TOWN OF SOMERSET

Planning Board
Stormwater Management Regulations

Section 1. Purpose

The following regulations are hereby adopted by the Town of Somerset Planning Board for the purpose of controlling discharges to the municipal separate storm sewer system (MS4) pursuant to Somerset General Bylaw Article 6, (Discharges to the Municipal Storm Drain System) and as mandated by the U.S. Environmental Protection Agency's 2003 National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4).

Section 2. Applicability

These regulations shall apply to all activities that result in disturbance of more than one-half acre of land, where all or a portion of that land drains to the municipal separate storm sewer system (MS4) or waters of the United States. Except as authorized by the Planning Board in a Stormwater Permit or as otherwise provided in this regulation, no person shall perform any activity that results in disturbance of one half-acre or more of land.

Exempt Activities:

1. Maintenance of existing landscaping, gardens or lawn areas associated with a single family dwelling conducted in such a way as not to cause a nuisance;

2. Construction of fencing that will not substantially alter existing terrain or drainage patterns;

3. Construction of utilities other than drainage (gas, water, electric, telephone, etc.) which will not alter terrain or drainage patterns or result in discharge of sediment to the MS4;

4. Normal maintenance and improvement of land in agricultural or aquacultural use, as defined by the Wetlands Protection Act regulation 310 CMR 10.00.

5. Activities approved through an Order of Conditions, Site Plan Approval, Special Permit and Variance or Subdivision Plan approval, which demonstrate compliance with Massachusetts Stormwater Management Standards and the Town of Somerset Stormwater Management Regulations.

Section 3. Definitions

In addition to the definitions listed in Somerset General Bylaw Article 6, the following definitions are provided for purposes of these regulations:

AGRICULTURE: The normal maintenance or improvement of land in agricultural or

aquacultural use, as defined by the Massachusetts Wetlands Protection Act and its implementing regulations.

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 in impervious area, 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 or the Federal government to the extent permitted by law requesting a Stormwater permit for proposed Construction Activity.

CLEARING: Any activity that removes/structurally alters pre-existing pervious or impervious surfaces at a Site.

CONSTRUCTION ACTIVITY: Any activity that causes a change in the position or location of soil, sand, rock, gravel or similar earth material.

CONSTRUCTION SITE: The plot of land located within the Town on which the Construction Activity will occur.

CRITICAL AREAS: Critical areas include Outstanding Resource Waters as designated in 314 CMR 4.00, Special Resource Waters as designated in 314 CMR 4.00, recharge areas for public water supplies as defined in 310 CMR 22.02 (Zone Is, Zone IIs and Interim Wellhead Protection Areas for groundwater sources and Zone As for surface water sources), bathing beaches as defined in 105 CMR 445.000, cold-water fisheries as defined in 310 CMR 10.04 and 314 CMR 9.02, and shellfish growing areas as defined in 310 CMR 10.04 and 314 CMR 9.02.

CONSTRUCTION AND WASTE 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.

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

DISTURBANCE: Action to alter the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g. excavating, cutting and filling), soil compaction, and movement and stockpiling of top soils.

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

GRUBBING: The act of clearing land surface by digging up roots and stumps.

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 SEDIMENTATION CONTROL PLAN: A document containing narrative, drawings and details stamped by a Professional Civil Engineer (P.E.) registered in Massachusetts, which includes best management practices (BMP), or equivalent measures designed to control surface runoff, erosion and sedimentation during pre-construction and construction related activities.

ESTIMATED HABITAT OF RARE WILDLIFE AND CERTIFIED VERNAL POOLS: Habitats delineated 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).

INFEASIBLE: Not technologically possible, or not economically practicable and achievable in light of best industry practice.

LOW IMPACT DEVELOPMENT (LID): The term *low impact development* (LID) refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat. LID is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible.

MASSACHUSETTS ENDANGERED SPECIES ACT: (G.L. c. 131A) and its implementing regulations at (321 CMR 10.00) which prohibit the "taking" of any rare plant or animal species listed as Endangered, Threatened, or of Special Concern.

MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS: The Standards issued by the State Department of Environmental Protection (DEP), 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 Standards addresses stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and controlling the quantity of runoff from a site.

MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS: The Standards issued by the Massachusetts Department of Environmental Protection (DEP), codified in regulations at 310 CMR 10.05(6)(k)-(q) and further defined and specified in the Massachusetts Stormwater Handbook issued by the DEP. The Standards address stormwater impacts through implementation of performance standards that reduce or prevent pollutants from reaching water bodies and controlling 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 drainage system owned or operated by the Town of Somerset.

OPERATOR: The party associated with the Construction Activity that meets either of the

following two criteria: (1) The party who has operational control over construction plans and specifications including the ability to make modifications to those plans and specifications or (2) The party who has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a Stormwater Pollution Prevention Plan for the site or other permit conditions.

