

Resolution No. 2007-210

**EXTRACTION OF MINUTES OF MEETING OF TOWN BOARD ADOPTING A
RESOLUTION ADOPTING LOCAL LAW NO. 10 OF 2007 AMENDING CHAPTER 196
OF THE IRONDEQUOIT TOWN CODE WITH RESPECT TO STORMWATER
MANAGEMENT FOR CONSTRUCTION STORMWATER POLLUTION
PREVENTION AND EROSION AND SEDIMENT CONTROL**

At a regular meeting of the Town Board of the Town of Irondequoit, Monroe County, New York held at the Town Hall, 1280 Titus Avenue in said Town of Irondequoit on the 18th day of December, 2007 at 7:00 p.m. local time; there were

PRESENT:

Mary Ellen Heyman	Town Supervisor
Gail Bello	Town Board Member
Lydia V. Dzus	Town Board Member
Debbie Evans	Town Board Member
James C. Turner	Town Board Member

Woods Oviatt Gilman LLP Attorneys to the Town

Town Board member **Bello** offered the following resolution and moved its adoption:

WHEREAS, land disturbance activities and associated increases in impervious cover alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, and sediment transport and deposition. This stormwater runoff contributes to increased quantities of water-borne pollutants. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from development sites; and

WHEREAS, during the construction process, soil is the most vulnerable to erosion by wind and water. This eroded soil endangers water resources by reducing water quality, and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates maintenance and/or repair of sewers and ditches, and the dredging of waterways. In addition, clearing and/or grading during construction tends to increase soil erosion and causes the loss of native vegetation necessary for terrestrial and aquatic habitat, and to provide a healthy living environment for citizens of the Town of Irondequoit. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff thereby increasing stream bank erosion and sedimentation. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream base flow. Regulation of land disturbance activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and

thereby mitigate the adverse effects of erosion and sedimentation from development; and

WHEREAS, the Town has complied with the requirements of the New York State Environmental Quality Review Act, and the applicable regulations promulgated thereunder (“SEQRA”).

NOW, THEREFORE, BE IT RESOLVED that Chapter 196 of the Code be amended pursuant to the provisions of the following Local Law:

LOCAL LAW No. 10 of 2007

**TOWN OF IRONDEQUOIT, NEW YORK
FOR
AMENDMENT TO CHAPTER 196 OF THE IRONDEQUOIT TOWN CODE WITH
RESPECT TO STORMWATER MANAGEMENT FOR CONSTRUCTION STORMWATER
POLLUTION PREVENTION AND EROSION AND SEDIMENT CONTROL**

**BE IT RESOLVED BY THE TOWN BOARD OF THE TOWN OF IRONDEQUOIT,
COUNTY OF MONROE, STATE OF NEW YORK AS FOLLOWS:**

1. **SEQRA.** The Town hereby determines that the proposed amendments to Chapter 196 of the Irondequoit Town Code, as hereinafter set forth, constitute an Unlisted Action under SEQRA. Based on its review of the Environmental Assessment Form, the Town determines that such proposed amendments do not present potential significant adverse environmental impacts. In light of these findings, the Town hereby issues a Negative Declaration under SEQRA for the proposed action.

2. **AMENDMENT TO CHAPTER 196.** Chapter 196 of the Code is hereby amended in its entirety to read as follows:

Chapter 196

STORMWATER MANAGEMENT

Article I.

Construction Stormwater Pollution Prevention and Erosion and Sediment Control

Section 196-1.Title.

This Article I of this Chapter 196 shall be known as and may be cited as the “Construction Stormwater Pollution Prevention and Erosion and Sediment Control Law of the Town of Irondequoit of 2007”.

Section 196-2. Introduction and Purpose.

Land disturbance activities and associated increases in impervious cover alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, and sediment transport and deposition. This stormwater runoff contributes to increased quantities of water-borne pollutants. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from development sites.

During the construction process, soil is the most vulnerable to erosion by wind and water. This eroded soil endangers water resources by reducing water quality, and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates maintenance and/or repair of sewers and ditches, and the dredging of waterways. In addition, clearing and/or grading during construction tends to increase soil erosion and causes the loss of native vegetation necessary for terrestrial and aquatic habitat, and to provide a healthy living environment for citizens of the Town of Irondequoit. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff thereby increasing stream bank erosion and sedimentation. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream base flow. Regulation of land disturbance activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

As a result, the purpose of this article is to safeguard public health, protect property, prevent damage to the environment and promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity which disturbs or breaks the topsoil or results in the movement of earth on land in the Town of Irondequoit. It seeks to meet those purposes by achieving the following objectives:

- Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit no. GP-02-02 or as amended or revised;
- Require land disturbance activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities or as amended or revised;
- Minimize increases in stormwater runoff from land disturbance activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;
- Minimize increases in pollution caused by stormwater runoff from land disturbance activities which would otherwise degrade local water quality;
- Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and

- Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

Section 196-3. Definitions.

Agricultural Activity - The activity of an active farm including grazing and watering livestock, irrigating crops, harvesting crops, using land for growing agricultural products, and cutting timber for sale, but shall not include the operation of a dude ranch or similar operation, or the construction of new structures associated with agricultural activities.

Applicant - A property owner or agent of a property owner who has filed an application for a land disturbance activity.

Clearing - Any activity which removes the vegetative surface cover.

Designated Agent - Individual(s) directed by the Town of Irondequoit to conduct site inspections and/or perform other municipal duties.

Earthwork - Construction activities including clearing, grading, excavating, soil disturbance or placement of fill that result in land disturbance.

Erosion Control - Measures that minimize erosion.

Final Stabilization - All soil-disturbing activities at the site have been completed and a uniform perennial vegetative cover with density of 80% has been established or equivalent measures such as the use of mulches or geotextiles have been employed on all unpaved areas and areas not covered by permanent structures.

Grading - Excavation or fill of material, including the resulting conditions thereof.

