

Town of Shrewsbury Stormwater Management Rules & Regulations

Adopted February 19, 2019



Table of Contents

Section 1. Purpose.	4
Section 2. Establishment and Supervision.	5
Section 3. Authority.....	5
Section 4. Definitions.....	5
Section 5. Funding.....	10
Section 6. Fees.....	10
Section 7. Rates.....	11
Section 8. Scope of Responsibility.....	11
Section 9. Purposes of Fund.....	11
Section 10. Exemptions.....	12
Section 11. Credits.....	12
Section 12. Fee billing, delinquencies, collections, credits.....	13
Section 13. Appeals; hearings.....	13
Section 14. Final Report.....	14
Section 15. Application.....	14
Section 16. Application Review.....	15
Section 16a. Entry.....	15
Section 16b. Review Meeting.....	15
Section 16c. Information Requests.....	15
Section 16d. Action.....	15
Section 16e. Failure to Take Final Action.....	16
Section 16f. Appeals.....	16
Section 16g. Project Changes.....	16
Section 16h. Permit Term.....	16
Section 17. Erosion and Sediment Control Plan.....	16
Section 17a. Design Requirements.....	17
Section 17b. Erosion and Sedimentation Control Plan Content.....	17
Section 18. Post-Construction Stormwater Management Plan.....	19
Section 18a. Design Requirements.....	19
Section 18b. Plan Contents.....	21
Section 19. Long-Term Operation and Maintenance Plans.....	22
Section 19a. Changes to Operation and Maintenance Plans.....	22

STORMWATER MANAGEMENT RULES & REGULATIONS (SHREWSBURY, MA)

Section 20. Inspection and Site Supervision.23
 Section 20a. Pre-construction Meeting.....23
 Section 20b. Construction Inspection.23
 Section 20c. Permittee Inspections and Reporting.....24
 Section 20d. Access Permission.....24
Section 21. Completion of Work.....24

Section 1. Purpose.

The purposes of the Stormwater Management Rules & Regulations is, among other purposes, to safeguard the public health, safety and welfare; to improve stream health and environmental conditions; to protect the Town of Shrewsbury's water bodies and groundwater from further negative impacts of stormwater runoff; to reduce contamination of stormwater runoff; to protect aquatic and wildlife habitat; to comply with federal and State regulatory mandates of the National Pollutant Discharge Elimination System Program ("NPDES"); and to reduce flooding. The following conditions have been identified as contributors to the challenges of stormwater management:

- a. Increased and contaminated stormwater runoff is a major cause of impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater; contamination of drinking water supplies; alteration or destruction of aquatic and wildlife habitat; and flooding.
- b. Regulation of illicit connections and discharges to the municipal storm drain system is necessary for the protection of the Town's water bodies and groundwater, and to safeguard the public health, safety, welfare and the environment.
- c. Regulation of discharges to the municipal separate storm sewer system ("MS4") is necessary for the protection of the Town's water bodies and groundwater, and to safeguard the public health, safety, welfare and the environment. Increased and contaminated stormwater runoff associated with developed land uses and the accompanying increase in impervious surface are major causes of impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater. In particular, land disturbances can cause harmful impacts due to:
 - a. Soil erosion and sedimentation.
 - b. Impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater.
 - c. Contamination of drinking water supplies.
 - d. Erosion of stream channels.
 - e. Alteration or destruction of aquatic and wildlife habitat.
 - f. Flooding.
 - g. Overloading or clogging of municipal catch basins and municipal storm drain systems.

Therefore, the Stormwater Management Rules & Regulations establishes stormwater management standards for the final conditions that result from development and redevelopment projects to minimize adverse impacts offsite and downstream which would be borne by abutters, townspeople, and the general public. The objectives of the Stormwater Management Rules & Regulations are as follows:

- a. To prevent pollutants from entering the Town's municipal separate storm sewer system (MS4) and to minimize discharge of pollutants from the MS4.

