Chapter 105 - EROSION CONTROL AND STORMWATER MANAGEMENT^[1]

Footnotes:

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Cross reference— Erosion control during subdivision development, § 113-16.

ARTICLE I. - IN GENERAL

Secs. 105-1—105-18. - Reserved.

ARTICLE II. - CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL[2]

Footnotes:

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State Law reference— Construction site erosion control and stormwater management zoning, Wis. Stat. § 62.234.

Sec. 105-19. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this article, except where the context clearly indicates a different meaning:

Agricultural facilities and practices has the meaning in Wis. Stat. § 281.16 (1).

Agricultural land means the land used for the production of food and fiber, including, but not limited to, general farming, livestock and poultry enterprises, grazing, nurseries, horticulture, viticulture, truck farming, forestry, sod production and wild crop harvesting and includes lands for on-site structures necessary to carry out such activities.

Best management practice or BMP means structural or non-structural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff to waters of the state.

Business day means a day the office of the City of La Crosse is routinely and customarily open for business.

Cease and desist order means 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 Community Risk Management.

Community Risk Management means the La Crosse Fire Department's Division of Community Risk Management, or such successor department responsible for administering this Chapter.

Construction site means 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. A long-range planning document that describes separate construction projects, such as a 20-year transportation improvement plan, is not a common plan of development.

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

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

Excavation means any act by which organic matter, earth, sand, gravel, rock or any other similar material is cut into, dug, quarried, uncovered, removed, displaced, relocated or bulldozed and shall include the conditions resulting therefrom.

Fill means any act by which earth, sand, gravel, rock, construction rubble or any other material is deposited, placed, replaced, pushed, dumped, pulled, transported or moved by man to a new location and shall include the conditions resulting therefrom.

Final stabilization means 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 percent of the cover for the unpaved areas and areas not covered by permanent structures or that employ equivalent permanent stabilization measures.

Land disturbing construction activity means any man-made alteration of the land surface resulting in a change in the topography or existing vegetative or non-vegetative 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.

Landowner means any person holding fee title, an easement or other interest in property, which allows the person to undertake cropping, livestock management, land disturbing construction activity or maintenance of stormwater BMPs on the property.

Maximum extent practicable means 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 section 105-27 of this article.

Percent slope means the grade of the land determined by the vertical rise or fall in feet per horizontal length in feet measured perpendicular to the existing land contour and expressed as a percentage.

Performance standard means a narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.

Permit means a written authorization made by Community Risk Management to the applicant to conduct land disturbing construction activity or to discharge post-construction runoff to waters of the state.

Permittee mean any person to whom a permit is issued under this article.

Plan means an erosion and sedimentation control plan. Said plan shall consist of a written or graphic description or condensation of written and graphic description approved by Community Risk Management and the Director of Engineering & Public Works of methods for controlling sediment pollution from accelerated erosion on a development area and/or from erosion caused by accelerated runoff from a land disturbing construction activity.

Pollutant has the meaning given in Wis. Stat. § 283.01 (13).

Pollution has the meaning given in Wis. Stat. § 281.01 (10).

Removal means cutting vegetation to the ground or stumps, complete extraction or killing by spraying.

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

Restricted development areas means the areas with steep slopes existing at or greater than 30 percent.

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

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

Sedimentation means settling or deposition of sediment.

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

Soil loss means soil moved from a given site because of land disturbing construction activities or by the forces of erosion and redeposited at another site on land or in a body of water.

Stop work order means an order issued by Community Risk Management which requires that all construction activity on the site be stopped.

Stormwater drainage system means all facilities used for conducting stormwater to, through, or from a drainage area to the point of final outlet, including, but not limited to, any of the following: conduits and appurtenant features, canals, channels, ditches, streams, culverts, streets, pumping stations, grass waterways, detention basins, retention basins, sedimentation basins and sedimentation traps.

Structural measures means any works or improvement for land stabilization to prevent erosion, sediment or runoff which includes, but are not limited to, gully control structures, grass waterways, riprap, detention basins, sediment basins, flood retention dams, diversions, lining channels with rock, concrete or other materials. Contour strip cropping is not a structural measure.