Land Disturbance Activity - Construction activity including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance of equal to or greater than one (1) acre, or activities disturbing less than one (1) acre of total land area that is part of a larger common plan of development or sale, even though multiple separate and distinct land disturbance activities may take place at different times on different schedules.

Licensed/Certified Professional - A person currently licensed to practice engineering in New York State, a registered landscape architect or a Certified Professional in Erosion and Sediment Control (CPESC).

New York State Stormwater Management Design Manual - the *New York State Stormwater Management Design Manual*, most recent version including applicable updates that serves as the

official guide for stormwater management principles, methods and practices.

New York Standards and Specifications for Erosion and Sediment Control – the most recent version of this publication which is commonly known as the “Blue Book”.

Phasing - Clearing a parcel of land in distinct sections, with the stabilization of each section before the clearing of the next.

Qualified Professional - A person knowledgeable in the principles and practices of erosion and sediment controls, such as a licensed professional engineer, registered landscape architect, Certified Professional in Erosion & Sediment Control (CPESC), or soil scientist.

Responsible Individual - As related to inspection of construction site erosion controls, any person with an in-depth understanding of the principles and practices of erosion and sediment control, stormwater management and the proper procedures and techniques for the installation and maintenance of erosion and sediment control features.

Sediment Control - Measures that prevent eroded sediment from leaving the site.

Silvicultural Activity - Activities that control the establishment, growth, composition, health and quality of forests and woodlands.

Site - A parcel of land, or a contiguous combination thereof, where grading work is performed as a single unified operation.

Site Plan Approval - The examination and subsequent authorization to proceed with a project based upon a drawing prepared to specifications and containing necessary elements, which show the arrangement, layout and design of the proposed use of a single parcel of land as shown on said plan.

SPDES General Permit for Construction Activities - A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems

A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA established water quality standards and/or to specify stormwater control standards.

Stabilization - The use of practices that prevent exposed soil from eroding.

Start of Construction - The first land disturbance activity associated with a development, including: land preparation such as clearing, grading and filling; installation of streets and walkways; excavation for basements, footings, piers or foundations; erection of temporary forms; and

installation of accessory buildings such as garages.

Stormwater Management - The use of structural or non-structural practices that are designed to reduce stormwater runoff pollutant loads, discharge volumes, and/or peak flow discharge rates.

Stormwater Management Officer - An employee or officer designated by the municipality to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices

Stormwater Pollution Prevention Plan (SWPPP) - A plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

Stormwater Runoff - The flow on the surface of the ground, resulting from precipitation.

Surface Waters of the State of New York - Lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Storm sewers and waste treatment systems, including treatment ponds or lagoons which also meet the criteria of this definition are not waters of the state. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the state (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.

Waterway or Watercourse - A channel that directs surface runoff to a watercourse, or to the public storm drain.

Section 196-4. Applicability.

This chapter shall be applicable to all land disturbance activities that will disturb land equal to or greater than one (1) acre unless exempted under Section 196-8.C. This article also applies to land disturbance activities that are less than one (1) acre of disturbance if such activities are part of a larger common plan of development or sale that will disturb land equal to or greater than one (1) acre, even though multiple separate and distinct land disturbance activities may take place at different times on different schedules.

Section 196-5. Compatibility with Other Permits and Town Code Requirements.

Compliance with this chapter does not relieve the applicant of the obligation and responsibility to obtain separate coverage under the NYSDEC SPDES General Permit for Construction Activities if required. For projects also applying for coverage under the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity, the applicant shall submit a copy of the Stormwater Pollution Prevention Plan (SWPPP), a Notice of Intent (NOI) with a certification

statement including the date demonstrating submission to the NYSDEC, a letter of permission from the NYSDEC granting approval to disturb five (5) acres or greater of land at one time (if applicable) and any related documents to the Town of Irondequoit's officer for review and approval.

The requirements of this chapter should be considered minimum requirements and where any provision of this chapter imposes restrictions different from those imposed by any other federal, state, or local law, ordinance, rule or regulation, or other provision of law, the provisions that are more restrictive or impose more stringent requirements shall take precedence.

Construction activities that involve land disturbance may also require additional compliance measures detailed in other chapters of this code, other laws, regulations and/or ordinances, including, by way of example only and not limited to, article II of this chapter entitled "Design and Management of Post-Construction Stormwater Pollution Prevention Measures".

Section 196-6. Legislative Authority.

In accordance with Article 196 of the Stormwater Law of the State of New York, the Irondequoit Town Board has the authority to enact laws for the purpose of promoting the health, safety, or general welfare of the Town of Irondequoit, including the protection and preservation of the property of its inhabitants. By the same authority, the Irondequoit Town Board may include in any such law provisions for the appointment of any municipal employees to effectuate and administer such law.

Section 196-7. Standards for Construction Activities Covered Under this Law.

The Town of Irondequoit requires the use of technical standards for erosion and sediment controls. These are detailed in the Town of Irondequoit's Design Criteria and the *New York State Department of Environmental Conservation's Standards and Specifications for Erosion and Sediment Control*. For the design of water quality and water quantity controls (post-construction stormwater runoff control practices), the NYSDEC's technical standards are detailed in the *New York State Stormwater Management Design Manual*.

Where stormwater management practices are not in accordance with the aforementioned technical standards, the applicant or developer must demonstrate equivalence to these technical standards and the SWPPP shall be prepared by a licensed/certified professional.

Section 196-8. Land Disturbance Activity Approval Process.

A. Requirements of Application

1. Any applicant requesting site plan approval or a permit for land disturbance activity which would require the disturbance of land equal to or greater than one (1) acre shall also include with a submission a SWPPP that shall be reviewed and approved by the Town of Irondequoit prior to issuance of the final site plan approval or a permit.
2. No applicant shall be granted site plan approval or a permit which would require the

disturbance of land equal to or greater than one (1) acre without the review and approval of a SWPPP by the Town of Irondequoit.

