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Chapter 288
Erosion and Sediment Control

[HISTORY: Adopted by the Common Council of the City of Watertown as indicated in article histories. Amendments noted where applicable.]

GENERAL REFERENCES

Building construction — See Ch. **253**.
Stormwater management — See Ch. **453**.

Subdivision of land — See Ch. **545**.

Zoning — See Ch. **550**.

Article I
Erosion Control and Stormwater Runoff

[Adopted by Ord. No. 08-26 (§ 20.16 of the former City Code); amended in its entirety 10-18-2016 by Ord. No. 16-19]

§ 288-1 **Authority.**

A. This article is adopted under the authority granted by § 62.234, Wis. Stats. This article supersedes all provisions of an ordinance previously enacted under § 62.23, Wis. Stats., that relates to construction site erosion control. Except as otherwise specified in § 62.234, Wis. Stats., § 62.23, Wis. Stats., applies to this article and to any amendments to this article.

B. The provisions of this article are deemed not to limit any other lawful regulatory powers of the same governing body.

C. The Common Council hereby authorizes the ~~City Engineer~~Director of Public Works/City Engineer and its designees to administer and enforce the provisions of this article.

D. The requirements of this article do not preempt more stringent erosion and sediment control requirements that may be imposed by any of the following:

(1) Wisconsin Department of Natural Resources administrative rules, permits or approvals including those authorized under §§ 281.16 and 283.33, Wis. Stats.

(2) Targeted nonagricultural performance standards promulgated in rules by the Wisconsin Department of Natural Resources under § NR 151.004, Wis. Adm. Code.

§ 288-2 **Findings of fact.**

The Common Council finds that runoff from land-disturbing construction activity carries a significant amount of sediment and other pollutants to the waters of the state in the City of Watertown.

§ 288-3 **Purpose.**

It is the purpose of this article to further the maintenance of safe and healthful conditions; prevent and control

water pollution; prevent and control soil erosion; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and land uses; preserve ground cover and scenic beauty; and promote sound economic growth, by minimizing the amount of sediment and other pollutants carried by runoff or discharged from land-disturbing construction activity to waters of the state in the City of Watertown.

§ 288-4 **Applicability and jurisdiction.**

A. Applicability.

(1) This article applies to the following land-disturbing construction activities except as provided under Subsection **A(2)**:

(a) A construction site, which has 3,000 or more square feet of land-disturbing construction activity.

(2) This article does not apply to the following:

(a) Land-disturbing construction activity that includes the construction of a one- or two-family residential site less than one acre and is otherwise regulated by the Wisconsin Department of Safety and Professional Services.

(b) A construction project that is exempted by federal statutes or regulations from the requirement to have a national pollutant discharge elimination system permit issued under Chapter 40, Code of Federal Regulations, Part 122, for land-disturbing construction activity.

(c) Nonpoint discharges from agricultural facilities and practices.

(d) Nonpoint discharges from silviculture activities.

(e) Construction projects that do not result in land-disturbing activity including mill and crush operations that do not have soil disturbance, filling or road shoulder grading.

(f) Routine maintenance for project sites under five acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.

(3) Notwithstanding the applicability requirements in Subsection **A(1)**, this article applies to construction sites of any size that, in the opinion of the City, are likely to result in runoff that exceeds the safe capacity of the existing drainage facilities or receiving body of water, that causes undue channel erosion, that increases water pollution by scouring or the transportation of particulate matter or that endangers property or public safety.

B. Jurisdiction. This article applies to land-disturbing construction activity on construction sites located within the boundaries and jurisdiction of the City of Watertown.

C. Exclusions. This article is not applicable to activities conducted by a state agency, as defined under § 227.01(1), Wis. Stats., but also including the office of District Attorney, which is subject to the state plan promulgated or a memorandum of the understanding entered into under § 281.33(2), Wis. Stats.

§ 288-5 **Definitions.**

As used in this article, the following terms shall have the meanings indicated:

ADMINISTERING AUTHORITY

A governmental employee or his/her designee that is designated by the City of Watertown to administer this article.

AGRICULTURAL FACILITIES AND PRACTICES

Has the meaning in § 281.16(1), Wis. Stats.

AVERAGE ANNUAL RAINFALL

A typical calendar year of precipitation as determined by the Wisconsin Department of Natural Resources for users of models such as WlnSLAMM, P8 or equivalent methodology. The average annual rainfall is chosen from a department publication for the location closest to the City.

BEST MANAGEMENT PRACTICE or BMP

Structural or nonstructural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff to waters of the state.

BUSINESS DAY

A day the City Hall is routinely and customarily open for business.

CEASE AND DESIST ORDER

A court-issued order to halt land-disturbing construction activity that is being conducted without the required permit.

~~CITY ENGINEER~~DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

The individual holding the ~~City Engineer~~Director of Public Works/City Engineer title or his/her designees within the City of Watertown.

CONSTRUCTION SITE

An area upon which one or more land-disturbing construction activities occur, including areas that are part of a larger common plan of development or sale where multiple separate and distinct land-disturbing construction activities may be taking place at different times on different schedules but under one plan.

DESIGN STORM

A hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency and total depth of rainfall.

DIVISION OF LAND

The creation from one parcel of four or fewer parcels or building sites of one or fewer acres each in area where such creation occurs at one time or through the successive partition within a five-year period.

EROSION

The process by which the land's surface is worn away by the action of wind, water, ice or gravity.

EROSION AND SEDIMENT CONTROL PLAN

A comprehensive plan developed to address pollution caused by erosion and sedimentation of soil particles or rock fragments during construction.

EXTRATERRITORIAL

The unincorporated area within three miles of the corporate limits of a first, second, or third class city, or within 1.5 miles of a fourth class city or village.

FINAL STABILIZATION

That all land-disturbing construction activities at the construction site have completed and that a uniform perennial vegetative cover has been established, with a density of at least 70% of the cover, for the unpaved areas and areas not covered by permanent structures, or that employ equivalent permanent stabilization measures.

GOVERNING BODY

The City Public Works Commission or the City Council.

LAND-DISTURBING CONSTRUCTION ACTIVITY

Any man-made alteration of the land surface resulting in a change in the topography or existing vegetative or nonvegetative soil cover, that may result in runoff and lead to an increase in soil erosion and movement of sediment into waters of the state. Land-disturbing construction activity includes clearing and grubbing, demolition, excavating, pit trench dewatering, filling and grading activities.

MEP or MAXIMUM EXTENT PRACTICABLE

The highest level of performance that is achievable but is not equivalent to a performance standard identified in this article as determined in accordance with § **288-6** of this article.

PERFORMANCE STANDARD

A narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.

PERMIT

A written authorization made by the City of Watertown to the applicant to conduct land-disturbing construction activity or to discharge post-construction runoff to waters of the state.

POLLUTANT

Has the meaning given in § 283.01(13), Wis. Stats.

POLLUTION

Has the meaning given in § 281.01(10), Wis. Stats.

RESPONSIBLE PARTY

The landowner or any other entity performing services to meet the requirements of this article through a contract or other agreement.

RUNOFF

Stormwater or precipitation including rain, snow or ice melt or similar water that moves on the land surface via sheet or channelized flow.

SEDIMENT

Settleable solid material that is transported by runoff, suspended within runoff or deposited by runoff away from its original location.

SEPARATE STORM SEWER

A conveyance or system of conveyances including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, constructed channels or storm drains, which meets all of the following criteria:

A. Is designed or used for collecting water or conveying runoff.

B. Is not part of a combined sewer system.

C. Is not draining to a stormwater treatment device or system.

D. Discharges directly or indirectly to waters of the state.

SILVICULTURE ACTIVITY

Activities including tree nursery operations, tree harvesting operations, reforestation, tree thinning, prescribed burning, and pest and fire control. Clearing and grubbing of an area of a construction site is

not a silviculture activity.

SITE

The entire area included in the legal description of the land on which the land-disturbing construction activity is proposed in the permit application.

STOP-WORK ORDER

An order issued by the City which requires that all construction activity on the site be stopped.

TECHNICAL STANDARD

A document that specifies design, predicted performance and operation and maintenance specifications for a material, device or method.

WATERS OF THE STATE

Includes those portions of Lake Michigan and Lake Superior within the boundaries of this state, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction.

§ 288-6 **Applicability of maximum extent practicable.**

Maximum extent practicable applies when a person who is subject to a performance standard of this article demonstrates to the City's satisfaction that a performance standard is not achievable and that a lower level of performance is appropriate. In making the assertion that a performance standard is not achievable and that a level of performance different from the performance standard is the maximum extent practicable, the responsible party shall take into account the best available technology, cost effectiveness, geographic features, and other competing interests such as protection of public safety and welfare, protection of endangered and threatened resources, and preservation of historic properties.

§ 288-7 **Technical standards.**

A. Design criteria, standards and specifications. All BMPs required to comply with this article shall meet the design criteria, standards and specifications based on any of the following:

(1) Design guidance and technical standards identified or developed by the Wisconsin Department of Natural Resources under Subchapter V of Chapter NR 151, Wis. Adm. Code.

(2) Soil loss prediction tools [such as the Universal Soil Loss Equation (USLE)] when using an appropriate rainfall or runoff factor (also referred to as the R factor) or an appropriate design storm and precipitation distribution, and when considering the geographic location of the site and the period of disturbance.

B. Other standards. Other technical standards not identified or developed in Subsection **A** may be used provided that the methods have been approved by the City.

§ 288-8 **Performance standards.**

A. Responsible party. The responsible party shall implement an erosion and sediment control plan, developed in accordance with § **288-10** that incorporates the requirements of this section.

B. Plan. A written plan shall be developed in accordance with § **288-10** and implemented for each construction site. Simplified plans may be completed for sites with less than one acre of land-disturbing construction activity in accordance with the requirements of this article.