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

Transportation facility means 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 Wis. Stat. § 85.095 (1)(b). "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 of Natural Resources pursuant to Wis. Stat. § 281.33.

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.

Watercourse means any lake, pond, stream or other waters which are navigable under the laws of the State.

(Code 1980, § 14.29(C); , § I(attch.), 1-14-2016)

Cross reference— Definitions and rules of construction, § 1-2.

Sec. 105-20. - Penalties, enforcement officers and citations.

- (a) Forfeiture. Any person, either the owner or the occupant of the premises who violates, disobeys, omits, neglects or refuses to comply with any of the provisions of this article shall be subject to a forfeiture of not less than \$100.00 nor more than \$1,000.00 plus the costs of prosecution for each violation. Each day that a violation exists or continues shall constitute a separate offense. The City may also seek an order to restore the property to the condition required by this article.
- (b) *Injunction*. 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.
- (c) Stop Work Orders and Permit Revocation.
 - (1) The Chief Inspector may post a stop work order if any of the following occurs:
 - a. Land disturbing construction activity regulated under this article is occurring without a permit.
 - b. An erosion and sediment control plan is not being implemented in good faith.
 - c. The conditions of the permit are not being met.

- (2) 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 Chief inspector may revoke the permit.
- (3) If the responsible party, where no permit has been issued or the permit has been revoked, does not cease the activity after being notified by the Chief Inspector, or if a responsible party violates a stop work order posted under subsection (c)(1), Community Risk Management may request the city attorney to obtain a cease and desist order in any court with jurisdiction.
- (4) The Board of Public Works may retract the stop work order issued under subsection (c)(1) or the permit revocation under subsection (c)(2).
- (d) Performance of work by the City. When the Chief Inspector determines that the holder of a permit issued pursuant to this article has failed to make any improvements or follow practices as approved in the erosion and sediment control plan, or has failed to comply with the time schedule as included in the erosion and sediment control plan, the Chief Inspector or a party designated by him may, after giving three working days' written notice to the permittee if noncompliance causes or could reasonably be expected to cause soil or sediment to be deposited on a public roadway, enter a stormwater drainage system, or be deposited on public or private property not owned by the permittee, enter upon the land and cause to be performed the work or other operations necessary to bring the condition of said lands into conformity with the requirements of the approved erosion and sediment control plan. The Chief Inspector shall keep a detailed accounting of the costs and expenses of performing this work and these costs and expenses of performing this work, plus interest at the rate authorized by Board of Public Works, shall be billed to the responsible party. In the event a responsible party fails to pay the amount due, the amount due shall be entered on the tax roll as a special assessment against the property and collected with any other taxes levied thereon for the year in which the work is completed, pursuant to Wis. Stat. § 66.0703.
- (e) Enforcement officers and citations: The following persons are hereby authorized to enforce the provisions of this article and may issue citations as provided for in Wis. Stat. § 800.02(2) for violations of this article:
 - (1) The Chief of Police.
 - (2) The Fire Chief.
 - (3) The Chief Inspector.
 - (4) Such other City officers or City employees who are assigned enforcement responsibilities for this chapter.

(Code 1980, § 14.29(I); Ord. No. 4911, § I(attach.), 1-14-2016)

Cross reference— General penalty for ordinance violations, § 1-7.

Sec. 105-21. - Authority.

This article is adopted under the authority granted by Wis. Stat. § 62.234.

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(Code 1980, § 14.29(A)(1))
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Sec. 105-22. - Findings.

The Common Council finds runoff from construction sites carries a significant amount of sediment and other pollutants to surrounding watersheds.

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(Code 1980, § 14.29(A)(2))
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Sec. 105-23. – Purpose

This article is intended to protect our natural resources, water quality, and public health, safety, and welfare to the extent practicable. Its goal is to minimize the amount of sediment and other pollutants carried by runoff or discharge from construction sites to lakes, streams, wetlands, and stormwater conveyances.

(Code 1980, § 14.29(A)(3))

Sec. 105-24. - Applicability and Jurisdiction.