- b. To comply with state and federal statutes and regulations relating to stormwater discharges.
- c. To establish the legal authority to ensure compliance with the provisions of Article 21 through inspection, monitoring, and enforcement.
- d. To require practices to control the flow of stormwater from new and redeveloped sites into the Town's municipal storm drain system in order to prevent flooding and erosion.
- e. To protect groundwater and surface water from degradation and promote groundwater recharge and infiltration.
- f. To ensure adequate long-term operation and maintenance of structural stormwater best management practices ("BMPs") so that they work as designed.
- g. To require practices that eliminate soil erosion and sedimentation and control the volume and rate of stormwater runoff resulting from land disturbances.
- h. To ensure that soil erosion and sediment control measures and stormwater runoff control practices are incorporated into the site planning and design process and are implemented and maintained.
- i. To require practices to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
- j. To establish the Town's legal authority to ensure compliance with the provisions of the Stormwater Management Rules & Regulations through inspection, monitoring, and enforcement.

Section 2. Establishment and Supervision.

There is hereby established within the Department of Public Works ("DPW") the Stormwater Management Rules & Regulations under the day-to-day supervision of the Director of the Public Works.

Section 3. Authority.

The Stormwater Management Rules & Regulations is adopted in accordance with the authority granted by the Town of Shrewsbury General By-Law Article 21, Sections 6 through 7.

Section 4. Definitions.

For the purposes of these rules & regulations, the following shall mean:

ABUTTER – The owner(s) of land abutting the activity

ALTERATION OF DRAINAGE CHARACTERISTICS – Any activity on an area of land that changes the water quality, force, direction, timing or location of runoff flowing from the area. Such changes include: change from distributed runoff to confined, discrete discharge; change in the

volume of runoff from the area; change in the peak rate of runoff from the area; and change in the recharge to groundwater on the area.

APPLICANT – Any person, individual, partnership, association, firm, company, corporation, trust, authority, agency, department, or political subdivision, of the Commonwealth of Massachusetts or the Federal government to the extent permitted by law requesting a Stormwater Management Permit for proposed land disturbances.

APPLICANT’S TECHNICAL REPRESENTATIVE – a Registered Professional Engineer (P.E.) hired by the applicant to certify that design and construction are completed in accordance with the applicable local, state, and federal stormwater requirements.

ARTICLE 21 – Refers to Article 21, Stormwater Management Bylaw of the “General By-Laws of the Town of Shrewsbury”.

AUTHORIZED ENFORCEMENT AGENCY – The Board of Sewer Commissioners (“Board”), its employees, officers, or agents designated to enforce Article 21.

BEST MANAGEMENT PRACTICE (BMP) – An activity, procedure, restraint, or structural improvement that helps to reduce the quantity or improve the quality of stormwater runoff.

CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) – An individual who holds a current certification from the Soil and Water Conservation Society in cooperation with the American Society of Agronomy.

CLEAN WATER ACT – The Federal Water Pollution Control Act (33 U.S.C. § 1251 *et seq.*) as hereafter amended.

CLEARING – Any activity that removes the vegetative surface cover.

DEVELOPMENT – The modification of land to accommodate a new use or expansion of use, usually involving construction.

DISCHARGE OF POLLUTANTS – The addition from any source of any pollutant or combination of pollutants into the municipal storm drain system or into the waters of the United States or Commonwealth of Massachusetts from any source.

EROSION – The wearing away of the land surface by natural or artificial forces such as wind, water, ice, gravity, or vehicle traffic and the subsequent detachment and transportation of soil particles.

EROSION AND SEDIMENT CONTROL PLAN – A document containing narrative, drawings, and details developed by a Registered Professional Engineer (P.E.) or a Certified Professional in Erosion and Sediment Control (CPESC), which includes BMPs, or equivalent measures designed to control surface runoff, erosion and sedimentation during pre-construction and construction related land disturbances. The plan is required as part of the application for a Stormwater Management Permit.

GRADING - Changing the level or shape of the ground surface.

GROUNDWATER – Water beneath the surface of the ground.

ILLCIT 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, permitted, or approved before the effective date of Article 21.