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

OUTFALL: The point at which stormwater flows out from a point source into Waters of the Commonwealth and Waters of the Town.

OUTSTANDING RESOURCE WATERS (ORWs): Waters designated by Massachusetts Department of Environmental Protection as ORWs. These waters have exceptional sociologic, recreational, ecological and/or aesthetic values and are subject to more stringent requirements under both the Massachusetts Water Quality Standards (314 CMR 4.00) and the Massachusetts Stormwater Management Standards. ORWs include vernal pools certified by the Natural Heritage and Endangered Species Program of the Massachusetts Department of Fisheries and Wildlife and Environmental Law Enforcement, all Class A designated public water supplies with their bordering vegetated wetlands, and other waters specifically designated.

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.

POLLUTANTS: Include without limitation the following: Dredged spoil, solid waste, incinerator residue, filter back-wash, sewage, garbage, sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rocks, sand, animal or agricultural waste, oil, grease, gasoline or diesel fuel.

REDEVELOPMENT: Development, rehabilitation, expansion, demolition or phased projects that disturb the ground surface, including impervious surfaces, on previously developed sites. The creation of new areas of impervious surface or new areas of land disturbance on a site constitutes Development, not Redevelopment, even where such activities are part of a common plan which also involves Redevelopment.

PRE-CONSTRUCTION: All activity in preparation for construction.

PRIORITY HABITAT OF RARE SPECIES: Habitats delineated for rare plant and animal populations protected pursuant to the Massachusetts Endangered Species Act and its regulations. These habitats are delineated on maps produced by the Natural Heritage and Endangered Species Program of the Massachusetts Department of Fisheries and Wildlife.

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-disturbing activities are, were, or will be performed.

SLOPE: The incline of a ground surface expressed as a ratio of horizontal distance to vertical distance.

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

STABILIZATION: The use, singly or in combination, of mechanical, structural, or vegetative methods, to prevent or retard erosion.

STORMWATER MANAGEMENT MEASURES: Infrastructure improvements that are constructed or installed during Construction Activity to prevent Pollutants from entering Stormwater Discharges or to reduce the quantity of Stormwater Discharges that will occur after Construction Activity has been completed. Examples include but are not limited to: onsite filtration, flow attenuation by vegetation or natural depressions, outfall velocity dissipation devices, retention structures and artificial wetlands, and water quality detention structures.

STORMWATER PERMIT: The permit issued by the Planning Board to the Applicant which allows Construction Activity to occur as outlined by the Applicant in its application and Erosion and Sediment Control Plan.

STRIP: Any activity which removes the vegetative ground surface cover, including tree removal, clearing, grubbing, and storage or removal of topsoil.

TSS: Total Suspended Solids**.**

VERNAL POOLS: Temporary bodies of freshwater which provide critical habitat for a number of vertebrate and invertebrate wildlife species.

WETLANDS: Tidal and non-tidal areas characterized by saturated or nearly saturated soils most of the year that are located between terrestrial (land-based) and aquatic (water-based) environments, including freshwater marshes around ponds and channels (rivers and streams), brackish and salt marshes; common names include marshes, swamps and bogs.

Section 4. Responsibility for Administration

A. The Board shall administer, implement, and enforce this Section. Any powers granted to or duties imposed upon the Board may be delegated in writing by the Board to its employees or agents.

B. Waiver. The Board may waive strict compliance with any requirement of this Section or the rules and regulations promulgated hereunder, where:

1. Such action is allowed by federal, state and local statutes and/or regulations,
2. The project is in the public interest, and

3. The project is not inconsistent with the purpose and intent of this Section.

C. Rules and Regulations. The Board may adopt, and periodically amend rules and regulations to effectuate the purposes of this Section. Failure by the Board to promulgate such rules and regulations shall not have the effect of suspending or invalidating this Section.

Section 5. Permits and Procedure

A. Application Procedure**.** Applicant must sign and file an Application for a Stormwater Permit on a form provided by the Town. The Application should be submitted to the Board and to be deemed complete must be accompanied by:

1. A Stormwater Permit Application Fee.
2. Identification of the Construction Site by book, page, and plot number in the records of the Assessor's Office.
3. A narrative description of the Construction Activity intended, the proposed use of any improvements to be constructed and the construction timetable.
4. A Site Plan required by Section 6.
5. A list of abutters certified by the Assessor's Office including addresses.
6. An Erosion and Sediment Control Plan required by Section 7.
7. A Stormwater Management Plan required by Section 8.
8. Operation and Maintenance Plan required by Section 9.
9. Illicit discharge compliance statement certifying that there are no existing or new illicit discharges from this property

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

C. Other Boards. The Board shall notify the Town Clerk of receipt of the application, and shall give one copy of the application package to the Building Department, Conservation Commission and Highway Department for review and comment.