- (a) Applicability.
 - (1) Unless otherwise exempted by subsection (a)(2), an erosion and sediment control permit containing an approved erosion control plan under this article is required and all construction site erosion and sediment control provisions of this article shall apply to any of the following activities in the City:
 - a. Land disturbing construction activity in excess of 4,000 square feet resulting in the loss or removal of protective ground cover or vegetation;
 - b. Land disturbing construction activity that involves the excavation or filling, or any combination thereof, in excess of 400 cubic yards of material;
 - c. Any public (federal, state or local) street, road or highway that is constructed, enlarged, relocated or substantially reconstructed;
 - d. Land disturbing construction activity that disturbs more than 300 lineal feet of road ditch, grass waterway or other land area where surface drainage flows in a defined open channel, including the placement, repair, or removal of any underground pipe, utility or other facility within the cross section of the channel;
 - e. Any subdivision or minor land division as defined by chapter 113 which requires plat approval or any certified survey map created;
 - f. Land disturbing construction activity on any other site as determined by the City where severe, actual or potential erosion problems may warrant action.
 - (2) The following are exempt from the construction site erosion control provisions of subsection (a)(1):

- a. One- and two-family dwelling units regulated under the Wisconsin Uniform Dwelling Code. The City shall regulate these sites during the period that residential building permits are in effect, consistent with then-existing Wisconsin Uniform Dwelling Code requirements. Notwithstanding the foregoing, land disturbing construction activities in excess of one (1) acre, whether or not associated with the construction of a dwelling, are not exempt from this chapter.
- b. Transportation facilities, except transportation facility construction projects that are part of a larger common plan of development such as local roads within a residential or industrial development. Transportation facility projects directed and supervised by Wisconsin Department of Transportation are not subject to this article.
- c. 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.
- d. Nonpoint discharges from agricultural facilities and practices.
- e. Nonpoint discharges from silviculture activities.
- f. Routine maintenance for project sites that have less than 5 acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.
- g. Other projects specifically exempted from local erosion and sediment control ordinances under state or federal statute. It is the responsibility of the responsible party to demonstrate such exemption with documentation acceptable to Community Risk Management.
- (3) Notwithstanding the applicability requirements in subsection (a), this article applies to construction sites of any size that, as determined by Community Risk Management, 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, or that increases water pollution by scouring or transporting of particulate.
- (b) *Jurisdiction*. This article applies to land disturbing construction activity on lands within the boundaries and jurisdiction of the City, as well as the extraterritorial division of land subject to Wis. Stat. § 236.10 and City of La Crosse Code Ch. 113.
- (c) Exclusions. This article is not applicable to activities conducted by a state agency, as defined under Wis. Stat. § 227.01 (1).

(Code 1980, § 14.29(A)(4))

Sec. 105-25. - Administration.

- (a) Delegation of authority. The Council herewith designates Community Risk Management and the Director of Engineering & Public Works to administer the provisions of this article under the direction of the Board of Public Works and may appoint assistants to aid in the performance of the Director's duties and may seek technical advice as needed from the La Crosse County Land Conservation Department as to the adequacy of any proposed plan and permit application submitted to the Director.
- (b) Administrative duties. In the administration and enforcement of this article, Community Risk Management shall perform the following duties:
 - (1) Keep an accurate record of all plan data received, plans approved, permits issued, inspections made and other official actions and make a periodic permit activity report to the Board of Public Works.
 - (2) Review all plans and permit applications received when accompanied with the necessary information and the appropriate fee and issue the permits required by section 105-28(a) in accordance with the procedure as set forth in this article, but only when the erosion and sedimentation will be controlled to meet the standards of section 105-30.
 - (3) Investigate all complaints made to the application of this article.
 - (4) Revoke any permit granted under this article if it is found that the holder of the permit has misrepresented any material fact in the permit application or plan; has failed to comply with the plan as originally approved or as modified in writing subsequently by Community Risk Management; or has violated any of the other conditions of the permit as issued to the applicant.
 - (5) Make periodic inspections of sites to verify implementation of approved erosion and sediment control plans and to enforce permit conditions.
 - (6) Issue stop work orders for violations of approved erosion and sediment control plans not corrected within 24 hours of notification.
- (c) Other duties. In the administration and enforcement of this article, the Director of Engineering & Public Works shall perform the following duties:
 - (1) Perform all aspects of this article where an erosion and sediment control plan is prepared for plats, subdivisions or certified survey maps, except that the permit applications shall be reviewed by Community Risk Management.
- (d) Inspection authority. The Chief Inspector is authorized to enter upon any public or private lands affected by this article to inspect the land prior to permit issuance for the purpose of determining whether to approve the erosion and sediment control plan, and after permit issuance to determine compliance with this article. If permission cannot be received from the land occupier or user, entry by the Chief Inspector shall be in accordance with Wis. Stat. § 66.0119.

