent activities which adversely affect such waters; to encourage the construction of stormwater management systems that aesthetically and functionally approximate natural systems and which protect natural drainage systems; to protect and maintain natural salinity levels in estuarine areas; to minimize soil erosion, sedimentation and siltation; to protect and maintain environmentally sensitive areas and all natural wildlife habitats; and to minimize flooding.

605.3. Relationship to other Stormwater Management Requirements. In addition to meeting the requirements of this section and the City's master drainage plan, the design and performance of all stormwater management systems shall comply with applicable State regulations; requirements of the Southwest Florida Water Management District; National Estuary Program; and Florida Administrative Code; based on the provisions for stormwater management under Florida Statute.

605.3.1. Low Impact Development Standards as adopted by the City shall be utilized in accordance with the intent of this section (see Chapter 5).

605.4. Exemptions. The following development activities are exempt from the requirements of this section. Developments which are exempt under this section shall nevertheless be constructed in such a

manner as to prevent flooding from stormwater entering the site from adjacent property, Supplement Number Two 130 including roadways.

605.4.1. Interior renovations and alterations and building permit applications determined by the City Staff not to impact or involve exterior site work.

605.4.2. Any development within a subdivision if each of the following conditions have been met: 1. Stormwater management provisions for the subdivision were previously approved by the Southwest Florida Water Management District and the Department of Environmental Protection and remain valid as part of a final plat or development plan; and 2. The development is conducted in accordance with the stormwater management provisions submitted with the final plat or development plan.

605.4.3. Maintenance activity that does not increase the quality, rate, volume or location of stormwater flows on the site or of stormwater runoff.

605.4.4. Action taken under emergency conditions to prevent imminent harm or danger to persons or to protect property from imminent fire, storms, hurricanes, flood or other hazards. A report of the emergency action shall be made to the City Staff within three days after the emergency to determine an appropriate course of action and if a building permit and/or a stormwater management permit is required.

605.5. Performance Standards. All development must be designed, constructed and maintained to meet the following performance standards:

605.5.1. While development activity is underway and after it is completed, the characteristics of stormwater runoff shall approximate the rate, volume, quality and timing of that which occurred under the natural unimproved or existing state of the site.

605.5.2. The proposed development and development activity shall be consistent with the water quality standards set forth in the Florida Administrative Code, Chapter 62-3.

605.5.3. New development with 20,000 SF or less of proposed impervious or semiimpervious area shall retain the runoff from all storms up to and including the 10-year 24- hour rainfall event of seven (7) inches. New development with more than 20,000 SF of proposed impervious or semi-impervious area shall retain the runoff from all storms up to and including the 100 year 24 hour rainfall event of ten (10) inches. The Rational Method formula or Modified Rational Method as applicable shall be used for such calculations. All new structures shall be equipped with Rain Gutters that direct the discharge into a swale, infiltration area, detention/retention area or cistern. Recovery time for the subject storm event shall be designed to occur within 72 hours. The system shall not be designed to allow runoff from the subject property to be directed onto adjacent properties or rights-of-way. Design calculations shall be consistent with State of Florida Department of Transportation Drainage Handbook and Southwest Florida Water Management District Environmental Resource permit Applicant's Handbook Volume II, latest editions. Drainage calculations and plans shall be submitted in electronic format. Calculations and plans shall be reviewed by a City Engineer and cost for such review shall be borne by the applicant.

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605.5.4. Adequate retention areas and controls and swales along front, rear and side yard lot lines, in accordance with the City of Bradenton Beach Public Works Standard Details, shall be designed into the

development and shall be designed so the probability of flooding either the upstream or downstream property is not increased.

605.5.5. No new point sources of pollution shall be permitted.

605.5.6. All non-exempt development shall receive appropriate permits from the Florida Department of Environmental Protection and the Southwest Florida Water Management District before a development order is issued by the City.

605.5.7. Trees and shrubs shall not be installed within detention areas, retention areas or swales, unless part of a bioswale or vertical infiltration trench design approved by the City.

605.5.8. Where impervious surfaces are installed for driveways and walkways, contouring to direct the surface flow to a detention area, retention area or swale is required. Gutters shall be provided to allow the roof rain water to be directed to conductor pipes, then to a detention area, retention area or swale for all new construction and substantial improvements.

605.5.9. Placement of fill which prevents or reduces the natural sheet flow is prohibited.

605.5.10. All new development not exempt per this Chapter shall require a stormwater management plan prepared and certified by a qualified professional. As part of this Section, the developer may utilize the Standard Infiltration Trench Design for single family residential lots. Construction of the Infiltration Trenches must be in substantial compliance with the applicable City Standard Details. Utilization of this method will not require signed and sealed calculations and/or drainage plans prepared by a Florida licensed Professional Engineer. The details shall be included as part of the application for development in pdf format. An inspection by the designated City Staff shall be required upon completion of excavation and prior to placement of infiltration materials. Except for one and two family structures, stormwater management plans shall be accompanied by all calculations of attenuation and shall bear the seal of a Registered Engineer or Architect duly licensed to practice in the State.

605.5.11. The primary exit from any structure shall not be directed through any stormwater facility.

605.5.12. The required cross sectional volume of any detention area, retention area or swale shall, as designed and when constructed, be absent of any material which reduces the required volume.

605.5.13. For areas to be developed or redeveloped, any filling or other topography changes within the site shall not divert stormwater to any adjacent property or lot. Existing and new swales along property lines shall be maintained by each property owner to insure positive flow to a detention basin, retention basin or to a primary drainage facility.

605.5.14. All stormwater facilities and construction activities shall be designed and constructed in accordance with FDEP "The Florida Stormwater, Erosion and Sedimentation Control Inspector's Manual" and best management practices.