D. Public Hearing. The Board shall hold a public hearing within twenty-one (21) days of the receipt of a complete application and shall take final action within twenty-one (21) days from the time of the close of the hearing unless such time is extended by agreement between the applicant and the Board. Notice of the public hearing shall be given by publication and posting and by first-class mailings to abutters at least fourteen (14) days prior to the hearing. The Board shall make the application available for inspection by the public during business hours at the Town of Somerset's Planning Department Office.

E. Information requests. The applicant shall submit all additional information requested by the

Board to issue a decision on the application.

F. Action by the Board.

The Board may:

1. Approve the Stormwater Permit Application and issue a permit if it finds that the proposed plan will protect water resources and meets the objectives and requirements of this Section;
2. Approve the Stormwater Permit Application and issue a permit with conditions, modifications or restrictions that the Board determines are required to ensure that the project will protect water resources and meets the objectives and requirements of this Section;
3. Disapprove the Stormwater Permit Application and deny the permit if it finds that the proposed plan will not protect water resources or fails to meet the objectives and requirements of this Section.

Prior to approval of a Stormwater Permit Application, the Board will ensure that that the Applicant is incorporating Low Impact Design and green infrastructure (e.g., rain gardens, bioretention areas, water quality swales, etc.) to the maximum extent practicable. This should include elements that avoid clear cutting and minimize the amount of proposed impervious surfaces.

G. Failure of the Board to take final action**.** Failure of the Board to take final action upon an Application within the time specified above shall be deemed to be approval of said Application. Upon certification by the Town Clerk that the allowed time has passed without the Board's action, the Stormwater Permit shall be issued by the Board.

H. Fee Structure. Each application must be accompanied by the appropriate application fee as established by the Board. Applicants shall pay review fees as determined by the Board sufficient to cover any expenses connected with the public hearing and review of the Stormwater Permit Application before the review process commences. The Board is authorized to retain a Registered Professional Engineer or other professional consultant to advise the Board on any or all aspects of the Application.

I. Project Changes. The permittee, or their agent, must notify the Board in writing of any change or alteration of a land-disturbing activity authorized in a Stormwater Permit before any change or alteration occurs. If the Board determines that the change or alteration is significant, based on the design requirements listed in Section 7 and accepted construction practices, the Board may require that an amended Stormwater Permit application be filed and a public hearing held. If any change or alteration from the Stormwater Permit occurs during any land disturbing activities, the Board may require the installation of interim erosion and sedimentation control measures before approving the change or alteration.

Section 6. Site Plan

The Site Plan that is submitted must be stamped by a Professional Civil Engineer (P.E.) registered in Massachusetts and contain at least the following information:

A. Names, addresses and telephone numbers of the Person(s) or firm(s) preparing the plan. The name, address, and telephone number of all persons having a legal interest in the property

and the tax reference number and parcel number of the property or properties affected;

B. Title, date, north arrow, scale, legend and USGS locus map indicating the site locus and properties within a minimum of 500 feet of project property line.

C. Zoning, district boundaries and current land use on the Construction Site.

D. Location and description of natural features including 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 Registered Professional Engineer in Massachusetts for areas not assessed on those maps) located on or adjacent to the Construction Site.

E. A description and delineation of existing Stormwater conveyances and impoundments located on the Construction Site with their point of discharge noted.

F. Location and description of existing soils and vegetation including tree lines, shrub layer, ground cover and herbaceous vegetation with run-off coefficient of each and identification of trees with a caliper twelve (12) inches or larger.

G. 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 located on or adjacent to the Construction Site.

H. Lines of existing abutting streets showing drainage, driveway locations and curb cuts on and abutting the Construction Site.

I. Surveyed property lines of the Construction Site showing distances and monument locations, all existing easements, rights-of-way, and other encumbrances, the area of the entire area that is to be disturbed. The plan shall specify the land area and area of upland and wetlands on the Site and easements required for construction/post-construction O&M. As a condition of the issuance of the Certificate of Completion by the Board, all easements required for construction/post-construction O&M should be filed at the Bristol County Registry of Deeds.

J. All proposed Site improvements including location of buildings or other structures and impervious surfaces (such as parking lots).

K. Topographical features including existing and proposed contours at intervals of no greater than two (2) feet with spot elevations provided when needed.

L. The existing and proposed site hydrology including drainage patterns and finish grades after construction.

M. Location of the Municipal Separate Stormwater Sewer System with relation to the Construction Site.

N. Identification of Outfalls which are located on the Construction Site.

O. Stormwater Discharge calculations prepared and certified by a Registered Professional

Engineer in the Commonwealth of Massachusetts describing the volume and rate of Stormwater that presently discharges from the Construction Site and the estimated volume and rate of post-development conditions.

