

STORMWATER MANAGEMENT RULES AND REGULATIONS

Westminster Planning Board

Adopted: July 21, 2020

1.0 Purpose

The purpose of these rules and regulations is to establish Stormwater Management Rules and Regulations for the Town of Westminster Stormwater Management Bylaw.

2.0 Authority

The Westminster Planning Board, under the authority of Chapter 137 of the Code of the Town of Westminster, and after holding a duly called Public Hearing on July 21, 2020, adopts these Stormwater Management Rules and Regulations.

3.0 Definitions

3.1. For the purposes of these rules and regulations, the following shall mean:

- (1) **ABUTTER:** The owner(s) of land abutting the site on which the activity occurs.
- (2) **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-disturbance activity.
- (3) **BEST MANAGEMENT PRACTICE (BMP):** An activity, procedure, restraint, or structural improvement that helps reduce the quantity or improve the quality of stormwater runoff.
- (4) **CERTIFICATE OF COMPLETION:** Document issued by the Town of Westminster Planning Board, its employees, or authorized agents upon receipt of a final inspection report and acknowledgement that all conditions of the Stormwater Management Permit have been satisfactorily completed.
- (5) **CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC):** A certified specialist in soil erosion and sediment control. This certification program, sponsored by the Soil and Water Conservation Society in cooperation with the American Society of Agronomy, provides the public with evidence of professional qualifications.

- (6) **CERTIFIED VERNAL POOLS:** Temporary bodies of freshwater that provide critical habitat for a number of vertebrate and invertebrate wildlife species, certified by the Massachusetts Natural Heritage and Endangered Species Program (NHESP).
- (7) **CLEARING:** Any activity that removes vegetative surface cover.
- (8) **CONSTRUCTION WASTE AND MATERIALS:** Excess or discarded building or site materials, including but not limited to concrete truck washout, chemicals, litter and sanitary waste at a construction site that may adversely impact water quality.
- (9) **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.
- (10) **DISTURBANCE OF LAND:** Any action that causes a change in the position, location, or arrangement of soil, sand, rock, gravel or similar earth material.
- (11) **DPW:** Westminster Department of Public Works.
- (12) **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.
- (13) **EROSION AND SEDIMENT CONTROL PLAN:** A document containing narrative, drawings, and details developed by a registered professional engineer (P.E.) or CPESC, which includes BMPs, or equivalent measures designed to control surface runoff, erosion, and sedimentation during pre-construction and construction-related land disturbance activities.
- (14) **ESTIMATED HABITAT OF RARE WILDLIFE:** Habitats delineated by the NHESP for state-protected rare wildlife and certified vernal pools for use with the Wetlands Protection Act Regulations (310 CMR 10.00) and the Forest Cutting Practices Act Regulations (304 CMR 11.00).
- (15) **GRADING:** Changing the level or shape of the ground surface.
- (16) **GROUNDWATER:** Water beneath the surface of the ground including confined or unconfined aquifers.
- (17) **GRUBBING:** The act of clearing land surface by digging up roots and stumps.
- (18) **IMPERVIOUS SURFACE:** Any material or structure on or above the ground that prevents or delays water from infiltrating the underlying soil, or causes water to runoff in greater quantities or at an increased rate of flow. Impervious surfaces include, but are not limited to, roads, driveways, parking lots, sidewalks, rooftops, patios, storage areas, concrete or asphalt paving, and gravel/dense-graded crushed stone areas.

- (19) **LANDOWNER:** Owner of the land where a stormwater has been constructed and is in charge of ensuring that maintenance is completed on an annual basis.
- (20) **LOW IMPACT DEVELOPMENT (LID):** An approach to land development design and stormwater management that attempts to mimic the natural hydrology of the site by avoiding, reducing, and mitigating impacts with natural, non-structural and structural measures.
- (21) **MASSACHUSETTS ENDANGERED SPECIES ACT (MESA):** (G.L. c. 131A) and its implementing regulations at (321 CMR 10.00). This Act prohibits the "taking" of any rare plant or animal species listed as "Endangered", "Threatened", or of "Special Concern".
- (22) **MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS (the STANDARDS):** The Stormwater Management Standards promulgated by the Massachusetts Department of Environmental Protection (DEP) 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, and further described in the Wetlands Protection Act Regulations (310 CMR 10.00) and the 401 Water Quality Certification Regulations (314 CMR 9.00). The Stormwater Management Standards address stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and to control the quantity of runoff from a site.
- (23) **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 drainage system owned or operated by the Town of Westminster, MA.
- (24) **NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT:** A permit issued by the United States Environmental Protection Agency (EPA) or jointly with the Commonwealth of Massachusetts that authorizes the discharge of stormwater to waters of the United States.
- (25) **NEW DEVELOPMENT:** Any construction, land alteration, or addition of impervious surfaces on previously undeveloped sites resulting in total disturbance of land equal to or 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 Redevelopment.

