

Ordinance 2005-004

AN ORDINANCE AMENDING THE LAND USE ORDINANCES OF THE BOROUGH OF MILLSTONE, SOMERSET COUNTY BY DELETING ZONING, SUBSECTION D-123.L IN ITS ENTIRETY, RESERVED FOR FUTURE USE AND ADDING ARTICLE V ENTITLED "STORMWATER CONTROL

ARTICLE 1: ZONING, SUBSECTION D-123.L shall be deleted in its entirety and reserved for future use.

ARTICLE 2: A new ARTICLE V entitled STORMWATER CONTROL shall be created as follows:

ARTICLE V: Stormwater Control

Table of Contents

D-132	Purpose	1
D-133	General Standards.....	2
D-134	Stormwater Management Requirements for Development.....	3
D-135	Calculation of Stormwater Runoff and Groundwater Recharge.....	11
D-136	Standards for Structural Stormwater Management Measures	11
D-137	Sources for Technical Guidance	12
D-138	Safety Standards for Stormwater Management Basins.....	13
D-139	Requirements for a Stormwater Control Plan.....	14
D-140	Inspection.....	16
D-141	Fees and Expenses	17
D-142	Performance Guarantee	18
D-143	Maintenance and Repair	18
D-144	Prohibitions.....	19
D-145	Enforcement and Penalties	20
D-146	Definitions	22

D-132 Purpose

A. Policy Statement

Flood control, groundwater recharge, and pollutant reduction through nonstructural or low impact techniques shall be explored before relying on structural Best Management Practices (BMPs.) Structural

BMPs should be integrated with nonstructural stormwater management measures and proper maintenance plans. Nonstructural measures include both environmentally sensitive site design and source controls that prevent pollutants from being placed on the site. Source control plans should be developed based upon physical site conditions and the origin, nature, and the anticipated loading of potential pollutants. Multiple stormwater management BMPs may be necessary to achieve the established performance standards for water quality, quantity, and groundwater recharge.

B. Purpose

It is the purpose of this ordinance to establish minimum stormwater management requirements and controls for development.

C. Applicability

(1). This ordinance shall be applicable to:

- a. Any site plan or subdivision that requires preliminary or final site plan review.
- b. All grading applications for development or redevelopment at a site for earth disturbance greater than five thousand (5,000) square feet in area.
- c. Redevelopment that includes the creation, addition, or replacement of five thousand (5,000) square feet or more of impervious surface cover, or involves land development activities of one (1) or more acres.
- d. Any new development or redevelopment, regardless of size, that is defined by the municipal engineer to be a hotspot land use, as further defined in Section D-134.F(1)b(3)(c) herein, or,
- e. Land development activities that are smaller than the minimum applicability criteria set forth in items b and c above if such activities are part of a larger common plan of development, even though multiples, separate and distinct land development activities may take place at different times on different time schedules.

(2) The following activities are exempt from this ordinance

- a. Agricultural or silvicultural land management activities within areas zoned for these activities, and;
- b. Repairs to any stormwater management facility or practice deemed necessary by the Borough.

D. Compatibility with Other Permit and Ordinance Requirements

Development approvals issued pursuant to this ordinance are to be considered an integral part of development approvals under the subdivision and site plan review process and do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act, or ordinance. In their interpretation and application, the provisions of this ordinance shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare. This ordinance is not intended to interfere with, abrogate, or annul any other ordinances, rule or regulation, statute, or other provision of law except that, where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, the more restrictive provisions or higher standards shall control.

D-133 General Standards

A. Design and Performance Standards for Stormwater Management Measures

- (1) Stormwater management measures shall be developed to meet the erosion control, groundwater recharge, stormwater runoff quantity, and stormwater runoff quality standards in this section. To the maximum extent feasible, these standards shall be met by incorporating nonstructural stormwater management strategies into the design. If these strategies alone are not sufficient to meet these standards, structural stormwater management measures necessary to meet these standards shall be incorporated into the design.
- (2) The standards in this ordinance apply to development as defined within Section 1.C and are intended to minimize the impact of stormwater runoff on water quality and water quantity in receiving water bodies and maintain groundwater recharge. The standards do not apply to new development to the extent that alternative design and performance standards are applicable under a regional stormwater management plan or Water Quality Management Plan adopted in accordance with Department of Environmental Protection rules. Such alternative standards shall provide at least as much protection from stormwater-related loss of groundwater recharge, stormwater quantity and water quality impacts of development projects as would be provided under the standards in this subchapter.
- (3) For site improvements regulated under the Residential Site Improvement Standards (RSIS) at N.J.A.C. 5:21, the RSIS shall apply in addition to this section except to the extent the RSIS are superseded by this section or alternative standards applicable under a regional stormwater management plan or Water Quality Management Plan adopted in accordance with Department rules.

D-134 Stormwater Management Requirements for Development

- A. The development shall incorporate a maintenance plan for the stormwater management measures incorporated into the design of the development.
- B. Stormwater management measures shall avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the Department's Landscape Project or Natural Heritage Database established under N.J.S.A. 13:1B-15.147 through 15.150, particularly *Helonias bullata* (swamp pink) and/or *Clemmys muhlenbergi* (bog turtle).
- C. The following linear development projects are exempt from the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements at Sections D-134.F and D-134.G:
 - (1) The construction of an underground utility line provided that the disturbed areas are revegetated upon completion;
 - (2) The construction of an aboveground utility line provided that the existing conditions are maintained to the maximum extent practicable; and
 - (3) The construction of a public pedestrian access, such as a sidewalk or trail with a maximum width of 14 feet, provided that the access is made of permeable material.
- D. A waiver from strict compliance from the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements at Sections D-134.F and D-134.G may be obtained for the enlargement of an existing public roadway or railroad; or the construction or enlargement of a public pedestrian access, provided that the following conditions are met, where applicable:
 - (1) The applicant demonstrates that there is a public need for the project that cannot be accomplished by any other means;

- (2) The applicant demonstrates through an alternatives analysis, that through the use of nonstructural and structural stormwater management strategies and measures, the option selected complies with the requirements of Sections D-134.F and D-134.G to the maximum extent practicable;
- (3) The applicant demonstrates that, in order to meet the requirements at Sections D-134.F and D-134.G, existing structures currently in use, such as homes and buildings would need to be condemned; and
- (4) The applicant demonstrates that it does not own or have other rights to areas, including the potential to obtain through condemnation lands not falling under D.3 above within the upstream drainage area of the receiving stream, which would provide additional opportunities to mitigate for requirements of Sections D-134.F and D-134.G that were not achievable on-site.