3. Furthermore, prior to the issuance of a permit or site plan approval all projects that would result in the disturbance of land equal to or greater than one (1) acre will be required to comply with all applicable provisions of article II of this chapter captioned “Design and Management of Post-Construction Stormwater Pollution Prevention Measures”. As part of the SWPPP the applicant shall include a signed statement that all applicable requirements of such article II of this chapter have been met to the satisfaction of the Town of Irondequoit.
4. Each application shall bear the name(s) and address(es) of the owner or developer of the site, and of any consulting firm retained by the applicant, together with the name of the applicant’s principal contact at such firm, and shall be accompanied by a filing fee as set forth in Section 196-15.
5. Each application shall include a comprehensive and complete SWPPP that shall be prepared in accordance with Section 196-10.
6. Each application shall include a statement that any land clearing, construction, or development involving the movement of land shall be in accordance with the submitted SWPPP.
7. All land disturbance activities as defined in Section 196-3 not subject to site plan or permit approval shall be required to submit a SWPPP to the Stormwater Management Officer designated by the Town of Irondequoit who shall approve the SWPPP if it complies with the requirements of this chapter.

B. Review & Approval of Application

1. The Town of Irondequoit shall review each application and shall designate the approval with the authorized representative’s signature on the plans. All applicable permits shall be acquired from the Town for EPOD disturbances and Grade and Fill Permits in accordance with chapter 235 and other applicable provisions of the Town Code.

C. Exemptions from Article

The following activities are exempt from review under this article:

- Any emergency activity which is immediately necessary for the protection of public health, property or natural resources.
- Agricultural activity as defined in this article.
- Silvicultural activity except that landing areas and log haul roads are subject to this article.
- Routine maintenance activities that disturb less than five (5) acres and are performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility.

- Repairs to any stormwater treatment practice deemed necessary by Town of Irondequoit.

D. Activities Requiring Permit

1. With respect to any of the following activities which do not constitute a land disturbance activity as defined in Section 196-3, no such activity will be undertaken within the Town of Irondequoit until a permit has been issued under the provisions of this article:

- (a) Site preparation in the subdivision of land into two parcels.
- (b) Site preparation within wetlands.
- (c) Site preparation on slopes which exceed 1 1/2 feet of vertical rise to 10 feet of horizontal distance or in those areas designated as Steep Slope Protection Districts on the Official Town of Irondequoit EPOD Maps.
- (d) Site preparation within the one-hundred-year floodplain of any watercourse.
- (e) Excavation which affects more than 25 cubic yards of material or will exceed four feet in vertical depth at its deepest point as measured from the natural ground surface within any parcel or any contiguous area. [
- (f) Stripping which affects more than 20,000 square feet of ground surface within any parcel of any contiguous area.
- (g) Filling which exceeds a total of 25 cubic yards of material or will exceed three feet in vertical depth at its deepest point as measured from the natural ground surface within any parcel or any contiguous area.
- (h) Storage of more than 25 cubic yards of topsoil or other fill material within any parcel or any contiguous area.
- (i) Site preparation activities within fish and wildlife habitat areas designated on the Local Waterfront Revitalization Program Map.
- (j) Construction of or substantial modifications to erosion protection structures.
- (k) Disposal of dredge spoils.

2. Before any site preparation, land development or construction activities that require a permit under Section 196-8.D.1.of this chapter are undertaken within the Town of Irondequoit, the following shall apply:

(a)	An application for such permit shall be made by the property owner or his or her authorized agent and shall be made to the Commissioner of Public Works/Superintendent of Highways. The permit application and all application materials shall be filed with the Town Department of Planning and Zoning. Copies of the permit application shall be submitted to the Town Engineer, the Town Conservation Board and the Monroe County Soil Conservation District, which shall all submit recommendations on the application to the Commissioner within 30 days of the date of filing of such application.
(b)	Upon the filing of an application for a permit, the applicant shall pay to the Town a fee to cover the cost of permit review and inspection established in accordance with Section 196-15 of this chapter. The fee shall be deemed a reasonable sum to cover the costs of administering this chapter and shall in no part be returnable to the applicant.
(c)	The Commissioner of Public Works/Superintendent of Highways shall have the authority to grant or deny all permits pursuant to this Section 196-8.D.2. When the application for a permit made under the provisions of this chapter is accompanied by an application for site plan approval and/or EPOD development permit approval, there shall be one public hearing with the Town Planning Board to review and act on all such EPOD applications. The Commissioner of Public Works/Superintendent of Highways shall grant or deny an application for a permit required by this chapter within sixty (60) days of the date of filing of the application thereof, unless the applicant(s) and the Commissioner consent to a time extension.
(d)	The Commissioner of Public Works/Superintendent of Highways shall not approve a permit application unless it is determined that the proposed site preparation, land development or construction activities adequately meet the standards and criteria set forth in this chapter and are in compliance with the goals and policies of the Town of Irondequoit's Local Waterfront Revitalization Program. In granting a permit, the Commissioner shall fix a reasonable time limit for the termination of the permit and may attach any reasonable conditions to such permit which are deemed necessary to assure compliance with the provisions of this chapter. Major modifications of the terms of the approved permit shall follow the same application, review and approval procedure as those set forth in this section for the original permit. It shall be the responsibility of the authorized official to inspect sites as frequently as necessary to assure compliance with the terms of approved permits and the provisions of this chapter and to submit written notification of any violations of these terms or provisions to the Commissioner of Public Works/Superintendent of Highways. If at any time during the effective period of a permit or upon its expiration the terms of the permit are violated, the Commissioner may revoke the permit and may require that the performance guaranty be forfeited to the Town. If the applicant is unable to complete the project or any phase thereof within the specified time period of the permit, he or she shall, at least thirty (30) days prior to the specified date of completion, present, in writing, to the Commissioner a request for an extension of time, setting forth therein the reasons for such request. The Commissioner shall consider such request. If, in the discretion of the Commissioner, such an extension is deemed acceptable and warranted, he or she may grant a reasonable extension of time in order for the applicant to complete the work.

