

PERFORMANCE STANDARDS - STORMWATER MANAGEMENT

Sec. 27-1536. Performance standards with respect to stormwater management.

(a) ***Intent.***

Recognizing that development activity increases stormwater runoff by reducing the infiltrative capacity of soils and that stormwater runoff poses dangers of flooding, adds pollution to water resources, and increases erosion and sedimentation, the purpose of this section is to encourage the disposal of stormwater on the land at the site of development and, to the extent practical, to do so through the wise use of the natural features of the site. This policy will preserve the natural drainage system, valuable topsoil, water quality, and wildlife habitat during and after construction through infiltration, detention, or retention of water falling on the site and help assure that the Total Maximum Daily Loads (TMDLs) that have been established by the U.S. Environmental Protection Agency for various waterbodies in the City will be met to the extent practical. The disposal of stormwater shall not constitute a threat to public health, safety and welfare and shall not degrade the quality of South Portland's surface water or groundwater below state or city standards. It shall be the responsibility of the developer to adequately provide for the necessary control of storm water runoff and erosion.

(b) ***Applicable Standards for Stormwater Management.***

The standards for stormwater management vary depending on the type of project and the amount of disturbed area as follows:

- (1) **Post-Construction Stormwater Management Plan** - Major subdivisions and activities subject to site plan review that involve more than fifteen thousand (15,000) square feet of disturbed area must meet the requirements for a Post-Construction Stormwater Management Plan.
- (2) **Basic Stormwater Management Plan** - Minor subdivisions and activities subject to site plan review that are not subject to the requirements for a Post-Construction Stormwater Management Plan must meet the requirements for a Basic Stormwater Management Plan.
- (3) **Drainage Plan** - Activities that are not subject to site plan review that result in the expansion or alteration of an existing building or structure that increases the amount of impervious surface area by more than five thousand (5,000) square feet or the construction of a new principal building or structure must meet the requirements for a Drainage Plan. New principal buildings that are located in a subdivision with an approved Post-Construction or Basic Stormwater Management Plan are not required to comply with the requirement for a Drainage Plan if the approved Stormwater Management Plan contains provisions that adequately address surface drainage related to the construction of the building as determined by the Code Enforcement Officer.

(c) ***Standards for a Post-Construction Stormwater Management Plan.***

(1) Design Standard.

The applicant shall make adequate provision for the management of the quantity and quality of all stormwater generated by the activity through a Post-Construction Stormwater Management Plan. This Post-Construction Stormwater Management Plan shall be designed to meet one of the following:

- (a) If the project requires a stormwater permit from the Maine Department of Environmental Protection ("DEP") under its Chapter 500 Stormwater Management Rules, as may be amended from time to time ("DEP Chapter 500 Rules"), the plan must, at a minimum, meet the "basic" and "general" standards of Section 4 of DEP Chapter 500 Rules. The plan shall also meet the "urban impaired stream standard" and "flooding standard" of Section 4 of DEP Chapter 500 Rules and the "other applicable standards" of Section 5, if applicable, as contained in DEP Chapter 500 Rules, and shall comply with the practices described in the manual *Stormwater Management for Maine*, published by the DEP in January 2006, as may be amended from time to time ("*DEP Stormwater Manual*"); or
- (b) If the project does not require a stormwater permit from the DEP under its Chapter 500 Rules, the plan may either meet the Chapter 500 standards as set forth in (a) above, or provide for the treatment of 0.5 inches of runoff from ninety percent (90%) of the impervious surfaces on the site, and 0.2 inches of runoff from all disturbed pervious areas of the site using LID design practices and techniques determined by the Planning Board to be appropriate for the site. In addition, the project must meet the "other applicable standards" of Section 5, if applicable, as contained in DEP Chapter 500 Rules. The treatment techniques used may include those set forth in Chapter 10 of the *DEP Stormwater Manual, Volume III-BMPs Technical Design Manual*, and/or any City of South Portland LID Manual adopted by the Planning Board after appropriate notice and public hearing. The Planning Board may approve the use of other treatment techniques on a case-by-case basis based upon the recommendation of the Director of Water Resource Protection that the proposed treatment techniques are appropriate for the site and will provide at least the same level of treatment as the specified techniques. Provisions must be made in the Stormwater Management Plan for all stormwater treatment techniques to be maintained in perpetuity.