- (26) **NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM (NHESP):** The State program for implementing MESA requirements.
- (27) **OPERATION AND MAINTENANCE PLAN:** A plan setting up the functional, financial and organizational mechanisms for the ongoing operation and maintenance of a stormwater management system to ensure that it continues to function as designed.
- (28) **OUTFALL:** The point where stormwater flows out from a point source which is a discernible, confined and discrete conveyance into waters of the Commonwealth of Massachusetts.
- (29) **OWNER:** A person with a legal or equitable interest in property.
- (30) **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.
- (31) **PLANNING BOARD:** Town of Westminster Planning Board its employees or authorized agents designated to enforce these regulations.
- (32) **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 stormwater is or may be discharged.
- (33) **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 non-point source, that is or may be introduced into any sewage treatment works or waters of the Commonwealth of Massachusetts. Pollutants shall include, but are not limited to:
- (a) Chemicals, 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, and soils;
 - (j) Concrete truck washout;
 - (k) Sanitary wastes;
 - (l) Construction wastes, demolition debris, and discarded building materials; and
 - (m) Noxious or offensive matter of any kind.

- (34) **PRE-CONSTRUCTION:** All activity in preparation for construction.
- (35) **PRIORITY HABITAT OF RARE SPECIES:** Habitats delineated for rare plant and animal populations protected pursuant to the MESA and its regulations.
- (36) **RECHARGE:** The process by which groundwater is replenished by precipitation through the percolation of runoff and surface water through soil.
- (37) **REDEVELOPMENT:** Development, rehabilitation, expansion, demolition or phased projects that disturb the ground surface or increase the impervious area on previously developed sites. Any construction, land alteration, or improvement of impervious surfaces resulting in total disturbance of land equal to or greater than 1 acre (or activities that are part of a larger common plan of redevelopment disturbing greater than 1 acre) that does not meet the definition of New Development.
- (38) **RUNOFF:** Rainfall, snowmelt, or irrigation water flowing over the ground surface.
- (39) **SEDIMENT:** Mineral or organic soil material that is transported by wind or water, from its origin to another location; the product of erosion processes.
- (40) **SEDIMENTATION:** The process or act of deposition of sediment.
- (41) **SITE:** Any lot, parcel of land, or area of property where land-disturbing activities are, were, or will be performed.
- (42) **SLOPE:** The incline of a ground surface expressed as a ratio of horizontal distance to vertical distance.
- (43) **SOIL:** Any earth, sand, rock, gravel, or similar material.
- (44) **STABILIZATION:** The use, singly or in combination, of mechanical, structural, or vegetative methods, to prevent or minimize erosion.
- (45) **STORMWATER:** Stormwater, snow melt, and surface water runoff and drainage.
- (46) **STORMWATER MANAGEMENT PERMIT:** The written approval granted by the Planning Board to undertake a construction activity pursuant to a Stormwater Management Permit Application.
- (47) **STORMWATER MANAGEMENT PLAN:** A plan required as part of the application for a Stormwater Management Permit.
- (48) **STRIP:** Any activity that removes the vegetative ground surface cover, including tree removal, clearing, grubbing, and storage or removal of topsoil.

- (49) **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 or organic chemical, petroleum product, heavy metal, radioactive, biological, 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.
- (50) **TOTAL SUSPENDED SOLIDS (TSS):** Sediment being carried in stormwater.
- (51) **WATERCOURSE:** A natural or man-made channel through which water flows or a stream of water, including a river, brook, or underground stream.
- (52) **WATERS OF THE COMMONWEALTH:** All waters within the jurisdiction of the Commonwealth of Massachusetts, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, groundwaters, and vernal pools.
- (53) **WETLAND RESOURCE AREAS:** Areas specified in the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00, as amended, and in the Town of Westminster Chapter 202 Wetlands Protection Bylaw, as amended.

