

PROPOSED Replacement General Bylaw For Town Meeting Consideration – May 8, 2017

Article XXVI

Stormwater Management and Land Disturbance

SECTION 26.1 AUTHORITY

This bylaw is adopted in accordance with the authority granted by M.G.L. Chapter 43B, Section 13.

SECTION 26.2 PURPOSE

The purpose and intent of this bylaw is to fulfill the Town's obligations under the Clean Water Act (33 U.S.C 1251 & seq.) (the "Act") and under the Town's National Pollution Discharge Elimination System ("NPDES") permit. More specifically, its purpose is the following:

1. To protect the waters of the U.S. as defined in the Act and implementing regulations from uncontrolled Discharges of Storm Water or discharges of contaminated water which have a negative impact on the receiving waters by changing the physical, biological and chemical composition of those waters resulting in an unhealthy environment for aquatic organisms, wildlife and people;
2. To establish a comprehensive and fair system of regulation of discharges to the Town's Municipal Separate Storm Sewer System (MS4);
3. To prohibit illicit connections and unauthorized discharges to the MS4;
4. To require the removal of all such illicit discharges;
5. To comply with Town, state and federal regulations related to storm water discharges, including but not limited to point sources, construction or industrial activities, and post-construction runoff by establishing provisions for the long-term responsibility for and maintenance of structural stormwater control facilities; and
6. To establish legal authority to ensure compliance with the provisions of this bylaw through inspection, monitoring and enforcement.

SECTION 26.3 DEFINITIONS

Except as listed below, words, all terms, abbreviations and acronyms that appear in this bylaw and are also defined in Appendix A of the Final 2016 Massachusetts Small MS4 General Permit ("Appendix A") signed April 4, 2016 with an effective date of July 1, 2017, (MS4 General Permit) or as most recently amended, shall be construed to have the meaning presented in Appendix A.

Common Plan of Development - A "larger common plan of development or sale" is a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan. This Bylaw shall apply to land or parcels of land that are held in common ownership (including ownership by related or jointly-controlled persons or entities) as of the effective date of this Bylaw. A development shall not be segmented or phased in a manner to avoid compliance with this Bylaw. For example, if a developer buys a 20-acre lot and builds roads, installs pipes, and runs electricity with the intention of constructing homes or other structures sometime in the future, this would be considered a larger common plan of development or sale. If the land is parceled off or sold, and construction occurs on plots that are less than one acre by separate, independent builders, this activity still would be subject to stormwater permitting requirements if the smaller plots were included on the original site plan.

Illicit Connection -- A surface or subsurface drain or conveyance, which allows an illicit discharge into the municipal storm drain system, including without limitation sewage, process wastewater, or wash water and any connections from indoor drains, sinks, or toilets, regardless of whether said connection was previously allowed or approved before the effective date of this Bylaw.

New Development – Any construction activities or land alteration resulting in total earth disturbances greater than 1 acre (or activities that are part of a larger common plan of development disturbing greater than 1 acre) on an area that has not previously been developed to include impervious cover.

Redevelopment – Any construction, land alteration, or improvement of impervious surfaces resulting in total earth disturbances greater than 1 acre (or activities that are part of a larger common plan of development disturbing greater than 1 acre) that does not meet the definition of New Development (see above).

Small Project – Any construction activities or land alteration resulting in total earth disturbances greater than 20,000 square feet but less than 1 acre whether or not such area has previously been developed to include impervious cover.

SECTION 26.4 ILLICIT DISCHARGES

Section 26.4.1. Prohibited Activities:

- a. Illicit Discharges – no person shall dump, discharge, cause or allow to be discharged any pollutant, unauthorized stormwater or non-stormwater discharge into the municipal separate storm sewer system (MS4) and/or Town right-of-way.
- b. Illicit Connections – No person shall construct, use, allow, maintain or continue any illicit connection to the municipal separate storm sewer system, regardless of whether the connection was permissible under applicable law, regulation or custom at the time of connection.
- c. Obstruction of MS4 – No person shall obstruct or interfere with the normal flow of storm water into or out of the MS4 without prior written approval from the Enforcement Authority.

- d. Yard Wastes – No person shall dump or dispose of yard waste (leaves, grass clippings, etc.) into the MS4, or into catch basins, retention/detention basins or any other component of a stormwater management system which discharges to the MS4.

Section 26.4.2. Pre-existing Illicit Discharges.