ILLCIT DISCHARGE – Direct or indirect discharge to the municipal storm drain system that is not composed entirely of stormwater, except as exempted in Article 21, Section 9. The term does not include a discharge in compliance with a NPDES Stormwater Discharge Permit or a Surface Water Discharge Permit, or resulting from firefighting activities exempted pursuant to Article 21, Section 9.

IMPERVIOUS COVER/SURFACE - Any material or structure on or above the ground that prevents water infiltrating the underlying soil. Impervious surface includes, without limitation, roads, paved parking lots, sidewalks, rooftops, and compacted gravel.

LAND DISTURBANCE – Any action that causes a change in the position, location, or arrangement of soil, sand, rock, gravel, or similar earth material.

MASSACHUSETTS STORMWATER MANAGEMENT POLICY – The Policy issued by the Department of Environmental Protection, and as amended, that coordinates the requirements prescribed by state regulations promulgated under the authority of the Massachusetts Wetlands Protection Act G.L. c. 131 § 40 and Massachusetts Clean Waters Act G.L. c. 21, § 23-56. The Policy addresses stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and control the quantity of runoff from a site.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) or MUNICIPAL STORM DRAIN SYSTEM – The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drain system owned or operated by the Town.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

STORMWATER DISCHARGE PERMIT – A permit issued by United States Environmental Protection Agency or jointly with the Commonwealth that authorizes the discharge of pollutants to waters of the United States.

NEW DEVELOPMENT SITES – The area extent of any construction activity, land alteration, or creation of impervious cover resulting in total earth disturbances equal to or greater than 5,000 square feet (or activities that are part of a larger common plan of development greater than 5,000 square feet) over an area that has not previously been developed to include impervious cover.

NON-STORMWATER DISCHARGE – Discharge to the municipal storm drain system not composed entirely of stormwater.

OWNER – A person with a legal or equitable interest in property.

PERMITTEE – Any person, individual, partnership, association, firm, company, corporation, trust, authority, agency, department, or political subdivision, of the Commonwealth of Massachusetts or the Federal government to the extent permitted by law having received a Stormwater Management Permit for proposed land disturbances.

PERSON – An individual, partnership, association, firm, company, trust, corporation, agency, authority, department or political subdivision of the Commonwealth of Massachusetts or the federal government, to the extent permitted by law, and any officer, employee, or agent of such person.

POINT SOURCE – Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants are or may be discharged.

POLLUTANT – Any element or property of sewage, agricultural, industrial or commercial waste, runoff, leachate, heated effluent, or other matter whether originating at a point or nonpoint source, that is or may be introduced into any sewage treatment works or waters of the Commonwealth of Massachusetts. Pollutants shall include without limitation:

- a. Paints, varnishes, and solvents;
- b. Oil and other automotive fluids;
- c. Non-hazardous liquid and solid wastes and yard wastes;
- d. Refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordnances, accumulations and floatables;
- e. Pesticides, herbicides, and fertilizers;
- f. Hazardous materials and wastes; sewage, fecal coliform and pathogens;
- g. Dissolved and particulate metals;
- h. Animal wastes;
- i. Rock, sand, salt, soils;
- j. Construction wastes and residues; and
- k. Noxious or offensive matter of any kind.

PRE-CONSTRUCTION – All activity in preparation for construction.

PROCESS WASTEWATER – Water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any material, intermediate product, finished product, or waste product.

RECHARGE – The process by which groundwater is replenished by precipitation through the percolation of runoff and surface water through the soil.

REDEVELOPMENT SITES - The area extent of any construction activity, land alteration, or improvement of impervious surfaces resulting in the improvement of impervious cover and total earth disturbances equal to or greater than 1 acre (or activities that are part of a larger common plan of development disturbing greater than 5,000 square feet) over an area that has previously been developed to include impervious cover (or over an area that has previously been disturbed).

RESIDENTIAL PROPERTY OWNER – An owner that has established primary residency in a single-family residential property.

RUNOFF – Rainfall, snowmelt, or irrigation water flowing over the ground surface.

SEDIMENT – Mineral or organic soil material that is transported by wind or water, from its origin to another location; the product of erosion processes.

SEDIMENTATION – The process or act of deposition of sediment.

