

# **STORMWATER MANAGEMENT AND EROSION CONTROL BYLAW**

## **SECTION 1. PURPOSE**

Erosion and sedimentation is a significant environmental concern in Westborough. Inadequate stormwater management systems can result in property damage, flooding, the contamination of drinking water supplies, the loss of recreational opportunities, adverse impacts on fisheries and wildlife, the loss of wetlands, costly maintenance of the Town's stormwater system, and the loss of valuable agricultural soils. The purpose of this bylaw is to prevent or diminish these impacts by controlling runoff and preventing soil erosion and sedimentation resulting from site construction and development.

This bylaw also establishes stormwater management standards for the final conditions that result from development and redevelopment projects to minimize adverse impacts offsite and downstream which would be born by abutters, townspeople and the general public.

## **SECTION 2. DEFINITIONS**

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

**BEST MANAGEMENT PRACTICE or BMP** — A structural, nonstructural, or vegetative measure which reduces erosion, sediment, peak storm discharge, and/or improves the quality of stormwater runoff as described in Stormwater Management or in a publication substantially equivalent.

**THE BOARD** – Town of Westborough Conservation Commission OR its authorized agent(s).

**CLEARING** — Any activity that removes the surface cover from land and exposes soil to the potential influence of stormwater.

**CRITICAL AREAS** —

- A. Disturbed areas 2,000 square feet or greater within the watershed of any of the Town's drinking water supplies; or
- B. Disturbed areas containing slope lengths exceeding 25 feet on slopes greater than 15%.

**DEVELOPMENT** — Any construction or grading activities other than for agricultural and silvicultural purposes.

**DISTURBED AREA** — An area where the natural vegetation has been removed, or is proposed to be removed, in connection with a development resulting in exposing the underlying soil or covering up of vegetation. In addition, it includes moving soil, asphalt, rock, sand and gravel.

**ENFORCING AGENT** — The Town of Westborough Conservation Commission and its employees or appointed agents shall be in charge of enforcing the requirements of this bylaw as they affect water bodies or wetland issues. The Town of Westborough Department of Public Works (DPW) and its employees or appointed agents shall be in charge of enforcing the requirements of this bylaw as they affect the municipal storm drain system.

**EROSION** — A condition in which the earth's surface, including soil or rock fragment, is detached and moved away by the action of water, wind, ice, gravity or other means.

**GRADING** — Changing the level or shape of the ground surface.

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

**IMPERVIOUS SURFACE** — Any material or structure on or above the ground that prevents water infiltrating the underlying soil. Impervious surface includes without limitation roads, paved parking lots, sidewalks, and roof tops.

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

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

**NOTICE OF INTENT** – The written notice filed by any person intending to remove, fill, dredge or alter an Area Subject to Protection under M.G.L. c. 131 § 40.

**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 insure that it continues to function as designed.

**ORDER OF CONDITIONS** – The document issued by a conservation commission containing conditions which regulate or prohibit an activity.

**OUTFALL** — The point at which stormwater flows out from a point source discernible, confined and discrete conveyance into waters of the Commonwealth.

**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 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.

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

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

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

**PROJECT AREA** — The area within the boundaries of a development and shall include the area within any proposed subdivision or as depicted on a site plan.

**REDEVELOPMENT** — Development, rehabilitation, expansion, demolition or phased projects that disturb the ground surface or increase the impervious area on previously developed sites.

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

**SEDIMENT** — Solid material, whether mineral or organic, that is in suspension, is transported or has been moved from its site of origin by erosion.

**STABILIZED** — The reduction in the soil erosion rate which results in an erosion rate typical of undisturbed soils. Soils which are disturbed will be considered stabilized when covered with a healthy, mature growth of grass. As a temporary measure only, disturbed soils will be considered stabilized if covered with a sufficient covering of hay or straw mulch, applied in an amount of at least two tons per acre, sufficient to prevent erosion on an interim basis.

**STORMWATER MANAGEMENT PLAN** — A plan required as part of the application for a Stormwater Management Permit. See Section 4.

**STORMWATER MANAGEMENT** — As a text, shall mean the Stormwater Management Standards and Handbooks, as revised, prepared by the Massachusetts Department of Environmental Protection and the Massachusetts Office of Coastal Zone Management.

**STORMWATER RUNOFF** — Water from precipitation which is not absorbed, evaporated or otherwise stored within the contributing drainage area.