Illicit discharges in existence prior to the adoption of this bylaw shall be addressed in compliance with the Town’s Illicit Discharge Detection and Elimination (“IDDE”) program.

Section 26.4.3. Non-Stormwater Discharges -- The following categories of non-stormwater discharges are allowed unless the Town, the United States Environmental Protection Agency (“EPA”), or the Massachusetts Department of Environmental Protection (“MassDEP”) identifies any category or individual discharge of non-stormwater discharge as a significant contributor of pollutants to the MS4, then that category or individual discharge is not allowed but rather shall be deemed an “illicit discharge” and the Town shall address that category or individual discharge as part of its IDDE Program:

- a. Water line flushing
- b. Landscape irrigation
- c. Diverted stream flows
- d. Discharge from potable water sources
- e. Air conditioning condensation
- f. Irrigation water, springs
- g. Lawn watering
- h. Individual resident car washing
- i. Flows from riparian habitats and wetlands
- j. Street wash waters
- k. Residential building wash waters without detergents
- l. Fire-fighting activities

Section 26.4.4. Permitted Non-Stormwater Discharges

A limited category of non-stormwater discharges are only allowed with a permit from the Department of Public Services (“DPS”). Such permits may be granted only following an examination of potential alternatives and a finding by DPS that there is no viable alternative. These categories are:

- a. Uncontaminated pumped ground water
- b. Foundation drains
- c. Water from crawl space pumps
- d. Footing drains

Section 26.4.5. Prohibited Non-Stormwater Discharges

The following non-stormwater discharges are strictly prohibited:

- a. De-chlorinated swimming pool discharges
- b. Discharging water from any source into the street

Section 26.4.6. Notification of Spills

Notwithstanding other requirements of local, state or federal law, as soon as a person responsible for a facility or operation, or responsible for emergency response for a facility

or operation has information of or suspects a release of materials at that facility or operation resulting in or which may result in discharge of pollutants to the municipal drainage system or waters of the Commonwealth, the person shall take all necessary steps to ensure containment, and cleanup of the release. In the event of a release of oil or hazardous materials, the person shall immediately notify the Fire Department and the Department of Public Services (DPS). In the event of a release of non-hazardous material, the reporting person shall notify DPS no later than the next business day. The reporting person shall provide to DPS written confirmation of all telephone, electronic or in-person notifications within three business days thereafter. If the discharge of prohibited materials is from a commercial or industrial facility, the facility owner or operator of the facility shall retain on-site a written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

Section 26.4.7. Enforcement – The Department of Public Services or an authorized agent of DPS shall enforce Section 26.4 of this by-law, including associated regulations, and may issue orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.

SECTION 26.5 LAND DISTURBANCE AND CONSTRUCTION ACTIVITY

Section 26.5.1. Applicability. This section shall apply to all activities in which the limit of work results in disturbance of:

- a. at least 20,000 square feet but less than 1 acre (for administrative review) or
- b. one or more acres (or less if the activity is part of a larger common plan of development that exceeds one acre of land disturbance within a 5-year period) for review by the applicable permit granting authority.

Section 26.5.2. Land Disturbance Permit. Except as authorized by the applicable board, commission, department, administrative team or its agent, as specified in Section 26.5.3 and hereafter known as *the “permitting authority,”* no person shall perform any applicable land disturbance activity without a Land Disturbance Permit. Normal maintenance and improvement of land in agricultural or aquacultural use, as defined by the Wetlands Protection Act regulations 310 CMR 10.04, are exempt. Roadway and utilities improvement and maintenance undertaken by the Town are also exempt from permitting but such road work that involves increasing impervious surface by more than a single lane width shall comply with MS4 General Permit requirements as specified in Section 26.8.2 (3)(d).

Section 26.5.3. Coordinated Permitting.

26.5.3.1 In the case of activities requiring an Order of Conditions from the Conservation Commission or subdivision, site plan or special permit approval from the Planning and Economic Development Board (“PEDB”), Land Disturbance Permits shall be reviewed and issued as a component of those other permits, including the fees, regulations, timing, notice and hearing requirements of those other permits. In cases where activities are subject to Conservation Commission jurisdiction under the Wetlands Protection Act for part of a site and activities on another part of the site are subject to the jurisdiction of the PEDB, the Conservation Commission shall have sole jurisdiction for issuing a Land

Disturbance Permit for the entire site. For activities outside the jurisdiction of the Conservation Commission and that do not require subdivision, site plan or special permit approval from the PEDB (e.g. construction of a house and associated facilities on an existing lot), including Small Projects, a Land Disturbance Permit pursuant to Section 26.5.1 shall be required from an administrative team consisting of the Building Inspector, DPS Director, Community and Economic Development Director, Planning and Economic Development Coordinator and Conservation Commission Agent, and may include other Town staff or the designee of any of the preceding as appropriate depending on the nature of the project..