C. Erosion and other pollutant control requirements. The plan required under Subsection **B** shall include the following:

(1) Erosion and sediment control practices. Erosion and sediment control practices shall be used at each site where more than 3,000 square feet of land-disturbing construction activity is to occur, and shall be used to prevent or reduce all of the following:

(a) The deposition of soil from being tracked onto streets by vehicles.

(b) The discharge of sediment from disturbed areas into on-site stormwater inlets.

(c) The discharge of sediment from disturbed areas into adjacent waters of the state.

(d) The discharge of sediment from drainageways that flow off the site.

(e) The discharge of sediment by dewatering activities.

(f) The discharge of sediment eroding from soil stockpiles existing for more than seven days.

(g) The discharge of sediment from erosive flows at outlets and in downstream channels.

(h) The transport by runoff into waters of the state of chemicals, cement, and other building compounds and materials on the construction site during the construction period. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this subsection.

(i) The transport by runoff into waters of the state of untreated wash water from vehicle and wheel washing.

(2) Sediment performance standards. In addition to the erosion and sediment control practices under Subsection **C(1)**, the following erosion and sediment control practices shall be employed for all construction sites with more than one acre of land-disturbing construction activity:

(a) BMPs that, by design, discharge no more than five tons per acre per year, or to the maximum extent practicable, of the sediment load carried in runoff from initial grading to final stabilization.

(b) No person shall be required to employ more BMPs than are needed to meet a performance standard in order to comply with maximum extent practicable. Erosion and sediment control BMPs may be combined to meet the requirements of this subsection. Credit may be given toward meeting the sediment performance standard of this subsection for limiting the duration or area, or both, of land-disturbing construction activity, or for other appropriate mechanisms.

(c) Notwithstanding Subsection **C(2)(a)**, if BMPs cannot be designed and implemented to meet the sediment performance standard, the erosion and sediment control plan shall include a written, site-specific explanation of why the sediment performance standard cannot be met and how the sediment load will be reduced to the maximum extent practicable.

(3) Preventive measures. The erosion and sediment control plan shall incorporate all of the following:

(a) Maintenance of existing vegetation, especially adjacent to surface waters whenever possible.

(b) Minimization of soil compaction and preservation of topsoil.

(c) Minimization of land-disturbing construction activity on slopes of 20% or more.

(d) Development of spill prevention and response procedures.

D. Location. The BMPs used to comply with this section shall be located prior to runoff entering waters of

the state.

E. Implementation. The BMPs used to comply with this section shall be implemented as follows:

(1) Erosion and sediment control practices shall be constructed or installed before land-disturbing construction activities begin in accordance with the erosion and sediment control plan developed in § **288-10**.

(2) Erosion and sediment control practices shall be maintained until final stabilization.

(3) Final stabilization activity shall commence when land-disturbing activities cease and final grade has been reached on any portion of the site.

(4) Temporary stabilization activity shall commence when land-disturbing activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.

(5) BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

F. Alternate requirements. The City may establish stormwater management requirements more stringent than those set forth in this section if the City determines that an added level of protection is needed for sensitive resources.

§ 288-9 **Permitting requirements, procedures and fees.**

A. Permit required. No responsible party may commence a land-disturbing construction activity subject to this article without receiving prior approval of an erosion and sediment control plan for the site and a permit from the City.

B. Permit application and fees. At least one responsible party desiring to undertake a land-disturbing construction activity subject to this article shall submit an application for a permit and an erosion and sediment control plan that meets the requirements of § **288-10** and shall pay an application fee to the City of Watertown. By submitting an application, the applicant is authorizing the City of Watertown to enter the site to obtain information required for the review of the erosion and sediment control plan.

C. Review and approval of permit application. The City shall review any permit application that is submitted with an erosion and sediment control plan, and the required fee. The following approval procedure shall be used:

(1) Within ~~15~~20 business days of the receipt of a complete permit application, as required by Subsection **B**, the City shall inform the applicant whether the application and plan are approved or disapproved based on the requirements of this article.

(2) If the permit application and plan are approved, the City shall issue the permit.

(3) If the permit application or plan is disapproved, the City shall state in writing the reasons for disapproval.

(4) The City may request additional information from the applicant. If additional information is submitted, the City shall have 15 business days from the date the additional information is received to inform the applicant that the plan is either approved or disapproved.

D. Financial guarantee. As a condition of approval and issuance of the permit, the City may require the applicant to deposit a surety bond, irrevocable letter of credit or other financial guarantee to guarantee a good faith execution of the approved erosion control plan and any permit conditions. The financial guarantee shall be an amount up to 120% of the estimated cost of the improvements.

E. Permit requirements. All permits shall require the responsible party to:

(1) Notify the City within 48 hours of commencing any land-disturbing construction activity.

(2) Notify the City of completion of any BMPs within three days after their installation.

(3) Obtain permission in writing from the City prior to any modification pursuant to § **288-10C** of the erosion and sediment control plan.

(4) Install all BMPs as identified in the approved erosion and sediment control plan.

(5) Maintain all road drainage systems, stormwater drainage systems, BMPs and other facilities identified in the erosion and sediment control plan.

(6) Repair any siltation or erosion damage to adjoining surfaces and drainageways resulting from land-disturbing construction activities and document repairs in a site erosion control log.

(7) Inspect the BMPs within 24 hours after each rain of 0.5 inch or more which results in runoff during active construction periods, and at least once each week. Document the findings of the inspections in a site erosion control log with the date of inspection, the name of the person conducting the inspection, and a description of the present phase of the construction at the site. Repair or replace erosion and sediment control best management practices as necessary within 24 hours of an inspection or by the date agreed to between the permittee and the ~~City Engineer~~Director of Public Works/City Engineer or the appropriate designee. Inspections are only required for construction sites with more than one acre of land-disturbing construction activity.

(8) Allow the City to enter the site for the purpose of inspecting compliance with the erosion and sediment control plan or for performing any work necessary to bring the site into compliance with the control plan. Keep a copy of the erosion and sediment control plan at the construction site.

(9) Keep a copy of the inspection reports on the site at all times.

F. Permit conditions. Permits issued under this section may include conditions established by the City in addition to the requirements set forth in Subsection **E**, where needed to assure compliance with the performance standards in § **288-8**.

G. Permit duration. Permits issued under this section shall be valid for a period of ~~180 days~~three years~~, or the length of the building permit or other construction authorizations, whichever is longer,~~ from the date of issuance. The City may extend the period ~~one or more times~~ onceforfor up to an additional~~180 days~~three years. The City may require additional BMPs as a condition of the extension if they are necessary to meet the requirements of this article.

H. Maintenance. The responsible party throughout the duration of the construction activities shall maintain all BMPs necessary to meet the requirements of this article until the site has undergone final stabilization.

§ 288-10 **Erosion and sediment control plan, statement, and amendments.**

A. Erosion and sediment control plan.

(1) An erosion and sediment control plan shall be prepared and submitted to the City.

(2) The erosion and sediment control plan shall be designed to meet the performance standards in § **288-8** and other requirements of this article. Simplified plans may be completed for sites with less than one acre of land-disturbing construction activity.

(3) The erosion and sediment control plan shall address pollution caused by soil erosion and sedimentation during construction and up to final stabilization of the site. The erosion and sediment control plan shall include, at a minimum, the following items:

(a) 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. The application shall also include start and end dates for construction.

(b) Description of the site and the nature of the construction activity, including representation of the limits of land disturbance on a United States Geological Survey 7.5-minute series topographic map.

(c) A sequence of construction of the development site, including stripping and clearing; rough grading; construction of utilities, infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.

(d) Estimates of the total area of the site and the total area of the site that is expected to be disturbed by construction activities.

(e) Estimates, including calculations, if any, of the runoff coefficient of the site before and after construction activities are completed.

(f) Calculations to show the expected percent reduction in the average annual sediment load carried in runoff as compared to no sediment or erosion controls.

(g) Existing data describing the surface soil as well as subsoils.

(h) Depth to groundwater, as indicated by on-site soil borings or Natural Resources Conservation Service soil information where available.

(i) Name of the immediate named receiving water from the United States Geological Survey 7.5-minute series topographic maps.

(4) The erosion and sediment control plan shall include a site map. The site map shall include the following items and shall be at a scale not greater than 100 feet per inch and at a contour interval not to exceed five feet.

(a) Existing topography, vegetative cover, natural and engineered drainage systems, roads and surface waters. Lakes, streams, wetlands, channels, ditches and other watercourses on and immediately adjacent to the site shall be shown. Any identified one-hundred-year floodplains, flood fringes and floodways shall also be shown.

(b) Boundaries of the construction site.

(c) Drainage patterns and approximate slopes anticipated after major grading activities.

(d) Areas of soil disturbance.

(e) Location of major structural and nonstructural controls identified in the plan.

(f) Location of areas where stabilization practices will be employed.

(g) Areas which will be vegetated following construction.

(h) Area and location of wetland acreage on the site and locations where stormwater is discharged to a surface water or wetland within one-quarter mile downstream of the construction site.

(i) Locations of all surface waters and wetlands within one mile of the construction site.

(j) Areas used for infiltration of post-construction stormwater runoff.

(k) An alphanumeric or equivalent grid overlying the entire construction site map.

(5) Each erosion and sediment control plan shall include a description of appropriate erosion and sediment control best management practices that will be installed and maintained at the site to prevent pollutants from reaching waters of the state. The plan shall clearly describe the appropriate erosion and sediment control measures for each major land-disturbing construction activity and the timing during the construction process that the measures will be implemented. The description of erosion and sediment controls shall include, when appropriate, the following minimum requirements:

(a) Description of interim and permanent stabilization practices, including an implementation schedule. Site plans shall ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized.

(b) Description of structural practices to divert flow away from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from the site. Unless otherwise specifically approved in writing by the City of Watertown, structural measures shall be installed on upland soils.

(c) Management of overland flow at all sites, unless otherwise controlled by outfall controls.

(d) Trapping of sediment in channelized flow.

(e) Staging construction to limit exposed soil areas subject to erosion.

(f) Protection of downslope drainage inlets where they occur.