E. Nonstructural Stormwater Management Strategies

- (1) To the maximum extent practicable, the standards in D-134.F and D-134.G shall be met by incorporating nonstructural stormwater management strategies at D-134.E into the design. The applicant shall identify the nonstructural measures incorporated into the design of the project. If the applicant contends that it is not feasible for engineering, environmental, or safety reasons to incorporate any nonstructural stormwater management measures identified in D-134.E(2) below into the design of a particular project, the applicant shall identify the strategy considered and provide a basis for the contention.
- (2) Nonstructural stormwater management measures incorporated into site design shall:
 - a. Protect areas that provide water quality benefits or areas particularly susceptible to erosion and sediment loss;
 - b. Minimize impervious surfaces and break up or disconnect the flow of runoff over impervious surfaces;
 - c. Maximize the protection of natural drainage features and vegetation;
 - d. Minimize the decrease in the "time of concentration" from pre-construction to post construction. "Time of concentration" is defined as the time it takes for runoff to travel from the hydraulically most distant point of the watershed to the point of interest within a watershed;
 - e. Minimize land disturbance including clearing and grading;
 - f. Minimize soil compaction;
 - g. Provide low-maintenance landscaping that encourages retention and planting of native vegetation and minimizes the use of lawns, fertilizers and pesticides;
 - h. Provide vegetated open-channel conveyance systems discharging into and through stable vegetated areas;
 - i. Provide other source controls to prevent or minimize the use or exposure of pollutants at the site in order to prevent or minimize the release of those pollutants into stormwater runoff. These source controls include, but are not limited to:
 - (1) Site design features that help to prevent accumulation of trash and debris in drainage systems;
 - (2) Site design features that help to prevent discharge of trash and debris from drainage systems;
 - (3) Site design features that help to prevent and/or contain spills or other harmful accumulations of pollutants at industrial or commercial developments; and

- (4) When establishing vegetation after land disturbance, applying fertilizer in accordance with the requirements established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules.
- (3) Any land area used as a nonstructural stormwater management measure to meet the performance standards in Sections D-134.F and D-134.G shall be subjected to a conservation restriction filed with the appropriate County Clerk's office, or subject to an approved equivalent restriction that ensures that measure or an equivalent stormwater management measure approved by the reviewing agency is maintained in perpetuity or, if requested, dedicated to the Borough..
- (4) Guidance for nonstructural stormwater management measures is available in the New Jersey Stormwater Best Management Practices Manual. The manual is available on the Department of Environmental Protection's stormwater web page at <http://www.njstormwater.org> (or successor website).

F. Erosion Control, Groundwater Recharge and Runoff Quantity Standards

- (1) This section contains minimum design and performance standards to control erosion, encourage and control infiltration and groundwater recharge, and control stormwater runoff quantity impacts of \ development.
 - a. The minimum design and performance standards for erosion control are those established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. and implementing rules.
 - b. The minimum design and performance standards for groundwater recharge are as follows:
 - (1) The design engineer shall, using the assumptions and factors for stormwater runoff and groundwater recharge calculations at Section D-135, either:
 - (a) Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100% of the average annual pre-construction groundwater recharge volume for the site; or
 - (b) Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the 2-year storm is infiltrated.
 - (2) This groundwater recharge requirement does not apply to projects within the "urban redevelopment" area, or projects subject to (3) below.
 - (3) The following types of stormwater shall not be recharged:
 - (a) Stormwater from areas of high pollutant loading. High pollutant loading areas are areas in industrial and commercial developments where solvents and/or petroleum products are loaded/unloaded, stored, or applied, areas where pesticides are loaded/unloaded or stored; areas where hazardous materials are expected to be present in greater than 'reportable quantities' as defined by the United States Environmental Protection Agency (EPA) at 40 CFR 302.4; areas where recharge would be inconsistent with Department approved remedial action work plan or landfill closure plan and areas with high risks for spills of toxic materials, such as gas stations and vehicle maintenance facilities; and
 - (b) Industrial stormwater exposed to "source material." "Source material" means any material(s) or machinery, located at an industrial facility that is directly or indirectly related to process, manufacturing or other industrial activities, which could be a source of

pollutants in any industrial stormwater discharge to groundwater. Source materials include, but are not limited to, raw materials; intermediate products; final products; waste materials; by-products; industrial machinery and fuels, and lubricants, solvents, and detergents that are related to process, manufacturing, or other industrial activities that are exposed to stormwater.

- (c) Stormwater Hotspots – Below is a list of examples of designated hotspots. If a site is designated as a hotspot, it has important implications for how stormwater is managed. First and foremost, untreated stormwater runoff from hotspots shall not be allowed to recharge into groundwater where it may contaminate water supplies. Second, a greater level of stormwater treatment shall be required at hotspot sites to prevent pollutant washoff after construction. The Environmental Protection Agency's (EPA) NPDES stormwater program requires some industrial sites to prepare and implement a stormwater pollution prevention plan.

The following is a list of designated hotspots:

- Vehicle salvage yards and recycling facilities
- Vehicle fueling stations
- Vehicle service and maintenance facilities
- Vehicle and equipment cleaning facilities
- Fleet storage areas (bus, truck, etc.)
- Industrial sites as defined under the Industrial Site Recovery Act (ISRA) (N.J.S.A. 13:1K and N.J.A.C. 7:26B)
- Marinas (service and maintenance)
- Outdoor liquid container storage
- Outdoor loading/unloading facilities
- Public works storage areas
- Facilities that generate or store hazardous materials
- Commercial container nursery
- Other land uses and activities as designated by the municipal engineer

The following land uses and activities shall not be considered hotspots:

- Residential streets and rural highways
- Residential development
- Institutional development
- Office developments
- Nonindustrial rooftops
- Pervious areas, (i.e.) nurseries (which may need an integrated pest management (IPM) plan).

- (4) The design engineer shall assess the hydraulic impact on the groundwater table and design the site so as to avoid adverse hydraulic impacts. Potential adverse hydraulic impacts include, but are not limited to, exacerbating a naturally or seasonally high water table so as to cause surficial ponding, flooding of basements, or interference with the proper operation of subsurface sewage disposal systems and other subsurface structures in the vicinity or downgradient of the groundwater recharge area.

- c. In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at Section D-135, complete one of the following:
- (1) Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the 2, 10, and 100 year storm events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events;
 - (2) Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the 2, 10, and 100 year storm events and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development under existing zoning and land use ordinances in the drainage area;
 - (3) Design stormwater management measures so that the post-construction peak runoff rates for the 2, 10 and 100 year storm events are 50, 75 and 80 percent, respectively, of the preconstruction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed. The percentages shall not be applied to post-construction stormwater runoff into tidal flood hazard areas if the increased volume of stormwater runoff will not increase flood damages below the point of discharge; or
 - (4) In tidal flood hazard areas, stormwater runoff quantity analysis in accordance with 1, 2 and 3 above shall only be applied if the increased volume of stormwater runoff could increase flood damages below the point of discharge.
- (2) Any application for a new agricultural development that meets the definition of a development at Section D-143 shall be submitted to the appropriate Soil Conservation District for review and approval in accordance with the requirements of this section and any applicable Soil Conservation District guidelines for stormwater runoff quantity and erosion control. For the purposes of this section, “agricultural development” means land uses normally associated with the production of food, fiber and livestock for sale. Such uses do not include the development of land for the processing or sale of food and the manufacturing of agriculturally related products.