(e)	A property owner or his or her agent shall initiate a request for a permit or the modification of a permit to undertake any site preparation, land development or construction activities within the Town of Irondequoit described in Section 196-8.D.1. of this chapter by filing an application with the Town Department of Planning and Zoning. All maps and plans that accompany said application shall be prepared by and bear the seal of a licensed engineer, architect or landscape architect. The Town Department of Planning and Zoning shall specify the number of copies of the application and any accompanying maps or plans that must be filed and may modify the requirements concerning any materials to accompany the application by waiving or adding such requirements as deemed appropriate based on the nature, purpose and scope of the proposed activities.
(f)	<p>Except for the modification authorized or required by the Town Department of Planning and Zoning, each application for a permit required by this chapter shall contain the following material:</p> <p>(i) An existing feature map(s), at a scale no smaller than one inch equals 200 feet, indicating the following:</p> <p>(A) The boundaries of all parcels on which site preparation activities are proposed to be undertaken.</p> <p>(B) All structures and roads within a distance of 500 feet of the parcel on which site preparation activities are proposed to be undertaken, the structures identified by their uses and the roads identified by their surface material and width of surface.</p> <p>(C) All watercourses within a distance of 500 feet of the parcels on which site preparation activities are proposed to be undertaken.</p> <p>(D) Existing topography at contour intervals of no greater than five feet within a distance of 500 feet of the parcels on which site preparation activities are proposed to be undertaken.</p> <p>(E) All sewer, water, gas and electric lines and all other utilities within the parcels on which site preparation activities are proposed to be undertaken.</p> <p>(F) Major wooded areas and tree clusters within a distance of 500 feet of the parcels on which site preparation activities are proposed to be undertaken.</p> <p>(G) All vegetation areas on the site proposed for site preparation activities, including areas of grass, areas of brush and wooded areas and tree clusters.</p> <p>(H) The depth to bedrock on the site proposed for site preparation activities, if determined during site evaluation.</p> <p>(I) The depth to permanent groundwater aquifers on the site proposed for site preparation activities, if such depth is determined during site evaluation.</p> <p>(J) The location and present status of any previously undertaken and/or permitted excavation, grading or filling activities on the site.</p>
	(ii) An operations map(s), at a scale no smaller than one inch equals 200 feet, which presents a complete draining, erosion and sediment control plan and which indicates:
	(A) All excavation, filling and grading proposed to be undertaken, identified as to the depth, volume and nature of the materials involved.
	(B) All stripping, identified as to the nature of vegetation affected.

(C) All areas where topsoil is removed and stockpiled and where topsoil is ultimately placed identified as to the depth of topsoil in each such area.
(D) All temporary and permanent vegetation to be placed on the site, identified as to planting type, size and extent.
(E) All temporary and permanent drainage, erosion and sediment control facilities, including but not limited to such facilities as ponds, sediment basins, drains, culverts, bars walls and dams, identified as to the type of facility, the materials from which it is constructed, its dimensions and its capacity in gallons.
(F) The anticipated pattern of surface drainage during periods of peak runoff, during and after completion of site preparation and construction activities, identified as to rate and direction of flow at all major points within the drainage system.
(G) The location of all roads, driveways, sidewalks, structures, utilities and other improvements.
(H) The final contours of the site in intervals no greater than two feet.
(I) Proposed truck and equipment accessways within and to the work site.

- (iii) A time schedule which is keyed to the operation map(s) that indicates:
 - (A) When major phases of the proposed project are to be initiated and completed.
 - (B) When major site preparation activities are to be initiated and completed.
 - (C) When the installation of temporary and permanent vegetation and drainage, erosion and sediment control facilities is to be completed.
 - (D) The anticipated duration, in days, of exposure of all major areas of site preparation before the installation of erosion and sediment control measures.
- (iv) An estimate of the costs of providing temporary and permanent vegetation and drainage, erosion and sediment control facilities.
- (v) A statement or letter of intent from the applicant or his or her authorized agent outlining the proposed project and assuming full responsibility for the performance of the operation as stated in the application and presented on appropriate maps or plans.

E. Prohibited Activities.

The following excavation, filling, grading or stripping activities are prohibited within the Town of Irondequoit:

- (1) Commercial mining of any kind.
- (2) On-site processing of excavation materials

Section 196-9. Financial Guarantees.

The Town of Irondequoit may, at its discretion, require the applicant to submit a financial guarantee in a form acceptable to the Town of Irondequoit prior to issuance of site plan approval or a permit in order to insure that the stormwater pollution prevention and erosion and sediment control practices are implemented and maintained by the applicant as required by the approved SWPPP. The financial guarantee may be in the form of a performance bond, cash escrow or irrevocable letter of credit from an appropriate financial or surety institution which names the Town of Irondequoit as sole beneficiary. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability. The amount of the financial guarantee shall be the total estimated construction cost of the stormwater pollution prevention and erosion and sediment control practices approved, plus a contingency. The financial guarantee shall contain forfeiture provisions for failure to complete work specified in the SWPPP. The financial guarantee shall be released in full only upon satisfaction of the requirements listed in Section 196-12. At its discretion, the Town of Irondequoit may allow for a partial release of the financial guarantee based on the completion of various development stages.

Section 196-10. Stormwater Pollution Prevention Plan Requirements.

The Town of Irondequoit shall designate a Stormwater Management Officer who shall accept and review all SWPPPs and forward such plans to the applicable municipal board. A consultant cannot be appointed as a Stormwater Management Officer. The Stormwater Management Officer may (1) review the plans, (2) upon approval by the Town Board, engage the services of a New York State licensed professional engineer to review the plans, specifications and related documents at a cost not to exceed a fee schedule established by said governing board, or (3) accept the certification of a licensed/certified professional that the plans conform to the requirements of this chapter.