(Code 1980, § 14.29(G); Ord. No. 4911, § I(attch.), 1-14-2016)

- (a) Authority. The City Board of Zoning Appeals shall:
 - (1) Shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made by Community Risk Management in administering this article except for cease and desist orders obtained under section 105.20(c)(3).
 - (2) May authorize, upon appeal, 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 ordinance 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 may be made by any person aggrieved or by any officer, department or board of the City affected by the order, or requirement, decision or determination made by the Chief Inspector. Such appeals shall be filed with the secretary with a complete copy to Community Risk Management within 30 days after the date of the written notice of the decision or order of the Chief Inspector.

(Code 1980, § 14.29(H); Ord. No. 4911, § I(attch.), 1-14-2016)

Sec. 105-27. - Applicability of Maximum Extent Practicable.

Maximum extent practicable applies when a person who is subject to a performance standard of this article demonstrates to Community Risk Management'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.

Sec. 105-28. - 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 Community Risk Management.
- (b) Permit application and fees. The responsible party that will 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 section 105-29, and shall pay an application fee in the amount provided in a fee schedule established by the Common Council, that may be from time to time modified by resolution. By submitting an application, the applicant is authorizing Community Risk Management to enter the site to obtain information required for the review of the erosion and sediment control plan.

- (c) Exceptions. Exceptions to this section are as follows:
 - (1) There shall be no permit fees charged for Municipal, County, School District of La Crosse, State or Federal construction projects
 - (2) In lieu of an individual permit for each land-disturbing activity, subject to this article, an annual permit may be issued to public or private utilities and governmental units for a fee as shall be as established by resolution of the Common Council. The utility or governmental unit shall agree to adopt and follow a procedure for each land disturbing construction activity which meets all applicable standards contained in this article. Further, the permit shall stipulate that in the event a utility or governmental unit activity fails to meet the standard, the permit shall terminate and the utility or governmental unit shall be subject to the penalties of this article.
 - (3) The La Crosse County landfill located at 3200 Berlin Drive is exempt from the provision of this section for normal day to day operations of the landfill if the proper permits from the Wisconsin Department of Natural Resources are obtained and adhered to.
- (d) Permit application review and approval. Community Risk Management 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 10 business days of the receipt of a complete permit application, as required by subsection (b), Community Risk Management shall inform the applicant whether the application and erosion and sediment control plan are approved, approved conditionally with modifications, or disapproved based on the requirements of this article.
 - (2) If the permit application and erosion and sediment control plan are approved, Community Risk Management shall issue the permit.
 - (3) If the permit application or erosion and sediment control plan is disapproved, Community Risk Management shall state in writing the reasons for disapproval. The applicant may resubmit a new application or erosion and sediment control plan.
 - (4) Community Risk Management may request additional information from the applicant. If additional information is submitted, Community Risk Management shall have 10 business days from the date the additional information is received to inform the applicant that the erosion and sediment control plan is either approved or disapproved.
 - (5) If Community Risk Management requires modification of the erosion and sediment control plan, and the applicant modifies the permit application and erosion and sediment control plan accordingly and reapplies for the permit, then no additional permit fee is required.
 - (6) Failure by Community Risk Management to inform the permit applicant of a decision within 10 business days of a required submittal shall be deemed to mean approval of the submittal and the applicant may proceed as if a permit had been issued.