P. Identification of any existing Stormwater Discharges emanating from the Construction Site and discharging into the Municipal Separate Stormwater Sewer System and receiving waters.

Q. Soil logs at all proposed detention/retention basins demonstrating infiltration rates necessary for Best Management Practice implementation.

Section 7. Erosion and Sediment Control Plan

A. The Erosion and Sediment Control Plan shall be designed to ensure compliance with these Regulations and if applicable (for projects disturbing in excess of one acre of land), the NPDES General Permit for Storm Water Discharges From Construction Activities. In addition, the plan shall ensure that the Massachusetts Surface Water Quality Standards (314 CMR 4.00) are met in all seasons. Refer to the latest version of the *Massachusetts Erosion and Sediment Control Guidelines for Urban & Suburban Areas* for detailed guidance.

B. If a project requires a Stormwater Pollution Prevention Plan (SWPPP) per the NPDES General Permit for Storm Water Discharges From Construction Activities (and as amended), then the permittee is required to submit a complete electronic copy of the SWPPP (including the signed Notice of Intent and approval letter) for approval by the Town. If the SWPPP meets the requirements of the General Permit, it will be considered equivalent to the Erosion and Sediment Control Plan described in this section.

C. The Owner and / or Contractor shall maintain a copy on site of the Erosion and Sediment Control Plan and / or SWPPP and all other permit documents submitted by the authority. Upon request by the Town copies maintenance documents and or inspection reports shall be provided to the Town to show compliance with the Erosion and Sediment Control Plan and / or SWPPP.

D. The Erosion and Sediment Control Plan shall contain sufficient information to describe the nature and purpose of the proposed development, pertinent conditions of the site and the adjacent areas, and proposed erosion and sedimentation controls. The plan shall also describe measures to control construction wastes including but not limited to construction materials, concrete truck wash out and chemicals. The applicant shall submit such material as is necessary to show that the proposed development will comply with the design requirements listed below. The plan must be stamped by a Registered Professional Engineer in Massachusetts.

E. PLAN TO CONTROL WASTES. Applicant must list the construction and waste materials expected to be generated or stored on the Construction Site. These wastes include but are not limited to: discarded building materials, concrete truck washout, chemicals, litter, sanitary waste and material stockpilings. Applicant must also describe in narrative form the Best Management Practices it will utilize to reduce pollutants from these materials including storage practices to minimize exposure of the materials to Stormwater and spill prevention and response plans. If any structural BMPs are proposed, they must be

identified and located on the site plan. At a minimum, the Applicant's plan should provide for the following:

1. Areas designated and controlled for equipment storage, maintenance and repair.

2. Convenient locations for waste receptacles and a schedule for regular removal.

3. Wash down areas for vehicles selected to prevent contamination of Stormwater.
4. Covered storage areas for chemicals, paints, solvents, fertilizers and other toxic materials.

5. Adequately maintained sanitary facilities.

F. EROSION AND SEDIMENTATION CONTROL PLAN CONTENT. Applicant must describe its plan for properly stabilizing the site before construction begins and the BMPs that it will use during construction to minimize erosion of the soil and sedimentation of the Stormwater. These BMPs should include both stabilization practices such as: seeding, mulching, preserving trees and vegetative buffer strips, contouring and structural practices such as: earth dikes, silt fences, drainage swales, sediment traps, check dams, and subsurface or pipe slope drains. Applicant must locate structural BMPs on the site plan. Applicant must also provide details of construction including the timing, scheduling and sequencing of development including clearing, stripping, rough grading, construction, final grading and Final Site Stabilization.

The design requirements of the Erosion and Sedimentation Control Plan are:

1. Minimize total area of disturbance;

2. Sequence activities to minimize simultaneous areas of disturbance;

3. Minimize peak rate of runoff in accordance with the Massachusetts Stormwater Standards;

4. Minimize soil erosion and control sedimentation during construction, provided that prevention of erosion is preferred over sedimentation control;
5. Divert uncontaminated water around disturbed areas;

6. Maximize groundwater recharge;

7. Install and maintain all Erosion and Sediment Control measures in accordance with the manufacturers specifications and good engineering practices;

8. Prevent off-site transport of sediment;

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 all 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. 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;

12. Institute interim and permanent stabilization measures, which shall be applied 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;

13. Prevent off-site vehicle tracking of sediments by placing stone at all points of ingress and egress to the Site and installing wash-down areas for vehicles as necessary to ensure no off-site vehicle tracking of sediments

The Erosion and Sedimentation Control Plan shall contain the following:

1) Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the 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 waterbodies, 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 registered 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.