(2) Additional Requirements.

- (a) The applicant may meet the quantity and quality standards above either on-site or off-site, but where off-site facilities are used, the applicant must submit to the City documentation approved as to legal sufficiency by Corporation Counsel that the applicant has a sufficient property interest in the property where the off-site facilities are located - by perpetual easement or other

appropriate legal instrument - to ensure that the facilities will be able to provide post-construction stormwater management for the project and that the property will not be altered in a way that interferes with the off-site facilities.

- (b) Where the applicant proposes to retain ownership of the Stormwater Management Facilities shown in its Stormwater Management Plan, the applicant shall submit to the City documentation, approved as to legal sufficiency by Corporation Counsel, that the applicant, his/her/its successors, heirs and assigns, shall have the legal obligation to operate, repair, maintain and replace the Stormwater Management Facilities. Applications requiring Stormwater Management Facilities that will not be dedicated to the City shall enter into a **Drainage Maintenance Agreement** with the City in a form acceptable to Corporation Counsel.
- (c) Whenever elements of the Stormwater Management Facilities are not within the right-of-way of a public street and the facilities will not be offered to the City for acceptance as public facilities, the Planning Board may require that perpetual easements be provided to the City allowing access for maintenance, repair, replacement and improvement of the Stormwater Management Facilities in accordance with the approved Drainage Maintenance Agreement. If an offer of dedication is proposed, the applicant shall be responsible for the maintenance of these Stormwater Management Facilities until such time (if ever) as they are accepted by the City.
- (d) In addition to any other applicable requirements of this ordinance, any activity which also requires a stormwater management permit from the DEP under 38 M.R.S.A. Sec. 420-D shall comply with the rules adopted by DEP under 38 M.R.S.A. Sec. 420-D(1), as the same may be amended from time to time, and the applicant shall document such compliance to the Planning Board. Where the standards or other provisions of such stormwater rules conflict with City ordinances, the stricter (more protective) standard shall apply.
- (e) At the time of application, the applicant shall notify the Director of Water Resource Protection if its Stormwater Management Plan includes any Stormwater BMP(s) that will discharge to the City's MS4 and shall include in this notification a listing of which Stormwater BMP(s) will so discharge.
- (f) Prior to the issuance of a Certificate of Occupancy for the project, the applicant must submit an inspection report to the Code Enforcement Officer documenting that the stormwater facilities have been installed and are functioning as designed and approved and are fully operational. This inspection report must be prepared by a qualified third party inspector as defined in subsection (3) (e).

(3) Requirement for Compliance.

Any person owning, leasing or having control over Stormwater Management Facilities required by a Post-Construction Stormwater Management Plan shall demonstrate compliance with that Plan as follows:

- (a) That person shall, at least annually, inspect, clean and maintain the Stormwater Management Facilities, including, but not limited to, any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all City and State inspections, cleaning and maintenance requirements of the approved Post-Construction Stormwater Management Plan.
- (b) That person shall repair any deficiencies found during inspection of the Stormwater Management Facilities.
- (c) That person shall, on or by July 15th of each year, provide a completed and signed certification to the Director of Water Resource Protection in a form provided by that Department, certifying that the person has inspected, cleaned and maintained the Stormwater Management Facilities, describing any deficiencies found during inspection of the Stormwater Management Facilities and certifying that the person has repaired any deficiencies in the Stormwater Management Facilities noted during the annual inspection.
- (d) The required inspection(s) must be conducted by a qualified third-party inspector employed by the responsible person if the property is subject to a DEP stormwater permit. The third-party inspector shall perform an initial inspection to determine the status of the Stormwater Management Facilities. If the initial inspection identifies any deficiencies with the facilities, the same third-party inspector shall re-inspect the facilities after they have been maintained or repaired to determine if they are performing as intended.
- (e) The qualified third party inspector must meet both of the following standards:
 - 1. The inspector must not have any ownership or financial interest in the property being inspected nor be an employee or partner of any entity having an ownership or financial interest in the property; and
 - 2. The inspector must be on the list of approved third-party inspectors maintained by the Water Resource Protection Department. An individual may request to be included on the list by submitting documentation of his/her qualifications to the Director of Water Resource Protection. The Director shall approve third-party inspectors only if they meet the following criteria:
 - a. Have a college degree in an environmental science or civil engineering, or comparable

expertise;

- b. Have a practical knowledge of stormwater hydrology and stormwater management techniques, including the maintenance requirements for Stormwater Management Facilities; and
- c. Have the ability to determine if stormwater facilities are performing as intended.