(g) Minimization of tracking via installation of tracking pads at all vehicle and equipment entry and exit locations of the construction site.

(h) Clean up of off-site sediment deposits.

(i) Proper disposal of building and waste materials at all sites.

(j) Stabilization of drainageways.

(k) Control of soil erosion from dirt stockpiles.

(l) Installation of permanent stabilization practices as soon as possible after final grading.

(m) Minimization of dust to the maximum extent practicable.

(6) The erosion and sediment control plan shall require that velocity dissipation devices be placed at discharge locations and along the length of any outfall channel, as necessary, to provide a nonerosive flow from the structure to a watercourse so that the natural physical and biological characteristics and functions are maintained and protected.

B. Erosion and sediment control plan statement. For each construction site identified under § **288-4A** with more than one acre of land-disturbing construction activity, an erosion and sediment control plan statement shall be prepared. This statement shall be submitted to the City. The control plan statement

shall briefly describe the site, including a site map. Further, it shall also include the best management practices that will be used to meet the requirements of the article, including the site development schedule.

C. Amendments. The applicant shall amend the plan if any of the following occur:

(1) There is a change in design, construction, operation or maintenance at the site which has the reasonable potential for the discharge of pollutants to waters of the state and which has not otherwise been addressed in the plan.

(2) The actions required by the plan fail to reduce the impacts of pollutants carried by construction site runoff.

(3) The City notifies the applicant of changes needed in the plan.

§ 288-11 **Fee schedule.**
The fees referred to in other sections of this article shall be established by the Common Council and may from time to time be modified by resolution. A schedule of the fees established by the Common Council shall be available for review in City Hall. The fee shall cover all City and consultant costs to review the permit application and perform the required site inspections.

§ 288-11.1 **Inspection.**
If land-disturbing construction activities are being carried out without a permit required by this article, the City may enter the land pursuant to the provisions of § 66.0119(1), (2) and (3), Wis. Stats. The City will inspect any construction site with more than one acre of land-disturbing construction activity that holds a permit under this chapter as required by the current Wisconsin Department of Natural Resources Municipal Separate Storm Sewer System (MS4) Permit or within the first 2 weeks of construction, at least once a month, and again at the end of construction ~~during the period starting March 1 and ending October 31 and at least two times during the period starting November 1 and ending February 28~~ to ensure compliance with the approved sediment and erosion control plan. If erosion and/or sediment control Best Management Practices (BMPs) are out of compliance during inspections, the City may conduct follow-up inspections within 7 days, unless corrections are made and observed by the inspector or verified via photographs submitted to the inspector. The costs of these inspections shall be billed to the responsible party.

§ 288-11.2 **Enforcement.**
A. The City may post a stop-work order if any of the following occurs:

(1) Any land-disturbing construction activity regulated under this article is being undertaken without a permit.

(2) The erosion and sediment control plan is not being implemented in a good faith manner.

(3) The conditions of the permit are not being met.

B. If the responsible party does not cease activity as required in a stop-work order posted under this section or fails to comply with the erosion and sediment control plan or permit conditions, the City may revoke the permit.

C. If the responsible party, where no permit has been issued, does not cease the activity after being notified by the City, or if a responsible party violates a stop-work order posted under Subsection **A**, the City may request the City Attorney to obtain a cease and desist order in any court with jurisdiction.

D. The City may retract the stop-work order issued under Subsection **A** or the permit revocation under Subsection **B**.

E. After posting a stop-work order under Subsection **A**, the City may issue a notice of intent to the responsible party of its intent to perform work necessary to comply with this article. The City may go on the land and commence the work after issuing the notice of intent. The costs of the work performed under this subsection by the City, plus interest at the rate authorized by City shall be billed to the responsible party. In the event a responsible party fails to pay the amount due, the Clerk shall enter the amount due on the tax rolls and collect as a special assessment against the property pursuant to Subch. VII of Ch. 66, Wis. Stats.

F. Any person violating any of the provisions of this article shall be subject to a forfeiture of not less than $100 nor more than $1,000 and the costs of prosecution for each violation. Each day a violation exists shall constitute a separate offense.

G. Compliance with the provisions of this article may also be enforced by injunction in any court with jurisdiction. It shall not be necessary to prosecute for forfeiture or a cease and desist order before resorting to injunctional proceedings.

§ 288-11.3 **Appeals.**

A. Public Works Commission. The Public Works Commission shall act as the review and appeal agency and:

(1) Shall hear and decide appeals where it is alleged that there is error in any order, decision or determination in administering this article except for cease and desist orders obtained under § **288-11.2C**.

(2) Upon appeal, may authorize variances from the provisions of this article which are not contrary to the public interest and where owing to special conditions a literal enforcement of the provisions of the article will result in unnecessary hardship; and

(3) Shall use the rules, procedures, duties and powers authorized by statute in hearing and deciding appeals and authorizing variances.

B. Who may appeal. Appeals to the Public Works Commission may be taken by any aggrieved person or by any office, department, board, or bureau of the City of Watertown affected by any decision of the City.

§ 288-11.4 **Severability.**

If a court of competent jurisdiction judges any section, clause, provision or portion of this article unconstitutional or invalid, the remainder of the article shall remain in force and not be affected by such judgment.

Article II
Control of Post-Construction Stormwater Management

[Adopted by Ord. No. 08-27 (§ 20.17 of the former City Code); amended in its entirety 10-18-2016 by Ord. No. 16-20]

§ 288-12 **Authority.**

A. This article is adopted by the Common Council under the authority granted by § 62.234, Wis. Stats. This article supersedes all provisions of an ordinance previously enacted under § 62.23, Wis. Stats., that relate to stormwater management regulations. Except as otherwise specified in § 62.234, Wis. Stats., § 62.23, Wis. Stats., applies to this article and to any amendments to this article.

B. The provisions of this article are deemed not to limit any other lawful regulatory powers of the same governing body.

C. The Common Council hereby authorizes the City and its designees to administer and enforce the provisions of this article.

D. The requirements of this article do not preempt more stringent stormwater management requirements that may be imposed by any of the following:

(1) Wisconsin Department of Natural Resources administrative rules, permits or approvals including those authorized under §§ 281.16 and 283.33, Wis. Stats.

(2) Targeted nonagricultural performance standards promulgated in rules by the Wisconsin Department of Natural Resources under § NR 151.004, Wis. Adm. Code.

§ 288-13 **Findings of fact.**

The Common Council finds that uncontrolled, post-construction runoff has a significant impact upon water resources and the health, safety and general welfare of the community and diminishes the public enjoyment and use of natural resources. Specifically, uncontrolled post-construction runoff can:

A. Degrade physical stream habitat by increasing stream bank erosion, increasing streambed scour, diminishing groundwater recharge, diminishing stream base flows and increasing stream temperature.

B. Diminish the capacity of lakes and streams to support fish, aquatic life, recreational and water supply uses by increasing pollutant loading of sediment, suspended solids, nutrients, heavy metals, bacteria, pathogens and other urban pollutants.

C. Alter wetland communities by changing wetland hydrology and by increasing pollutant loads.

D. Reduce the quality of groundwater by increasing pollutant loading.

E. Threaten public health, safety, property and general welfare by overtaxing storm sewers, drainageways, and other minor drainage facilities.

F. Threaten public health, safety, property and general welfare by increasing major flood peaks and volumes.

G. Undermine floodplain management efforts by increasing the incidence and levels of flooding.

§ 288-14 **Purpose and intent.**

A. Purpose. The general purpose of this article is to establish long-term, post-construction runoff management requirements that will diminish the threats to public health, safety, welfare and the aquatic environment. Specific purposes are to:

(1) Further the maintenance of safe and healthful conditions.

(2) Prevent and control the adverse effects of stormwater; prevent and control soil erosion; prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and land uses; preserve ground cover and scenic beauty; and promote sound economic growth.

(3) Control exceedance of the safe capacity of existing drainage facilities and receiving water bodies; prevent undue channel erosion; control increases in the scouring and transportation of particulate matter; and prevent conditions that endanger downstream property.

(4) Minimize the amount of pollutants discharged from the separate storm sewer to protect waters of the state.

B. Intent. It is the intent of the Common Council that this article regulates post-construction stormwater discharges to waters of the state. This article may be applied on a site-by-site basis. The Common Council recognizes, however, that the preferred method of achieving the stormwater performance standards set forth in this article is through the preparation and implementation of comprehensive, systems-level stormwater management plans that cover hydrologic units, such as watersheds, on a municipal and regional scale. Such plans may prescribe regional stormwater devices, practices or systems, any of which may be designed to treat runoff from more than one site prior to discharge to waters of the state. Where such plans are in conformance with the performance standards developed under § 281.16, Wis. Stats., for regional stormwater management measures and have been approved by the Common Council, it is the intent of this article that the approved plan be used to identify post-construction management measures acceptable for the community.

§ 288-15 **Applicability and jurisdiction.**

A. Applicability.

(1) Where not otherwise limited by law, this article applies to a post-construction site which has ~~3,000~~21,780 or more square feet of land-disturbing construction activity, unless the site is otherwise exempt under Subsection **A(2)**.

(2) A site that meets any of the criteria in this Subsection is exempt from the requirements of this article:

(a) Land-disturbing construction activity that includes the construction of a one- or two-family residential site less than one acre and is otherwise regulated by the Wisconsin Department of Safety and Professional Services.

(b) A post-construction site with less than 10% connected imperviousness based on complete development of the post-construction site, provided the cumulative area of all parking lots and rooftops is less than one acre.

(c) Nonpoint discharges from agricultural facilities and practices.

(d) Nonpoint discharges from silviculture activities.

(e) Routine maintenance for project sites under five acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.

(f) Underground utility construction such as water, sewer and fiberoptic lines. This exemption does not apply to the construction of any aboveground structures associated with utility construction.