26.5.3.2 Section 26.6 specifies procedures for administrative review. Sections 26.7 through 26.14 shall be applicable in all cases.

26.5.4 Application. A completed application for a Land Disturbance Permit shall be filed with the applicable permitting authority as established in Section 25.5.3. A permit must be obtained prior to the commencement of any applicable land disturbing activity. The Land Disturbance Permit Application package shall include:

- a. a completed Application Form with original signatures of all owners;
- b. three (3) copies of the Erosion and Sediment Control Plan as specified in Section 26.7 of this bylaw;
- c. three (3) copies of the Post-Construction Stormwater Management Plan as specified in Section 26.8 of this bylaw;
- d. three (3) copies of the Stormwater Operations and Maintenance Plan for both during construction and post-construction as specified in Section 26.9 of this bylaw
- e. payment of the application and review fees; and,
- f. one (1) copy of the Application Form filed with the Town Clerk.
- g. an electronic copy of all materials submitted.

SECTION 26.6 ADMINISTRATIVE REVIEW

26.6.1. Applicability. Administrative review is provided to address those land disturbance activities that fall outside the jurisdiction of any other reviewing authority as defined in Section 26.5.3.1, including Small Projects.

26.6.2. Entry. Filing an application for a permit grants the administrative team or its designee, permission to enter the site to verify the information in the application and to inspect for compliance with permit conditions.

26.6.3. Other Boards. The administrative team shall notify the Town Clerk of receipt of the application, and shall give one copy of the application package to and may seek input from the Planning and Economic Development Board, the Conservation Commission, Department of Public Services and/or other Town departments or boards as needed or appropriate.

26.6.4. Administrative Team Meeting. The Land Disturbance Permit application shall be made available for inspection by the public at Town Hall during its normal business hours. The applicant shall be invited to a review meeting which shall be held within 14 days of the receipt of a complete application and final action shall be taken within 14 days of the review meeting unless such time is extended by agreement between the applicant and the administrative team.

26.6.5. Information requests. The applicant shall submit all additional information requested by the administrative team in order to issue a decision on the application.

26.6.6. Waivers

26.6.6.1. The administrative team may waive strict compliance with any requirement of this by-law or the rules and regulations promulgated hereunder, where:

- a. such action is allowed by federal, state and local statutes and/or regulations,
- b. is in the public interest, and
- c. is not inconsistent with the purpose and intent of this by-law.

26.6.6.2. Any applicant may submit a written request to be granted such a waiver. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrating that strict application of the by-law does not further the purposes or objectives of this bylaw.

26.6.6.3. All waiver requests shall be discussed and voted on at the review meeting for the project.

26.6.6.4. If in the opinion of the administrative team, additional time or information is required for review of a waiver request, it may continue the review to a date certain announced at the meeting. In the event the applicant objects to a continuance, or fails to provide requested information, the waiver request shall be denied.

26.6.7. Action

The administrative team may:

- a. Approve the Land Disturbance Permit Application and issue a permit if it finds that the proposed plan will protect water resources and meets the objectives and requirements of this by-law;
- b. Approve the Land Disturbance Permit Application and issue a permit with conditions, modifications or restrictions that it determines are required to ensure that the project will protect water resources and meets the objectives and requirements of this by-law;
- c. Disapprove the Land Disturbance Permit Application and deny the permit if it finds that the proposed plan will not protect water resources or fails to meet the objectives and requirements of this by-law.

26.6.8. Failure to take final action. Failure of the administrative team to take final action upon an Application within the time specified above shall be deemed to be approval of said Application. Upon certification by the Town Clerk that the allowed time has passed without action, the Land Disturbance Permit shall be issued by the administrative team.

26.6.9. Appeals. Decisions of the administrative team may be appealed to the Conservation Commission within 20 days of filing the decision with the Town Clerk. The Conservation Commission may adopt rules and regulations for hearing such appeals but shall consider the appeal at a public meeting held within 30 days of receipt.