TSS: Total Suspended Solids.

WATERSHED — The land area which drains into any number of streams, ponds, and rivers within the Town including Westborough Reservoir and Sandra Pond.

### SECTION 3. APPLICABILITY

All projects shall prevent the discharge of polluted stormwater to wetlands, waterbodies, or the Municipal Storm Drain System of the Town of Westborough.

Where a project is subject to Subdivision Approval, Site Plan Review, Special Permit, Wetland Protection Act, Order of Conditions or Comprehensive Permit, the Stormwater Management and Erosion Control Bylaw requirements shall be met during review.

For projects involving:

1. Disturbance of more than 5,000 square feet up to 1 acre (43,560 square feet) of land
- OR**
2. Stockpiling more than 100 cubic yards of excavate or fill

The applicant shall be required to follow the procedures as outlined below:

- (a) Notify DPW in writing of the date and nature (including a sketch) of the proposed project at least 10 days prior to commencement of site clearing or stockpiling activities;
- (b) Implement measures to prevent the offsite discharge of sediment;
- (c) Construction materials (paints, glue, thinners, etc.) shall be managed so as not to pollute stormwater. Containers/materials shall be stored and disposed of properly;
- (d) Implement other stormwater management measures at the direction of the DPW;
- (e) The erosion control system shall be inspected by the DPW, Conservation Commission, or its agent prior to disturbing the site. The applicant shall be responsible for maintaining and removing this system at project completion.
- (f) Provide additional stormwater-related information at the request of the DPW, Conservation Commission or its agent. This may include providing an engineered plan prepared and stamped by a Massachusetts Registered Professional Engineer or a Certified Professional In Erosion and Sediment Control evaluating existing drainage systems as required.

For projects involving:

1. Total cumulative disturbed area of more than 1 acre (43,560 square feet)
- OR**
2. Development which causes alteration of drainage characteristics (see definition in section 2 of alteration of drainage characteristics)

A Stormwater Management Application as described in Section 4 shall be filed with the DPW.

No person shall start any project subject to the provisions of this bylaw without first obtaining the approval of the DPW, Conservation Commission or its agent.

**Exemptions:**

- Normal maintenance and improvement of land in agricultural use as defined by the Wetlands Protection Act regulation 310 CMR 10.04;
- Maintenance of existing landscaping, gardens or lawn areas (not to exceed 2,000 square feet) associated with a single or two-family dwelling;
- The construction of fencing that will not substantially alter existing terrain or drainage characteristics or patterns;
- Construction of utilities other than drainage (gas, water, electric, telephone, etc.) which will not alter terrain or drainage characteristics or patterns;
- The exemptions applicable to agricultural or forestry operations, contained in the Wetlands Protection Act, MGL c. 131, § 40, shall apply to this chapter.
- The reconstruction or resurfacing of any public way shall be exempt from the provisions of this chapter. The use of Best Management Practices shall be employed.
- Municipal maintenance activities
- Firefighting activities

**SECTION 4. APPLICATION REQUIREMENTS**

The Plan shall be designed to meet the Massachusetts Stormwater Management Standards, DEP Stormwater Management Handbooks, as revised, and those criteria identified in section 5 of the Bylaw. The plans, documents and calculations submitted must be stamped by a Massachusetts Professional Engineer or a Certified Professional in Erosion and Sediment Control. The applicant shall complete and sign the Stormwater Permit Application and deliver the application, Stormwater Management Plan and drawings to the DPW. The Stormwater Management Plan shall fully describe the project in drawings and narrative. It shall include:

- 1) Contact information
  - a) The location of the Stormwater Management Plan.
  - b) The name, address and the beeper or cell phone number, if applicable, of the:
    - i) owner of the project;
    - ii) operator of the project;
    - iii) emergency contact;
    - iv) person responsible for routine inspections of Best Management Practices;
    - v) person responsible for maintaining the Best Management Practices;
    - vi) person responsible for documenting changes to the Stormwater Management Plan;
    - vii) person responsible for communicating changes in the Stormwater Management Plan to the people working on the site.
- 2) Site map requirements:
  - a) A locus map showing the parcel in relation to the surrounding properties
  - b) A North arrow, scale and date