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 two (2) feet with spot elevations provided where 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 (Construction Phase Grading Plans);

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 industrial discharges to be covered by this permit;

12) Stormwater runoff calculations in accordance with the Department of Environmental Protection's Stormwater Management Standards;

13) Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures;

14) 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;

15) A description of provisions for phasing the project where one acre of area or greater is to be altered or disturbed;

16) Plans must be stamped and certified by a registered professional engineer in Massachusetts or a Certified Professional in Erosion and Sediment Control; and

17) Such other information as is required by the Planning Board.

Section 8. Stormwater Management Plan

The application for a Stormwater Permit shall include submittal of a Plan to Construct Stormwater Management Measures to the Board. This Plan must be stamped by a Massachusetts Registered Professional Engineer (P.E.) and shall contain sufficient information for the Board to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the Applicant for reducing adverse impacts from stormwater runoff during construction and on a long-term basis.

The Plan shall be designed to meet the Massachusetts Stormwater Management Standards as further defined in the Massachusetts Stormwater Handbook and any additional standards required by these regulations or regulations adopted hereunder. To the extent that any project within the jurisdiction of these regulations is located in an area subject to one or more pollutant-specific Total Maximum Daily Loads (TMDLs), such project is required to implement structural and non-structural stormwater best management practices (BMPs) that are consistent with each such TMDL and its associated Waste Load Allocation (for point sources) and Load Allocation (for nonpoint sources). The U.S. EPA/MassDEP or Stormwater Authority may develop, publish and periodically revise one or more pollutant-specific guidance documents describing the geographic applicability of

each TMDL and identifying BMPs that individually or in combination are considered to be consistent with the TMDL(s).

A. Design Standards for stormwater management system(s)

1) Developments are to be designed to provide for adequate collection and disposal of stormwater runoff from the project site consistent with MassDEP Stormwater Management Standards or more stringent, DPW Standard Details, recognized engineering methodologies and these Regulations with an emphasis to include Low Impact Development (LID) techniques in the design.

(a) LID site planning and design strategies must be implemented unless infeasible in order to reduce the discharge of stormwater from development sites.

2) Stormwater management systems for <u>New Development</u> projects are also to meet minimum requirements of the *General Permit for Stormwater Discharges From Small Municipal Separate Storm Sewer Systems in Massachusetts* (MS4 Permit) including removal of 90% of the average annual (not per storm) load of Total Suspended Solids (TSS) generated from the total post-construction impervious area on the site AND 60% of the average annual (not per storm) load of Total Phosphorus (TP) generated from the total post-construction impervious surface area on the site.

(a) Average annual pollutant removal requirements 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 (2006) or other BMP performance evaluation tool provided by EPA Region 1, where available. If EPA Region 1 tools do not address the planned or installed BMP performance any federally or State approved BMP design guidance or performance standards (e.g. State stormwater handbooks and design guidance manuals) may be used to calculate BMP performance; or

ii. 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

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.

3) Stormwater management systems for <u>Redevelopment</u> projects are to meet the minimum requirement of the *General Permit for Stormwater Discharges from*

Small Municipal Separate Storm Sewer Systems in Massachusetts (MS4 Permit) including removal of 80% of the average annual (not per storm) 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 (not per storm) load of Total Phosphorus (TP) generated from the total post-construction impervious surface area on the site.

(a) Average annual pollutant removal requirements 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 (2006) or other BMP performance evaluation tool provided by EPA Region 1, where available. If EPA Region 1 tools do not address the planned or installed BMP performance any federally or State approved BMP design guidance or performance standards (e.g. State stormwater handbooks and design guidance manuals) may be used to calculate BMP performance; or

ii. Retaining 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

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 Section 8.A.3. 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 8.A.3

4) Off-Site mitigation. For projects where it is not technically feasible to retain or treat the required depth of runoff on-site due to physical site restraints, the Applicant will describe in writing why it is not technically feasible to do so, including which on-site treatment BMPs were considered and why they were deemed not feasible. In lieu of requiring the applicant to meet the standards identified in Section 8.A (2&3), the Board may approve a Stormwater Management Plan that includes off-site mitigation through BMPs that provide

the equivalent retention or pollutant removal requirements in part 2.3.6.a.ii.4 of the MA MS4 General Permit meeting the following criteria:

i. Applicant has demonstrated to the satisfaction of the Board that on-site compliance has been met to the maximum extent practicable.
ii. Off-Site mitigation shall be located within the Town and the same tributary area to the maximum extent feasible. Under no circumstances will off-site mitigation be located outside the same USGS HUC12.
iii. The Off-Site mitigation project shall be designed and constructed in a manner consistent with the requirements of the Town Stormwater Management Bylaw and related regulations.
iv. The Off-Site mitigation project shall remediate the impacts of proposed and existing impervious surface that is not expected to be the subject of Redevelopment in the next five or more years.
v. The Board shall, at its discretion, identify priority areas within the watershed in which Off-Site mitigation may be completed.
vi. Off-Site mitigation provided at a site not owned by the Town, requires a separate Land Disturbance Review and/or Permit as applicable covering the Off-Site mitigation project, the terms and conditions of which, including ongoing operations and maintenance requirements, shall run with the land where the Off-Site Compliance is located.
vii. Construction of the Off-Site mitigation project shall commence within 12 months of Land Disturbance Permit issuance and be completed within 12 months of commencement.