(g) The requirements of this article do not preempt more stringent stormwater management requirements that may be imposed by any of the following:

[1] Wisconsin Department of Natural Resources administrative rules, permits or approvals including those authorized under § 288.16, Wis. Stats., for nonpoint sources, and § 283.33, Wis. Stats., for stormwater discharge.

[2] Targeted nonagricultural performance standards promulgated in rules by the Wisconsin Department of Natural Resources under § NR 151.004, Wis. Adm. Code.

(3) Notwithstanding the applicability requirements in Subsection **A(1)**, this article applies to post-construction sites of any size that, in the opinion of the City, are likely to result in runoff that exceeds the safe capacity of the existing drainage facilities or receiving body of water, that causes undue channel erosion, that increases water pollution by scouring or the transportation of particulate matter or that endangers property or public safety.

B. Jurisdiction. This article applies to land-disturbing activities within the boundaries of the City of Watertown, and that portion of the Town of Emmet, Dodge County, Wisconsin, that is subject to the City's Plat Review Jurisdiction as set forth in Resolution Exhibit No. 6152 and recorded on September 25, 1997, in Volume 937 on Page 86 as Document No. 851436 in the Dodge County Office of the Register of Deeds and all subsequent amendments.

C. Exclusions. This article is not applicable to activities conducted by a state agency, as defined under § 227.01(1), Wis. Stats., but also including the office of the District Attorney, which is subject to the state plan promulgated or a memorandum of understanding entered into under § 281.33(2), Wis. Stats.

§ 288-16 **Definitions.**
As used in this article, the following terms shall have the meanings indicated:

ADEQUATE SOD, OR SELF-SUSTAINING VEGETATIVE COVER
Maintenance of sufficient vegetation types and densities such that the physical integrity of the stream bank or lakeshore is preserved. Self-sustaining vegetative cover includes grasses, forbs, sedges and duff layers of fallen and woody debris.

ADMINISTERING AUTHORITY
The ~~City Engineer~~Director of Public Works/City Engineer, the City Public Works Commission, the City Council or other entity empowered under § 62.234, Wis. Stats., that is designated by the City of Watertown to administer this article.

AGRICULTURAL FACILITIES AND PRACTICES
Has the meaning given in § 281.16, Wis. Stats.

ATLAS 14
The National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Precipitation-Frequency Atlas of the United States, Volume 8 (Midwestern States), published in 2013.

AVERAGE ANNUAL RAINFALL
A typical calendar year of precipitation as determined by the Wisconsin Department of Natural Resources for users of models such as WlnSLAMM, P8 or equivalent methodology. The average annual rainfall is chosen from a department publication for the location closest to the City.

BEST MANAGEMENT PRACTICE or BMP
Structural or nonstructural measures, practices, techniques or devices employed to avoid or minimize sediment or pollutants carried in runoff to waters of the state.

BUSINESS DAY
A day the City Hall is routinely and customarily open for business.

CEASE AND DESIST ORDER
A court-issued order to halt land-disturbing construction activity that is being conducted without the required permit or in violation of a permit issued by the City of Watertown.

~~CITY ENGINEER~~DIRECTOR OF PUBLIC WORKS/CITY ENGINEER
The individual holding the ~~City Engineer~~Director of Public Works/City Engineer title or his/her designees within the City of Watertown.

COMBINED SEWER SYSTEM
A system for conveying both sanitary sewage and stormwater runoff.

CONNECTED IMPERVIOUSNESS

An impervious surface connected to waters of the state via a separate storm sewer, an impervious flow path, or a minimally pervious flow path.

DESIGN STORM

A hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency, and total depth of rainfall.

DEVELOPMENT

Residential, commercial, industrial or institutional land uses and associated roads.

DIRECT CONDUITS TO GROUNDWATER

Wells, sinkholes, swallets, fractured bedrock at the surface, mine shafts, nonmetallic mines, tile inlets discharging to groundwater, quarries, or depressional groundwater recharge areas over shallow fractured bedrock.

DIVISION OF LAND

The creation from one parcel of four or fewer parcels or building sites of one or fewer acres each in area where such creation occurs at one time or through the successive partition within a five-year period.

EFFECTIVE INFILTRATION AREA

The area of the infiltration system that is used to infiltrate runoff and does not include the area used for site access, berms or pretreatment.

EROSION

The process by which the land's surface is worn away by the action of wind, water, ice or gravity.

EXCEPTIONAL RESOURCE WATERS

Waters listed in § NR 102.11, Wis. Adm. Code.

EXTRATERRITORIAL

The unincorporated area within three miles of the corporate limits of a first, second, or third class city, or within 1.5 miles of a fourth class city or village.

FILTERING LAYER

Soil that has at least a three-foot-deep layer with at least 20% fines; or at least a five-foot-deep layer with at least 10% fines; or an engineered soil with an equivalent level of protection as determined by the regulatory authority for the site.

FINAL STABILIZATION

That all land-disturbing construction activities at the construction site have been completed and that a uniform, perennial, vegetative cover has been established, with a density of at least 70% of the cover, for the unpaved areas and areas not covered by permanent structures, or employment of equivalent permanent stabilization measures.

FINANCIAL GUARANTEE

A performance bond, maintenance bond, surety bond, irrevocable letter of credit, or similar guarantees submitted to the City by the responsible party to assure that requirements of the article are carried out in compliance with the stormwater management plan.

GOVERNING BODY

The City Public Works Commission or the City Council.

IMPERVIOUS SURFACE

An area that releases as runoff all or a large portion of the precipitation that falls on it, except for frozen soil. Rooftops, sidewalks, driveways, parking lots and streets are examples of areas that typically are impervious.

IN-FILL AREA

An undeveloped area of land located within an existing urban sewer service area, surrounded by development or natural or man-made features where development cannot occur.

INFILTRATION

The entry of precipitation or runoff into or through the soil.

INFILTRATION SYSTEM

A device or practice such as a basin, trench, rain garden or swale designed specifically to encourage infiltration, but does not include natural infiltration in previous surfaces such as lawns, redirecting of rooftop downspouts onto lawns or minimal infiltration from practices, such as swales or roadside channels designed for conveyance and pollutant removal only.

KARST FEATURE

An area or surficial geologic feature subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, seeps or swallets.

LAND-DISTURBING CONSTRUCTION ACTIVITY

Any man-made alteration of the land surface resulting in a change in the topography or existing vegetative or nonvegetative soil cover, that may result in runoff and lead to an increase in soil erosion and movement of sediment into waters of the state. Land-disturbing construction activity includes clearing and grubbing, demolition, excavating, pit trench dewatering, filling and grading activities.

MAINTENANCE AGREEMENT

A legal document that provides for long-term maintenance of stormwater management practices.

MEP or MAXIMUM EXTENT PRACTICABLE

The highest level of performance that is achievable but is not equivalent to a performance standard identified in this article. Maximum extent practicable applies when a person who is subject to a performance standard of this article demonstrates to the City's satisfaction that a performance standard is not achievable and that a lower level of performance is appropriate. In making the assertion that a performance standard is not achievable and that a level of performance different from the performance standard is the maximum extent practicable, the responsible party shall take into account the best available technology, cost effectiveness, geographic features, and other competing interests such as protection of public safety and welfare, protection of endangered and threatened resources, and preservation of historic properties.

NEW DEVELOPMENT

Development resulting from the conversion of previously undeveloped land or agricultural land uses.

NRCS MSE3 DISTRIBUTION

A specific precipitation distribution developed by the United States Department of Agriculture, Natural Resources Conservation Service, using precipitation data from Atlas 14.

OFF SITE

Located outside the property boundary described in the permit application.

ON SITE
Located within the property boundary described in the permit application.

ORDINARY HIGH WATER MARK
Has the meaning given in § NR 115.03(6), Wis. Adm. Code.

OUTSTANDING RESOURCE WATERS
Waters listed in § NR 102.10, Wis. Adm. Code.

PERCENT FINES
The percentage of a given sample of soil which passes through a No. 200 sieve.

PERFORMANCE STANDARD
A narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.

PERMIT
A written authorization made by the City to the applicant to conduct land-disturbing construction activity or to discharge post-construction runoff to waters of the state.

PERMIT ADMINISTRATION FEE
A sum of money paid to the City by the permit applicant for the purpose of recouping the expenses incurred by the authority in administering the permit.

PERVIOUS SURFACE
An area that releases as runoff a small portion of the precipitation that falls on it. Lawns, gardens, parks, forests or other similar vegetated areas are examples of surfaces that typically are pervious.

POLLUTANT
Has the meaning given in § 283.01(13), Wis. Stats.

POLLUTION
Has the meaning given in § 281.01(10), Wis. Stats.

POST-CONSTRUCTION SITE
A construction site following the completion of land-disturbing construction activity and final site stabilization.

PREDEVELOPMENT CONDITION
The extent and distribution of land cover types present before the initiation of land-disturbing construction activity, assuming that all land uses prior to development activity are managed in an environmentally sound manner.

PREVENTIVE ACTION LIMIT
Has the meaning given in § NR 140.05(17), Wis. Adm. Code.

PROTECTIVE AREA
An area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of those widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface.

REDEVELOPMENT
Areas where development is replacing older development.

RESPONSIBLE PARTY

The landowner or any other entity performing services to meet the requirements of this article through a contract or other agreement.

RUNOFF

Stormwater or precipitation including rain, snow or ice melt or similar water that moves on the land surface via sheet or channelized flow.

SEPARATE STORM SEWER

A conveyance or system of conveyances including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, constructed channels or storm drains, which meets all of the following criteria:

A. Is designed or used for collecting water or conveying runoff.

B. Is not part of a combined sewer system.

C. Is not draining to a stormwater treatment device or system.

D. Discharges directly or indirectly to waters of the state.

SILVICULTURE ACTIVITY

Activities including tree nursery operations, tree harvesting operations, reforestation, tree thinning, prescribed burning, and pest and fire control. Clearing and grubbing of an area of a construction site is not a silviculture activity.

SITE

The entire area included in the legal description of the land on which the land-disturbing construction activity occurred.