26.6.10. Fee Structure. Each application must be accompanied by the appropriate application fee as established by the Department of Community and Economic Development. Applicants shall pay review fees as determined by the administrative team sufficient to cover any expenses connected with the review of the Land Disturbance Permit Application before the review process commences. The administrative team is authorized to retain a Registered Professional Engineer or other professional consultant to advise it on any or all aspects of the Application.

26.6.11. Project Changes. The permittee, or their agent, must notify the Department of Community and Economic Development in writing of any change or alteration of a land-disturbing activity authorized in a Land Disturbance Permit before any change or alteration occurs. If the administrative team determines that the change or alteration is significant, based on the design requirements listed in Section 26.7.2 and accepted construction practices, the administrative team may require that an amended Land Disturbance Permit application be filed and a new review meeting be held. If any change or alteration from the Land Disturbance Permit occurs during any land disturbing activities, the administrative team may require the installation of interim erosion and sedimentation control measures before approving the change or alteration.

SECTION 26.7. EROSION AND SEDIMENT CONTROL PLAN

26.7.1. Applicability. An Erosion and Sediment Control Plan (ESCP) is required of all construction site operators performing land disturbance activities under the jurisdiction of this by-law. The Erosion and Sediment Control Plan shall contain sufficient information to describe the nature and purpose of the proposed development, pertinent conditions of the site and the adjacent areas, and proposed erosion and sedimentation controls. The applicant shall submit such material as is necessary to show that the proposed development will comply with the design requirements listed in Section 26.7.2. below.

26.7.2. Design Requirements. The design requirements of the Erosion and Sediment Control Plan are:

- a. Minimize total area of disturbance and protect natural resources;
- b. Sequence activities to minimize simultaneous areas of disturbance;
- c. Minimize soil erosion and control sedimentation during construction and document that proposed measures can handle a 100-year storm, recognizing that prevention of erosion is preferred over sedimentation control;

- d. Protect slopes on the construction site;
- e. Protect all storm drain inlets and armor all newly constructed outlets;
- f. Divert uncontaminated water around disturbed areas;
- g. Install and maintain all Erosion and Sediment Control measures in accordance with the manufacturers specifications and good engineering practices;
- h. Use perimeter controls to prevent off-site transport of sediment;
- i. Stabilize construction site entrances and exits to prevent off-site vehicle tracking of sediment;
- j. Inspect and report stormwater controls at consistent intervals.
- k. Protect and manage on and off-site material storage areas (overburden and stockpiles of dirt, borrow areas, or other areas used solely by the permitted project are considered a part of the project);
- l. Comply with applicable Federal, State and local laws and regulations including waste disposal, sanitary sewer or septic system regulations, and air quality requirements, including dust control;
- m. Prevent significant alteration of habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as Endangered, Threatened or Of Special Concern, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, and Priority Habitats of Rare Species from the proposed activities;
- n. Institute interim and permanent stabilization measures, which shall be instituted on a disturbed area as soon as practicable but no more than 14 days after construction activity has temporarily or permanently ceased on that portion of the site;
- o. Properly manage on-site construction and waste materials; including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes. These wastes may not be discharged to the MS4.

26.7.3. Erosion and Sedimentation Control Plan Content. The Plan shall contain the following information:

- a. Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan;
- b. Title, date, north arrow, names of abutters, scale, legend, and locus map;
- c. Location and description of natural features including:
 - 1) Watercourses and water bodies, wetland resource areas and all floodplain information, including the 100-year flood elevation based upon the most recent Flood Insurance Rate Map, or as calculated by a professional engineer for areas not assessed on these maps;
 - 2) Existing vegetation including tree lines, canopy layer, shrub layer, and ground

cover, and trees with a caliper twelve (12) inches or larger, noting specimen trees and forest communities; and