- (e) Surety bond. As a condition of approval and issuance of the permit, Community Risk Management may require the applicant to deposit a surety bond or irrevocable letter of credit to guarantee a good faith execution of the approved erosion and sediment control plan and any permit conditions.
- (f) Permit requirements. All permits shall require the responsible party to:
 - (1) Conduct all land disturbances, construction and development pursuant to the approved erosion and sediment control plan.
 - (2) Notify Community Risk Management within 48 hours of commencing any land disturbing construction activity.
 - (3) Install all BMPs as identified in the approved erosion and sediment control plan prior to any land disturbing construction activities or approved phased schedules.
 - (4) Notify Community Risk Management of completion of any BMPs within 10 days after their installation, and completion of all BMPs within 2 working days.
 - (5) Obtain inspection and approval from Community Risk Management of all BMPs required by the erosion and sediment control plan prior to the start of any land disturbing construction activity.
 - (6) Obtain permission in writing from Community Risk Management prior to any modification pursuant to section 105-29(c) of the erosion and sediment control plan.
 - (7) Maintain all road drainage systems, stormwater drainage systems, BMPs, public rights-of-way, streets, and other facilities identified in the erosion and sediment control plan.
 - (8) Repair any siltation or erosion damage to adjoining surfaces and drainage ways, including but not limited to streets, waterways and properties, resulting from land disturbing construction activities and document repairs in a site inspection log.
 - (9) Inspect the BMPs within 24 hours after each rain of 0.5 inches or more which results in runoff during active construction periods, and at least once each week. Make needed repairs and install additional BMPs as necessary, and document these activities in an inspection log that also includes 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. Allow Community Risk Management to enter and inspect the site within 24 hours after the occurrence of each rain of 0.5 inches or more.
 - (10)Not conduct any work on the site during periods of high wind velocity unless provision has been made to eliminate dust and blowing dirt.
 - (11)Cover that portion of the site that underwent land disturbing construction activity within 1 week after completion of the land disturbing construction activity.
 - (12)Allow Community Risk Management to enter the site at least weekly 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 erosion and sediment control plan. Keep a copy of the erosion and sediment control plan at the construction site.

- (13) File a written notice of completion of all land disturbing construction activities within 10 days after completion.
- (14)Consent and authorize Community Risk Management, or its designee, to perform any work or operations necessary to bring the condition of the lands into conformity with the approved erosion and sediment control plan, and for the City to place the total of the costs and expenses of such work and operations upon the tax roll as a special assessment against the property, as provided in section 105-20(d).
- (15)Indemnify and hold harmless the City, its employees, agents or officers from any cost, suit, liability or award which might come or be brought or assessed because of any adverse effect upon any person or property attributed to a partially or entirely completed project of the responsible party.
- (g) Permit conditions. Permits issued under this section may include conditions established by Community Risk Management in addition to the requirements set forth in subsection (f), where needed to assure compliance with the performance standards in section 105-29.
- (h) Permit duration. Permits issued under this section shall be valid for a period of one year, or the length of the building permit or other construction authorizations, whichever is longer, from the date of issuance. Community Risk Management may grant one or more extensions not to exceed one year cumulatively if such an extension will not cause an increase in erosion, sedimentation or runoff. In no case shall any permit be issued for more than a two-year period. Community Risk Management may require additional BMPs as a condition of an extension if they are necessary to meet the requirements of this article. Community Risk Management is further authorized to approve modification of the erosion and sediment control plan if necessary to prevent any increase in sedimentation, erosion or runoff resulting from any extension.
- (i) 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.
- (j) Surety bond. As a condition for approval and issuance of any permit required by this article, Community Risk Management shall, on construction sites equal to or greater than 20 percent slope, require the permittee to provide adequate security, an irrevocable letter of credit or permit bond in an amount specified in section 2-3 to guarantee the faithful execution of the approved control plan and permit conditions.
- (k) Post Construction Stormwater Management compliance required. No Construction Site Erosion Control Permit shall be issued by Community Risk Management without proof of Post Construction Stormwater Management permit compliance.

(m) No permits to violators. Applicants having outstanding orders, notices, or unpaid fees relative to this article or other ordinances enforced by the City shall not be issued any additional permits, prior to such orders, notices, or fees being corrected and/or paid to Community Risk Management's satisfaction, except that the Chief Inspector may issue permits to applicants with outstanding orders, notices or unpaid fees when the permit is required to comply with an outstanding order or notice.