STOP-WORK ORDER

An order issued by the ~~City Engineer~~Director of Public Works/City Engineer which requires that all construction activity on the site be stopped.

STORMWATER MANAGEMENT PLAN

A comprehensive plan designed to reduce the discharge of pollutants from stormwater after the site has undergone final stabilization following completion of the construction activity.

STORMWATER MANAGEMENT SYSTEM PLAN

A comprehensive plan designed to reduce the discharge of runoff and pollutants from hydrologic units on a regional or municipal scale.

TECHNICAL STANDARD

A document that specifies design, predicted performance and operation and maintenance specifications for a material, device or method.

TOP OF THE CHANNEL

An edge, or point on the landscape, landward from the ordinary high water mark of a surface water of the state, where the slope of the land begins to be less than 12% continually for at least 50 feet. If the slope of the land is 12% or less continually for the initial 50 feet, landward from the ordinary high water mark, the top of the channel is the ordinary high water mark.

TOTAL MAXIMUM DAILY LOAD or TMDL

The amount of pollutants specified as a function of one or more water quality parameters, that can be

discharged per day into a water quality limited segment and still ensure attainment of the applicable water quality standard.

TP-40
Technical Paper No. 40, Rainfall Frequency Atlas of the United States, published in 1961.

TR-55
The United States Department of Agriculture, Natural Resources Conservation Service (previously Soil Conservation Service), Urban Hydrology for Small Watersheds, Second Edition, Technical Release 55, June 1986.

TRANSPORTATION FACILITY
A highway, a railroad, a public mass transit facility, a public-use airport, a public trail or any other public work for transportation purposes such as harbor improvements under § 85.095(1)(b), Wis. Stats. "Transportation facility" does not include building sites for the construction of public buildings and buildings that are places of employment that are regulated by the Department pursuant to § 281.33, Wis. Stats.

TSS
Total suspended solids.

TYPE II DISTRIBUTION
A rainfall type curve as established in the United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published 1973.

WATERS OF THE STATE
Includes those portions of Lake Michigan and Lake Superior within the boundaries of this state, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction.

§ 288-17 **Technical standards.**
The following methods shall be used in designing the water quality, peak flow shaving and infiltration components of stormwater practices needed to meet the water quality standards of this article:

A. Technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under Subchapter V of Chapter NR 151, Wis. Adm. Code.

B. Where technical standards have not been identified or developed by the Wisconsin Department of Natural Resources, other technical standards may be used provided that the methods have been approved by the City.

C. In this article, the following year and location has been selected as the average annual rainfall for water quality modeling purposes: Madison, 1981 (Mar. 12-Dec. 2).

§ 288-18 **Performance standards.**
A. Responsible party. The responsible party shall implement a post-construction stormwater management plan that incorporates the requirements of this section.

B. Plan. A written stormwater management plan in accordance with § **288-20** shall be developed and implemented for each post-construction site. Simplified plans may be completed for sites with less than one acre of land-disturbing construction activity in accordance with the requirements of this chapter.

C. Maintenance of effort. For redevelopment sites where the redevelopment will be replacing older development that was subject to post-construction performance standards of Ch. NR 151, Wis. Adm. Code, in effect on or after October 1, 2004, the responsible party shall meet the total suspended solids reduction, peak flow control, infiltration, and protective areas standards applicable to the older development or meet the redevelopment standards of this article, whichever is more stringent.

D. Requirements. The plan required under Subsection **B** shall include the following:

(1) Pollutant control. BMPs shall be designed, installed and maintained to control total suspended solids and phosphorus carried in runoff from the post-construction site as follows:

(a) BMPs shall be designed in accordance with Table 1 or to the maximum extent practicable as provided in Subsection **D(1)(b)**. The design shall be based on an average annual rainfall, as compared to no runoff management controls.

Table 1

Pollutant Reduction Standards

Development Type	TSS Reduction	Phosphorus
New development	80%	30%
In-fill development	80%	30%
Redevelopment	60% of load from parking areas and roads	30% of load from parking areas and roads

(b) Maximum extent practicable. If the design cannot meet a total suspended solids or phosphorus reduction performance standard of Table 1, the stormwater management plan shall include a written, site-specific explanation of why the total suspended solids or phosphorus reduction performance standard cannot be met and why the total pollutant loads will be reduced only to the maximum extent practicable.

(c) Off-site drainage. When designing BMPs, runoff draining to the BMP from off-site shall be taken into account in determining the treatment efficiency of the practice. Any impact on the efficiency shall be compensated for by increasing the size of the BMP accordingly.

(2) Peak discharge.

(a) Unless otherwise provided for in this section, all land development activities subject to this section shall establish on-site management practices to control peak flow rates of stormwater discharged from the site. On-site management practices shall be used to meet the following minimum performance standards:

[1] The peak flow rates of stormwater runoff from the development shall not exceed those calculated for the series of design storms specified in Subsection **D(2)(a)[2]** occurring under development conditions

specified in Subsection **D(2)(a)[4]**. Discharge velocities must be nonerosive to discharge locations, outfall channels, and receiving streams. Safe overland conveyance must be provided for discharges from the development.

[2] The stormwater management facilities shall contain sufficient storage to contain the runoff from the one-hundred-year, twenty-four-hour rainfall event under developed conditions, while utilizing a peak discharge rate from the developed site which does not exceed the peak runoff rate from the site for a two-year, twenty-four-hour rainfall event under predevelopment conditions.

[3] By design, BMPs shall be employed to maintain or reduce the one-year, twenty-four-hour post-construction peak runoff discharge rates to the one-year, twenty-four-hour predevelopment peak runoff discharge rate, or to the maximum extent practicable.

[4] Predevelopment conditions shall assume "good hydrologic conditions" for appropriate land covers as identified in TR-55 or an equivalent methodology. The meaning of "hydrologic soil group" and "runoff curve number" are as determined in TR-55. However, when predevelopment land cover is woodland, grassland, or cropland, rather than using TR-55 values for these land use types, the runoff curve numbers in Table 2 shall be used. Peak discharges shall be calculated using TR-55 runoff curve number methodology, Atlas 14 precipitation depths, and the appropriate NRCS Wisconsin MSE3 precipitation distribution. On a case-by-case basis, the ~~City Engineer~~Director of Public Works/City Engineer may allow the use of TP-40 precipitation depths and the Type II distribution.

Table 2

Maximum Predevelopment Runoff Curve Numbers

Hydrologic Soil Group	**A**	**B**	**C**	**D**
Woodland curve number	30	55	70	77
Grassland curve number	39	61	71	78
Cropland curve number	55	69	78	83

(b) This subsection of the section does not apply to any of the following:

[1] A redevelopment post-construction site.

[2] An in-fill development area less than one acre.

(3) Infiltration. BMPs shall be designed, installed, and maintained to infiltrate runoff to the maximum extent practicable in accordance with the following, except as provided in Subsection **D(3)(f)** through **(i)**.

(a) Low imperviousness. For development up to 40% connected imperviousness, such as parks, cemeteries, and low-density residential development, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90% of the predevelopment infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the post-construction site is required as an effective infiltration area.

(b) Moderate imperviousness. For development with more than 40% and up to 80% connected imperviousness, such as medium- and high-density residential, multifamily development, industrial and

institutional development, and office parks, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 75% of the predevelopment infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the post-construction site is required as an effective infiltration area.

(c) High imperviousness. For development with more than 80% connected imperviousness, such as commercial strip malls, shopping centers, and commercial downtowns, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60% of the predevelopment infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the post-construction site is required as an effective infiltration area.

(d) Predevelopment condition shall be the same as in Table 2 of the peak discharge section of this article.

(e) Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with Subsection **D(3)(k)**. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.

(f) Exclusions. Runoff from the following areas may not be infiltrated and do not qualify as contributing to meeting the requirements of this section unless demonstrated to meet the conditions of Subsection **D(3)(k)**:

[1] Areas associated with Tier 1 industrial facilities identified in § NR 216.21(2)(a), Wis. Adm. Code, including storage, loading, rooftop and parking.

[2] Storage and loading areas of Tier 2 industrial facilities identified in § NR 216.21(2)(b), Wis. Adm. Code.

[3] Fueling and vehicle maintenance areas. Runoff from rooftops of fueling and vehicle maintenance areas may be infiltrated with the concurrence of the regulatory authorities.

(g) Location of practices. Infiltration practices may not be located in the following areas:

[1] Areas within 1,000 feet upgradient or within 100 feet downgradient of direct conduits to groundwater.

[2] Areas within 400 feet of a community water system well as specified in § NR 811.12(5)(d)6, Wis. Adm. Code, or within the separation distances listed in § NR 812.08, Wis. Adm. Code, for any private well or noncommunity well for runoff infiltrated from commercial (including multifamily residential), industrial and institutional land uses or regional devices for one- and two-family residential development.

[3] Areas where contaminants of concern, as defined in § NR 720.03(2), Wis. Adm. Code are present in the soil through which infiltration will occur.

(h) Separation distances.

[1] Infiltration practices shall be located so that the characteristics of the soil and the separation distance between the bottom of the infiltration system and the elevation of seasonal high groundwater or the top of bedrock are in accordance with Table 3:

Table 3

Separation Distances and Soil Characteristics

Source Area	Separation Distance	Soil Characteristics
Industrial, commercial, institutional parking lots and roads	5 feet or more	Filtering layer
Residential arterial roads	5 feet or more	Filtering layer
Roofs draining to subsurface infiltration practices	1 foot or more	Native or engineered soil with particles finer than coarse sand
Roofs draining to surface infiltration practices	Not applicable	Not applicable
All other impervious source areas	3 feet or more	Filtering layer

[2] Notwithstanding Subsection **D(3)(h)**, applicable requirements for injection wells classified under Ch. NR 815, Wis. Adm. Code, shall be followed.