(f) In order to determine compliance with this section and with the Post-Construction Stormwater Management Plan, the Director of Water Resource Protection or his/her designee may enter upon a property at reasonable hours and after making a good faith effort to contact the owner, occupant or agent to inspect the Stormwater Management Facilities. Entry into a building shall only be after actual notice to the owner, occupant or agent.

(4) Submission Requirements.

A Post-Construction Stormwater Management Plan shall conform to the applicable submission requirements of Section 8 of DEP Chapter 500 Rules. The submission for a project that does not require a State stormwater permit, shall provide, as a minimum, the information required for submissions under the General Standards of Chapter 500.

The applicant shall provide the City with an electronic version of the Post-Construction Stormwater Management Plan in a format that is compatible with the City's requirements. Following completion of construction, the applicant shall provide the City with an updated version of the plan showing the Stormwater Management Facilities as actually constructed.

(5) Relationship to Other Provisions.

Post-Construction Stormwater Management Plans are subject to the requirements of subsection (f), Standards for Easements or Rights-of-Way; subsection (g), Material Requirements; subsection (h), Modification of the Standards and Requirements; and subsection (i), Discharge of Stormwater.

(d) *Standards for a Basic Stormwater Management Plan.*

(1) Design Standard.

The applicant shall make adequate provision for the management of the quantity and quality of all stormwater generated by the activity through a Basic Stormwater Management Plan. This Basic Stormwater Management Plan shall be designed to meet one of the following:

- (a) The "basic" standard of Section 4 of DEP Chapter 500 Rules and the "other applicable standards" of Section 5 of DEP Chapter 500 Rules and shall comply with the practices described in the *DEP Stormwater Manual*; or
- (b) Provide for the treatment of 0.5 inches of runoff from ninety percent (90%) of the impervious surfaces on the site, and 0.2 inches of runoff from all disturbed pervious areas of the site using LID design practices and techniques determined by the Planning Board to be appropriate to the site. The treatment techniques used may include those set forth in Chapter 10 of the *DEP Stormwater Manual, Volume III-BMPs Technical Design Manual*, and/or any City of South Portland LID Manual adopted by the Planning Board. The Planning Board may approve the use of other treatment techniques on a case-by-case basis based upon the recommendation of the Director of Water Resource Protection that the proposed treatment techniques are appropriate for the site and will provide at least the same level of treatment as the specified techniques. Provisions must be made in the stormwater management plan for all stormwater treatment techniques to be maintained in perpetuity.

(2) Additional Requirements.

- (a) The applicant may meet the quantity and quality standards above either on-site or off-site, but where off-site facilities are used, the applicant must submit to the City documentation approved as to legal sufficiency by Corporation Counsel that the applicant has a sufficient property interest in the property where the off-site facilities are located - by perpetual easement or other appropriate legal instrument - to ensure that the facilities will be able to provide post-construction stormwater management for the project and that the property will not be altered in a way that interferes with the off-site facilities.
- (b) Where the applicant proposes to retain ownership of the Stormwater Management Facilities shown in its Stormwater

Management Plan, the applicant shall submit to the City documentation, approved as to legal sufficiency by Corporation Counsel that the applicant, his/her/its successors, heirs and assigns, shall have the legal obligation to operate, repair, maintain and replace the Stormwater Management Facilities. Applications requiring Stormwater Management Facilities that will not be dedicated to the City shall enter into a Drainage Maintenance Agreement with the City in a form acceptable to Corporation Counsel.