SITE – Any lot or parcel of land or area of property where land disturbances are, were, or will be performed.

SOIL – Any earth, sand, rock, gravel, or similar material.

STORMWATER – Stormwater runoff, snowmelt runoff, and surface water runoff and drainage.

STORMWATER MANAGEMENT PLAN – A plan required as part of the application for a Stormwater Management Permit.

STORMWATER UTILITY – A special assessment district set up to generate funding specifically for stormwater management. Users within the district pay a stormwater fee and the revenue generated directly supports operation, maintenance, and upgrade or expansion of existing storm drain systems; development of drainage studies, plans, flood control measures, and water-quality programs; administrative costs; and construction of capital improvement projects, and purchase of all equipment necessary for the installation, operation and maintenance of the system.

STREAM – A body of running water, including brooks, creeks, and other water courses, which moves in a definite channel in the ground due to a hydraulic gradient. A portion of a stream may flow through a culvert, is naturally obscured, or beneath a bridge. A stream's flow may be intermittent (i.e., does not flow throughout the year), or perennial.

SURFACE WATER DISCHARGE PERMIT – A permit issued by the Department of Environmental Protection (DEP) pursuant to 314 CMR 3.00 that authorizes the discharge of pollutants to waters of the Commonwealth of Massachusetts.

TOXIC OR HAZARDOUS MATERIAL OR WASTE – Any material, which because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics, either separately or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment. Toxic or hazardous materials include any synthetic organic chemical, petroleum product, heavy metal,

radioactive or infectious waste, acid and alkali, and any substance defined as Toxic or Hazardous under G.L. Ch.21C and Ch.21E, and the regulations at 310 CMR 30.000 and 310 CMR 40.0000.

WASTEWATER – Any sanitary waste, sludge, or septic tank or cesspool overflow, and water that during manufacturing, cleaning or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct or waste product.

WATERCOURSE – A natural or man-made channel through which water or a stream of water flows, including a river, brook or underground stream.

WATERS OF THE COMMONWEALTH OF MASSACHUSETTS – All waters within the jurisdiction of the Commonwealth of Massachusetts, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, and groundwater.

WETLANDS – Coastal and freshwater wetlands, including wet meadows, marshes, swamps, and bogs, as defined and determined pursuant to G.L. c 131, § 40 and 310 CMR 10.00 *et seq.*

Section 5. Funding.

The Stormwater Enterprise Fund shall administer the stormwater management programs of the Town of Shrewsbury (“Town”). It shall be funded by revenue through the Stormwater Utility Fee, Stormwater Application Review & Inspection Fee, and such other funds as may, from time to time, be appropriated or obtain through grants or low interest-loans.

Section 6. Fees.

The Town hereby establishes a charge for the use of the stormwater management services of the Town to be known as the “Stormwater Utility Fee.” The Stormwater Utility Fee is imposed on each parcel of residential property and each parcel of nonresidential property, whether occupied or not. The Stormwater Utility Fee shall be billed in advance periodically to the record title owner of the property.

The Town hereby establishes a charge to be known as the “Stormwater Application Review & Inspection Fee” for activity applicable to Article 21, Section 3. The Stormwater Application Review & Inspection Fee is must be accompanied by an application for the Stormwater Management Permit (“SMP”).

Receipts generated from the Stormwater Utility Fee and Stormwater Application Review & Inspection Fee shall be deposited to an Enterprise Fund (“Fund”) in accordance with the authority granted by M.G.L. ch.44 §53F1/2.

Section 7. Rates.

The DPW shall develop and, from time to time, update a proposed Stormwater Management Rate Model for the Stormwater Utility Fee and Stormwater Application Review & Inspection Fee (“Rate Model”). The DPW shall submit the proposed to the Board of Sewer Commissioners (“Board”), who may approve, modify and approve, or disapprove the Rate Model. The Rate Model shall be available for inspection by the public at the DPW.

Section 8. Scope of Responsibility.