4.0 Amendments

The Planning Board may adopt, and periodically amend, these Stormwater Management Rules and Regulations by majority vote of the Planning Board, after conducting a minimum of one (1) advertised public hearing to receive comments on any proposed revisions. The hearings shall be duly advertised in a paper of general circulation in the Town of Westminster no less than fourteen (14) days prior to the date of the public hearing.

5.0 Applicability

These rules and regulations apply to all projects meeting the applicability criteria of the Stormwater Management Bylaw (Chapter 137 of the Town's General Bylaws). New development and redevelopment projects must comply with the rules and regulations contained herein unless expressly waived by the Planning Board.

6.0 Permit Procedures and Requirements

- 6.1. The Building Inspector shall not issue a Building Permit without first confirming that a Stormwater Management Permit has been obtained or is otherwise not required. The Stormwater Management Permit process shall be incorporated into existing permits to ensure efficiency of the Town permitting process for the Town and Applicant. The following Town boards or commissions shall serve as the Permit Granting Authority

(PGA) as described below and their respective permits may serve as the Stormwater Management Permit upon finding the Project has demonstrated compliance with these rules and regulations:

- (1) Planning Board: Site Plan Approval, Definitive Subdivision Approval, Earth Removal/Placement of Fill Permit or Special Permit Approval issued by the Westminster Planning Board shall serve as the Stormwater Management Permit, provided the project demonstrates compliance with these rules and regulations and the decision includes a designation as such.
- (2) Conservation Commission: An Order of Conditions issued by the Westminster Conservation Commission shall serve as the Stormwater Management Permit, provided the project demonstrates compliance with these rules and regulations and the Order includes a condition as such.
- (3) In cases where the above boards or commissions do not include a clear finding of compliance with these rules and regulations or when none of the above permits are required, the Planning Board shall serve as the Stormwater Management PGA.

6.2. Filing Application.

- (1) The site owner or his/her agent shall file with the Planning Board, three (3) copies of a completed Stormwater Management Permit Application package. Permit issuance is required prior to any applicable site-altering activity. While the applicant can be a representative, the permittee must be the owner of the site.
- (2) The Planning Board shall provide one (1) copy of a completed Stormwater Management Permit Application package to the Westminster Department of Public Works.
- (3) Stormwater Management Permit Application package:
 - (a) Completed Application Form with original signatures of all owners;
 - (b) List of abutters, certified by the Assessors' Office;
 - (c) Three (3) copies of the Stormwater Management Plan as specified in Section 7.0;
 - (d) Three (3) copies of the Erosion Control Plan as specified in Section 8.0;
 - (e) Three (3) copies of the Operation and Maintenance Plan as specified in Section 9.0;
 - (f) Payment of any application and review fees.

6.3. Fee Structure.

The Planning Board shall obtain with each submission an Application Fee payable to the Town of Westminster. Applicants shall pay review fees as listed below to cover any expenses connected with the public hearing and review of the Stormwater Management Permit Application before the review process commences. The Planning Board may, at the applicant's expense, retain a registered P.E. or other professional consultant to advise the Planning Board on any or all aspects of these plans.

- (1) Application fee for single family residential or duplex only\$100
- (2) Application fee for projects from 1 to 2 acres\$200
- (3) Application fee for projects from 3 to 10 acres\$300
- (4) Application fee for projects greater than 10 acres\$500
- (5) Application fee for a resubmittal / amendment.....\$100
- (6) Fees for a professional peer review Assessed on a case by case basis

6.4. Entry. Filing an application of a permit grants the Planning Board, or its agent, permission to enter the site to verify the information in the application and to inspect for compliance with the resulting permit.

6.5. Information Requests. The applicant shall submit all additional information requested by the Planning Board to issue a decision on the application.