- c) The property lines
  - d) Easements and/or legal rights of other persons within the property lines
  - e) All structures, utilities, downstream culverts, roads and other paved areas
  - f) Topographic contours at two foot intervals
  - g) Critical area boundaries at the site
  - h) Surface water and wetlands, drainage patterns and watershed boundaries
  - i) Existing vegetation at the site
  - j) The extent of one-hundred-year floodplain boundaries if identified on the Federal Emergency Management Agency floodplain maps
  - k) Soils information for design purposes from the Natural Resources Conservation Services soil survey and available site soil samples
  - l) A depiction of areas of soil disturbance
  - m) A depiction of areas of cut and fill
  - n) A construction details sheet showing notes specifying materials to be used and construction specifications
- 3) Site and activity description including:
- a) Location
  - b) Existing conditions
  - c) Proposed conditions
  - d) Area to be disturbed in square feet and acres.
  - e) Topography
  - f) Wetlands and water bodies
  - g) Land type
- 4) Identification of potential pollutant sources such as paint, pesticides, oil, or other toxic chemicals etc.
- 5) Description of controls to reduce pollutants
- a) List and discuss each Best Management Practice, its purpose, its construction sequence and installation timing as they apply to the site and the project proposed.
  - b) Design calculations of all temporary and permanent stormwater management and erosion and sediment control best management practices.
- 6) Phases as related to soil disturbance.
- a) Tabulated sequence of construction.
  - b) The construction schedule.
  - c) The earth movement schedule.
- 7) Maintenance/inspection procedures
- a) Proposed schedule for the inspection and maintenance of all best management practices.
  - b) Proposed inspection forms to be filled out by the person responsible for routine inspections of Best Management Practices.

The DPW, Conservation Commission, or its agent may waive all, or some, of the requirements for a stormwater management and erosion control application if it determines that some, or all, of the application requirements are unnecessary because of the size or character of the development project or because of the natural conditions at the site.

The applicant shall make all requests for waivers in writing. The applicant must submit supporting technical information and documentation to demonstrate that, because of minimal

environmental impact, some, or all, of the requirements are unnecessary. The Enforcing Agent's decision to grant or deny waiver shall be in writing and shall set forth the reasons for the grant or denial.

## SECTION 5. DESIGN STANDARDS

The following standards shall be applied in planning for stormwater management and erosion control:

- A. All measures in the plan shall meet, at a minimum, the Best Management Practices as set forth in the Stormwater Management handbook.
- B. Whenever practical, natural vegetation shall be retained, protected and/or supplemented. The stripping of vegetation shall be done in a manner that minimizes soil erosion.
- C. Temporary erosion and sediment control measures shall be installed before any soil disturbance.
- D. The area of disturbance shall be kept to a minimum. Disturbed areas remaining idle for more than 30 days shall be stabilized.
- E. Measures shall be taken to control erosion within the project area. Sediment in runoff water shall be trapped and retained within the project area using approved measures. Wetland areas and surface areas shall be protected from sediment.
- F. Off-site surface water and runoff from undisturbed areas shall be diverted away from disturbed areas where feasible or carried through the project area without causing erosion. Integrity of downstream drainage systems shall be maintained.
- G. Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post-development site should approximate the annual recharge rate from the pre-development or existing site conditions, based on soil types.
- H. Measures shall be taken to control the post-development peak rate of runoff and volume of runoff so that it does not exceed predevelopment runoff for the two-year, ten-year and one-hundred-year twenty-four-hour storm event as specified in the design criteria of the Stormwater Management handbook. The drainage design may, at the discretion of the enforcing agent, incorporate the use of open space to minimize the change in volume of runoff in post-development.
- I. Priority shall be given to preserving natural drainage systems, including perennial and intermittent streams, wetlands, soils and drainage ditches for conveyance of runoff entering and leaving the project area.
- J. When one or more of the Standards cannot be met, an applicant may demonstrate that an equivalent level of environmental protection will be provided.
- K. All temporary erosion and sedimentation control measures shall be removed after final site stabilization. Stabilization measures such as hydroseeding or application of salt hay/mulch or soil netting shall be applied immediately upon removal of temporary erosion measures and inspected weekly until stabilization is complete. Trapped sediment and other disturbed soil

areas resulting from the removal of temporary measures shall be permanently stabilized within thirty days unless adverse weather conditions delay stabilization.