The Town shall be responsible for all costs to operate, maintain, improve, and access those stormwater management systems and facilities, which are located:

- a. Within the public road rights-of-way;
- b. On private property, but within easements granted to, and accepted by, the Town, or which are otherwise permitted to be located on such private property by written agreements for rights-of-entry, rights-of-access, rights-of-use, or such other lawful means to allow for operation, maintenance, improvement, and access to the stormwater management systems and facilities located thereon; and
- c. On public land which is owned by the Town and/or land of another governmental entity upon which the Town has agreements providing for the operation, maintenance, improvement, and access to the stormwater management systems and facilities located thereon.

Operation, maintenance and/or improvement of stormwater management systems and facilities which are located on private or public property not owned by the Town, and for which the Town lacks a lawful right-of-entry, shall be and remain the legal responsibility of the property owner, except as otherwise provided for by state and federal laws and regulations.

In accordance with Article 21, Section 17, Part B, the Board or an authorized agent may issue a written order to owners of neglected or improperly maintained stormwater management systems and facilities.

Section 9. Purposes of Fund.

The funds deposited into this account shall be used to fund the:

- a. Operation and maintenance of stormwater systems including, but not limited to, the acquisition by gift, purchase, or condemnation of real and personal property, and interested therein, necessary to construct, operate, and maintain stormwater management systems and facilities;
- b. Administrative and implementation costs of stormwater management including, but not limited to, the costs of labor attributable to stormwater management and the establishment

of reasonable operating and capital reserves to meet anticipated, unanticipated, or emergency stormwater management requirements;

- c. Engineering and design, debt service and relating financing expenses, construction costs for new facilities and enlargement or improvement of existing facilities;
- d. Illicit discharge detection and elimination program;
- e. Water quality monitoring and water quality programs;
- f. Public education and outreach program;
- g. Retrofitting developed areas for pollution control;
- h. Inspection and enforcement activities;
- i. Billing and related administrative costs; and
- j. Other activities, which are reasonably necessary, including costs related to regulatory compliance.

Section 10. Exemptions.

The Town finds that all real property in the Town contributes to runoff and either uses or benefits from the maintenance of the stormwater system. Therefore, except as provided in this section or otherwise provided by law, no public property, including public property funded by taxpayers of the Town of Shrewsbury, or private property located in the Town of Shrewsbury shall be exempt from the Stormwater Utility Fee charges.

Notwithstanding the foregoing, the Town establishes exemptions to the Stormwater Utility Fee for public streets, highways, and rights-of-way. However, maintenance buildings and/or other improved property used for road maintenance purposes shall not be exempt from Stormwater Utility Fee charges. All other State, Federal, and Country properties are subject to the user fee charges on the same basis as private properties.

Section 11. Credits.

The DPW shall develop and, from time to time, update a proposed Stormwater Management Credit Policy (“Credit Policy”). The DPW shall submit the proposed to the Board of Sewer Commissioners, who may approve, modify and approve, or disapprove the Credit Policy. The Stormwater Management Credit Policy can define potential credits or adjustments such as: for stormwater improvements, undeveloped land with protected status, multiple undeveloped parcels under single ownership, seniors, low income, educational programs, and others. The Stormwater Management Credit Policy shall be available for inspection by the public at the DPW.

The DPW is hereby authorized to grant credits to property owners to be applied against the Stormwater Utility Fee based on the technical and procedural criteria set forth in the Stormwater Management Credit Policy. Any credit allowed against the Stormwater Utility fee shall be conditioned on continuing compliance with the Town’s design and performance standards as stated

in the Stormwater Credit Policy and/or upon continuing provisions of the controls, systems, facilities, services, and activities provided, operated, and maintained by the property owner or owners upon which the credit is based. The DPW may revoke a credit at any time for noncompliance with applicable standards and criteria as established in the Stormwater Management Credit Policy, Article 21, or these rules & regulations. The method for obtaining credit against the Stormwater Utility Fee shall be published in the Credit Policy.

Section 12. Fee billing, delinquencies, collections, credits.

Failure of the Town to send a bill for Stormwater Utility shall not relieve the property owner of record from the obligation to pay for such utility. If a property is unbilled, or if no bill is sent for a particular parcel of land, the Town may back bill for the fees as applicable for a period not to exceed one year of charges, but no late fees or delinquency charges of any kind shall be charged or recovered from any property owner so back billed.