G. Stormwater Runoff Quality Standards

- (1) Stormwater management measures shall be designed to reduce the post-construction load of total suspended solids (TSS) in stormwater runoff by 80 percent of the anticipated load from the developed site, expressed as an annual average. Stormwater management measures shall only be required for water quality control if an additional 1/4 acre of impervious surface is being proposed on a development site. The requirement to reduce TSS does not apply to any stormwater runoff in a discharge regulated under a numeric effluent limitation for TSS imposed under the New Jersey Pollution Discharge Elimination System (NJPDES) rules, N.J.A.C. 7:14A, or in a discharge specifically exempt under a NJPDES permit from this requirement. The water quality design storm is 1.25 inches of rainfall in two hours. Water quality calculations shall take into account the distribution of rain from the water quality design storm, as reflected in Table 1. The calculation of the volume of runoff may take into account the implementation of non-structural and structural stormwater management measures

Table 1: Water Quality Design Storm Distribution

Time (Minutes)	Cumulative Rainfall (Inches)	Time (Minutes)	Cumulative Rainfall (Inches)
0	0.0000	65	0.8917
5	0.0083	70	0.9917
10	0.0166	75	1.0500
15	0.0250	80	1.0840
20	0.0500	85	1.1170
25	0.0750	90	1.1500
30	0.1000	95	1.1750
35	0.1330	100	1.2000
40	0.1660	105	1.2250
45	0.2000	110	1.2334
50	0.2583	115	1.2417
55	0.3583	120	1.2500
60	0.6250		

- (2) For purposes of TSS reduction calculations, Table 2 below presents the presumed removal rates for certain BMPs designed in accordance with the New Jersey Stormwater Best Management Practices Manual. The BMP Manual may be obtained from the address identified in Section 6, or found on the Department’s website at www.njstormwater.org (or successor website). The BMP Manual and other sources of technical guidance are listed in Section 6. TSS reduction shall be calculated based on the removal rates for the BMPs in Table 2 below. Alternative removal rates and methods of calculating removal rates may be used if the design engineer provides documentation demonstrating the capability of these alternative rates and methods to the review agency. A copy of any approved alternative rate or method of calculating the removal rate shall be provided to the Department at the following address: Division of Watershed Management, New Jersey Department of Environmental Protection, PO Box 418 Trenton, New Jersey, 08625-0418 (or successor address).
- (3) If more than one BMP in series is necessary to achieve the required 80% TSS reduction for a site, the applicant shall utilize the following formula to calculate TSS reduction:

$$R = A + B - (AXB)/100$$

Where

R = total TSS percent load removal from application of both BMPs, and

A = the TSS percent removal rate applicable to the first BMP

B = the TSS percent removal rate applicable to the second BMP.

Table 2: TSS Removal Rates for Best Management Practices (BMPs)

Best Management	Practice TSS %
Bioretention Systems	90
Constructed Stormwater Wetland	90
Extended Detention Basin	40-60
Infiltration Structure	80
Manufactured Treatment Device	See Section D-136.C
Sand Filter	80
Vegetative Filter Strip	60-80
Wet Pond	50-90

- (4) If there is more than one onsite drainage area, the 80% TSS removal rate shall apply to each drainage area, unless the runoff from the subareas converge on site in which case the removal rate can be demonstrated through a calculation using a weighted average.
- (5) Stormwater management measures shall also be designed to reduce, to the maximum extent feasible, the post-construction nutrient load of the anticipated load from the developed site in stormwater runoff generated from the water quality design storm. In achieving reduction of nutrients to the maximum extent feasible, the design of the site shall include nonstructural strategies and structural measures that optimize nutrient removal while still achieving the performance standards in Sections 3.F and 3.G.
- (6) Additional information and examples are contained in the New Jersey Stormwater Best Management Practices Manual, which may be obtained from the address identified in Section 6.
- (7) In accordance with the definition of FW1 at N.J.A.C. 7:9B-1.4, stormwater management measures shall be designed to prevent any increase in stormwater runoff to waters classified as FW1.
- (8) Special water resource protection areas shall be established along all waters designated Category One at N.J.A.C. 7:9B and perennial or intermittent streams that drain into or upstream of the Category One waters as shown on the USGS Quadrangle Maps or in the County Soil Surveys, within the associated HUC14 drainage. These areas shall be established for the protection of water quality, aesthetic value, exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, and exceptional fisheries significance of those established Category One waters. These areas shall be designated and protected as follows:
 - a. The applicant shall preserve and maintain a special water resource protection area in accordance with one of the following:
 - (1) A 300-foot special water resource protection area shall be provided on each side of the waterway, measured perpendicular to the waterway from the top of the bank outwards or from the centerline of the waterway where the bank is not defined, consisting of existing vegetation

- or vegetation allowed to follow natural succession is provided. (2) Encroachment within the designated special water resource protection area under Subsection (1) above shall only be allowed where previous development or disturbance has occurred (for example, active agricultural use, parking area or maintained lawn area). The encroachment shall only be allowed where applicant demonstrates that the functional value and overall condition of the special water resource protection area will be maintained to the maximum extent practicable. In no case shall the remaining special water resource protection area be reduced to less than 150 feet as measured perpendicular to the top of bank of the waterway or centerline of the waterway where the bank is undefined. All encroachments proposed under this subparagraph shall be subject to review and approval by the Department.
- b. All stormwater shall be discharged outside of and flow through the special water resource protection area and shall comply with the Standard For Off-Site Stability in the “Standards for Soil Erosion and Sediment Control in New Jersey”, established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq.
 - c. If stormwater discharged outside of and flowing through the special water resource protection area cannot comply with the Standard For Off-Site Stability in the “Standards for Soil Erosion and Sediment Control in New Jersey”, established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., then the stabilization measures in accordance with the requirements of the above standards may be placed within the special water resource protection area, provided that:
 - (1) Stabilization measures shall not be placed within 150 feet of the Category One waterway;
 - (2) Stormwater associated with discharges allowed by this section shall achieve a 95% TSS post construction removal rate;
 - (3) Temperature shall be addressed to ensure no impact on receiving waterway;
 - (4) The encroachment shall only be allowed where the applicant demonstrates that the functional value and overall condition of the special water resource protection area will be maintained to the maximum extent practicable;
 - (5) A conceptual project design meeting shall be held with the appropriate Department staff and Soil Conservation District staff to identify necessary stabilization measures; and
 - (6) All encroachments proposed under this section shall be subject to review and approval by the Department.
 - d. A stream corridor protection plan may be developed by a regional stormwater management planning committee as an element of a regional stormwater management plan, or by a municipality through an adopted municipal stormwater management plan. If a stream corridor protection plan for a waterway subject to Section D-134.G(8) has been approved by the Department of Environmental Protection, then the provisions of the plan shall be the applicable special water resource protection area requirements for that waterway. A stream corridor protection plan for a waterway subject to G.8 shall maintain or enhance the current functional value and overall condition of the special water resource protection area as defined in G.8.a.(1) above. In no case shall a stream corridor protection plan allow the reduction of the Special Water Resource Protection Area to less than 150 feet as measured perpendicular to the waterway subject to this subsection.