(Code 1980, § 14.29(F); Ord. No. 4911, § I(attch.), 1-14-2016; Ord. No. 4922, § I, 4-14-2016)

Cross reference— Persons indebted to City not to be issued permit, license or lease, § 2-292.

Sec. 105-29. - Erosion and Sediment Control Plan, Statement and Amendment.

- (a) Erosion and sediment control plan statement.
 - (1) For each construction site an erosion and sediment control plan statement shall be prepared by the applicant. This statement shall be submitted to Community Risk Management. The erosion and sediment control plan statement shall briefly describe the site, the development schedule, and the BMPs that will be used to meet the requirements of the ordinance. A site map shall also accompany the erosion and sediment control plan statement.
 - (2) If the proposed land-disturbing activity involves less than one-half acre of land, instead of the requirements of subsection (a)(1), the permit applicant may submit a simplified erosion and sediment control checklist plan on forms available from Community Risk Management. An approved erosion and sediment control checklist plan, specifying those control devices and practices necessary to control erosion and signed by the permit applicant and the Chief Inspector, shall constitute the approved control plan.
- (b) Erosion and sediment control plan requirements.
 - (1) An erosion and sediment control plan shall be prepared and submitted to Community Risk Management.
 - (2) The erosion and sediment control plan shall be designed to meet the performance standards in section 105-30 and other requirements of this article.
 - (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. 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 construction site and the nature of the land disturbing construction activity, including representation of the limits of land disturbance on a United States Geological Service 7.5 minute series topographic map.
- c. Description of the intended sequence of major land disturbing construction activities for major portions of the construction 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 construction site and the total area of the construction site that is expected to be disturbed by land disturbing construction activities.
- e. Calculations to show the compliance with the performance standard in section 105-30(g)(2)b.1.
- f. Existing data describing the surface soil as well as subsoils.
- g. Depth to groundwater, as indicated by Natural Resources Conservation Service soil information where available.
- h. Name of the immediate named receiving water from the United States Geological Service 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 100-year flood plains, 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 non-structural controls identified in the erosion and sediment control plan.
 - f. Location of areas where stabilization BMPs will be employed.

- g. Areas which will be vegetated following land disturbing construction activities.
- h. Area(s) and location(s) of wetland on the construction site, and locations where stormwater is discharged to a surface water or wetland within one-quarter mile downstream of the construction site.
- i. Areas(s) used for infiltration of post-construction stormwater runoff.
- j. An alphanumeric or equivalent grid overlying the entire construction site map.
- (5) Each erosion and sediment control plan shall include a description of appropriate control BMPs that will be installed and maintained at the construction site to prevent pollutants from reaching waters of the state. The erosion and sediment control plan shall clearly describe the appropriate erosion and sediment control BMPs for each major land disturbing construction activity and the timing during the period of land disturbing construction activity that the erosion and sediment control BMPs will be implemented. The description of erosion and sediment control BMPs shall include, when appropriate, the following minimum requirements:
 - a. Description of interim and permanent stabilization practices, including a BMP implementation schedule. The erosion and sediment control plan 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 Community Risk Management, structural measures shall be installed on upland soils.
 - c. Management of overland flow at all areas of the construction site, unless otherwise controlled by outfall controls.
 - d. Trapping of sediment in channelized flow.
 - e. Staging land disturbing construction activities to limit exposed soil areas subject to erosion.
 - f. Protection of downslope drainage inlets where they occur.
 - g. Minimization of tracking 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 material.
 - Stabilization of drainage ways.

- k. Installation of permanent stabilization practices as soon as possible after final grading.
- I. 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 non-erosive flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected.
- (7) The erosion and sediment plan requirements of this subsection will meet the erosion and sediment control plan requirements of Wis. Admin Code s. NR 216.46, when prepared in accordance with good engineering practices and the design criteria, standards and specifications published by the Wisconsin Department of Natural Resources under subchapter V of chapter NR 151, Wis. Adm. Code.
- (c) Erosion and sediment control plan amendments. The applicant shall amend the erosion and sediment control 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 erosion and sediment control plan.
 - (2) The actions required by the erosion and sediment control plan fail to reduce the impacts of pollutants carried by construction site runoff.
 - (3) The Chief Inspector notifies the applicant of changes needed in the erosion and sediment control plan.