6.6. Actions. The Planning Board's action, rendered in writing, shall consist of either:

- (1) "Approval" of the Stormwater Management Permit Application based upon determination that the proposed Stormwater Management Plan meets the Standards and will adequately protect the water resources of the community and is in compliance with the requirements set forth in these rules and regulations;
- (2) "Approval with Conditions" of the Stormwater Management Permit Application subject to any conditions, modifications, or restrictions required by the Planning Board that will ensure the proposed Stormwater Management Plan meets the Standards and will adequately protect the water resources of the community and is in compliance with the requirements set forth in these rules and regulations;
- (3) "Disapproval" of the Stormwater Management Permit Application based upon determination that the proposed Stormwater Management Plan, as submitted, does not meet the Standards or will not adequately protect the water resources of the community and is not in compliance with the requirements set forth in these rules and regulations.

6.7. Appeals. The applicant may appeal the decision, within thirty (30) consecutive calendar days, to the Superior Court, in accordance with M.G.L. Ch 249 §4.

- 6.8. Plan Changes. The permittee must notify the Planning Board in writing of any drainage change or alteration in the system authorized in the Stormwater Management Permit before any change or alteration is made. If the Planning Board determines that the change or alteration is significant, based on the Standards, the requirements set forth in these rules and regulations, or accepted construction practices, the Planning Board may require that an amended application be filed. If any change or alteration from the Stormwater Management Permit occurs during any land disturbing activities, the Planning Board may require the installation of interim erosion and sedimentation control measures before approving the change or alteration.

7.0 Stormwater Management Permit Application

- 7.1. The Stormwater Management Permit Application shall consist of a submittal of a Stormwater Management Plan to the Planning Board. This Stormwater Management Plan shall contain sufficient information for the Planning Board to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater. The Stormwater Management Plan shall be designed to meet the Standards, as set forth in Section 7.3, and the Massachusetts DEP Stormwater Handbook Volumes 1, 2, and 3, as amended.
- 7.2. The Stormwater Management Plan shall fully describe the project in drawings and narrative. It shall include, as a minimum, the following:
- (1) Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan;
 - (2) Project Narrative containing relevant information related to stormwater requirements;
 - (3) Locus Map of the Site;
 - (4) Description of existing and proposed conditions;
 - (5) Existing and Proposed Zoning and Land Use at the Site;
 - (6) Existing and Proposed Easements and Utilities at the Site;
 - (7) Existing and Proposed Topography (1-foot or 2-foot interval contours with additional spot grades as needed to depict detailed drainage patterns) at the Site;
 - (8) Existing and Proposed hydrology, watershed boundaries, drainage area, and stormwater flow paths;
 - (9) Existing and Proposed Stormwater Conveyances, Impoundments, and Wetlands into which stormwater flows at and adjacent to the Site;

- (10) Existing and Proposed 100-year flood plain, if applicable;
 - (11) Estimated High Groundwater Elevation (November to April) as determined via completion of representative test pits or other geological investigations in areas to be used for stormwater retention, detention, or infiltration;
 - (12) Description of subsurface conditions in areas to be used for stormwater retention, detention, or infiltration;
 - (13) Plans, Drawings, and Descriptions of Proposed Drainage System and all components including:
 - (a) Locations, cross sections, and profiles of all stormwater conveyances such as drainage swales and their method of stabilization;
 - (b) All measures for the detention, retention, and/or infiltration of stormwater;
 - (c) All measures for the protection of water quality;
 - (d) The structural details and sizing for all components of the proposed drainage systems and stormwater management facilities;
 - (e) Notes on drawings specifying materials to be used, construction specifications, and typical details and cross-sections;
 - (f) Analysis of existing and proposed hydrology with supporting calculations.
 - (g) Calculations supporting the estimate of stormwater treatment performance;
 - (h) Calculations supporting the design of infiltration practices, including design infiltration rates, estimated dewatering times, and mounding analyses, where applicable;
 - (14) Stormwater runoff shall be calculated using latest Northeast Regional Climate Center (NRCC) extreme precipitation amounts for recurrence intervals (storm events) 2-, 10-, 25-, 50- and 100-year frequencies.
 - (15) An Erosion and Sediment Control Plan as detailed in Section 8.0.
 - (16) An Operation and Maintenance Plan as detailed in Section 9.0.
 - (17) Documents must be stamped and certified by a qualified registered P.E.; and
 - (18) Any other information requested by the Planning Board.
- 7.3. Stormwater Management Standards. Projects shall meet the following standards:
- (1) No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth of Massachusetts;