D-135 Calculation of Stormwater Runoff and Groundwater Recharge

A. Stormwater runoff shall be calculated in accordance with the following:

- (1) The design engineer shall calculate runoff using one of the following methods:
 - a. The USDA Natural Resources Conservation Service (NRCS) methodology, including the NRCS Runoff Equation and Dimensionless Unit Hydrograph, as described in the NRCS National Engineering Handbook Section 4 – Hydrology and Technical Release 55 – Urban Hydrology for Small Watersheds; or
 - b. The Rational Method for peak flow and the Modified Rational Method for hydrograph computations.
- (2) For the purpose of calculating runoff coefficients and groundwater recharge, there is a presumption that the pre-construction condition of a site or portion thereof is a wooded land use with good hydrologic condition. The term “runoff coefficient” applies to both the NRCS methodology at Section 4.A.1.a and the Rational and Modified Rational Methods at Section D-135.A.1.b. A runoff coefficient or a groundwater recharge land cover for an existing condition may be used on all or a portion of the site if the design engineer verifies that the hydrologic condition has existed on the site or portion of the site for at least five years without interruption prior to the time of application. If more than one land cover have existed on the site during the five years immediately prior to the time of application, the land cover with the lowest runoff potential shall be used for the computations. In addition, there is the presumption that the site is in good hydrologic condition (if the land use type is pasture, lawn, or park), with good cover (if the land use type is woods), or with good hydrologic condition and conservation treatment (if the land use type is cultivation).
- (3) In computing pre-construction stormwater runoff, the design engineer shall account for all significant land features and structures, such as ponds, wetlands, depressions, hedgerows, or culverts, that may reduce pre-construction stormwater runoff rates and volumes.
- (4) In computing stormwater runoff from all design storms, the design engineer shall consider the relative stormwater runoff rates and/or volumes of pervious and impervious surfaces separately to accurately compute the rates and volume of stormwater runoff from the site. To calculate runoff from unconnected impervious cover, urban impervious area modifications as described in the NRCS Technical Release-55, Urban Hydrology for Small Watersheds and other methods may be employed.
- (5) If the invert of the outlet structure of a stormwater management measure is below the flood hazard design flood elevation as defined at N.J.A.C. 7:13, the design engineer shall take into account the effects of tailwater in the design of structural stormwater management measures.

B. Groundwater recharge may be calculated in accordance with the following:

- (1) The New Jersey Geological Survey Geological Survey Report GSR-32 A Method for Evaluating Ground- Water Recharge Areas in New Jersey, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the New Jersey Stormwater Best Management Practices Manual; at <http://www.state.nj.us/dep/njgs/> (or successor website), or at New Jersey Geological Survey, 29 Arctic Parkway, P.O. Box 427 Trenton, New Jersey 08625-0427; (609) 984-6587 (or successor address)..

D-136 Standards for Structural Stormwater Management Measures

A. Standards for structural stormwater management measures are as follows:

- (1) Structural stormwater management measures shall be designed to take into account the existing site conditions, including, for example, environmentally critical areas, wetlands; flood-prone areas; slopes; depth to seasonal high water table; soil type, permeability and texture; drainage area and drainage patterns; and the presence of solution-prone carbonate rocks (limestone).
 - (2) Structural stormwater management measures shall be designed to minimize maintenance, facilitate maintenance and repairs, and ensure proper functioning. Trash racks shall be installed at the intake to the outlet structure as appropriate, and shall have parallel bars with one-inch (1") spacing between the bars to the elevation of the water quality design storm. For elevations higher than the water quality design storm, the parallel bars at the outlet structure shall be spaced no greater than one-third (1/3) the width of the diameter of the orifice or one-third (1/3) the width of the weir, with a minimum spacing between bars of one-inch and a maximum spacing between bars of six inches. In addition, the design of trash racks must comply with the requirements of Section 7.D.
 - (3) Structural stormwater management measures shall be designed, constructed, and installed to be strong, durable, and corrosion resistant. Measures that are consistent with the relevant portions of the Residential Site Improvement Standards at N.J.A.C. 5:21-7.3, 7.4, and 7.5 shall be deemed to meet this requirement.
 - (4) At the intake to the outlet from the stormwater management basin, the orifice size shall be a minimum of two and one-half inches in diameter.(5). Stormwater management basins shall be designed to meet the minimum safety standards for stormwater management basins at Section 7.
- B. Stormwater management measure guidelines are available in the New Jersey Stormwater Best Management Practices Manual. Other stormwater management measures may be utilized provided the design engineer demonstrates that the proposed measure and its design will accomplish the required water quantity, groundwater recharge and water quality design and performance standards established by this subchapter.
- C. Manufactured treatment devices may be used to meet the requirements of this subchapter, provided the pollutant removal rates are verified by the New Jersey Corporation for Advanced Technology and certified by the Department.

D-137 Sources for Technical Guidance

- A. Technical guidance for stormwater management measures can be found in the documents listed at 1 and 2 below, which are available from Maps and Publications, Department of Environmental Protection, 428 East State Street, P.O. Box 420, Trenton, New Jersey, 08625 (or successor address); telephone (609) 777-1038 (or successor telephone number).
- (1) Guidelines for stormwater management measures are contained in the New Jersey Stormwater Best Management Practices Manual, as amended. Information is provided on stormwater management measures such as: bioretention systems, constructed stormwater wetlands, dry wells, extended detention basins, infiltration structures, manufactured treatment devices, pervious paving, sand filters, vegetative filter strips, and wet ponds.
 - (2) The New Jersey Department of Environmental Protection Stormwater Management Facilities Maintenance Manual, as amended.
- B. Additional technical guidance for stormwater management measures can be obtained from the following:
- (1) The "Standards for Soil Erosion and Sediment Control in New Jersey" promulgated by the State Soil Conservation Committee and incorporated into N.J.A.C. 2:90. Copies of these standards may be

obtained by contacting the State Soil Conservation Committee or any of the Soil Conservation Districts listed in N.J.A.C. 2:90-1.3(a)4. The location, address, and telephone number of each Soil Conservation District may be obtained from the State Soil Conservation Committee, P.O. Box 330, Trenton, New Jersey 08625; (609) 292-5540 (or successor address and telephone number);;

- (2) The Rutgers Cooperative Extension Service, 732-932-9306; and
- (3) The Soil Conservation Districts listed in N.J.A.C. 2:90-1.3(a)4. The location, address, and telephone number of each Soil Conservation District may be obtained from the State Soil Conservation Committee, P.O. Box 330, Trenton, New Jersey, 08625, (609) 292-5540 (or successor address and telephone number);

D-138 Safety Standards for Stormwater Management Basins

- A. This section sets forth requirements to protect public safety through the proper design and operation of stormwater management basins. This subchapter applies to any new stormwater management basin.
- B. The provisions of this section are not intended to preempt more stringent municipal or county safety requirements for new or existing stormwater management basins. Other existing municipal and county stormwater management plans and ordinances may, pursuant to their authority, require existing stormwater management basins to be retrofitted to meet one or more of the safety standards in Section D-138.C(1), D-138.C(2), and D-138.C(3) for trash racks, overflow grates, and escape provisions at outlet structures.