Stormwater Utility bills shall be managed by the DPW for collection. The Treasurer shall keep records of all paid and unpaid stormwater utility bills and maintain financial records for the utility. If a bill for Stormwater Utility bill is not paid in full by the thirtieth (30th) day from the date the bill is mailed, interest at the statutory rate shall accrue on any unpaid balance. Interest shall accrue from the date of the mailing of the bill. At any time after interest begins to accrue on an unpaid account, the Town Manager may serve on the party assessed a statement of the amount due, including interest, with a demand for payment. A charge as set forth in Chapter 174, Fees, shall be made for such demand. If the amount due remains unpaid fourteen (14) days after the mailing of said demand, the Town Manager shall commit the amount to the Board of Assessors for inclusion on the next annual property tax bill. Upon inclusion of the unpaid amount on an annual property tax bill, the amount due shall be a lien on the property, which shall have priority over all other liens except municipal liens and mortgages of record prior to the recording of a notice of lien.

In the event that a property owner believes the Stormwater Utility Fee is improperly calculated or is otherwise incorrect, the property owner may, within thirty (30) days from the date of issuance of the Stormwater Utility bill, and after payment of the bill in full, apply to the DPW for a credit. The application for credit shall be supported by such information as is necessary for a reasonable person to conclude that it is more likely than not that the billing is in error. The DPW shall have sixty (60) days to consider the request for credit and render a written decision, which may deny the credit, grant the credit in full or grant the credit in part.

Section 13. Appeals; hearings.

In the event that a property owner is aggrieved by a written decision from the DPW denying an application for credit in whole or in part, or denying an application for a credit, in whole or in part, the property owner shall have thirty (30) days from the date of the written decision to file an appeal

to the Board of Sewer Commissioners (“Board”). The appeal shall be in writing and shall specify the grounds thereof.

Upon the filing of the notice of appeal with the DPW, the Department shall forthwith transmit to the Board all documents constituting the record upon which the particular decision was made. The Board shall set a date for hearing which shall be within ninety (90) days of the date of the filing of the appeal, and notice thereof setting forth the place, date and time of hearing shall be sent to the property owner no less than ten (10) days prior to the hearing date. The Board shall render a written decision within ten (10) days of the conclusion of the hearing affirming the action of the DPW or reversing the action. If reversing the denial of an credit, the decision shall specify the sum to be abated, which shall not exceed the amounts paid. If reversing the denial of a credit, the decision shall specify the credit to be applied prospectively against future charges unless the property owner has paid the full amount of the Stormwater Utility Fee as charged and has also requested an credit.

In the event that a property owner fails to pay the Stormwater Utility Fee as charged and the Town utilizes the process set forth in MGL c. 83, §§ 16A through 16F, to collect the unpaid charges, the property owner shall have the right to seek an credit by filing an application for credit with the DPW in accordance with the remedy specified in MGL c. 83, § 16E. The application for credit shall conform to the requirements for a notice of appeal as set forth thereof, and the process for a hearing before the Board, including the applicable time limits, shall be as set forth therein.

In the event that the Board denies the credit, in whole or in part, it shall, in its written decision, include a statement notifying the property owner of the right to seek a review of the decision by the filing of an appeal with the Appellate Tax Board of the Commonwealth of Massachusetts within three months of the date of the decision of the Board. As the right to Appellate Tax Board review under this Subsection B is derived from applicable sections of the General Laws as contained in Chapters 59 and 83 thereof; to the extent that the terms of this chapter conflict with the terms specified therein, the terms specified in the General Laws control.

Section 14. Final Report.

The DPW will make an annual report providing information relating to the work and projects financed by the Stormwater Utility Fee and Stormwater Application Review & Inspection Fee in the previous year, including, to the extent practicable, an account of expenditures from the Stormwater Enterprise Fund and projected future expenditures.

Section 15. Application.