- (2) Low Impact Development (LID) site planning and design strategies must be implemented unless infeasible in order to reduce the discharge of stormwater from development sites;
- (3) Stormwater management system design shall be consistent with, or more stringent than, the requirements of the 2008 Massachusetts Stormwater Handbook or most current version of said document;
- (4) Stormwater management systems in new development and redevelopment shall be optimized for nitrogen removal as feasible;
- (5) Stormwater management systems on new development shall be designed to meet an average annual pollutant removal equivalent to 90% of the average annual load of Total Suspended Solids (TSS) related to the total post-construction impervious area on the site AND 60% of the average annual load of Total Phosphorus (TP) related to the total post-construction impervious surface area on the site.
 - (a) Average annual pollutant removal requirements in 7.3.(4) are achieved through one of the following methods:
 - i. Installing BMPs that meet the pollutant removal percentages based on calculations developed consistent with EPA Region 1's BMP Accounting and Tracking Tool (2016) 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, then 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; or
 - ii. Retaining the volume of runoff equivalent to, or greater than, 1.0 inch multiplied by the total post-construction impervious surface area on the new development site; or
 - iii. Meeting a combination of retention and treatment that achieves the above standards; or
 - iv. Utilizing offsite mitigation that meets the above standards within the same USGS HUC12 as the new development site.
- (6) Stormwater management systems on redevelopment sites shall be designed to meet an average annual pollutant removal equivalent to 80% of the average annual post-construction load of TSS related to the total post-construction impervious area on the site AND 50% of the average annual load of TP related to the total post-construction impervious surface area on the site.
 - (a) Average annual pollutant removal requirements in 7.3.(5) are achieved through one of the following methods:

- i. Installing BMPs that meet the pollutant removal percentages based on calculations developed consistent with EPA Region 1's BMP Accounting and Tracking Tool (2016) 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, then 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; or
 - ii. Retaining the volume of runoff equivalent to, or greater than, 0.8 inches multiplied by the total post-construction impervious surface area on the redevelopment site; or
 - iii. Meeting a combination of retention and treatment that achieves the above standards; or
 - iv. Utilizing offsite mitigation that meets the above standards within the same USGS HUC12 as the new development site.
- (b) 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 unless infeasible and are exempt from part Section 7.3(5). 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 7.3(5).

8.0 Erosion and Sediment Control Plan

8.1. The Stormwater Management Permit Application shall include submittal of an Erosion and Sediment Control Plan to the Planning Board. This Erosion and Sediment Control Plan shall contain sufficient information for the Planning Board about the nature and purpose of the proposed development, pertinent conditions of the site and adjacent areas, proposed erosion and sedimentation controls, and proposed control for other wastes on construction sites such as demolition debris, litter, and sanitary wastes to ensure they are not discharged to the MS4, drainage system, or waters of the United States or Commonwealth of Massachusetts. The applicant shall submit such material as is necessary to show that the proposed development will comply with the design requirements as follows:

- (1) Minimize total area of disturbance;
- (2) Sequence activities to minimize simultaneous areas of disturbance;
- (3) Minimize soil erosion and control sedimentation during construction, provided that prevention of erosion is preferred over sedimentation control;

- (4) Divert uncontaminated water around disturbed areas;
- (5) Maximize infiltration and groundwater recharge;
- (6) Install, inspect, and maintain all Erosion and Sediment Control measures in accordance with the manufacturer's specifications and good engineering practices;
- (7) Prevent off-site transport of sediment and wastes;
- (8) Protect all storm drain inlets and armor all newly constructed outlets;
- (9) 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);
- (10) 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;
- (11) Institute interim and permanent stabilization measures, which shall be instituted on a disturbed area as soon as practicable but no more than fourteen (14) days after construction activity has temporarily or permanently ceased on that portion of the site;
- (12) Properly manage on-site construction waste and materials;
- (13) Stabilize construction site entrances and exits and prevent off-site vehicle tracking of sediments; and
- (14) Ensure that any stormwater BMP (for post-construction stormwater management) installed during construction will be protected from compaction, siltation, and erosion or will be restored or replaced such that the BMP will be capable of functioning as designed in accordance with these stormwater regulations.