5) Structural BMPs and LID techniques suitable to address TMDLs and/or impairments as listed on MassDEP's most recent *Integrated List of Waters Map* are to be utilized to the maximum extent feasible. Provide evaluation process narrative with supporting calculations in the stormwater report. Calculations shall include total impervious area and volume of stormwater to be infiltrated and phosphorus or nitrogen loading calculations including reduction through use of LIDs and BMPs. Innovative or alternative technologies may be considered on a case by case / site by site basis.

6) Provisions are to be made for the adequate disposal of surface runoff so that no flow is conducted over Town ways, or over land not owned by or controlled by the Applicant unless an easement in proper form is obtained permitting such discharge.

7) LID techniques are to be used where adequate soil, groundwater and topographic conditions allow. These may include but not be limited to reduction in impervious surfaces, disconnection of impervious surfaces, bioretention (rain gardens) and infiltration systems.

8) Utilize the 24 hour rainfall data taken from the NOAA Atlas 14 https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html (or most current data from NOAA) and type III storm.

B. The Stormwater Management Plan shall fully describe the project in narrative, drawings, and calculations. It shall at a minimum include:

1. The existing site hydrology with supporting data,

2. A description & delineation of existing stormwater conveyances, impoundments, and wetlands on or adjacent to the site or into which stormwater flows,
3. Estimated seasonal high groundwater elevation (November to April), soil mapping and soil logs for areas to be used for stormwater retention, detention, or infiltration,

4. The existing and proposed vegetation and ground surfaces with runoff coefficients for each,

5. Identification of water bodies that will receive Stormwater Discharges from the Construction Site with the location of drains/outfalls noted on the Site Plan. A brief description of known water quality impacts and whether the water bodies receiving such Stormwater Discharges have:

    - Been assessed and reported in reports submitted by the Massachusetts Department of Environmental Protection to EPA pursuant to Section 305 (b) of the Clean Water Act

    - Been listed as a Category 5 Water (Waters Requiring a Total Maximum Daily Load (TMDL)) by DEP under 303(d) of the CWA.

6. Separate drainage area maps showing pre- and post-construction watershed plan indicating:

    a. Structures, pavements, surface vegetation and other ground cover materials
    b. Topography to delineate watershed areas and cut and fill areas
    c. Point(s) of analysis
    d. Watershed areas including upgradient and /or offsite areas that contribute stormwater flow onto the project site, labeled to be easily identified in calculations. Total pre and post watershed areas must be equivalent.
    e. Breakdown summary of various surface conditions by soil hydrologic group rating and cover type
    f. Flow path for time of concentration (Tc) calculation

7. 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, storm drains 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. Location, size, material, invert data and the structural details for all components of the proposed drainage systems and stormwater management facilities,
    e. notes on drawings specifying materials to be used and construction specifications,

    f. drainage easements

8. Proposed improvements including location of buildings or other structures, impervious surfaces, utilities and drainage facilities, if applicable.

9. Project impacts, LIDs and BMPs mitigation techniques and water quality calculations for treatment for pollutants in stormwater runoff from the project site that discharges to downgradient waterbody(s) identified in EPA's waterbody assessment and TMDL status of the waterbody(s), http://www.epa.gov/region1/npdes/stormwater/ma.html.

10. MassDEP Checklist for Stormwater Report completed, stamped and signed by a Registered Professional Engineer in Massachusetts to certify that the Stormwater Management Plan is in accordance with the criteria established in the Mass DEP Stormwater Management Standards, Somerset Stormwater By-law and these Regulations.

11. Timing, schedules, and sequence of development including clearing, stripping, rough grading, construction, final grading, and vegetative stabilization,

12. A maintenance schedule for the period of construction,

13. Any other information requested by the Board.

Section 9. Operations and Maintenance Plan

An Operation and Maintenance Plan (O&M Plan) is required at the time of application for all projects. The O&M plan shall be designed to ensure compliance with this Section 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 Board shall make the final decision of what maintenance option is appropriate in a given situation. The Board 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 O&M Plan, as approved by the Board, shall be recorded at the Bristol County Registry of Deeds by the permitee prior to the commencement of any work and shall constitute a continuing requirement. The O&M Plan shall remain on file with the Board.