A completed application for a Stormwater Management Permit shall be filed with the DPW. A permit must be obtained prior to the commencement of any applicable land disturbing activity. The Stormwater Management Permit Application package shall include:

- a. A completed Application Form with original signatures of all owners;
- b. A list of emergency contacts;
- c. Three (3) copies of the Erosion and Sediment Control Plan as specified in Section 17 of these rules & regulations;
- d. Three (3) copies of the Post-Construction Stormwater Management Plan as specified in Section 18 of these rules & regulations;
- e. Three (3) copies of the Stormwater Operations and Maintenance Plan for both during construction and post-construction as specified in Section 19 of these rules & regulations;
- f. Payment of the Stormwater Application Review & Inspection Fee; and
- g. An electronic copy of all materials submitted in PDF format.

Section 16. Application Review.

Section 16a. Entry.

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

Section 16b. Review Meeting.

The Stormwater Management Permit application shall be made available for inspection by the public at the DPW during its normal business hours. The applicant shall be invited to a review meeting, which shall be held within fourteen (14) days of the receipt of a complete application, and final action shall be taken within fourteen (14) days of the review meeting unless such time is extended by agreement between the applicant and the DPW.

Section 16c. Information Requests.

The applicant shall submit all additional information requested by the DPW in order to issue a decision on the application.

Section 16d. Action.

The DPW may:

- a. Approve the Stormwater Management Permit Application and issue a permit if it finds that the proposed plan will protect water resources and meets the objectives and requirements of these rules & regulations;
- b. Approve the Stormwater Management 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 these rules & regulations; or
- c. Disapprove the Stormwater Management 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 these rules & regulations.

Section 16e. Failure to Take Final Action.

Failure of the DPW to take final action upon an application within the time specified above shall be deemed to be approval of said application. The Stormwater Management Permit shall be issued by the DPW.

Section 16f. Appeals.

Decisions of the DPW may be appealed to the Board of Sewer Commissioners within twenty (20) days of the Final Action. The Board may adopt rules and regulations for hearing such appeals but shall consider the appeal at a public meeting held within thirty (30) days of receipt.

Section 16g. Project Changes.

The permittee, or their agent, must notify the DPW, in writing, of any change or alteration of a land disturbing activity authorized in a Stormwater Management Permit before any change or alteration occurs.

If the DPW determines that the change or alteration is significant, based on the design requirements listed in Section 17a and accepted construction practices, the DPW may require that an amended Stormwater Management Permit application be filed and a new review meeting be held.

If any change or alteration from the Stormwater Management Permit occurs during any land disturbing activities, the DPW may require the installation of interim erosion and sedimentation control measures before approving the change or alteration.

Section 16h. Permit Term.

The permit shall be valid for two (2) years from the date of Final Action unless the permittee submits a written request to the DPW at least thirty (30) days prior to the expiration date of the Final Action.

If the Stormwater Management Permit is intended to be valid for more than two (2) years, the extension date and the special circumstances warranting the extended time period shall be set forth as a condition in accordance with Section 16d, Part b.

The Stormwater Management Permit can be extended by the DPW for one or more periods of up to two (2) years each upon each written request to the DPW at least 30 days prior to the expiration date of the Stormwater Management Permit.

Section 17. Erosion and Sediment Control Plan.

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, sedimentation, and waste controls. The applicant shall submit such material

as is necessary to show that the proposed development will comply with the design requirements listed below.

Section 17a. 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 1-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. Manage on-site construction and waste materials such that they do not and will not discharge to the MS4. On-site construction and waste materials include, but are not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes.

Section 17b. 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:
 - a. 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;
 - b. 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
 - c. 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 based on NAVD88 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 18. Post-Construction Stormwater 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 18a and DEP Stormwater Management Handbook Volumes I and II.

Section 18a. 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. Not allow new stormwater conveyances to discharge untreated stormwater in accordance with Massachusetts Stormwater Handbook Standard 1;
- c. Control peak runoff rates in accordance with Massachusetts Stormwater Handbook Standard 2;
- d. Recharge groundwater in accordance with Massachusetts Stormwater Handbook Standard 3;
- e. 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; and
- f. Protect Zone II or Interim Wellhead Protection Areas of public water supplies in accordance with Massachusetts Stormwater Handbook Standard 6.