8.2. The content of the Erosion and Sediment Control Plan shall contain the following information:

- (1) Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing this plan;
- (2) Title, date, north arrow, names of abutters, scale, legend, and locus map;
- (3) 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 qualified P.E. 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.
- (4) Lines of existing abutting streets showing drainage and driveway locations and curb cuts;
 - (5) Existing soils, volume and nature of imported soil materials;
 - (6) Topographical features including existing and proposed contours at intervals no greater than one (1) feet with spot elevations provided when needed;
 - (7) 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;
 - (8) Drainage patterns and approximate slopes anticipated after major grading activities;
 - (9) 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;
 - (10) Path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable;
 - (11) Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures;
 - (12) 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;

- (13) A description of provisions for phasing the project where one acre of area or greater is to be altered or disturbed;
- (14) A description of how the project owner will inspect the site during the course of construction to monitor the management of stormwater in accordance with applicable town, state, and federal regulations;
- (15) Plans must be stamped and certified by a qualified registered P.E. or a Certified Professional in Erosion and Sediment Control (CPESC); and
- (16) Such other information as is required by the Planning Board.

9.0 Operation and Maintenance Plan

9.1. The Stormwater Management Permit Application shall include a submittal of Operation and Maintenance Plan (O&M Plan) to the Planning Board. This O&M Plan shall be designed to ensure compliance with the Stormwater Management Permit, these rules and regulations, and that the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, are met in all seasons and throughout the life of the system. The Planning Board shall make the final decision of what maintenance option is appropriate in a given situation. The Planning Board will consider natural features, proximity of the site to MS4 infrastructure, proximity of the site to waterbodies 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 O&M Plan shall remain on file with the Planning Board and shall be an ongoing requirement. The O&M Plan shall include:

- (1) The name(s) of the owner(s) of all components of the system;
- (2) Maintenance agreements that specify:
 - (a) The names and addresses of the person(s) responsible for operation and maintenance
 - (b) The person(s) responsible for financing maintenance and emergency repairs.
 - (c) A Maintenance Schedule that includes routine inspection along with routine and non-routine maintenance tasks for each BMP.
 - (d) A list of easements, if applicable, with the purpose and location of each.
 - (e) The signature(s) of the owner(s).
 - (f) Estimated operation and maintenance budget.
 - (g) The responsible party shall:
 - i. Maintain a log of all operation and maintenance activities for the last three years including inspections, repair, replacement, and disposal (the log shall indicate the type of material and the disposal location);

- ii. Make this log available to the Planning Board, Department of Public Works, and the Commonwealth of Massachusetts upon request; and
- iii. Allow DEP and the Planning Board to inspect each BMP to determine whether the responsible party is implementing the Operation and Maintenance Plan.

(3) Stormwater Management Easement(s).

- (a) Stormwater management easements shall be provided by the property owner(s) as necessary 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.
- (b) The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
- (c) Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Planning Board.
- (d) Easements shall be recorded by the Owner with the Worcester Registry of Deeds prior to issuance of a Certificate of Completion.

(4) Changes to Operation and Maintenance Plans.

- (a) The owner(s) of the stormwater management system must notify the Planning Board of changes in ownership or assignment of financial responsibility.
- (b) The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of these rules and regulations by mutual agreement of the Planning Board and the responsible parties. 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 during future years.

- 9.2. Stormwater infrastructure shall be privately owned, inspected and maintained per the Operation and Maintenance procedures approved for the project. Inspection and maintenance logs shall be provided to the DPW on a yearly basis by final day in June for the Town to use in preparation of its annual report to the US EPA as part of the NPDES MS4 Permit requirements.

- 9.3. Landowner shall provide the PGA an annual report prepared and stamped by a Massachusetts Licensed P.E. documenting and certifying performance of required maintenance and providing an assessment of overall system performance.
- 9.4. The O&M Plan shall include procedures for using dedicated funds, establishing an escrow account, and/or developing a maintenance contract, if determined appropriate to ensure adequate long-term maintenance.
- 9.5. Stormwater Management operation and maintenance duties shall be recorded with the deed for each lot in a subdivision. The applicant may elect to setup a home owner's association (HOA) or other means to ensure all BMPs are inspected and maintained as required.
- 9.6. Long-term operators responsible for O&M Plan implementation shall submit an annual report to the Planning Board documenting all inspection and maintenance completed on the stormwater system.