- 3) Habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as Endangered, Threatened or of Special Concern, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, and Priority Habitats of Rare Species within five hundred (500) feet of any construction activity.
- d. Lines of existing abutting streets showing drainage and driveway locations and curb cuts;
 - e. Existing soils, volume and nature of imported soil materials;
 - f. Topographical features including existing and proposed contours at intervals no greater than two (2) feet with spot elevations provided when needed;
 - g. Surveyed property lines showing distances and monument locations, all existing and proposed easements, rights-of-way, and other encumbrances, the size of the entire parcel, and the delineation and number of square feet of the land area to be disturbed;
 - h. Drainage patterns and approximate slopes anticipated after major grading activities (Construction Phase Grading Plans);
 - i. A plan showing the limit of work with a calculation indicating its area.
 - j. Location and details of erosion and sediment control measures with a narrative of the construction sequence/phasing of the project, including both operation and maintenance for structural and non-structural measures, interim grading, and material stockpiling areas;
 - k. Path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable;
 - l. Location and description of industrial discharges, including stormwater discharges from dedicated asphalt plants and dedicated concrete plants, which are covered by this permit;
 - m. Stormwater runoff calculations in accordance with the Department of Environmental Protection's Stormwater Management Policy;
 - n. Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures;
 - o. A description of construction and waste materials expected to be stored on-site. The Plan shall include a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response;
 - p. A description of provisions for phasing the project where one acre of area or greater is to be altered or disturbed;
 - q. Timing, schedules, and sequence of development including clearing, stripping,

- rough grading, construction, final grading, and vegetative stabilization,
- r. A maintenance schedule for the period of construction,
 - s. Plans must be stamped and certified by a qualified Professional Engineer registered in Massachusetts or a Certified Professional in Erosion and Sediment Control; and
 - t. Such other relevant information as is required by the applicable permitting authority.

SECTION 26.8. POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN

26.8.1. Application. The application for a Land Disturbance Permit shall include a Post-Construction Stormwater Management Plan, including a Long-Term Operations and Management Plan. This Post-Construction Stormwater Management Plan shall contain sufficient information for the applicable reviewing authority to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater. The Plan shall be designed to meet the most current Massachusetts Stormwater Management Standards as set forth in Section 26.8.3 and DEP Stormwater Management Handbook Volumes I and II.

26.8.2 Plan Contents. The Stormwater Management Plan shall fully describe the project in drawings, and narrative. It shall include:

- a. A locus map,
- b. The existing zoning, and land use at the site,
- c. The proposed land use,
- d. The location(s) of existing and proposed easements,
- e. The location of existing and proposed utilities,
- f. The site's existing & proposed topography with contours at 2 foot intervals,
- g. The existing site hydrology,
- h. A description & delineation of existing stormwater conveyances, impoundments, and wetlands on or adjacent to the site or into which stormwater flows,
- i. A delineation of 100-year flood plains, if applicable,
- j. Estimated seasonal high groundwater elevation (November to April) in areas to be used for stormwater retention, detention, or infiltration,
- k. The existing and proposed vegetation and ground surfaces with runoff coefficients for each,
- l. A drainage area map showing pre and post construction watershed boundaries, drainage area and stormwater flow paths,
- m. A description and drawings of all components of the proposed drainage system including:
 - 1) locations, cross sections, and profiles of all brooks, streams, drainage swales and their method of stabilization,
 - 2) all measures for the detention, retention or infiltration of water,
 - 3) all measures for the protection of water quality,
 - 4) the structural details for all components of the proposed drainage systems and stormwater management facilities,
 - 5) notes on drawings specifying materials to be used, construction specifications,

and typical, and
6) expected hydrology with supporting calculations.

- n. Proposed improvements including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable,
- o. Timing, schedules, and procedures to ensure proper functioning and operation of the system'
- p. A maintenance schedule,
- q. Documentation of consideration of the use of low impact design and green infrastructure,
- r. A final (and for longer term projects an annual) report documenting compliance with the plan, including receipts as applicable, and
- s. Any other relevant information requested by the applicable permitting authority.

26.8.3. Stormwater Design Requirements

Projects shall use Low Impact Development (LID) site planning and design strategies to the maximum extent feasible and shall comply with the following requirements