The O&M Plan shall include:

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

2. A map showing the location of the systems and facilities including all structural and nonstructural stormwater best management practices (BMPs), catch basins, manholes/access lids, pipes, and other stormwater devices. The plan showing such systems and facilities to be privately maintained, including associated easements shall be recorded with the Bristol County Registry of Deeds prior to issuance of a Certificate of Compliance by the Board.

3. 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.

    a. An Inspection and Maintenance Schedule for all stormwater management facilities including routine and non-routine maintenance tasks to be performed. Where applicable, this schedule shall refer to the Maintenance Criteria provided in the Stormwater Handbook or the E.P.A. National Menu of Stormwater Best Management Practices or equivalent;
    b. Instructions for routine and long-term operation and maintenance shall have sufficient detail for responsible parties to perform necessary maintenance activities and prevent actions that may adversely affect the performance of each structural and/or nonstructural stormwater BMP.

    c. A list of easements with the purpose and location of each.

    a. The signature(s) of the owner(s) and all persons responsible for operation and maintenance, financing, and emergency repairs, as defined in the Maintenance Agreement, if maintenance is to be performed by an entity other than the owner.
    b. As determined by the Board, the agreement shall include use of dedicated funds or escrow accounts for development projects or the acceptance of ownership by the Town of all privately owned BMPs including the development of a maintenance contract between the owner of the BMP and the Town. Alternatively, a requirement for submission of an annual certification documenting the work that has been done over the last 12 months to properly operate and maintain the stormwater control measures may be acceptable.

4. Stormwater Management Easement(s).
    a. Stormwater management easements shall be provided by the property owner(s) to the Town and Homeowners Association as applicable and shall be sufficient in location and extent to carry out the required maintenance. as necessary for:

        (1) access for facility inspections and maintenance,

(2) preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event.

(3) direct maintenance access by heavy equipment to structures requiring regular cleanout, a minimum of 20 feet wide or as directed by the Town.

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 Board.

d. Easements shall be recorded with the Bristol County Registry of Deeds prior to issuance of a Certificate of Completion by the Board.

5. Changes to Operation and Maintenance Plans

(a) The owner(s) of the stormwater management system must notify the Board of changes in ownership, assignment of Operation and Maintenance responsibilities, or assignment of financial responsibility within 30 days of the change in ownership. The owner of record shall be responsible for Operation and Maintenance activities until a copy of the updated Operation and Maintenance Plan has been furnished to the Board signed by the new owner or any new responsible person.

(b) The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of this Section by mutual agreement of the 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.

Section 10. Permit Term

The Stormwater Permit shall be effective upon the date of issuance and remain in effect until the earlier to occur of: 1) a Certificate of Completion is issued by the Awarding Authority indicating that all Construction Activity has ceased and Final Site Stabilization construction, inspection and approval by a representative of the Awarding Authority has occurred, or 2) the date three years from the date of issuance of the Stormwater Permit has occurred without Applicant starting Construction Activity on the Construction Site.

Section 11. Inspection and Site Supervision

A. 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 the Board, to review the permitted plans and their implementation.

B. Board Inspection. The Board 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 Permit as approved. The Permit and associated plans for grading, stripping, excavating, and filling work, bearing the signature of approval of the Board, and all inspection records that are part of the Erosion Control Plan or SWPPP shall be maintained at the site during the progress of the work for inspection by the Town. In order to obtain inspections, the permittee shall notify the Board at least two (2) working days before each of the following events:

1. Erosion and sediment control measures are in place and stabilized;
2. Site Clearing has been substantially completed;
3. Rough Grading has been substantially completed;
4. Final Grading has been substantially completed;
5. Close of the Construction Season; and
6. Final Landscaping (permanent stabilization) and project final completion.

C. Permittee Inspections. The permittee or his/her agent shall conduct and document inspections of all control measures) no less than weekly 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 Board or designated agent in a format approved by the Board.

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

Section 12. Surety

The Board may require the permittee to post before the start of Construction Activity, a surety bond, irrevocable letter of credit, cash, or other acceptable security. The form of the bond shall be approved by town counsel, and be in an amount deemed sufficient by the Board to ensure that the work will be completed in accordance with the permit. If the project is phased, the Board may release part of the bond as each phase is completed in compliance with the permit but the bond may not be fully released until the Board has received the final report as required by Section 13 and issued a certificate of completion.

Section 13. Final Reports

No later than two (2) years from completion of the work, the permittee shall submit a report (including certified as-built construction plans) from a Registered Professional Engineer in Massachusetts, surveyor, certifying that all erosion and sediment control devices, and approved changes and modifications, have been completed in accordance with the conditions of the approved Stormwater Permit. 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). Any discrepancies from the approved plan should be noted in the cover letter.