C. Requirements for Trash Racks, Overflow Grates and Escape Provisions

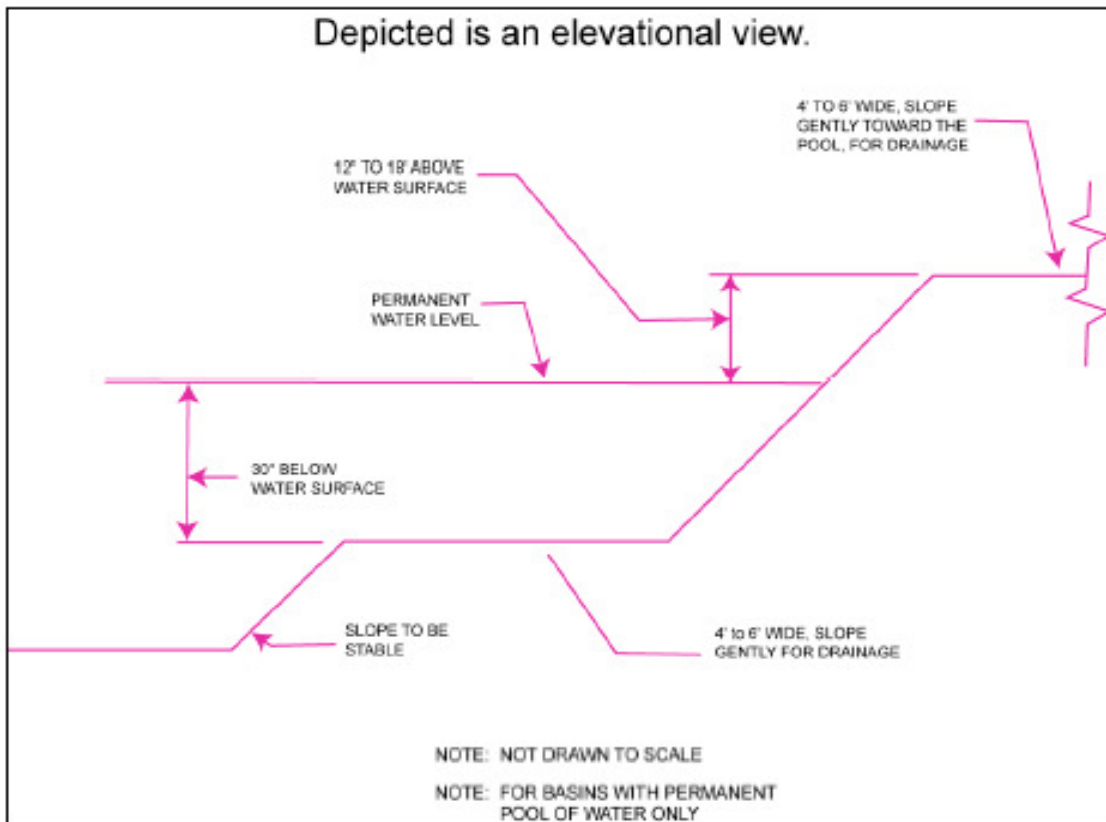
- (1) A trash rack is a device designed to catch trash and debris and prevent the clogging of outlet structures. Trash racks shall be installed at the intake to the outlet from the stormwater management basin to ensure proper functioning of the basin outlets in accordance with the following:
 - a. The trash rack shall have parallel bars, with no greater than six inch spacing between the bars.
 - b. The trash rack shall be designed so as not to adversely affect the hydraulic performance of the outlet pipe or structure.
 - c. The average velocity of flow through a clean trash rack is not to exceed 2.5 feet per second under the full range of stage and discharge. Velocity is to be computed on the basis of the net area of opening through the rack.
 - d. The trash rack shall be constructed and installed to be rigid, durable, and corrosion resistant, and shall be designed to withstand a perpendicular live loading of 300 lbs/ft sq.
- (2) An overflow grate is designed to prevent obstruction of the overflow structure. If an outlet structure has an overflow grate, such grate shall meet the following requirements:
 - a. The overflow grate shall be secured to the outlet structure but removable for emergencies and maintenance.
 - b. The overflow grate spacing shall be no less than two inches across the smallest dimension.
 - c. The overflow grate shall be constructed and installed to be rigid, durable, and corrosion resistant, and shall be designed to withstand a perpendicular live loading of 300 lbs/ft sq.
- (3) For purposes of this subsection, escape provisions means the permanent installation of ladders, steps, rungs, or other features that provide easily accessible means of egress from stormwater management basins. Stormwater management basins shall include escape provisions as follows:

- a. If a stormwater management basin has an outlet structure, escape provisions shall be incorporated in or on the structure. With the prior approval of the reviewing agency identified in Section D-138.D a freestanding outlet structure may be exempted from this requirement.
- b. Safety ledges shall be constructed on the slopes of all new stormwater management basins having a permanent pool of water deeper than two and one-half feet. Such safety ledges shall be comprised of two steps. Each step shall be four to six feet in width. One step shall be located approximately two and one-half feet below the permanent water surface, and the second step shall be located one to one and one-half feet above the permanent water surface. See Section D-138.E for an illustration of safety ledges in a stormwater management basin.
- c. In new stormwater management basins, the maximum interior slope for an earthen dam, embankment, or berm shall not be steeper than 3 horizontal to 1 vertical.

D. Variance or Exemption from Safety Standards

- (1) When considering a waiver from the safety standards for stormwater management basins, the Planning Board shall consider, among all other pertinent factors, whether granting the request will constitute a threat to public safety.

E Illustration of Safety Ledges in a New Stormwater Management Basin



D-139 Requirements for a Stormwater Control Plan

A. Submission of Stormwater Control Plan

- (1) Whenever an applicant seeks municipal approval of a development subject to this ordinance, the applicant shall submit all of the required components of the Checklist for the Stormwater Control Plan at D-139.C below as part of the submission of the applicant's application for subdivision or site plan approval.
- (2) The applicant shall demonstrate that the project meets the standards set forth in this ordinance.
- (3) The applicant shall submit five (5) copies of the materials listed in the checklist for Stormwater Control Plans in accordance with Subsection D-139.C of this ordinance, unless this submission is part of a subdivision or land development application, in which case the applicant shall submit twelve (12) copies of the materials in the checklist for Stormwater Control Plans in accordance with Subsection D-139.C of this ordinance.

B. Stormwater Control Plan Approval

The applicant's Site Development project shall be reviewed as a part of the subdivision or site plan review process by the municipal board or official from which municipal approval is sought. That municipal board or official shall consult the engineer retained by the Planning Board to determine if all the checklist requirements have been satisfied and to determine if the project meets the standards set forth in this ordinance.

C. Checklist Requirements

The following information shall be required:

(1) Topographic Base Map

The reviewing engineer may require upstream tributary drainage system information as necessary. It is recommended that the topographic base map of the site be submitted which extends a minimum of 200 feet beyond the limits of the proposed development, at a scale of 1"=200' or greater, showing 2-foot contour intervals. The map as appropriate may indicate the following: existing surface water drainage, shorelines, steep slopes, soils, erodible soils, perennial or intermittent streams that drain into or upstream of the Category 1 waters, wetlands and flood plains along with their appropriate buffer strips, marshlands and other wetlands, pervious or vegetative surfaces, existing man-made structures, roads, bearing and distances of property lines, and significant natural and manmade features not otherwise shown.

(2) Environmental Site Analysis

A written and graphic description of the natural and man-made features of the site and its environs.

This description should include a discussion of soil conditions, slopes, wetlands, waterways and vegetation on the site. Particular attention should be given to unique, unusual, or environmentally sensitive features and to those that provide particular opportunities or constraints for development.

(3) Project Description and Site Plan(s)

A map (or maps) at the scale of the topographical base map indicating the location of existing and proposed buildings, roads, parking areas, utilities, structural facilities for stormwater management and sediment control, and other permanent structures. The map(s) shall also clearly show areas where alterations occur in the natural terrain and cover, including lawns and other landscaping, and seasonal high ground water elevations. A written description of the site plan and justification of proposed changes in natural conditions may also be provided.