Prior to final permit/final approval of a land disturbance activity, a SWPPP shall be prepared by the applicant in accordance with the specifications outlined by the Town of Irondequoit and submitted to the Stormwater Management Officer designated by the Town of Irondequoit for review by the appropriate board. This plan must be prepared in accordance with sound engineering practices by a qualified professional as defined in Section 196-3. The final plan must be signed by a New York State licensed professional engineer (PE), who will certify that the design of all stormwater pollution prevention and erosion and sediment control practices meet the requirements outlined in the Town of Irondequoit design criteria and the *New York Standards and Specifications for Erosion and Sediment*

Control and shall be adequate to prevent transportation of sediment from the site to the satisfaction of Town of Irondequoit.

The requirements to have a SWPPP prepared by a qualified professional and to have the final plan signed and certified by a New York State licensed professional engineer (PE) are not applicable to land disturbance activities that meet technical standards and are five (5) acres or less occurring on a single family residence, which is not part of a larger common plan of development, or an agricultural property. In addition, these land disturbance activities must not discharge directly to a 303(d) impaired waterbody or must not be located in a Total Maximum Daily Load (TMDL) watershed, unless otherwise directed by the stormwater management officer.

A. Minimum Requirements

All SWPPPs shall provide the following background information and erosion and sediment controls:

1. Background information about the scope of the project, including location, type and size of project and contact information that includes the name, address, and telephone number of all persons having a legal interest in the property and the tax reference number and parcel number of the subject property or properties.
2. Site map/construction drawing(s) for the project, including a general location map and a 1" =100' topographic base map of the site which extends a minimum of 100 feet beyond the limits of the proposed development. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s) including receiving waters (name of the water), streams, ponds, culverts, ditches, and wetlands as well as drainage patterns that could be affected by the construction activity; existing and final slopes; locations of utilities, roads, soils types, forest cover, and significant natural and manmade features not otherwise shown; locations of off-site material, waste, borrow or equipment storage areas, proposed concrete clean out basin(s) and construction entrance; and location(s) of the stormwater discharges(s); and resources protected under other chapters of this code or by easements;
3. Description of the soil(s) present at the site;
4. Construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation, final grading and landscaping, and any other activity at the site that results in soil disturbance. Sequencing shall identify the expected date on which clearing will begin and the estimated duration of exposure of cleared areas. Consistent with the *New York State Standards and Specifications for Erosion and Sediment Control*, not more than five (5) acres shall be disturbed at any one time unless pursuant to an approved SWPPP and a letter of permission

from the NYSDEC.

5. A description of the pollution prevention measures that will be used to control litter and prevent construction chemicals and construction debris from becoming a pollutant source in the stormwater discharges; a description of construction and waste materials expected to be stored on-site with updates as appropriate; a description of controls that will be implemented to reduce pollutants from these materials including storage practices to minimize exposure of the materials to stormwater; and a description of spill prevention and response measures.
6. A description of the temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project, from initial land disturbance to project closeout, including who will be responsible for the maintenance and implementation of said features at the site and what practices will be employed to ensure that adequate vegetative cover is established and preserved. For temporary and permanent vegetative control measures, the seeding mixtures and rates, types of sod, method of seedbed preparation, depth of topsoil, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching shall be provided.
7. A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;
8. Illustration of all necessary erosion and sediment control measures, including the siting and sizing of any temporary sediment basins and provide the dimensions, material specifications and installation details for each throughout all phases of construction and completion of development of the site. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.
9. Identification of all temporary practices that will be converted to permanent control measures.
10. Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;
11. Identification of the parts or components of the SWPPP that require maintenance. Furthermore it shall also provide a schedule of required maintenance and identify the party responsible for such work.
12. Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
13. Any existing data that describes the stormwater runoff at the site.

14. Assurance that all other applicable environmental permits have been acquired for the site prior to initial land disturbance. Copies of the applicable environmental permits shall be provided to the Town of Irondequoit.
15. Assurance that the applicant or their "Responsible Individual" shall be on site at all times when earthwork takes place and shall inspect and document the effectiveness of all erosion and sediment control practices.
16. Assurance that all contractors and subcontractors involved in soil disturbance and/or stormwater management practice installation and maintenance shall be identified in the SWPPP. All such contractors and subcontractors shall sign a copy of the following certification statement before undertaking any land disturbance activity at the site:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP. I also understand that it is unlawful for any person to cause or contribute to a violation of the water quality standards."

The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made. The certification statement must be included in the SWPPP.

B. Modifications to the Plan After Approval

Major amendments of the SWPPP shall be submitted to the Town of Irondequoit and shall be approved or disapproved.

The applicant shall amend the SWPPP whenever:

1. (a) There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or

(b) The SWPPP proves to be ineffective in providing the proper stormwater pollution prevention and erosion and sediment control as required by this chapter. Amendments to the SWPPP may be reviewed by the Town of Irondequoit. A copy of the newly amended SWPPP must be provided to the Town of Irondequoit within 5 business days.
2. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP. The Town of Irondequoit may request copies of signed contractor certification statements from new contractors/subcontractors working on the site.

Field modifications of a minor nature may be authorized by Town of Irondequoit by written authorization to the applicant.

Section 196-11. Inspections.

A. Town of Irondequoit Inspections

The Town of Irondequoit or designated agent as defined in Section 196-3 shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the applicant that the work fails to comply with the SWPPP. In addition, the Town of Irondequoit reserves the right to enter the work site at any reasonable time for purposes of inspection. The SWPPP and the records of any inspections completed by the owner or their agent shall be maintained at the site in the site logbook from the date of initiation of construction activities to the date of final stabilization. To obtain inspections, the applicant shall notify Town of Irondequoit at least forty-eight (48) hours before the following activities occur:

1. Start of construction
2. Erosion and sediment control measures have been installed and stabilized
3. Site clearing has been completed
4. Rough grading has been completed
5. Final grading has been completed
6. Close of the construction Season
7. Final landscaping
8. Closeout inspection

The above inspection timetable does NOT relieve the owner of the obligation under this or any other permit or regulation to conduct regular inspections as set forth in said permit and/or regulation.