#### SECTION 6. RESPONSIBILITY FOR INSTALLATION AND CONSTRUCTION.

- A. The applicant shall have the responsibility to install, construct, inspect and dispose of all stormwater management and erosion control measures required of this chapter.
- B. The DPW, Conservation Commission, or its agent may, in its discretion, require a bond or other security in an amount, and with sureties and conditions, satisfactory to the Commission, to assure the actual construction and installation of measures within the time specified by the Commission and expressed in the bond or other security document.
- C. Site development shall not begin until the stormwater management and erosion control plan receives conditional approval. Best management practices shall be installed, as designed and scheduled, as a condition of final approval of the plan.

#### SECTION 7. PLAN APPROVAL AND REVIEW.

- A. The DPW, Conservation Commission, or its agent shall indicate approval of the stormwater management and erosion control plan, as filed, if it complies with requirements and objectives of this chapter. The approval shall be noted on the face of the plan. If disapproved, the DPW, Conservation Commission, or its agent will give the applicant a list of the plan's deficiencies and will describe the substantive and procedural steps required to submit an alternative plan.
- B. The DPW, Conservation Commission, or its agent, if it determines such action to be appropriate, may submit the plan for technical review to a qualified professional consultant at the expense of the applicant. The Enforcing Agent may require such fees to be paid as a precondition to its review of the application.
- C. The DPW, Conservation Commission, or its agent shall adopt, and from time to time amend rules and regulations relative to the issuance of stormwater management and erosion control permits. Such rules shall prescribe substantive specifications consistent with this chapter and the procedures for the submission and approval of such permits.

#### SECTION 8. MAINTENANCE AND INSPECTION.

- A. The DPW, Conservation Commission, or its agent's decision shall incorporate the approved application and the plan and shall describe the maintenance requirements for water quality measures required by stormwater management and erosion and sediment control plans.
- B. The DPW, Conservation Commission, or its agent may require routine inspections to determine compliance with conditions of the permit and to ascertain if the owner is maintaining water quality protection measures. The DPW, Conservation Commission, or its agent shall notify the landowner before such inspections and shall attempt to arrange for inspections at reasonable times for the landowner. The application for permit and acceptance of the permit shall be deemed to be consent for such inspections.



- C. Right of Entry. Filing an application for a Stormwater and Erosion Control Permit grants the DPW, Conservation Commission, or its agent, permission to enter the site to verify the information in the application and to inspect for compliance with permit conditions.
- D. If the landowner denies the DPW, Conservation Commission, or its agent access to the property in order to inspect the site, the agent shall seek to obtain an administrative search warrant from the appropriate court.
- E. The DPW, Conservation Commission, or its agent may require a fee for routine inspections. It shall be the duty of the owner of the site to pay the fee. The Commission shall establish a fee schedule which will adequately and reasonably reflect the actual cost of performing inspections for various types of water quality measures and for compliance with the conditions of the permit.
- F. The DPW, Conservation Commission, or its agent may appoint an inspector, at the owner's expense, to perform inspections during construction. This inspector shall have the authority to shut down the project if, in the inspector's opinion, the owner is not complying with the conditions of the permit during the period of construction.
- G. The contractor is responsible to inspect and maintain the Best Management Practices regularly. The contractor shall keep a record of all inspection and follow-up maintenance of Best Management Practices. The DPW, Conservation Commission, or its agent shall be given copies of the inspection reports every 2 weeks or as they see necessary. The contractor is to keep a record of all amendments to the Stormwater Management Plan and inform the DPW, Conservation Commission or its agent of such changes.

## SECTION 9. OPERATION AND MAINTENANCE PLANS

An Operation and Maintenance plan (O&M Plan) is required at the time of application for all projects. The maintenance plan shall be designed to ensure compliance with the Permit, this Bylaw and that the Massachusetts Surface Water Quality Standards, 314, CMR 4.00 are met in all seasons and throughout the life of the system. The DPW, Conservation Commission, or its agent shall make the final decision of what maintenance option is appropriate in a given situation. The DPW, Conservation Commission, or its agent will consider natural features, proximity of site to water bodies and wetlands, extent of impervious surfaces, size of the site, the types of stormwater management structures, and potential need for ongoing maintenance activities when making this decision. The Operation and Maintenance Plan shall remain on file with the DPW, Conservation Commission, or its agent and shall be an ongoing requirement. The O&M Plan shall include:

- A. The name(s) of the owner(s) for all components of the system
- B. Maintenance agreements that specify:
  - 1. The names and addresses of the person(s) responsible for operation and maintenance
  - 2. The person(s) responsible for financing maintenance and emergency repairs.
  - 3. A Maintenance Schedule for all drainage structures, including swales and ponds.
  - 4. A list of easements with the purpose and location of each.
  - 5. The signature(s) of the owner(s).
  - 6. Record Maintenance agreement.