Section 14. Enforcement

A. The Board or an authorized agent of the Board shall enforce this Section, regulations, orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.

B. Orders

1. The Board or an authorized agent of the Board may issue a written order to enforce the provisions of this Section or the regulations thereunder, which may include:

   a. a requirement to cease and desist from the Construction Activity until there is compliance with the provisions of the land-disturbance permit;
   b. maintenance, installation or performance of additional erosion and sediment control measures;
   c. monitoring, analyses, and reporting;
   d. remediation of erosion and sedimentation resulting directly or indirectly from the land-disturbing activity.

2. If the enforcing person determines that abatement or remediation of erosion and sedimentation is required, the order shall set forth a deadline by which such abatement or remediation must be completed. Said order shall further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town of Somerset may, at its option, undertake such work, and the property owner shall reimburse the Town of Somerset's expenses.
3. Within thirty (30) days after completing all measures necessary to abate the violation or to perform remediation, the violator and the property owner shall be notified of the costs incurred by the Town of Somerset, including administrative costs. The violator or property owner may file a written protest objecting to the amount or basis of costs with the Board within thirty (30) days of receipt of the notification of the costs incurred. If the amount due is not received by the expiration of the time in which to file a protest or within thirty (30) days following a decision of the Board affirming or reducing the costs, or from a final decision of a court of competent jurisdiction, the costs shall become a special assessment against the property owner and shall constitute a lien on the owner's property for the amount of said costs. Interest shall begin to accrue on any unpaid costs at the statutory rate, as provided in G.L. Ch. 59, § 57, after the thirty-first day following the day on which the costs were due.

C. Any person that violates any provision of this Section may be punished, under MGL C. 40 s 21D as a noncriminal offense, by fines of:

1. First offense: $100
2. Second offense: $200
3. Additional offenses: $300 each

Or under MGL C. 40 s. 21D by criminal complaint at the appropriate venue. Each day or portion

thereof during which a violation continues shall constitute a separate offense.

D. Appeals. The decisions or orders of the Board shall be final. Further relief shall be to a court of competent jurisdiction.

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

Section 15. Certificate of Completion

The Board will issue a letter certifying completion upon receipt and approval of the final reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with this Section.

Section 16. Severability

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

The Planning Board voted to adopt the Stormwater Management Regulations on August 27, 2019 with most recent updated voted for adoption on June 8, 2021.

STORMWATER PERMIT APPLICATION

To the Planning Board:

The undersigned wishes to submit a Stormwater Permit Application as defined in the Planning Board Regulations and requests a review and determination by the Board of said Stormwater Permit Application.

The Stormwater Permit Application involves property where owner's title to the land is derived under deed from_____ , dated _____ , and recorded in the Bristol County Registry of Deeds, Book_____ , Page _____ , or Land Court Certificate of Title No. , Registered in _____District, Book _____ , Page

Give a brief summary of the nature of the project.

The property (building) is described as being located at_____;
it is currently used as _____ and the changes proposed to be made are_____ .

The project is located on the parcel shown on Assessors Map _____ , Parcel _____.

Applicant's Signature _____ Owners' Signature(s) _____

Applicant's Name (print)_____ Owners' Names(s)_____

Applicant's Address _____ Owners' Address_____

Date Received by Town Clerk:

Signature _____

Please note: 1) An applicant for a Stormwater Permit must file with the Board a completed Stormwater Permit Application as detailed in Section 5. 2) The applicant shall also file a copy of the Stormwater Plan and the application with the Town Clerk. The date of receipt by the Town Clerk shall be the official filing date.

STORMWATER PERMIT REVIEW FEE SCHEDULE

The following fee schedules are minimum fees. The Board may require higher fees if deemed necessary for proper review of an application or to ensure compliance.

An application fee of five hundred dollars ($500.00) for an individual residential housing lot any Stormwater Permit Application. An application fee of one thousand dollars ($1000.00) is required for any Stormwater Plan Application for a commercial project, residential subdivision or any development exceeding one half-acre of disturbance and not single residence on an individual lot

GENERAL

1. Any application not accompanied by the appropriate fee shall be deemed incomplete. Payment must be made to the Board in cash, money order, bank or certified check payable to the Town of Somerset.

2. An Applicant's failure to pay any additional review or inspection fee within five business days of receipt of the notice that further fees are required shall be grounds for disapproval.

3. The Board will publish the public notice and send abutter notifications. Abutter notification shall be by certified mail-return receipt requested. The applicant shall pay all costs associated with the publication and notification requirements. These costs shall not be imposed on the applicant if the applicant completes the public notice and abutter notification requirements, and provides the Board with copies of the public notices and the return receipt cards.

   Professional review fees include engineering review, legal review, and clerical fees associated with the public hearing and permit processing. A fee estimate may be provided by the Board's consulting engineer.