If any violations are found, the applicant and developer shall be notified in writing of the nature of the violation and the required corrective actions. No further earthwork shall be conducted on the site, except for site stabilization until the violations are corrected and approved by the Town of Irondequoit.

B. Property Owner/Developer Inspections

The applicant shall employ a “Responsible Individual” as defined in Section 196-3 who will oversee the implementation of the SWPPP on a daily basis. The “Responsible Individual” shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices. The applicant shall also employ the services of a qualified professional in erosion and sediment control who will inspect and document the effectiveness of all erosion and sediment control practices. The documentation will be kept in a site logbook. Inspection reports will be

completed every seven (7) days and within twenty-four (24) hours of any storm event producing 0.5 inches of precipitation or more. A monthly summary of reports will be copied to the site logbook and delivered to Town of Irondequoit within five (5) days after the month's end.

The requirement to employ a qualified professional to inspect and document the effectiveness of all erosion and sediment control practices is not applicable to land disturbance activities five (5) acres or less occurring on a single family residence, which is not part of a larger common plan of development or on an agricultural property. In addition, these land disturbance activities must not discharge directly to a 303(d) impaired waterbody or must not be located in a Total Maximum Daily Load (TMDL) watershed.

Section 196-12. Duration, Maintenance and Closeout.

A. Duration

For a project that requires a NYSDEC SPDES Permit, the SWPPP approved by the Town of Irondequoit shall be in effect until (i) the site has been finally stabilized, (ii) a Notice of Termination (N.O.T) is submitted to the NYSDEC in accordance with the general permit, and (iii) a final inspection has been completed by the Town of Irondequoit.

For projects that do not require a NYSDEC N.O.T., the SWPPP is in effect until a final inspection is conducted and the Town of Irondequoit has issued the applicant written approval.

Notwithstanding the foregoing, in the event no land disturbance activity as defined in Section 196-3 takes place within two (2) years following the date upon which the Town's approval of the SWPPP was issued, no development activity or work of any kind may take place until such time, if any, as the Town's Stormwater Management Officer reviews and confirms its previous approval of the SWPPP. The Town shall establish a fee for such review and confirmation in accordance with the provisions of Section 196-15.

B. Maintenance

1. The applicant shall at all times properly operate and maintain all stormwater management facilities and erosion and sediment control measures which are installed or used by the applicant to achieve compliance with the conditions of this chapter. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by fifty percent (50%). The land disturbance activity shall not cause an increase in turbidity that will result in substantial visible contrast to natural conditions in surface waters of the state of New York.
2. At the end of the construction season when soil disturbance activities will be finalized or suspended until the following spring, it may be desirable to reduce the frequency of the required weekly site inspections to monthly inspections. In order to reduce inspection

frequencies, the applicant must complete stabilization activities before proper installation is precluded by snow cover or frozen ground. If vegetation is used as a stabilization method, seeding, planting, and/or sodding must be scheduled to avoid fall frosts and to allow for proper germination/establishment. Installations and maintenance must be done according to the *New York State Standards and Specifications for Erosion and Sediment Control*.

3. The maintenance and proper operation of all privately owned stormwater management facilities, including nonstructural practices, shall be ensured through the creation of a formal and enforceable maintenance agreement that must be approved by the Town of Irondequoit and recorded in the office of the County Clerk as a deed restriction on the property prior to final plan approval. This agreement will include any and all maintenance easements required to access and inspect the stormwater management practices, and will outline the procedures and schedule to be followed to perform routine maintenance as necessary to ensure proper functioning of the stormwater management practice. In addition, the legally binding agreement shall identify the parties responsible for the proper maintenance of all stormwater treatment practices and include plans for periodic inspections by the owners, or their designated agent, to ensure proper performance of the facility. The maintenance agreement shall be generally consistent with the terms and conditions of the “Stormwater Control Facility Maintenance Agreement”, the form of which is attached to and made a part of this chapter as Exhibit A.
4. The Town of Irondequoit, in lieu of a maintenance agreement, may accept dedication of any existing or future stormwater management facility for maintenance, provided such facility meets all the requirements of this chapter and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

C. Closeout

The applicant must satisfy the following project closeout requirements:

1. Reestablish grade of all permanent stormwater facilities;
2. Inspect grading of all drainage structures and provide elevation as-builts to the Town of Irondequoit;
3. Establish perennial vegetative cover to a density of eighty percent (80%) over one hundred percent (100%) of the site;
4. Removal of all debris and temporary erosion and sediment control practices;
5. Provide a written certification by a New York State licensed/certified professional that the site has undergone final stabilization (as defined in Section 196-3) and that all temporary erosion and sediment controls not needed for long-term erosion control have been removed.
6. Complete any other measure deemed appropriate and necessary by the Town of Irondequoit to stabilize the project site.

Section 196-13. Enforcement & Penalties.

A. Stop-Work Order

The Town of Irondequoit may issue a stop-work order for violations of this chapter. Persons receiving a stop-work order shall be required to halt all land disturbance activities, except those activities that address the violations leading to the stop-work order. The stop-work order shall be in effect until the Town of Irondequoit confirms that the land disturbance activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop-work order in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this chapter.

B. Notice of Violation

When the Town of Irondequoit determines that an activity is not being carried out in accordance with the requirements of this article, it shall issue a written notice of violation to the owner of the property. The notice of violation shall contain:

1. The name and address of the owner or applicant;
2. The address when available or a description of the building, structure or land upon which the violation is occurring;
3. A statement specifying the nature of the violation;
4. A description of the remedial measures necessary to bring the development activity into compliance with this article, a time schedule for the completion of such remedial action and a statement to the effect that the failure to commence any such remedial action within ten (10) days following the date of service of such notice of violation shall result in the commencement of enforcement proceedings;
5. A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;
6. A statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within fifteen (15) days of service of notice of violation.