605.6. Stormwater Management Plan. A stormwater management plan shall be submitted in pdf Supplement Number Two 132 format with all applications for approval of any proposed development except development activities described in this chapter. The stormwater management plan shall contain sufficient information and shall be drawn to a sufficient scale to allow the City Staff to determine whether the proposed major development meets the requirements of this section.

605.6.1. One copy of the completed Southwest Florida Water Management District Stormwater Management Application and Plan, as required by the Southwest Florida Water Management District, plus one completed copy of the drainage calculation form, shall be submitted to the City Staff in pdf format.

605.6.2. A stormwater management plan shall not be required when the net increase of the proposed impervious surface is 200 square feet or less provided the total impervious lot coverage does not exceed the minimum allowed in Chapter 3. The City Staff may allow the property owner to prepare a stormwater management plan if the impervious surface for the total project is less than 500 square feet.

605.7. Dedication, Maintenance and inspection of Stormwater Management Systems.

605.7.1. Dedication. If a stormwater management system approved under this section will function as an integral part of the City maintained system, a maintenance easement shall be dedicated to the City.

605.7.2. Maintenance. The developer shall be responsible for the maintenance of all improvements until such time as the responsible organization or party, stipulated by the Southwest Florida Water Management District or the City, assumes responsibility. The developer shall not, however, transfer these improvements for the purpose of maintenance until the developer has complied with the above and until he has received final approval, final inspection and submitted a letter of compliance from the Engineer of Record. Thereafter, all stormwater management system improvements shall be maintained in perpetuity and cannot be developed for any other use which would limit or cause to limit the use for stormwater management.

605.7.3. Inspection and Monitoring.

1. A Registered Professional Engineer shall certify all drainage facilities and certify compliance with approved plans. The submittal of a copy of such certification to the Southwest Florida Water Management District will be accepted as compliance with this requirement.

2. All systems shall have adequate easements to permit the City Staff to inspect and, if necessary, take corrective action should the owner fail to properly maintain the system. Before taking corrective action, the City Staff shall give the owner written notice of the nature of the existing defects. If the owner fails within 30 days from the date of notice to commence corrective action or to appeal the matter to the Special Master, the City Staff may take necessary corrective action, the cost of which shall become a lien on the property until paid.

3. For all new swales installed as part of the approved Stormwater Management Plan, Developer shall submit percolation test results or other evidence demonstrating that recovery rates are achieved within the 72 hour requirement. Tests shall be submitted upon completion of construction and on an annual basis or sooner if a complaint is filed Supplement Number Two 133 or failure of the system is discovered by the Public Works Director or designee.

4. The Public Works Director or designee shall have Right of Entry onto private properties to inspect and, if necessary, to require corrective action should the owner fail to properly maintain the system and has reasonable cause to believe the conditions are the cause of flooding of adjacent properties or damage to the City Municipal separate storm sewer system. Such entry or inspection shall be performed in accordance with the procedures established herein. If such building or premises are occupied, he shall first present proper credentials and request entry. If such building, structure, or premises are

unoccupied, the Public Works Director or designee shall first make a reasonable effort to notify the owner or other persons having charge or control of such and request entry. If entry is refused, the Public Works Director or designee shall have recourse to every remedy provided by law to secure entry.

5. Private stormwater facilities not in compliance with the standards for maintenance or previous approved design shall be subject to enforcement in accordance with Section 605.7.4.

6. The city may inspect all stormwater facilities, including public and private facilities, at least once per year. Any city inspection program shall not relieve the owner of any private stormwater facility from maintaining the system in accordance with the article and other applicable laws and regulations, and good maintenance and engineering practice.

#### 605.7.4. Enforcement.

1. If the Director of Public Works determines that stormwater is being discharged, directly or indirectly, to any municipal separate storm sewer system by or from a site of industrial activity or any other source in violation of this chapter or in violation of any federal, state or local law or regulation, the Director of Public Works may order the immediate cessation of such discharge and shall notify all governmental authorities having jurisdiction over any such discharge.

2. A site of industrial activity shall obtain appropriate local, state and federal stormwater local development permits, and shall remain in compliance with these local development permits. The Director of public Works may require proof of such local development permit compliance.

3. The Director of Public Works shall carry out all inspection, surveillance, and monitoring procedures deemed necessary to determine compliance and noncompliance with local development permit conditions and this chapter.

4. Any violation of this article shall be treated and prosecuted as if a code violation pursuant to chapter 2, article III of the City Code of Ordinances, including all remedies provided therein.

5. No provisions of this article shall be construed to impair the city or any other person from bringing any common law, equitable, administrative, or statutory cause of action, or other legal remedy for injury or damage arising from any violation of this chapter. As an additional remedy, the operation and maintenance of any stormwater management systems in violation of any provision of this chapter that causes damage, erosion or Supplement Number Two 134 siltation off site whether public or private shall be deemed and is declared to be a public nuisance and may be subject to abatement summarily by proceedings in a court of competent jurisdiction for injunction, both temporary and permanent, and to the recovery of any cost associated with the repair, restoration and maintenance for such facility. The city is hereby authorized to bring any such action authorized in this section on its behalf or on behalf of the general public.

605.7.5 Fees and Consultant Reimbursement. The city is authorized to hire consultants to assist it in administering this article. The city is authorized to seek reimbursement of its costs from the applicant as an additional application fee. The city commission is authorized to adopt reasonable fees for administering this article by resolution from time to time.

605.7.6 City of Bradenton Beach Public Works Standard Details. City Standard Details: The administration is authorized to create such technical documents as necessary to implement this section.