(i) Exemptions. Infiltration practices located in runoff from the following areas may be credited towards meeting the requirements when infiltrated, but the decision to infiltrate under these conditions is optional:

[1] Areas where the infiltration rate of the soil measured at the proposed bottom of the infiltration system is less than 0.6 inch/hour using a scientifically credible field test method.

[2] Areas where the least permeable soil horizon to five feet below the proposed bottom of the infiltration system using the U.S. Department of Agriculture method of soils analysis is one of the following: sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay.

[3] Parking areas and access roads less than 5,000 square feet for commercial development.

[4] Parking areas and access roads less than 5,000 square feet for industrial development not subject to the prohibitions/exclusions under Subsection **D(3)(f)**.

[5] Redevelopment post-construction sites except as provided under § **288-18C**.

[6] In-fill development areas less than one acre.

[7] Roads in commercial, industrial and institutional land uses, and arterial residential roads.

(j) Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation, such alternate use shall be given equal credit toward the infiltration volume required by this section.

(k) Groundwater standards.

[1] Infiltration systems designed in accordance with this section shall, to the extent technically and

economically feasible, minimize the level of pollutants in filtration to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with Ch. NR 140. However, if site-specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.

[2] Notwithstanding Subsection **D(3)(k)[1]**, the discharge from BMPs shall remain below the enforcement standard at the point of standards application.

(l) Maximum extent practicable. Where the conditions of Subsection **D(3)(f)** through **(i)** limit or restrict the use of infiltration practices, the infiltration performance standard of § **288-18D(3)** shall be met to the maximum extent practicable.

(4) Protective areas.

(a) "Protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this subsection, protective area does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.

[1] For outstanding resource waters and exceptional resource waters: 75 feet.

[2] For perennial and intermittent streams identified on a United States Geological Survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current: 50 feet.

[3] For lakes: 50 feet.

[4] For wetlands not subject to Subsection **D(4)(a)[5]** or **[6]**: 50 feet.

[5] For highly susceptible wetlands: 75 feet. Highly susceptible wetlands include the following types: calcareous fens, sedge meadows, open and coniferous bogs, low prairies, coniferous swamps, lowland hardwood swamps and ephemeral ponds.

[6] For less susceptible wetlands: 10% of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass, cultivated hydric soils; and any gravel pits, or dredged material or fill material disposal sites that take on the attributes of a wetland.

[7] In Subsection **D(4)(a)[4]** through **[6]**, determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in § NR 103.03, Wis. Adm. Code.

[8] Wetland boundary delineations shall be made in accordance with § NR 103.08(1m), Wis. Adm. Code. This subsection does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed. Where there is a legally authorized wetland fill, the protective area standard need not be met in that location.

[9] For concentrated flow channels with drainage areas greater than 130 acres: 10 feet.

[10] Notwithstanding Subsection **D(4)(a)[1]** to **[9]**, the greatest protective area width shall apply where rivers, streams, lakes and wetlands are contiguous.

(b) This subsection applies to post-construction sites located within a protective area, except those areas exempted pursuant to Subsection **D(4)(d)**.

(c) The following requirements shall be met:

[1] Impervious surfaces shall be kept out of the protective area entirely or to the maximum extent practicable. If there is no practical alternative to locating an impervious surface in the protective area, the stormwater management plan shall contain a written site-specific explanation.

[2] Where land-disturbing construction activity occurs within a protective area, and where no impervious surface is present, adequate sod or self-sustaining vegetative cover of 70% or greater shall be established and maintained. The adequate sod or self-sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Nonvegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion, such as on steep slopes or where high-velocity flows occur.

[3] Best management practices such as filter strips, swales, or wet detention basins that are designed to control pollutants from nonpoint sources may be located in the protective area.

(d) This subsection does not apply to:

[1] Except as provided under § **288-18C**, redevelopment post-construction sites.

[2] In-fill development areas less than one acre.

[3] Structures that cross or access surface waters such as boat landings, bridges and culverts.

[4] Structures constructed in accordance with § 59.692(1v), Wis. Stats.

[5] Areas of post-construction sites from which runoff does not enter the surface water, including wetlands, without first being treated by a BMP to meet the local ordinance requirements for total suspended solids and peak flow reduction, except to the extent that vegetative ground cover is necessary to maintain bank stability.

(5) Fueling and vehicle maintenance areas. Fueling and vehicle maintenance areas shall, to the maximum extent practicable, have BMPs designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen.

(6) Site Drainage. Measures shall be implemented to ensure proper site drainage, prevent property damage and protect public health and safety, including the following minimum requirements:

(a) Drainage easement. Perpetual drainage easements or other deed restrictions shall be recorded on the property to preserve major stormwater flow paths and permanent stormwater BMP locations. Covenants in these areas shall not allow buildings or other structures and shall prevent any grading, filling or other activities that interrupt or obstruct flows in any way. Covenants shall also specify maintenance responsibilities and authorities in accordance with § **288-21**.

(b) Site grading. Site grading shall ensure positive flows away from all buildings, roads, driveways and septic systems, be coordinated with the general stormwater drainage patterns for the area, and minimize adverse impacts on adjacent properties.

(c) Street drainage. All street drainage shall be designed to prevent concentrated flows from crossing the traffic lanes to the maximum extent practicable. Design flow depths at the road center line for on-street drainage shall not exceed six inches during the peak flows generated by the one-hundred-year, twenty-four-hour design storm, using planned land use conditions for the entire contributing watershed area.

(d) Bridges and cross-culverts. All new or modified bridges and cross-culverts shall comply with applicable design standards and regulations, facilitate fish passage and prevent increased flooding or channel erosion upstream or downstream from the structure. All bridges and cross-culverts on collector and arterial roadways shall be designed to convey the one-hundred-year, twenty-four-hour design storm. All bridges and cross-culverts on local roadways shall be designed to convey ten-year, twenty-four-hour design storm, while providing an overland flow path that does not impact any structures for the one-hundred-year, twenty-four-hour design storm. A floodplain analysis shall be required for all developments impacting a navigable waterway. This analysis must demonstrate no adverse off-site impacts, in accordance with state and federal regulations and may require larger structures than those specified above. Design flow depths at the road center line for all crossings shall not exceed six inches during peak flows generated by the one-hundred-year, twenty-four-hour design storm, using planned land use conditions for the entire contributing watershed area. All predevelopment runoff storage areas within the flow path upstream of bridges and cross-culverts shall be preserved and designated as drainage easements, unless compensatory storage is provided and accounted for in modeling. As-built documentation shall be submitted for all new or modified structures that are located within a mapped floodplain or that the City determines to be necessary to maintain floodplain modeling for the applicable watershed.

(e) Subsurface drainage. To avoid property and other damages from groundwater, all buildings planned for human occupation on a regular basis shall meet all of the following:

[1] Basement floor surfaces shall be built a minimum of one foot above the highest groundwater table elevation, as documented in the submitted soil evaluations in accordance with City standards. On sloped sites, basements may be allowed partially below the highest groundwater table only on the upslope side if they meet City drainage system standards for design, discharge, engineering oversight, and long-term maintenance. For these sites, the one-foot groundwater separation will be enforced at the furthest downslope point of the basement.

[2] Avoid hydric soils as much as possible.

[3] The City shall be notified of any drain tiles that are uncovered during construction, which the City may require to be restored or connected to other drainage systems.

[4] No discharge of groundwater from tile lines, sump pumps or other means shall be allowed onto another person's land or any public space without the written approval of the City and the property owner.

i. Where storm sewer is available, all cistern overflows, drain tile, downspouts, roof leaders, surface or area drains may be connected to it with the appropriate city permit.

ii Where storm sewer is not available, all cistern overflows, drain tile, downspouts, roof leaders, surface or area drains or other clean water may be piped separately to the street curb or other place of disposal with the appropriate city permit.

(f) Open channels. All open channel drainage systems shall at a minimum be designed to carry the peak flows from a one-hundred-year, twenty-four-hour design storm using planned land use for the entire contributing watershed area. Side slopes shall be no steeper than 4h:1v unless otherwise approved by the City for unique site conditions. Water surface elevations for the one-hundred-year, twenty-four-hour design storm shall be calculated for all existing and proposed open channels.

(g) Storm sewers. All storm sewers shall be designed to convey the ten-year, twenty-four-hour design storm while providing an overland flow path that does not impact any structures for the one-hundred-year, twenty-four-hour design storm, unless otherwise modified by the City.

(h) Changes to stormwater discharges. For sites where the City determines the post-development

stormwater discharge flow paths will be significantly different than predevelopment conditions, or where proposed stormwater discharges may otherwise have a significant negative impact on downstream property owner(s), the City may require the applicant to submit written authorization, record a drainage easement, or complete other legal arrangements with the affected property owner(s) prior to permit issuance.

(i) Structure protection and safety. Flows generated by the one-hundred-year, twenty-four-hour design storm under the planned land use conditions may exceed the design capacity of conveyance systems, but shall not come in contact with any buildings. For buildings designed for human occupation on a regular basis, the following additional requirements shall apply:

[1] The lowest elevation of the structure that is exposed to the ground surface shall be a minimum of two feet above the maximum water surface elevation produced by the one-hundred-year, twenty-four-hour design storm, including flows through any stormwater BMP that may temporarily or permanently store water at a depth of greater than one foot; and

[2] The structure shall be set back at least 50 feet from any stormwater BMP that may temporarily or permanently store water at a depth of greater than one foot, including any internally drained area with a significant contributing watershed and/or limited runoff storage capacity, as determined by the City. Setback distance shall be measured from the closest edge of water at the elevation produced by the one-hundred-year, twenty-four-hour design storm. The City may exempt existing structures and structures with no basement from this requirement if the City determines other site risks are minimal based on soil and site conditions.

(7) Swale treatment for transportation facilities.

(a) Applicability. Except as provided in Subsection **D(7)(b)**, transportation facilities that use swales for runoff conveyance and pollutant removal meet all of the water quality requirements of this section, if the swales are designed to the maximum extent practicable to do all of the following:

[1] Be vegetated. However, where appropriate, nonvegetative measures may be employed to prevent erosion or provide for runoff treatment, such as rock riprap stabilization or check dams.