- a. No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.
- b. For new development, stormwater management systems must be designed to:
 - 1) Not allow new stormwater conveyances to discharge untreated stormwater in accordance with Massachusetts Stormwater Handbook Standard 1;
 - 2) Control peak runoff rates in accordance with Massachusetts Stormwater Handbook Standard;
 - 3) Recharge groundwater in accordance with Massachusetts Stormwater Handbook Standard;
 - 4) Eliminate or reduce the discharge of pollutants from land uses with higher pollutant loads as defined in the Massachusetts Stormwater Handbook in accordance with Massachusetts Stormwater Handbook Standard 5;
 - 5) Protect Zone II or Interim Wellhead Protection Areas of public water supplies in accordance with Massachusetts Stormwater Handbook Standard 6;
 - 6) Implement long term maintenance practices in accordance with Massachusetts Stormwater Handbook Standard 9; and
 - 7) Require that all stormwater management systems be designed to:
 - a) Retain the volume of runoff equivalent to, or greater than, one (1.0) inch multiplied by the total post-construction impervious surface area on the site AND/OR
 - b) Remove 90% of the average annual load of Total Suspended Solids (TSS) generated from the total post-construction impervious area on the site AND 60% of the average annual load of Total Phosphorus (TP) generated from the total post-construction impervious surface area on the site. Pollutant removal shall be calculated consistent with EPA Region 1's BMP Performance Extrapolation Tool or other BMP performance evaluation tool provided by EPA Region 1, where available. If EPA Region 1 tools do not address the planned or installed BMP performance any federally or State approved BMP design guidance or performance standards (e.g. State stormwater handbooks and design guidance manuals) may be used to

calculate BMP performance. The required removal percentage is not required for each storm, it is the average removal over a year that is required.

c. For redevelopment sites:

- 1) Stormwater management systems on Redevelopment sites shall meet the following sections of part 2.3.6.a.ii.3 of the MS4 General Permit as most recently amended, to the maximum extent feasible:
 - a) Part 2.3.6.a.ii.3(a) (Massachusetts Stormwater Standard 1);
 - b) Part 2.3.6.a.ii.3(b) (Massachusetts Stormwater Standard 2)
 - c) Part 2.3.6.a.ii.3(c) (Massachusetts Stormwater Standard 3); and
 - d) The pretreatment and structural best management practices requirements of 2.3.6.a.ii.3(d) and 2.3.6.a.ii.3(e) (Massachusetts Stormwater Standards 5 and 6).
- 2) Stormwater management systems on Redevelopment sites shall also improve existing conditions by requiring that stormwater management systems be designed to:
 - a) Retain the volume of runoff equivalent to, or greater than, 0.80 inch multiplied by the total post-construction impervious surface area on the site AND/OR
 - b) Remove 80% of the average annual post-construction load of Total Suspended Solids (TSS) generated from the total post-construction impervious area on the site AND 50% of the average annual load of Total Phosphorus (TP) generated from the total post construction impervious surface area on the site. Pollutant removal shall be calculated consistent with EPA Region 1's BMP Performance Extrapolation Tool or other BMP performance evaluation tool provided by EPA Region 1 where available. If EPA Region 1 tools do not address the planned or installed BMP performance any federally or State approved BMP design guidance or performance standards (e.g. State stormwater handbooks and design guidance manuals) may be used to calculate BMP performance.
- 3) Stormwater management systems on redevelopment sites may utilize offsite mitigation within the same USGS HUC10 as the redevelopment site to meet the equivalent retention or pollutant removal requirements in part 2.3.6.a.ii.4(b) of the [MS4 General Permit](#), as most recently amended,.
- 4) Redevelopment activities that are exclusively limited to maintenance and improvement of existing roadways, (including widening less than a single lane, adding shoulders, correcting substandard intersections, improving existing drainage systems, and repaving projects) shall improve existing conditions where feasible and are exempt from the MS4 General Permit part 2.3.6.a.ii.4(a), part 2.3.6.a.ii.4(b) and part 2.3.6.a.ii.4(c). Roadway widening or improvements that increase the amount of impervious area on the redevelopment site by greater than or equal to a single lane width shall meet the requirements of part 2.3.6.a.ii.4(a) – (c) of MS4 General Permit as most recently amended fully.

d. All stormwater management systems must have a Long-Term Operation and Maintenance plan prepared in accordance with 26.8.5 to ensure that systems function as designed.

When one or more of the Standards cannot be met, an applicant may demonstrate that an equivalent level of environmental protection will be provided.

26.8.4. Recording. The Post-Construction Stormwater Management Plan shall be recorded at the Registry of Deeds along with the decision of the applicable permitting authority.