(4) Land Use Planning and Source Control Plan

This plan shall provide a demonstration of how the goals and standards of Sections D-133 through D-136 are being met. The focus of this plan shall be to describe how the site is being developed to meet the objective of controlling groundwater recharge, stormwater quality and stormwater quantity problems at the source by land management and source controls whenever possible.

(5) Stormwater Management Facilities Map

The following information, illustrated on a map of the same scale as the topographic base map, shall be included:

- a. Total area to be paved or built upon, proposed surface contours, land area to be occupied by the stormwater management facilities and the type of vegetation thereon, and details of the proposed plan to control and dispose of stormwater.
- b. Details of all stormwater management facility designs, during and after construction, including discharge provisions, discharge capacity for each outlet at different levels of detention and emergency spillway provisions with maximum discharge capacity of each spillway.

(6) Calculations

- a. Comprehensive hydrologic and hydraulic design calculations for the pre-development and postdevelopment conditions for the design storms specified in Section D-134 of this ordinance.
- b. When the proposed stormwater management control measures (e.g. infiltration basins) depends on the hydrologic properties of soils, then a soils report shall be submitted. The soils report shall be based on onsite boring logs or soil pit profiles. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soil types present at the location of the control measure.

(7) Maintenance and Repair Plan

The design and planning of the stormwater management facility shall meet the maintenance requirements of Section D-143.

(8) Waiver from Submission Requirements

The municipal official or board reviewing an application under this ordinance may, in consultation with the municipal engineer, waive submission of any of the requirements in Subsections D-139.C(1) through D-139.C(6) of this ordinance when it can be demonstrated that the information requested is impossible to obtain or it would create a hardship on the applicant to obtain and its absence will not materially affect the review process.

D-140 Inspection

- A. The municipal Engineer or his municipal designee shall inspect all phases of the installation of the permanent BMPs and/or stormwater management facilities as deemed appropriate by the municipal Engineer.
- B. During any stage of the work, if the municipal Engineer or his municipal designee determines that the permanent BMPs and/or stormwater management facilities are not being installed in accordance with the approved stormwater management plan, the Borough shall revoke any existing permits or other approvals

and issue a cease and desist order until a revised drainage plan is submitted and approved, as specified in Article V in its entirety, and until the deficiencies are corrected.

- C. A final inspection of all BMPs and/or stormwater management facilities shall be conducted by the municipal Engineer or his municipal designee to confirm compliance with the approved drainage plan prior to the issuance of any occupancy permit.

D-141 Fees Schedule and Administration

A. Application Procedures

Every application for Stormwater Control Plan approval shall be accompanied by a check payable to the Borough of Millstone, in accordance with the schedule set forth within this section. Applications for development requiring a combination of approvals (e.g., subdivision, site plan, and/or hardship variances) shall pay an amount equal to the sum of the amounts of the separate elements of relief requested, including an amount for each variance. In no case shall the escrow deposit required at the time of the application exceed \$30,000.00. The amount of any unexpected escrow deposits for review shall be a credit toward fees for review of the application for stormwater control. The application shall be deemed incomplete if the fees and deposits are not paid. Whether or not specifically stated in the resolution of memorialization, payment in a timely manner of all escrow fees which shall become due shall become a condition of approval of any application.

- B. The application charge is a flat fee to cover direct administrative expenses and is non-refundable. The escrow deposit is established to cover the costs of professional services, including:

- (1) The review of the drainage plan by the Borough Engineer and such other professionals as the Borough chooses, the Planning Commission and its professionals.
- (2) The site inspections.
- (3) The inspection of stormwater management facilities and drainage improvements during construction.
- (4) The final inspection upon completion of the stormwater management facilities and drainage improvements presented in the drainage plan.
- (5) Any additional work required to enforce any permit provisions regulated by this Ordinance, correct violations, and assure proper completion of stipulated remedial actions.

Sums not utilized in the review process shall be returned to the developer. Insufficient Funds and Municipal Remedies Thereof shall be administered in accordance with Subsection D-136.C. Periodic accounting of the escrow account shall be administered in accordance with Subsection D-136.D. Close-out procedures shall be administered in accordance with Subsection D-136.E.

- C. The attached fee schedule for a Stormwater Control Plan is hereby established with respect to development projects within the Borough of Millstone, County of Somerset.

	Filing Fee	Escrow Deposit
A stormwater management plan per Section D-139: Stormwater Control Plan	\$250.	\$1,500 per the first acre or less, and \$1000. per each acre or portion thereafter.

D-142 Performance Guarantee

A. For all stormwater improvements, the Applicant shall provide a financial guarantee to the Borough for the timely installation and proper construction of all stormwater management controls.

- (1) Performance guarantees shall be in accordance with regulations set forth in Article III D-125.C & D herein.

D-143 Maintenance and Repair

A. Applicability

- (1) Projects subject to review as in Subsection D-132.C of this ordinance shall comply with the requirements of Subsections D-143.B and D-143.C

B. General Maintenance

- (1) The design engineer shall prepare a maintenance plan for the stormwater management measures incorporated into the design of the development.
- (2) The maintenance plan shall contain specific preventative maintenance tasks and schedules; cost estimates, including estimated cost of sediment, debris, or trash removal; and the name, address, and telephone number of the person or persons responsible for preventative and corrective maintenance (including replacement). Maintenance guidelines for stormwater management measures are available in the *New Jersey Stormwater Best Management Practices Manual*. If the maintenance plan identifies a person other than the developer (for example, a public agency or homeowners' association) as having the responsibility for maintenance, the plan shall include documentation of such person's agreement to assume this responsibility, or of the developer's obligation to dedicate a stormwater management facility to such person under an applicable ordinance or regulation.
- (3) Responsibility for maintenance shall not be assigned or transferred to the owner or tenant of an individual property in a residential development or project, unless such owner or tenant owns or leases the entire residential development or project.
- (4) If the person responsible for maintenance identified under Subsection D-143.B(2) above is not a public agency, the deed of record shall refer to the maintenance plan on file with the Borough of Millstone.
- (5) Preventative and corrective maintenance shall be performed to maintain the function of the stormwater management measure, including repairs or replacement to the structure; removal of sediment, debris, or trash; restoration of eroded areas; snow and ice removal; fence repair or replacement; restoration of vegetation; and repair or replacement of nonvegetated linings.
- (6) The person responsible for maintenance identified under Subsection D-143.B(2) above shall maintain a detailed log of all preventative and corrective maintenance for the structural stormwater management measures incorporated into the design of the development, including a record of all inspections and copies of all maintenance-related work orders.
- (7) The person responsible for maintenance identified under Subsection D-143.B(2) above shall evaluate the effectiveness of the maintenance plan at least once per year and adjust the plan and the deed as needed.
- (8) The person responsible for maintenance identified under Subsection D-143.B(2) above shall retain and make available, upon request by any public entity with administrative, health, environmental, or safety

authority over the site, the maintenance plan and the documentation required by Subsections D-143.B(6) and D-143.B(7) above.

- (9) The requirements of Subsections D-143.B(3) and D-143.B(4) do not apply to stormwater management facilities that are dedicated to and accepted by the Borough or another governmental agency.
- (10) In the event that the stormwater management facility becomes a danger to public safety or public health, or if it is in need of maintenance, the Borough shall so notify the responsible person in writing. Upon receipt of that notice, the responsible person shall have fourteen (14) days to affect maintenance and repair of the facility in a manner that is approved by the municipal engineer or his designee. If the responsible person fails or refuses to perform such maintenance and repair, the Borough or County may immediately proceed to do so and shall bill the cost thereof to the responsible person.