- (c) Whenever elements of the Stormwater Management Facilities are not within the right-of-way of a public street and the facilities will not be offered to the City for acceptance as public facilities, the Planning Board may require that perpetual easements be provided to the City allowing access for maintenance, repair, replacement and improvement of the Stormwater Management Facilities in accordance with the approved Drainage Maintenance Agreement. If an offer of dedication is proposed, the applicant shall be responsible for the maintenance of these Stormwater Management Facilities until such time (if ever) as they are accepted by the City.
- (d) In addition to any other applicable requirements of this ordinance, any activity which also requires a stormwater management permit from the DEP under 38 M.R.S.A. Sec. 420-D shall comply with the rules adopted by DEP under 38 M.R.S.A. Sec. 420-D(1), as the same may be amended from time to time, and the applicant shall document such compliance to the Planning Board. Where the standards or other provisions of such stormwater rules conflict with City ordinances, the stricter (more protective) standard shall apply.
- (e) At the time of application, the applicant shall notify the Director of Water Resource Protection if its Stormwater Management Plan includes any Stormwater BMP(s) that will discharge to the City's MS4 and shall include in this notification a listing of which Stormwater BMP(s) will so discharge.

(3) Requirement for Compliance.

Any person owning, leasing or having control over Stormwater Management Facilities required by a Basic Stormwater Management Plan shall be responsible for maintaining all Stormwater Management Facilities and BMPs so they function as designed and approved.

(4) Submission Requirements.

A Basic Stormwater Management Plan shall conform to the applicable submission requirements of Section 8-C of DEP Chapter 500 Rules.

The applicant shall provide the City with an electronic version of the Basic Stormwater Management Plan in a format that is compatible with the City's requirements. Following completion of construction, the applicant shall provide the City with an updated version of the plan showing the Stormwater Management Facilities as actually constructed.

(5) Relationship to Other Provisions.

Basic Stormwater Management Plans are subject to the requirements of subsection (f), Standards for Easements or Rights-of-Way; subsection (g), Material Requirements; subsection (h), Modification of the Standards and Requirements; and subsection (i), Discharge of Stormwater.

(e) ***Standards for a Drainage Plan***

(1) Design Standard

The plan must demonstrate that the proposed improvements are designed to minimize the amount of stormwater leaving the site. This must include consideration of the design and location of improvements to minimize the total area of impervious surface on the site and stormwater management techniques to minimize both the volume and rate of runoff from the lot. The use of LID practices appropriate for the type of development as set forth in Chapter 10 of the *DEP Stormwater Manual, Volume III-BMPs Technical Design Manual*, and/or any City of South Portland LID Manual adopted by the Planning Board after appropriate notice and hearing is encouraged but not required. The Drainage Plan must also demonstrate that:

- (a) any stormwater draining onto or across the lot in its pre-improvement state will not be impeded or re-directed so as to create ponding on, or flooding of, adjacent lots;
- (b) any increase in volume or rate of stormwater draining from the lot onto an adjacent lot following the improvement can be handled on the adjacent lot without creating ponding, flooding or other drainage problems and that the owner of the lot being improved has the legal right to increase the flow of stormwater onto the adjacent lot;
- (c) any increase in volume or rate of stormwater draining from the lot onto City property following the improvement can be handled without creating ponding, flooding or other drainage problems and that the owner of the lot being improved has the legal right to increase the flow of stormwater onto the City's property; and

- (d) any increase in volume or rate of stormwater draining from the lot into the City's separate storm sewer system can be accommodated in the system without creating downstream problems or exceeding the capacity of the storm sewer system.

(2) Submission Requirements

A Drainage Plan must include a written statement demonstrating how the project has been designed to minimize the volume and rate of stormwater leaving the site including provisions for minimizing the area of impervious surface or the use of LID practices, and a plan and supporting documentation with at least the following information:

- (a) The location and characteristics of any streams or drainage courses existing on the parcel and/or abutting parcels.
- (b) The existing and proposed grading of the site using one-foot contours.
- (c) The location and area of existing and proposed buildings and impervious surfaces on the site.
- (d) The existing pattern of stormwater drainage on the site, including points of discharge to the City's storm sewer system or adjacent properties.
- (e) The proposed pattern of stormwater drainage after development, including the location and design of any stormwater facilities.

(3) Relationship to Other Provisions.

Drainage Plans are subject to the requirements of subsection (f), Standards for Easements or Rights-of-Way; subsection (g), Material Requirements; subsection (h), Modification of the Standards and Requirements; and subsection (i), Discharge of Stormwater.