For new development, stormwater management systems must be designed to:

- g. Implement long term maintenance practices in accordance with Massachusetts Stormwater Handbook Standard 9; and
- h. 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; OR
- i. 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.

- a. 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.
- b. 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.

For redevelopment sites, stormwater management systems shall also improve existing conditions by requiring that stormwater management systems be designed to:

- j. 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; OR
- k. 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.
 - a. 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.
 - b. 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.
 - c. 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 as above.

New development and redevelopment stormwater management BMPs shall be optimized for phosphorus removal.

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 Section 18a, Parts b through d. 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 Section 18a, Parts b through d above.

All stormwater management systems must have a Long-Term Operation and Maintenance plan prepared in accordance with Section 19 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.

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

Section 18b. 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(s) of existing and proposed utilities;
- f. The site's existing & proposed topography with contours at one (1) foot intervals based on NAVD88;
- 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:
 - a. locations, cross sections, and profiles of all brooks, streams, drainage swales and their method of stabilization;
 - b. all measures for the detention, retention or infiltration of water;
 - c. all measures for the protection of water quality;
 - d. the structural details for all components of the proposed drainage systems and stormwater management facilities;
 - e. notes on drawings specifying materials to be used, construction specifications, and typicals; and
 - f. expected hydrology with supporting calculations.
- a. Proposed improvements including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable;
- b. Timing, schedules, and procedures to ensure proper functioning and operation of the system;
- c. A maintenance schedule;
- d. Documentation of consideration of the use of low impact design and green infrastructure;
- e. A final (and for longer term projects an annual) report documenting compliance with the plan, including receipts as applicable; and
- f. Any other relevant information requested by the applicable permitting authority.

Section 19. 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 NPDES Permit, these rules & regulations, 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:

- a. The name(s) of the owner(s) for all components of the system.
- b. Maintenance agreements that specify:
 - a. The names and addresses of the person(s) responsible for operation and maintenance including emergency contacts;
 - b. The person(s) responsible for financing maintenance and emergency repairs;
 - c. A Maintenance Schedule for all drainage structures, including swales and ponds;
 - d. A list of easements to the town with the purpose and location of each; and
 - e. The signature(s) of the owner(s).
- c. Stormwater Management Easement(s).
 - a. Stormwater management easements may be required for areas used for off-site stormwater control, unless a waiver is granted by the applicable permitting authority.
 - b. 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:
 - i. access for facility inspections and maintenance;
 - ii. preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event; and
 - iii. direct maintenance access by heavy equipment to structures requiring regular cleanout.
 - c. The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
 - d. Easements along with a plan illustrating their location shall be recorded with the Worcester County Registry of Deeds prior to issuance of a Certificate of Completion by the applicable permitting authority.

Section 19a. Changes to Operation and Maintenance Plans.

The owner(s) of the stormwater management system must notify the DPW of changes in ownership or assignment of financial responsibility.

The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of these rules & regulations by mutual agreement of the DPW 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 Article 21, Section 16.

A report shall be provided annually to the DPW on the anniversary date of the permit. The Report shall include documentation of compliance with the Plan, including photographs, and receipts as applicable.

Section 20. Inspection and Site Supervision.

Section 20a. 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.

Section 20b. 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 Stormwater Management 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 drainage systems and other 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.

Section 20c. 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 DPW in a format approved by it.

Section 20d. 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 these rules & regulations 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 21. Completion of Work.

As in Article 21, Section 15, upon completion of work, the permittee shall submit a report (including as-built plans) from a Professional Engineer (“PE”), Certified Professional in Erosion and Sediment Control (“CPESC”), a Certified Professional in Storm Water Quality (“CPSWQ”), or another certified professional, as appropriate. The report shall certify that all erosion and sediment control devices and stormwater management facilities along with approved changes and modifications have been completed in accordance with the conditions of the approved Stormwater Management Permit. Any discrepancies should be noted in the cover letter.

As in Article 21, Section 16, the Board of Sewer Commissioners shall 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 complete in conformance with the Stormwater Management Permit.