C. Violation and Penalties

No person shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any terms of this article I. Failure to comply with any provision or requirement of this article, or of any statement, plan, application, approval, permit or certification provided pursuant to the provisions of this article, shall be deemed a violation punishable by a fine not exceeding \$350.00 or imprisonment for a period of not to exceed fifteen (15) days, or both, for conviction of a first offense; for a conviction of a second offense, both of

which were committed within a period of five (5) years, punishable by a fine not less than \$350.00 nor more than \$700.00 or imprisonment for a period of not to exceed fifteen (15) days, or both; and, upon conviction of a third or each and every subsequent offense all of which were committed within a period of five (5) years, punishable by a fine not less than \$700.00 nor more than \$1,000.00 or imprisonment for a period not to exceed fifteen (15) days, or both. Each week's continued violation shall constitute a separate, additional violation. In addition to any other penalty authorized by this section, any person, partnership, limited liability company, association, corporation or other entity convicted of violating any of the provisions of this chapter shall be required to bear the expense of such restoration.

D. Withholding of Certificate of Occupancy

Occupation permits may not be granted until corrections to all stormwater management practices have been made and accepted by the Town of Irondequoit.

Section 196-14. Severability.

The provisions and sections of this chapter and article shall be deemed to be separable and if the provisions of any article, section, subsection, paragraph, subdivision or clause of this chapter or article shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this chapter.

Section 196-15. Fees; Costs and Expenses.

The applicant shall pay to the Town of Irondequoit at the time it submits its application a one-time fee to be established from time to time by the Town Board to cover administrative costs associated with the review and consideration of SWPPs, SMPs and permits issued pursuant to Section 196-8.D. In addition to the foregoing fee:

- A. The applicant shall reimburse the Town of Irondequoit for all reasonable and necessary engineering, administrative and legal expenses incurred by the Town in connection with the review, inspection and consideration of a stormwater application, regardless of whether such application is approved or denied in whole or in part.
- B. Simultaneous with the filing of an application and prior to the commencement of any construction or site work activities, the applicant shall deposit with the Town Supervisor a sum of money determined by the Town Board to cover the costs to be incurred by the Town for engineering, inspection and legal expenses. Such deposit shall be held in a separate, non-interest bearing account in the name of the Town, and the Town Supervisor shall keep a separate record of all such moneys deposited; on whose behalf the moneys were deposited; and the project for which the sums were deposited.
- C. Upon receipt and approval by the Town Board of itemized vouchers from an engineer

and/or attorney for services rendered on behalf of the Town pertaining to the application, construction or site work activities, the Town Supervisor shall cause such vouchers to be paid out of the moneys so deposited and shall furnish copies of such vouchers to the applicant at the same time such vouchers are submitted to the Town.

- D. The Town Board shall review and audit all such vouchers and shall approve payment of only such engineering and legal fees which the Town Board determined to have been reasonable and necessarily incurred by the Town in connection with the review, consideration and approval of any application. For purposes of the foregoing, a fee or part thereof is reasonable in amount if it bears a reasonable relationship to the average charge by engineers or attorneys to the Town for services performed in connection with the approval or construction of a similar development. In this regard, the Town Board may take into consideration, among other things: the size, type and number of facilities and of the construction and/or site work activities to be performed; the topography of the land on which such construction and/or site work activities are to be conducted and/or facilities to be located; soil conditions; surface water' drainage conditions; the nature and extent of facilities to be constructed; and any special conditions or considerations that the Town Board may deem relevant. A fee or part thereof is necessarily incurred if it was charged by the engineer or attorney for a service which was rendered in order to protect the health, safety or other vital interests of the residents of the Town or to protect public or private property from damage and other factors, to assure the proper and timely implementation of the purposes and provisions of this article, to protect the legal interests of the Town, including, but not limited to, the avoidance of claims and liability, and such other interests as the Town Board may deem relevant.
- E. If at any time during or after processing of such application or during or after construction or site work activities there shall be insufficient moneys on hand to the credit of the applicant to pay the approved vouchers in full, or if it shall reasonably appear to the Town Supervisor that such moneys will be insufficient to meet vouchers yet to be submitted, the Town Supervisor shall cause the applicant to deposit additional sums as the Supervisor deems necessary or advisable to meet such expenses or anticipated expenses.
- F. In the event that the applicant fails to deposit such funds or such additional funds, the Town Supervisor shall notify any and all applicable Town officers and boards of such failure, and any review, approval, permit or certificate may be withheld by such appropriate officer and/or board until such moneys are deposited.
- G. The issuance of any final approval, permit or certificate of occupancy shall not occur unless and until all fees incurred by the Town have been paid in full. Any amounts remaining on account to the credit of the applicant after such final approval, permit or certificate shall be returned to such applicant.

3. EFFECTIVE DATE. This local law shall be effective upon filing in the office of the

Secretary of State of New York and with the Town Clerk of the Town of Irondequoit and otherwise in accordance with and pursuant to the Town Law of the State of New York.

4. HISTORY. Adopted: December 18, 2007

This resolution shall take in accordance with the provisions of Section 264 of the Town Law of the State of New York.

Seconded by Town Board member **Turner** and duly put to vote, which resulted as follows:

Town of Supervisor Heyman	voting	Aye
Town Board Member Bello	voting	Aye
Town Board Member Dzus	voting	Aye
Town Board Member Evans	voting	Aye
Town Board Member Turner	voting	Aye

**EXHIBIT A TO CHAPTER 196 OF CODE OF THE
TOWN OF IRONDEQUOIT, NEW YORK**

Stormwater Control Facility Maintenance Agreement

Whereas, the Town of Irondequoit (the “Town”) and _____ (the “Facility Owner”) want to enter into an agreement to provide for the long term maintenance and continuation of stormwater control measures approved by the Town for the below named project; and

Whereas, the Town and the Facility Owner desire that the stormwater control measures be built in accordance with the approved project plans and thereafter be maintained, cleaned, repaired, replaced and continued in perpetuity in order to ensure optimum performance of the components.