(f) ***Standards for Easements or Rights-of-Way.***

Drainage easements or rights-of-way containing components of the storm water runoff system lying outside of public street right-of-way lines shall conform to the following standards:

- (1) The minimum width of the easement shall be thirty (30) feet, provided that where a watercourse or retention area is wider than thirty (30) feet, the Planning Board may require a drainage right-of-way of adequate width to conform substantially to the lines of such watercourse or retention area, including additional width to provide for access. The Planning Board may reduce the width of the easement upon the positive recommendation of the Director of Water Resource Protection or his/her designee if the narrower easement will allow the stormwater facilities to be maintained or if the

unique characteristics of the site make the creation of a wider easement impractical.

- (2) Where a drainage easement will contain an open channel, stream or drainageway, the easement shall be designed and landscaped to further the objectives of the Stormwater Management Plan. The natural landscape shall be retained to the extent practical as determined by the Planning Board or Code Enforcement Officer, as applicable.
- (3) Where the easement will contain a closed conduit, the facility shall be constructed in accordance with the approved plan.

(g) ***Requirements for storm sewers.***

- (1) Storm sewers shall be designed and constructed in accordance with the Planning Board's Standards for Storm Sewers. The Standards shall be adopted by the Planning Board by regulation upon the recommendation of the Director of Water Resource Protection and following appropriate notice and public hearing.

(h) ***Modification of the Standards and Requirements***

- (1) The Planning Board may modify or waive any of the submission requirements for a Post-Construction Stormwater Management Plan or a Basic Stormwater Management Plan if the Planning Board finds that, due to the unique physical characteristics of the site or the scale of the proposed activity, the information is not required to allow the Planning Board to determine if the applicable stormwater management standards are met.
- (2) The Planning Board may approve a Post-Construction Stormwater Management Plan that does not comply with the detailed requirements of subsection (c) or a Basic Stormwater Management Plan that does not comply with the detailed requirements of subsection (d) if the Planning Board finds that the proposed plan will provide the same or higher level of water quality protection than strict conformance with the applicable standard or that due to the unique physical characteristics of the site and/or the receiving waters, full conformance with the standard is not warranted to assure that the quality of the receiving waters will not be degraded.
- (3) The Code Enforcement Officer may modify or waive any of the submission requirements for a Drainage Plan if the Code Enforcement Officer determines that the information is not required to determine if the drainage standard is met.
- (4) The Code Enforcement Officer may approve a Drainage Plan that does not comply with the detailed requirements of subsection (e) if the Code Enforcement Officer determines that full compliance with the standard is not practical given the unique characteristics of the parcel.

(i) ***Discharge of Stormwater***

- (1) The volume of stormwater discharged from any parcel must be

minimized through the use of on-site retention to the extent practical. When stormwater must be discharged from a parcel, the preferred method is discharge into the natural drainage system. Discharge of stormwater to the City's MS4 shall be allowed only when on-site retention and/or discharge to the natural system is not practical.

- (2) The direct connection of new or expanded Stormwater Management Facilities to a combined sewer is not permitted. In areas served by combined sewers, the preferred method of stormwater management is on-site retention. If on-site retention is not practical, discharge to the natural drainage system is the preferred alternative. If retention and/or discharge to the natural drainage system are not practical, connection to the MS4 is allowed. If connection to the MS4 is not practical, the treatment of one inch of runoff from impervious surfaces and 0.4 inches of runoff from disturbed pervious surfaces through the use of LID BMPs which are disconnected from the combined sewer system may be permitted by the Planning Board or Code Enforcement Officer, as applicable, upon the positive recommendation of the Director of Water Resource Protection. The LID BMPs used may include those set forth in Chapter 10 of the *DEP Stormwater Manual, Volume III-BMPs Technical Design Manual*, and/or any City of South Portland LID Manual adopted by the Planning Board after appropriate notice and public hearing.

(j) *Additional Requirements in the Long Creek Watershed*

In addition to the requirements set forth in this section, property that is located within the watershed of Long Creek may be subject to additional stormwater management requirements imposed by the U.S. Environmental Protection Agency and administered by the DEP. These additional requirements apply to certain types of both new and existing development within the watershed.

(Ord. No. 19-08/09, 4/22/09 [Fiscal Note: Less than \$1000])