D-144 Prohibitions

A. Prohibited Discharges

- (1) No person in the Borough shall allow, or cause to allow, stormwater discharges into the Borough's separate storm sewer system which are not composed entirely of stormwater, except 1) as provided in Subsection D-144.A(2) below, and 2) discharges allowed under a state or federal permit.
- (2) Discharges that may be allowed based on a finding by the Borough that the discharge(s) do not significantly contribute to pollution to surface waters of the State are:
 - a. Discharges from fire fighting activities
 - b. Potable water sources including dechlorinated water line and fire hydrant flushings
 - c. Irrigation drainage
 - d. Routine external building washdown (which does not use detergents or other compounds)
 - e. Air conditioning condensate
 - f. Water from individual residential car washing
 - g. Spring water from crawl space pumps
 - h. Uncontaminated water from foundation or from footing drains
 - i. Flows from riparian habitats and wetlands
 - j. Lawn watering
 - k. Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used
 - l. Dechlorinated swimming pool discharges
 - m. Uncontaminated groundwater
- (3) In the event that the Borough determines that any of the discharges identified in Subsection D-144.A(2) significantly contribute to pollution of waters of the State, or is so notified by NJDEP, the Borough will notify the responsible person to cease the discharge.
- (4) Upon notice provided by the Borough under Subsection D-144.A(2), the discharger will have a reasonable time, as determined by the Borough, to cease the discharge consistent with the degree of pollution caused by the discharge.

(5) Nothing in this section shall affect a discharger's responsibilities under state law.

B. Prohibited Connections

(1) The following connections are prohibited, except as provided in Subsection D-144.A(2) above:

- a. Any drain or conveyance, whether on the surface or subsurface, which allows any nonstormwater discharge including sewage, process wastewater, and wash water to enter the separate storm sewer system and any connections to the storm drain system from indoor drains and sinks; and
- b. Any drain or conveyance connected from a commercial or industrial land use to the separate storm sewer system which has not been documented in plans, maps, or equivalent records and approved by the Borough.

C. Roof Drains

- (1) Roof drains shall not be connected to streets, sanitary or storm sewers, or roadside ditches in order to promote overland flow and infiltration/percolation of stormwater where advantageous to do so.
- (2) When it is more advantageous to connect directly to streets or storm sewers, connections of roof drains to streets or roadside ditches may be permitted on a case by case basis as determined by the Borough.

Roof drains shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable.

D. Alteration of BMPs

- (1) No person shall modify, remove, fill, landscape, or alter any existing stormwater control or BMP unless it is part of an approved maintenance program without the written approval of the Borough.
- (2) No person shall place any structure, fill, landscaping, or vegetation into a stormwater control or BMP or within a drainage easement which would limit or alter the functioning of the stormwater control or BMP without the written approval of the Borough.

D-145 Enforcement and Penalties

A. Right-of-Entry

- (1) Upon presentation of proper credentials, duly authorized representatives of the Borough may enter at reasonable times upon any property within the Borough to inspect the implementation, condition, or operation and maintenance of the stormwater controls or BMPs in regard to any aspect governed by this Ordinance.
- (2) Stormwater control and BMP owners and operators shall allow persons working on behalf of the Borough ready access to all parts of the premises for the purposes of determining compliance with this Ordinance.
- (3) Persons working on behalf of the Borough shall have the right to temporarily locate on any stormwater control or BMP in the Borough such devices as are necessary to conduct monitoring and/or sampling of the discharges from such stormwater control or BMP.
- (4) Unreasonable delays in allowing the Borough access to a stormwater control or BMP is a violation of this Article.

B. Municipal Implementation of Maintenance

- (1) The Borough or its designee shall have the authority to perform maintenance if the applicant fails to do so, in which case it may charge the owner therefor.

C. Enforcement Generally

- (1) Whenever the Borough finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the Borough may order compliance by written notice to the responsible person. Such notice may, without limitation, require the following remedies:
 - a. Performance of monitoring, analyses, and reporting;
 - b. Elimination of prohibited connections or discharges;
 - c. Cessation of any violating discharges, practices, or operations;
 - d. Abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
 - e. Payment of a fine to cover administrative and remediation costs;
 - f. Implementation of stormwater controls and BMPs; and
 - g. Operation and maintenance of stormwater controls and BMPs.
- (2) Failure to comply within the time specified shall also subject such person to the penalty provisions of this Ordinance. All such penalties shall be deemed cumulative and shall not prevent the Borough from pursuing any and all other remedies available in law or equity.

D. Suspension and Revocation of Permits and Approvals

- (1) Any building, land development, or other permit or approval issued by the Borough may be suspended or revoked by the Borough for:
 - a. Noncompliance with or failure to implement any provision of the permit;
 - b. A violation of any provision of this Ordinance; or
 - c. The creation of any condition or the commission of any act during construction or development which constitutes or creates a hazard or nuisance, pollution, or which endangers the life, health, or property of others.
- (2) A suspended permit or approval shall be reinstated by the Borough when:
 - a. The municipal Engineer or designee has inspected and approved the corrections to the stormwater controls and BMPs or the elimination of the hazard or nuisance, and/or
 - b. The Borough is satisfied that the violation of the Ordinance, law, or rule and regulation has been corrected.
- (3) A permit or approval that has been revoked by the Borough cannot be reinstated. The Applicant may apply for a new permit under the procedures outlined in this Ordinance.

E. Penalties

- (1) Any person violating the provisions of this ordinance shall be subject to a fine of not less than \$100.00 nor more than \$1,000.00 for each violation, recoverable with costs; each day that the violation continues shall constitute a separate offense and the applicable fines are cumulative, as outlined in Section D-151 herein..

(2) In addition, the Borough, through its Attorney, may institute injunctive, or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance.

F. Notification

In the event that a person fails to comply with the requirements of this Ordinance or fails to conform to the requirements of any permit issued hereunder, the Borough shall provide written notification of the violation. Such notification shall state the nature of the violation(s) and establish a time limit for correction of these violation(s). Said notice may further advise that, if applicable, should the violator fail to take the required action within the established deadline, the work will be done by the Borough or designee, and the expense thereof shall be charged to the violator. Failure to comply within the time specified shall subject such person to the penalty provisions of this Ordinance. All such penalties shall be deemed cumulative and shall not prevent the Borough from pursuing any and all remedies. It shall be the responsibility of the owner of the real property on which any regulated activity is proposed to occur, is occurring, or has occurred to comply with the terms and conditions of this Ordinance.

D-146 Definitions

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

“BMP” means Best Management Practices.

"Compaction" means the increase in soil bulk density.

“County review agency” means an agency designated by the County Board of Chosen Freeholders to review municipal stormwater management plans and implementing ordinance(s). The county review agency may either be: a county planning agency; or a county water resource association created under N.J.S.A 58:16A-55.5, if the ordinance or resolution delegates authority to approve, conditionally approve, or disapprove municipal stormwater management plans and implementing ordinances.

"Department" means the New Jersey Department of Environmental Protection.

“Designated Center” means a State Development and Redevelopment Plan Center as designated by the State Planning Commission such as urban, regional, town, village, or hamlet.