26.8.5. Long-Term Operation and Maintenance Plans

A Long-Term Operation and Maintenance plan (O&M Plan) is required at the time of application for all projects. The maintenance plan shall be designed to ensure compliance with the Permit, this Bylaw and the Massachusetts Stormwater Standards are met in all seasons and throughout the life of the system. The applicable permitting authority shall make the final decision of what maintenance option is appropriate in a given situation. The applicable permitting authority will consider natural features, proximity of site to water bodies and wetlands, extent of impervious surfaces, size of the site, the types of stormwater management structures, and potential need for ongoing maintenance activities when making this decision. The Operation and Maintenance Plan shall remain on file with the applicable permitting authority and shall be an ongoing requirement. The O&M Plan shall include:

26.8.5.1. The name(s) of the owner(s) for all components of the system

26.8.5.2. Maintenance agreements that specify:

1. The names and addresses of the person(s) responsible for operation and maintenance
2. The person(s) responsible for financing maintenance and emergency repairs.
3. A Maintenance Schedule for all drainage structures, including swales and ponds.
4. A list of easements to the town with the purpose and location of each.
5. The signature(s) of the owner(s).

26.8.5.3. Stormwater Management Easement(s).

1. Stormwater management easements may be required for areas used for off-site stormwater control, unless a waiver is granted by the applicable permitting authority.
2. Stormwater management easements shall be provided to the Town by the property owner(s) as necessary to comply with the Post Construction and Long-Term Operation and Maintenance Plans for:
 - a. access for facility inspections and maintenance,
 - b. preservation of stormwater runoff conveyance, infiltration, and detention

areas and facilities, including flood routes for the 100-year storm event.

- c. direct maintenance access by heavy equipment to structures requiring regular cleanout.
3. The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
4. Easements along with a plan illustrating their location shall be recorded with the Norfolk County Registry of Deeds prior to issuance of a Certificate of Completion by the applicable permitting authority.

26.8.5.4. Changes to Operation and Maintenance Plans

1. The owner(s) of the stormwater management system must notify the Department of Public Services of changes in ownership or assignment of financial responsibility.
2. The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of this by-law by mutual agreement of the Department of Public Services and the Responsible Parties. Proposed amendments must be in writing and signed by all Responsible Parties. Responsible Parties shall include owner(s), persons with financial responsibility, and persons with operational responsibility. Proposed amendments must be described in detail along with reasons why the Town should consider them. Amendments will not be considered until at least three years after Project Completion as defined in Section 26.12.
3. A report shall be provided annually to the Department of Public Services on the anniversary date of the permit. The Report shall include documentation of compliance with the Plan, including photographs, and receipts as applicable.

SECTION 26.9. INSPECTION AND SITE SUPERVISION

26.9.1. Pre-construction Meeting. Prior to starting clearing, excavation, construction, or land disturbing activity the applicant, the applicant's technical representative, the general contractor or any other person with authority to make changes to the project, shall meet with appropriate Town staff and/or designated agents, to review the permitted plans and their implementation.

26.9.2. Construction Inspection. The applicable Town staff or its designated agent shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the land disturbance permit as approved. The Permit and associated plans for grading, stripping, excavating, and filling work, bearing the signature of approval of applicable permitting authority, shall be maintained at the site during the progress of the work. In order to obtain inspections, the permittee shall notify applicable permitting authority at least two (2) working days before each of the following events:

- a. Erosion and sediment control measures are in place and stabilized;
- b. Site Clearing has been substantially completed;

- c. Rough Grading has been substantially completed;
- d. Installation of physical control measures;
- e. Final Grading has been substantially completed;
- f. Close of the Construction Season; and
- g. Final Landscaping (permanent stabilization) and project final completion.

A written report of these inspections shall be provided to both the permittee and the applicable permitting authority. Such inspections may be combined with other inspections required under any other permits issued to authorize the project.

26.9.3. Permittee Inspections and Reporting. The permittee or his/her agent shall conduct and document inspections of all control measures no less than weekly during construction or as specified in the permit, and prior to and following anticipated storm events. The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for maintenance or additional control measures. The permittee or his/her agent shall submit monthly reports to the applicable permitting authority or designated agent in a format approved by it.

26.9.4. Access Permission. To the extent permitted by state law, or if authorized by the owner/permittee or other party in control of the property, the applicable permitting authority its agents, officers, and employees may enter upon privately owned property for the purpose of performing their duties under this by-law and may make or cause to be made such examinations, surveys or sampling as the applicable permitting authority deems reasonably necessary to determine compliance with the permit.