[2] Swales shall comply with Wisconsin Department of Natural Resources Technical Standard 1005, "Vegetated Infiltration Swales." Transportation facility swale treatment does not have to comply with other sections of Technical Standard 1005.

(b) Exemptions. The City may, consistent with water quality standards, require that other provisions be met on a transportation facility with an average daily travel of vehicles greater than 2,500 and where the initial surface water of the state that the runoff directly enters is any of the following:

[1] An outstanding resource water.

[2] An exceptional resource water.

[3] Waters listed in § 303(d) of the federal Clean Water Act that are identified as impaired in whole or in part, due to nonpoint source impacts.

[4] Waters where targeted performance standards are developed under § NR 151.004, Wis. Adm. Code, to meet water quality standards.

(c) The transportation facility authority shall contact the City to determine if additional BMPs beyond a water quality swale are needed under this subsection.

E. General considerations for on-site and off-site stormwater management measures. The following

considerations shall be observed in managing runoff:

(1) Natural topography and land cover features such as natural swales, natural depressions, native soil infiltrating capacity, and natural groundwater recharge areas shall be preserved and used, to the extent possible, to meet the requirements of this section.

(2) Emergency overland flow for all stormwater facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.

(3) Unless deemed not possible by City staff, stormwater facilities ~~shall~~ may be located on outlots with direct access to adjacent public streets.

F. Location and regional treatment option.

(1) BMPs may be located on site or off site as part of a regional stormwater device, practice or system, but shall be in accordance with § NR 151.003, Wis. Adm. Code.

(2) The City may approve off-site management measures provided that all of the following conditions are met:

(a) The City determines that the post-construction runoff is covered by a stormwater management system plan that is approved by the City of Watertown and that contains management requirements consistent with the purpose and intent of this article.

(b) The off-site facility meets all of the following conditions:

[1] The facility is in place.

[2] The facility is designed and adequately sized to provide a level of stormwater control equal to or greater than that which would be afforded by on-site practices meeting the performance standards of this article.

[3] The facility has a legally obligated entity responsible for its long-term operation and maintenance.

(3) Where a regional treatment option exists such that the City exempts the applicant from all or part of the minimum on-site stormwater management requirements, the applicant shall be required to pay a fee in an amount determined in negotiation with the City. In determining the fee for post-construction runoff, the City shall consider an equitable distribution of the cost for land, engineering design, construction, and maintenance of the regional treatment option.

G. Alternate requirements. The City may establish stormwater management requirements more stringent than those set forth in this section if the City determines that an added level of protection is needed to protect sensitive resources, to control stormwater quantity or control flooding, comply with federally approved total maximum daily load requirements, or control pollutants associated with existing development or redevelopment.

§ 288-19 **Permitting requirements, procedures and fees.**

A. Permit required. No responsible party may undertake a land-disturbing construction activity without receiving a post-construction runoff permit from the City prior to commencing the proposed activity.

B. Permit application and fees. Unless specifically excluded by this article, any responsible party desiring a permit shall submit to the City a permit application made on a form provided by the City for that purpose.

(1) Unless otherwise excepted by this article, a permit application must be accompanied by a stormwater

management plan, a maintenance agreement and a nonrefundable permit administration fee.

(2) The stormwater management plan shall be prepared to meet the requirements of §§ **288-18** and **288-20**, the maintenance agreement shall be prepared to meet the requirements of § **288-21**, the financial guarantee shall meet the requirements of § **288-22**, and fees shall be those established by the City of Watertown as set forth in § **288-23**.

C. Review and approval of permit application. The City shall review any permit application that is submitted with a stormwater management plan, maintenance agreement, and the required fee. The following approval procedure shall be used:

(1) Within 20 business days of the receipt of a complete permit application, including all items as required by Subsection **B**, the City shall inform the applicant whether the application, plan and maintenance agreement are approved or disapproved based on the requirements of this article.

(2) If the stormwater permit application, plan and maintenance agreement are approved, or if an agreed upon payment of fees in lieu of stormwater management practices is made, the City shall issue the permit.

(3) If the stormwater permit application, plan or maintenance agreement is disapproved, the City shall detail in writing the reasons for disapproval.

(4) The City may request additional information from the applicant. If additional information is submitted, the City shall have 20 business days from the date the additional information is received to inform the applicant that the plan and maintenance agreement are either approved or disapproved.

D. Permit requirements. All permits issued under this article shall be subject to the following conditions, and holders of permits issued under this article shall be deemed to have accepted these conditions. The City may suspend or revoke a permit for violation of a permit condition, following written notification of the responsible party. An action by the City to suspend or revoke this permit may be appealed in accordance with § **288-25**.

(1) Compliance with this permit does not relieve the responsible party of the responsibility to comply with other applicable federal, state, and local laws and regulations.

(2) The responsible party shall design and install all structural and nonstructural stormwater management measures in accordance with the approved stormwater management plan and this permit.

(3) The responsible party shall notify the City at least three business days before commencing any work in conjunction with the stormwater management plan, three days prior to commencing work on the stormwater management practices, and within three business days upon completion of the stormwater management practices. If required as a special condition under Subsection **E**, the responsible party shall make additional notification according to a schedule set forth by the City so that practice installations can be inspected during construction.

(4) Practice installations required as part of this article shall be certified "as built" by a licensed professional engineer and furnished to the City in digital AutoCad format (.dwg or .dxf file format), in Adobe PDF format, and in ArcGIS shapefile format (.shp or FileGDB format or other format as approved by Public Works Director/City Engineer. Files shall be tied to a coordinate system approved by the Public Works Director/City Engineer. Completed stormwater management practices must pass a final inspection by the City or its designee to determine if they are in accordance with the approved stormwater management plan and ordinance. The City or its designee shall notify the responsible party in writing of any changes required in such practices to bring them into compliance with the conditions of this permit.

(5) The responsible party shall notify the City of any significant modifications it intends to make to an approved stormwater management plan. The City may require that the proposed modifications be submitted for approval prior to incorporation into the stormwater management plan and execution by the responsible party.

(6) The responsible party shall maintain all stormwater management practices in perpetuity in accordance with the stormwater management plan until the practices either become the responsibility of the City of Watertown, or are transferred to subsequent private owners as specified in the approved maintenance agreement.

(7) The responsible party authorizes the City to perform any work or operations necessary to bring stormwater management measures into conformance with the approved stormwater management plan, and consents to a special assessment or charge against the property as authorized under Subch. VII of Ch. 66, Wis. Stats., or to charging such costs against the financial guarantee posted under § **288-22**.

(8) If so directed by the City, the responsible party shall repair at the responsible party's own expense all damage to adjoining municipal facilities and drainageways caused by runoff, where such damage is caused by activities that are not in compliance with the approved stormwater management plan.

(9) The responsible party shall permit property access to the City or its designee for the purpose of inspecting the property for compliance with the approved stormwater management plan and this permit.

(10) Where site development or redevelopment involves changes in direction, increases in peak rate and/or total volume of runoff from a site, the City may require the responsible party to make appropriate legal arrangements with affected property owners concerning the prevention of endangerment to property or public safety.

(11) The responsible party shall provide a five-year guarantee on all facilities installed as part of the stormwater plan.

(12) The responsible party is subject to the enforcement actions and penalties detailed in § **288-24**, if the responsible party fails to comply with the terms of this permit.

E. Permit conditions. Permits issued under this subsection may include conditions established by the City in addition to the requirements needed to meet the performance standards in § **288-18** or a financial guarantee as provided for in § **288-22**.

F. Permit duration. Permits issued under this section shall be valid ~~from the date of issuance through the date the City notifies the responsible party that~~ for a period of three years from the date of issuance. The City may extend the period once for up to an additional three years or until all stormwater management practices have passed the final inspection required under Subsection **D(4)**.

§ 288-20 **Stormwater management plan.**

A. Plan requirements. The stormwater management plan required under § **288-18B** shall contain any such information the City may need to evaluate the environmental characteristics of the area affected by land development activity, the potential impacts of the proposed development upon the quality and quantity of stormwater discharges, the potential impacts upon water resources and drainage utilities, and the effectiveness and acceptability of proposed stormwater management measures in meeting the performance standards set forth in this section. Unless specified otherwise by this section, stormwater management plans shall contain, at a minimum, the following information:

(1) Name, address, and telephone number for the following or their designees: landowner; developer; project engineer for practice design and certification; person(s) responsible for installation of stormwater management practices; and person(s) responsible for maintenance of stormwater

management practices prior to the transfer, if any, of maintenance responsibility to another party.

(2) A proper legal description of the property proposed to be developed, referenced to the U.S. Public Land Survey system or to block and lot numbers within a recorded land subdivision plat.

(3) Predevelopment site conditions, including:

(a) One or more site maps at a scale of not greater than one inch equals 50 feet. The site maps shall show the following: site location and legal property description; predominant soil types and hydrologic soil groups; existing cover type and condition; topographic contours of the site at a scale not to exceed two feet; topography and drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site; watercourses that may affect or be affected by runoff from the site; flow path and direction for all stormwater conveyance sections; watershed boundaries used in hydrology determinations to show compliance with performance standards; lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site; limits of the one-hundred-year floodplain; location of wells and wellhead protection areas covering the project area and delineated pursuant to § NR 811.16, Wis. Adm. Code.

(b) Hydrology and pollutant loading computations as needed to show compliance with performance standards. Computations of the peak flow discharge rates and discharge volumes from each discharge point in the development. At a minimum, computations must be made for the following storms: one-, two-, ten-, and one-hundred-year. All major assumptions used in developing input parameters shall be clearly stated. The geographic areas used in making the calculations shall be clearly cross-referenced to the required map(s).

(4) Post-development site conditions, including:

(a) Explanation of the provisions to preserve and use natural topography and land cover features to minimize changes in peak flow runoff rates and volumes to surface waters and wetlands.