10.0 Site Inspections and Supervision, and Final Reports

- 10.1. Pre-Construction Meeting. Prior to starting clearing, excavation, construction, or disturbance of land, 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 relevant Town staff (DPW, Conservation Agent & Town Planner) to review the permitted Stormwater Management, Erosion and Sediment Control, and Operation and Maintenance Plans and their implementation.
- 10.2. Permittee Erosion and Sediment Control Inspections. The permittee shall conduct and document inspections of all erosion and sediment control measures no less than weekly or as specified in the Stormwater Management Permit, and prior to and following anticipated storm events. The purpose of such inspections is to determine the overall effectiveness of the erosion and sediment control plan, and the need for maintenance or additional control measures. The permittee shall submit monthly erosion and sediment control reports to the Planning Board in a format approved by the Planning Board.
- 10.3. Routine Inspections. Routine inspections shall be performed as follows:
 - (1) Initial Site Inspection: prior to approval of any permit/plan;
 - (2) Erosion and Sediment Control Inspection: to ensure erosion and sediment control measures are in place and stabilized, and to ensure erosion control practices are in accordance with the filed plan.
 - (3) Site Clearing has been substantially completed;

- (4) Rough Grading has been substantially completed;
- (5) Final Grading has been substantially completed;
- (6) Bury Inspections: prior to backfilling of any underground drainage or stormwater structures.
- (7) Close of the Construction Season;
- (8) Landscaping (permanent stabilization); and
- (9) Final Inspection. After the stormwater management system has been constructed, and before any surety is released, the Applicant must submit a record as-built plan detailing the actual stormwater management system as installed. Such plans shall show compliance with the final approved plans by the Planning Board. The Planning Board or their designee shall inspect the system to confirm its "as-built" features. This inspector shall also evaluate the effectiveness of the system in an actual storm. If the inspector finds the system to be adequate, he/she shall so report to Planning Board which will issue a Certificate of Completion.

10.4. Inspector Qualifications. Inspections shall be performed by an independent third-party registered P.E. or CPESC. Alternatively, inspections shall be performed by a qualified employee of the Town of Westminster.

10.5. Access Permission. To the extent permitted by Massachusetts law, the Planning Board and third-party inspector may enter upon privately owned property for the purpose of performing their duties under these rules and regulations and may make or cause to be made such examinations, surveys or sampling as the Planning Board deems reasonably necessary to determine compliance with the Stormwater Management Permit.

10.6. Final Reports. Upon completion of the work, the permittee shall submit a report (including certified as-built construction plans) from a P.E. or Certified Professional in Erosion and Sediment Control (CPESC). As-built drawings shall be submitted no later than one year after completion of construction projects. The as-built drawings must depict all on site controls, both structural and non-structural, designed to manage the stormwater associated with the completed site (post-construction stormwater management). The report shall certify that all permitted construction, plans, and approved changes and modifications, were completed in accordance with the conditions of the approved Stormwater Management Permit. Any discrepancies should be noted in the report.

If the system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the Stormwater Management Plan, it shall be corrected by the permittee before the performance guarantee is released. If

the permittee fails to act the Town of Westminster may use the surety bond to complete the work. Examples of inadequacy include but are not limited to: errors in the infiltrative capability, errors in the maximum groundwater elevation, failure to properly define or construct flow paths, or erosive discharges from basins or other structural BMPs.

11.0 Related Permits

Prior to receiving an approved Stormwater Management Permit, all applicable projects must comply with Chapter 136 of the Westminster General Bylaws (LID Bylaw).

12.0 Certification of Completion

The Planning Board will issue a letter certifying completion upon receipt and approval of the final inspection reports and/or upon otherwise determining that all work of the Stormwater Management Permit has been satisfactorily completed in conformance with these rules and regulations. The Planning Board may, in addition to certifying satisfactory completion of the project, require ongoing maintenance procedures as outlined O&M Plan and/or work deemed necessary by the Planning Board.