“Design engineer” means a person professionally qualified and duly licensed in New Jersey to perform engineering services that may include, but not necessarily be limited to, development of project requirements, creation and development of project design and preparation of drawings and specifications.

“Development” in this section means the division of a parcel of land into two or more parcels, the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any building or structure, any mining excavation or landfill, and any use or change in the use of any building or other structure, or land or extension of use of land, for which permission is required under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., or any “development” that provides for ultimately disturbing one or more acres of land or increasing impervious surface by one-quarter acre or more. In the case of development of agricultural lands, development means: any activity that requires a State permit; any activity reviewed by the County Agricultural Board (CAB) and the State Agricultural Development Committee (SADC), and municipal review of any activity not exempted by the Right to Farm Act, N.J.S.A 4:1C-1 et seq. Projects undertaken by any government agency which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq. are also considered “development.”

“Disturbance” is the placement of impervious surface or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation.

“Drainage area” means a geographic area within which stormwater, sediments, or dissolved materials drain to a particular receiving waterbody or to a particular point along a receiving waterbody.

“Environmentally constrained area” means the following areas where the physical alteration of the land is in some way restricted, either through regulation, easement, deed restriction or ownership such as: wetlands, floodplains, threatened and endangered species sites or designated habitats, and parks and preserves. Habitats of endangered or threatened species are identified using the Department’s Landscape Project as approved by the Department’s Endangered and Nongame Species Program.

“Environmentally critical areas” means an area or feature which is of significant environmental value, including but not limited to: stream corridors; natural heritage priority sites; habitat of endangered or threatened species; large areas of contiguous open space or upland forest; steep slopes; and well head protection and groundwater recharge areas. Habitats of endangered or threatened species are identified using the Department’s Landscape Project as approved by the Department’s Endangered and Nongame Species Program.

“Erosion” means the detachment and movement of soil or rock fragments by water, wind, ice or gravity.

“Hotspot” means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater, as defined herein.

“Impervious surface” means a surface that has been covered with a layer of material so that it is highly resistant to infiltration by water.

“Infiltration” is the process by which water that seeps into the soil from precipitation.

“Nutrient” means a chemical element or compound, such as nitrogen or phosphorus, which is essential to and promotes the development of organisms.

“Person” means any individual, corporation, company, partnership, firm, association, or political subdivision of this State and any state, interstate or federal agency.

“Pollutant” means any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, refuse, oil, grease, sewage sludge, munitions, chemical wastes, biological materials, medical wastes, radioactive substance (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), thermal waste, wrecked or discarded equipment, rock, sand, cellar dirt, industrial, municipal, agricultural, and construction waste or runoff, or other residue discharged directly or indirectly to the land, ground waters or surface waters of the State, or to a domestic treatment works. Pollutant includes both hazardous and nonhazardous pollutants.

“Recharge” means the amount of water from precipitation that infiltrates into the ground and is not evapotranspired.

“Sediment” means solid material, mineral or organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water or gravity as a product of erosion.

“Site” means the lot or lots upon which the development is to occur or has occurred.

“Soil” means all unconsolidated mineral and organic material of any origin.

“Stormwater” means water resulting from precipitation (including rain and snow) that runs off the land’s surface, is transmitted to the subsurface, or is captured by separate storm sewers or other sewage or drainage facilities.

“Stormwater runoff” means water flow on the surface of the ground or in storm sewers, resulting from precipitation.

“Stormwater management basin” means an excavation or embankment and related areas designed to retain stormwater runoff. A stormwater management basin may either be normally dry (that is, a detention basin or infiltration basin), retain water in a permanent pool (a retention basin), or be planted mainly with wetland vegetation (most constructed stormwater wetlands).

“Stormwater management measure” means any structural or nonstructural strategy, practice, technology, process, program, or other method intended to control or reduce stormwater runoff and associated pollutants, or to induce or control the infiltration or groundwater recharge of stormwater or to eliminate illicit or illegal non-stormwater discharges into stormwater conveyances.

“TSS” means total suspended solids .

“Wetlands” or “wetland” means an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

ARTICLE 3: The current ARTICLE V. ADMINISTRATION shall be renumbered as ARTICLE VI. ADMINISTRATION. All Sections shall be renumbered to reflect the additional sections of ARTICLE V and all references to former Sections D-132 through D-141 shall be updated.

- | | |
|--|-------------------------------------|
| D-132 PLANNING BOARD/BOARD OF ADJUSTMENT | shall be renumbered as D-147 |
| D-133 ZONING BOARD OF ADJUSTMENT | shall be renumbered as D-148 |
| D-134 PROVISIONS APPLICABLE TO BOTH THE
PLANNING BOARD AND ZONING BOARD OF
ADJUSTMENT | shall be renumbered as D-149 |
| D-135 APPEALS | shall be renumbered as D-150 |
| D-136 FEE SCHEDULE | shall be renumbered as D-151 |
| D-137 PERMITS AND ADMINISTRATIVE OFFICERS | shall be renumbered as D-152 |
| D-138 VIOLATIONS AND PENALTIES | shall be renumbered as D-153 |
| D-139 VALIDITY OF ORDINANCE | shall be renumbered as D-154 |
| D-140 REPEAL OF INCONSISTENCIES | shall be renumbered as D-155 |
| D-141 TIME EFFECTIVE | shall be renumbered as D-156 |

ARTICLE 4:

ARTICLE III SUBDIVISION. Subsection D-121. CHECKLIST OF REQUIREMENTS SUBDIVISIONS. shall be amended as follows::

1. A plot for minor subdivision shall be amended to include after 16. the following:

	Applicant	Planning Board
16a. A stormwater management plan per Article V Section D-139: Requirements for a Stormwater Control Plan		

2. A plot for major preliminary subdivision shall be amended to include after 25. the following:

	Applicant	Planning Board
25a. A stormwater management plan per Article V Section D-139: Requirements for a Stormwater Control Plan		

3. A plot for Final Major Subdivision shall be amended to include after 46. the following:

	Applicant	Planning Board
46a. A stormwater management plan per Article V Section D-139: Requirements for a Stormwater Control Plan		

ARTICLE 5:

**ARTICLE IV SITE-PLAN. Subsection D-131.D(19) [new Subsection D-146.D(19)]
SITE PLAN REVIEW REQUIREMENTS: CHECKLIST OF
REQUIREMENTS SITE-PLANS/VARIANCES shall be amended as
follows:**

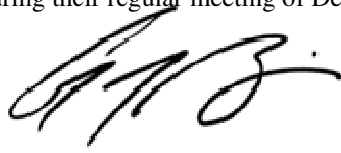
1. The checklist for Site-Plans/Variiances Schedule A shall be amended to include after 23. the following:

	Applicant	Planning Board
24. A stormwater management plan per Article V Section D-139: Requirements for a Stormwater Control Plan		

3. The checklist for Site Plan Application Schedule B shall be amended to include after 30. the following:

	Applicant	Planning Board
30a. A stormwater management plan per Article V Section D-139: Requirements for a Stormwater Control Plan		

I, Gregory J. Bonin, Borough Clerk of the Borough of Millstone, in the County of Somerset, State of New Jersey, do hereby certify the foregoing to be a true and correct copy of an ordinance adopted by the Millstone Borough Council during their regular meeting of December 19, 2005.



Gregory J. Bonin, Millstone Borough Clerk