(b) Explanation of any restrictions on stormwater management measures in the development area imposed by wellhead protection plans and ordinances.

(c) One or more site maps at a scale of not greater than one inch equals 50 feet showing the following: post-construction pervious areas including vegetative cover type and condition; impervious surfaces including all buildings, structures, and pavement; post-construction topographic contours of the site at a scale not to exceed two feet; post-construction drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site; locations and dimensions of drainage easements; locations of maintenance easements specified in the maintenance agreement; flow path and direction for all stormwater conveyance sections; location and type of all stormwater management conveyance and treatment practices, including the on-site and off-site tributary drainage area; location and type of conveyance system that will carry runoff from the drainage and treatment practices to the nearest adequate outlet such as a curbed street, storm drain, or natural drainageway; watershed boundaries used in hydrology and pollutant loading calculations and any changes to lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site.

(d) Hydrology and pollutant loading computations as needed to show compliance with performance standards. The computations shall be made for each discharge point in the development, and the geographic areas used in making the calculations shall be clearly cross-referenced to the required map(s). Computations of the peak flow discharge rates and discharge volumes from each discharge point in the development including analysis of the safe capacity of downstream conveyance systems. At a minimum, computations must be made for the following storms: one-, two-, ten-, and one-hundred-year. All major assumptions used in developing input parameters shall be clearly stated.

(e) Results of investigations of soils and groundwater required for the placement and design of stormwater management measures. Detailed drawings including cross-sections and profiles of all permanent stormwater conveyance and treatment practices.

(5) A description and installation schedule for the stormwater management practices needed to meet the performance standards in § **288-18**.

(6) A maintenance plan developed for the life of each stormwater management practice including a map showing the BMP, access routes, easements and corresponding streets and water resources, the required maintenance activities and maintenance activity schedule. A vegetation plan should be included if applicable.

(7) Cost estimates for the construction, operation, and maintenance of each stormwater management practice.

(8) Results of impact assessments on wetland functional values, as applicable.

(9) Design computations and all applicable assumptions for stormwater conveyance (open channel, closed pipe) and stormwater treatment practices (sedimentation type, filtrations, infiltration type) as needed to show that practices are appropriately sized and capable of meeting the discharge performance standards of this section.

(10) Other information requested in writing by the City to determine compliance of the proposed stormwater management measures with the provisions of this article.

(11) All site investigations, plans, designs, computations, and drawings shall be certified by a licensed professional engineer to be prepared in accordance with accepted engineering practice and requirements of this article.

(12) Total amount of new/revised impervious area on property in square feet.

B. Simplified plans. The City may allow simplified stormwater management plans for sites with less than one acre of land-disturbing construction activity.

(1) Erosion Control Plans are required for construction sites with 3,000 square feet or more of land disturbance.

(2) Stormwater management plans including modeling or other calculations accepted for review by the Director of Public Works/City Engineer detailed construction plans and stormwater maintenance agreements and are required for construction sites with 21,780 square feet or more of land disturbance.

C. Alternate requirements. The City may prescribe alternative submittal requirements for applicants seeking an exemption to on-site stormwater management performance standards under § **288-18D**.

§ 288-21 **Maintenance agreement.**

A. Maintenance agreement required. The maintenance agreement required under § **288-19B** for stormwater management practices shall be an agreement between the City and the responsible party to provide for maintenance of stormwater practices beyond the duration period of this permit. The maintenance agreement shall be filed with the County Register of Deeds as a property deed restriction so that it is binding upon all subsequent owners of the land served by the stormwater management practices.

B. Agreement provisions. The maintenance agreement shall contain the following information and provisions and be consistent with the maintenance plan required by § **288-20A(6)**:

(1) Identification of the stormwater facilities and designation of the drainage area served by the facilities.

(2) A schedule for regular maintenance of each aspect of the stormwater management system consistent with the stormwater management plan required under § **288-19B**.

(3) Identification of the party(s) responsible for long-term maintenance of the stormwater management practices identified in the stormwater management plan required under § **288-19B**.

(4) Requirement that the responsible party(s) shall maintain stormwater management practices in accordance with the schedule included in Subsection **B(2)** and shall submit an ~~annual~~ inspection and maintenance summary report to the City per the inspection frequency described in the maintenance plan and at least once every three years.

(5) Authorization for the City to access the property to conduct inspections of stormwater management practices as necessary to ascertain that the practices are being maintained and operated in accordance with the agreement.

(6) A requirement of the City to maintain public records of the results of the site inspections, to inform the responsible party responsible for maintenance of the inspection results, and to specifically indicate any corrective actions required to bring the stormwater management practice into proper working condition.

(7) Agreement that the party designated under Subsection **B(3)**, as responsible for long-term maintenance of the stormwater management practices, shall be notified by the City of maintenance problems which require correction. The specified corrective actions shall be undertaken within a reasonable time frame as set by the City.

(8) Authorization of the City to perform the corrected actions identified in the inspection report if the responsible party designated under Subsection **B(3)** does not make the required corrections in the specified time period. The City shall enter the amount due on the tax rolls and collect the money as a special charge against the property pursuant to Subch. VII of Ch. 66, Wis. Stats.

§ 288-22 **Financial guarantee.**

A. Establishment of the guarantee. The City may require the submittal of a financial guarantee, the form and type of which shall be acceptable to the City. The financial guarantee shall be up to an amount determined by the City to be 120% of the estimated cost of construction and the estimated cost of maintenance of the stormwater management practices during the period which the designated party in the maintenance agreement has maintenance responsibility. The financial guarantee shall give the City the authorization to use the funds to complete the stormwater management practices if the responsible party defaults or does not properly implement the approved stormwater management plan, upon written notice to the responsible party by the City that the requirements of this article have not been met.

B. Conditions for release. Conditions for the release of the financial guarantee are as follows:

(1) The City shall release the portion of the financial guarantee established under this section, less any costs incurred by the City of Watertown to complete installation of practices, upon submission of as-built plans by a licensed professional engineer. The City may make provisions for a partial pro-rata release of the financial guarantee based on the completion of various development stages.

(2) The City shall release the portion of the financial guarantee established under this section to assure maintenance of stormwater practices, less any costs incurred by the City, at such time that the responsibility for practice maintenance is passed onto another entity via an approved maintenance agreement.

§ 288-23 **Fee schedule.**

The fees referred to in other sections of this article shall be established by the Common Council and may from time to time be modified by resolution. A schedule of the fees established by the Common Council shall

be available for review in City Hall. The fee shall cover all City and consultant costs to review the permit application.

§ 288-24 **Enforcement.**

A. Any land-disturbing construction activity or post-construction runoff initiated after the effective date of this article by any person, firm, association, or corporation subject to the article provisions shall be deemed a violation unless conducted in accordance with the requirements of this article.

B. The City shall notify the responsible party by certified mail of any noncomplying land-disturbing construction activity or post-construction runoff. The notice shall describe the nature of the violation, remedial actions needed, a schedule for remedial action, and additional enforcement action which may be taken.

C. Upon receipt of written notification from the City under Subsection **B**, the responsible party shall correct work that does not comply with the stormwater management plan or other provisions of this permit. The responsible party shall make corrections as necessary to meet the specifications and schedule set forth by the City in the notice.

D. If the violations to a permit issued pursuant to this article are likely to result in damage to properties, public facilities, or waters of the state, the City may enter the land and take emergency actions necessary to prevent such damage. The costs incurred by the City plus interest, consultant and legal costs shall be billed to the responsible party.

E. The City is authorized to post a stop-work order on all land-disturbing construction activity that is in violation of this article, or to request the City Attorney to obtain a cease and desist order in any court with jurisdiction.

F. The City may revoke a permit issued under this article for noncompliance with article provisions.

G. Any permit revocation, stop-work order, or cease and desist order shall remain in effect unless retracted by the City or by a court with jurisdiction.

H. The City is authorized to refer any violation of this article, or of a stop-work order or cease and desist order issued pursuant to this article, to the City Attorney for the commencement of further legal proceedings in any court with jurisdiction.

I. Any person, firm, association, or corporation who does not comply with the provisions of this article shall be subject to a forfeiture of not less than $100 nor more than $1,000 per offense, together with the costs of prosecution. Each day that the violation exists shall constitute a separate offense.

J. Compliance with the provisions of this article may also be enforced by injunction in any court with jurisdiction. It shall not be necessary to prosecute for forfeiture or a cease and desist order before resorting to injunctional proceedings.

K. When the City determines that the holder of a permit issued pursuant to this article has failed to follow practices set forth in the stormwater management plan, or has failed to comply with schedules set forth in said stormwater management plan, the City or a party designated by the City may enter upon the land and perform the work or other operations necessary to bring the condition of said lands into conformance with requirements of the approved plan. The City shall keep a detailed accounting of the costs and expenses of performing this work. These costs and expenses shall be deducted from any financial security posted pursuant to § **288-22** of this article. Where such a security has not been established, or where such a security is insufficient to cover these costs, the costs and expenses shall be entered on the tax roll as a special charge against the property and collected with any other taxes levied thereon for the year in which the work is completed.

§ 288-25 **Appeals.**

A. Public Works Commission. The Public Works Commission shall act as the review and appeal agency and:

(1) Shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made in administering this article except for cease and desist orders obtained under § **288-24E**;

(2) Upon appeal, may authorize variances from the provisions of this article which are not contrary to the public interest and where owing to special conditions a literal enforcement of the provisions of the article will result in unnecessary hardship; and

(3) Shall use the rules, procedures, duties and powers authorized by statute in hearing and deciding appeals and authorizing variances.

B. Who may appeal. Appeals to the Public Works Commission may be taken by any aggrieved person or by any office, department, board, or bureau of the City of Watertown affected by any decision of the City.

§ 288-26 **Severability.**

If any section, clause, provision or portion of this article is judged unconstitutional or invalid by a court of competent jurisdiction, the remainder of the article shall remain in force and not be affected by such judgment.