### C. Stormwater Management Easement(s).

1. 1 Stormwater management easements shall be provided by the property owner(s) as necessary for:
  - a. access for facility inspections and maintenance,
  - b. preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event.
  - c. direct maintenance access by heavy equipment to structures requiring regular cleanout.
2. The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
3. Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the DPW, Conservation Commission, or its agent.
4. Easements shall be recorded with the Worcester County Registry of Deeds prior to issuance of a Certificate of Completion by the DPW, Conservation Commission, or its agent.

### D. Changes to Operation and Maintenance Plans

1. The owner(s) of the stormwater management system must notify DPW, Conservation Commission, or its agent of changes in ownership or assignment of financial responsibility.
2. The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of this by-law by mutual agreement of the DPW, Conservation Commission, or its agent 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. ENFORCEMENT; VIOLATIONS AND PENALTIES.

- A. The DPW, Conservation Commission, or its agent shall be responsible for enforcing the provisions of this chapter. To this end, they shall have the authority to seek any or all of the following remedies to enforce this chapter, its regulations and/or the terms and conditions of its permit:
  1. Written notice of violation.
  2. Injunctive relief in a court of appropriate jurisdiction.
  3. Noncriminal disposition. Whoever violates any provision of this chapter or a regulation promulgated by the DPW, Conservation Commission, or its agent, a condition contained in a permit issued by the DPW, Conservation Commission, or its agent, the conditions of a notice of violation or the conditions on the cease and desist order may, in the discretion of the DPW, Conservation Commission, or its agent, be subject to the noncriminal procedure established pursuant to the provisions of MGL c. 40, § 21D. The penalty for the first violation shall be \$50. The penalty for the second violation shall be \$100. Each day on which a violation occurs shall be considered a

separate offense. The owner or their agent may be denied permits/licenses after being cited for the second violation.

4. Criminal prosecution for violation of any provision of this chapter, the permit and/or regulations promulgated by the DPW, Conservation Commission, or its agent. Any such violation shall be punished by a fine of \$300 for each offense. Each day on which such violation continues shall constitute a separate offense.
  5. Issuance of a cease and desist order if the DPW, Conservation Commission, or its agent determines that conditions at the site are in violation of any of the requirements of this chapter, the Stormwater Bylaw or permit and that such violation is either an immediate threat to the environment, the public health or safety; or that the property owner has failed to take the corrective action(s) identified in a written notice of the violation issued under this chapter or has failed to take such corrective action within the time required in the notice of violation.
  6. If the DPW, Conservation Commission, or its agent takes remedial action upon failure of the owner to abate or remediate, notice shall be given to the owner of the costs, including administrative costs, incurred by the Town. Said notice shall be sent within thirty (30) days of completion of all measures necessary to abate the violation or to perform remediation. The violator or owner shall also be notified that they may, within thirty (30) days of receipt of said notice, file an appeal in writing to the Board of Selectmen objecting to either the amount or basis of the costs incurred. If the amount due is not received by the expiration of the time in which to file an appeal or within thirty (30) days following a decision by the board of Selectmen 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 provided in M.G.L. c. 59, s. 57 after the thirty-first day at which the costs first become due.
- B. The DPW, Conservation Commission, or its agent may issue a written notice of violation to any person whom it determined is in violation of any of the requirements of this chapter, the regulations enacted by the Enforcing Agent or a permit and plan approved under this chapter. The notice of violation shall:
- a. Specify the actions, conditions or omissions which create the violation
  - b. Identify the necessary corrective actions;
  - c. Specify the time within which the violations must be corrected;
  - d. Be served by certified mail upon the violator with a copy maintained in the records of the Commission.

## SECTION 11. AUTHORITY

This bylaw is adopted under authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule Procedures Act, and the regulations of the federal Clean Water Act found at 40 CFR 122.34g.

## SECTION 12. SEVERABILITY

The provisions of this by-law are hereby declared to be severable. If any provision, paragraph, sentence or clause of this by-law, or the application thereof to any person, establishment or circumstances, shall be held invalid, such invalidity shall not affect the other provisions or application of this by-law.