Now, therefore, the Town and the Facility Owner agree as follows:

1. This Agreement enures to the benefit of the Town, its successors and assigns, and binds the Facility Owner, its successors and assigns, with respect to the maintenance provisions depicted in the approved final site plan, which are attached to and made a part of this Agreement as Schedule A.

2. The Facility Owner shall maintain, clean, repair, replace (if necessary) the stormwater control measures depicted in the most recent version of the *NYS Stormwater Management Design Manual* as necessary to ensure optimum performance of the measures as designed. The stormwater control measures shall include, but shall not be limited to, the following: drainage ditches, swales, dry wells, infiltrators, drop inlets, pipes, culverts, soil absorption devices and retention ponds.

3. The Facility Owner shall be responsible for all expenses related to maintenance of stormwater control measures and shall establish a means for collection and distribution of expenses among parties for any commonly owned facilities.

4. The Facility Owner shall provide periodic inspection of stormwater control measures, not less than once every year and after every 3.6 inches of rain in 24-hours (a 10 year storm event), to determine the condition and integrity of the measures. A Civil Engineer licensed by the State of New York, shall perform such inspections. The inspecting engineer shall prepare and submit a report of the findings including recommended actions necessary for the continuation of the stormwater control measure, to the Town within 30 days of the inspection.
5. The Facility Owner shall not authorize, undertake or permit alteration, abandonment, modification or discontinuation of the stormwater control measures without written approval of the Town.
6. The Facility Owner shall undertake necessary repairs and replacement of the stormwater control measures at the direction of the Town or in accordance with the recommendation of the inspecting engineer.
7. This Agreement shall be recorded at the sole cost and expense of the Facility Owner in the Office of the County Clerk, County of Monroe, and shall, if applicable, be included in the offering plan and/or prospectus approved pursuant to _____.
8. If ever the Town determines that the Facility Owner has failed to construct or maintain the stormwater control measures in accordance with the project plans or has failed to undertake required corrective measures specified by the Town or the inspecting engineer, the Town is authorized to undertake steps reasonably necessary for the preservation, continuation or maintenance of the stormwater control measure and to affix the expenses as a lien against the property.

9. This Stormwater Control Facility Maintenance Agreement is executed and delivered and is effective as of the ___ day of _____, 20__.

Date

TOWN OF IRONDEQUOIT

By: _____

Its: Supervisor

Signature of Owner's Agent

STATE OF NEW YORK)
COUNTY OF MONROE) ss.:

On the _____ day of _____, in the year 20__, before me, the undersigned, a Notary Public in and for said State, personally appeared _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

STATE OF NEW YORK)
COUNTY OF _____) ss.:

On the _____ day of _____, in the year 20__, before me, the undersigned, a Notary Public in and for said State, personally appeared _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

Schedule A

Stormwater Management Practices Acceptable for Water Quality

(From: New York State Stormwater Management Design Manual, Table 5.1)

Group	Practice	Description
Pond	Micropool Extended Detention Pond (P-1)	Pond that treats the majority of the water quality volume through extended detention, and incorporates a micropool at the outlet of the pond to prevent sediment resuspension.
	Wet Pond (P-2)	Pond that provides storage for the entire water quality volume in the permanent pool.
	Wet Extended Detention Pond (P-3)	Pond that treats a portion of the water quality volume by detaining storm flows above a permanent pool for a specified minimum detention time.
	Multiple Pond System (P-4)	A group of ponds that collectively treat the water quality volume.
	Pocket Pond (P-5)	A stormwater wetland design adapted for the treatment of runoff from small drainage areas that has little or no baseflow available to maintain water elevations and relies on groundwater to maintain a permanent pool.
Wetland	Shallow Wetland (W-1)	A wetland that provides water quality treatment entirely in a shallow marsh.
	Extended Detention Wetland (W-2)	A wetland system that provides some fraction of the water quality volume by detaining storm flows above the marsh surface.
	Pond/Wetland System (W-3)	A wetland system that provides a portion of the water quality volume in the permanent pool of a wet pond that precedes the marsh for a specified minimum detention time.
	Pocket Wetland (W-4)	A shallow wetland design adapted for the treatment of runoff from small drainage areas that has variable water levels and relies on groundwater for its permanent pool.
Infiltration	Infiltration Trench (I-1)	An infiltration practice that stores the water quality volume in the void spaces of a gravel trench before it is infiltrated into the ground.
	Infiltration Basin (I-2)	An infiltration practice that stores the water quality volume in a shallow depression before it is infiltrated into the ground.
	Dry Well (I-3)	An infiltration practice similar in design to the infiltration trench, and best suited for treatment of rooftop runoff.

Filtering Practices	Surface Sand Filter (F-1)	A filtering practice that treats stormwater by settling out larger particles in a sediment chamber, and then filtering stormwater through a sand matrix.
	Underground Sand Filter (F-2)	A filtering practice that treats stormwater as it flows through underground settling and filtering chambers.
	Perimeter Sand Filter (F-3)	A filter that incorporates a sediment chamber and filter bed as parallel vaults adjacent to a parking lot.
	Organic Filter (F-4)	A filtering practice that uses an organic medium such as compost in the filter in place of sand.
	Bioretention (F-5)	A shallow depression that treats stormwater as it flows through a soil matrix, and is returned to the storm drain system.
Open Channels	Dry Swale (O-1)	An open drainage channel or depression explicitly designed to detain and promote the filtration of stormwater runoff into the soil media.
	Wet Swale (O-2)	An open drainage channel or depression designed to retain water or intercept groundwater for water quality treatment.