SECTION 26.10. SURETY

Unless otherwise provided for through a concurrent coordinated permitting process per Section 26.5.3, the applicable permitting authority or administrative team may require the permittee to post a performance guarantee in a form acceptable to Town Counsel and the Town Treasurer before the start of land disturbance activity. The form of the bond shall be in an amount deemed sufficient by the applicable permitting authority to ensure that the work will be completed in accordance with the permit. If the project is phased, **the** applicable permitting authority may release part of the bond as each phase is completed in compliance with the permit but the bond may not be fully released until the applicable permitting authority has received the final report as required by Section 26.9 and has issued a certificate of completion. The amount of the bond shall be sufficient to ensure that the site may be stabilized, including a minimum of 6" of loam seeded over any disturbed area along with erosion controls plus 25% contingency.

SECTION 26.11. FINAL REPORTS

Upon completion of the work, the permittee shall submit to the applicable permitting authority or administrative team a report (including certified as-built construction plans in accordance with Section 2.3.6.a.iii of the of the MS4 General Permit, as most recently amended) from a Professional Engineer (P.E.), surveyor, or Certified Professional in Erosion and Sediment Control (CPESC), certifying that all erosion and sediment control devices, and approved changes and modifications, have been completed in accordance

with the conditions of the approved permit. Any deviations should be noted in the cover letter.

SECTION 26.12. PROJECT COMPLETION

The issuing authority will issue a letter certifying completion upon receipt and approval of the final reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with this bylaw. Such certification may be a component of Conservation Commission Certificate of Compliance or a PEDB Certificate of Completion. A copy of the letter and Final Report shall be submitted by the issuing authority to the Department of Public Services.

SECTION 26.13. ENFORCEMENT

26.13.1 Applicability. The applicable permitting authority or an authorized agent shall enforce Sections 26.5 -26.13 of this by-law, including associated regulations, and may issue orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.

26.13.2. Orders

- a. The applicable permitting authority or an authorized agent may issue a written order to enforce the provisions of this by-law or the regulations thereunder, which may include:
 - 1) a requirement to cease and desist from the land-disturbing activity until there is compliance with the bylaw and provisions of the land-disturbance permit;
 - 2) maintenance, installation or performance of additional erosion and sediment control measures;
 - 3) monitoring, analyses, and reporting
 - 4) remediation of erosion and sedimentation resulting directly or indirectly from the land-disturbing activity.
- b. If the enforcing person determines that abatement or remediation of erosion and sedimentation is required, the order shall set forth a deadline by which such abatement or remediation must be completed. Said order shall further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town may, at its option, undertake such work, and the property owner shall reimburse the Town expenses.
- c. Within thirty (30) days after completing all measures necessary to abate the violation or to perform remediation, the violator and the property owner shall be notified of the costs incurred by the Town. The violator or property owner may file a written protest objecting to the amount or basis of costs with the Town Administrator within thirty (30) days of receipt of the notification of the costs incurred. If the amount due is not received by the expiration of the time in which to file a protest or within thirty (30) days following a decision of the Town Administrator affirming or reducing the costs, or from a final decision of a court of

competent jurisdiction, the costs shall become a special assessment against the property owner and shall constitute a lien on the owner's property for the amount of said costs. Interest shall begin to accrue on any unpaid costs at the statutory rate, as provided in G.L. Ch. 59, § 57, after the thirty-first day following the day on which the costs were due.

26.13.3 Non-Criminal Disposition. As an alternative to criminal prosecution or civil action, the Town may elect to utilize the non-criminal disposition procedure set forth in G.L. Ch. 40, §21D and Article XX of the Town of Medway General Bylaws, in which case the authorized agent of the applicable permitting authority] shall be the enforcing person. The penalty for the 1st violation shall be a written warning. The penalty for the 2nd violation shall be \$100. The penalty for the 3rd and subsequent violations shall be \$300. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

26.13.4. Criminal Penalty. Any person who violates any provision of this by-law, regulation, order or permit issued there under, and does not comply with any non-criminal disposition order, shall be punished by a fine of not more than \$300. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

26.13.5. Appeals. The decisions or orders of the PEDB or Conservation Commission shall be final. Further relief shall be to a court of competent jurisdiction. Decisions of the administrative team may be appealed to the Conservation Commission.

26.13.6 Remedies Not Exclusive. The remedies listed in this by-law are not exclusive of any other remedies available under any applicable federal, state or local law.

SECTION 26.14. SEVERABILITY

If any provision, paragraph, sentence, or clause of this by-law shall be held invalid for any reason, all other provisions shall continue in full force and effect.