(Code 1980, § 14.29(F); Ord. No. 4911, § I(attch.), 1-14-2016; Ord. No. 4922, § I, 4-14-2016)

Cross reference—Persons indebted to City not to be issued permit, license or lease, § 2-292.

Sec. 105-30. - Standards and criteria.

- (a) Effect of compliance. Compliance with the standards and criteria of this article shall not bar a nuisance action or other civil action brought by any injured public or private party for damage to property upon which the erosion directly occurred or to property or other rights which were damaged by erosion or sedimentation.
- (b) Standard for erosion and sediment control for land disturbing construction activities. Community Risk Management and Director of Engineering & Public Works shall not approve plans nor shall Community Risk Management issue permits required by this article for land disturbing construction activities unless said plans are in accordance with established specifications, including, but not limited to the Wisconsin Construction Site Erosion Control Field Guide.

- (c) Standard for tracking. For plan approval and issuance of a permit, there must be adequate provision to prevent the tracking or dropping of dirt or other materials from the site onto any public or private street.
- (d) Design criteria, engineering standards and general principles. All BMPs required to comply with this article shall meet the most recent design criteria, standards and specifications contained within the Wisconsin Construction Site Erosion Control Field Guide. The applicant for a permit may employ other control measures if they will accomplish the objectives of this article and are approved by Community Risk Management and Director of Engineering & Public Works. The following general principles shall be used by Community Risk Management and Director of Engineering & Public Works when evaluating erosion and sediment control plans and granting permits under this article:
 - (1) Erosion and sediment control plans shall incorporate BMPs to reduce soil loss during construction.
 - (2) All restoration of topsoil and/or revegetation must be completed by September 15 in order that the seeding is effective before winter. All disturbed area not seeded by September 15 of each year shall be sodded, or controlled by the use of erosion matting or other approved method. Dormant seeding may not be used on slopes greater than six percent or adjacent to streams, lakes or channels. Dormant seeding requires additional seeding in the spring. The Director of Engineering & Public Works and Community Risk Management shall have the authority to waive revegetation requirements in no set circumstances in which they determine that revegetation is not necessary to meet the purposes of this article. If it is determined that delays have occurred due to an act of God and topsoil spreading and revegetation is impossible, then the contractor/developer is required to take appropriate action to eliminate erosion while the site remains uncovered.
 - (3) Temporary vegetation, mulching or other cover shall be used to protect critical areas, and permanent vegetation shall be installed as soon as practical.
 - (4) Sod shall be laid in strips at those intervals necessary to prevent erosion and at right angles to the direction of drainage.
 - (5) Natural plant covering shall be retained and protected to the extent practicable and shall be deemed a dominant factor in developing the site.
 - (6) Sediment basins (where required) shall be constructed and maintained to trap and remove and prevent sediment and debris from being washed outside the area of land disturbance. Basins shall be designed and constructed for a ten-year, 24-hour storm (4.3 inches) in accordance with accepted design standards, as approved by the Director of Engineering & Public Works. Sediment basins intended to serve additional functions such as runoff volume control shall be subject to additional requirements and standards elsewhere in City codes, as applicable. Maintenance shall be the responsibility of the applicant until such time that the basin is transferred to and accepted by the City or

- homeowners association in writing. The sediment basins shall be readily accessible, via easement or dedicated access, for ease of maintenance if dedicated to the City.
- (7) Each site shall have roads, access drives and parking areas of sufficient width and length to minimize sediment tracking onto public or private roadways. Any sediment reaching a public or private road shall be removed by street cleaning, not flushing, before the end of each workday.
- (8) All storm drain inlets shall be protected with straw bales, filter fabric, or equivalent barriers upon completion of the inlet and until the site has been stabilized.
- (9) Site erosion and sediment control shall be attained by the following:
 - a. All site developments and land disturbance activities shall be planned and implemented to best fit the terrain, minimize exposed area, retain as much existing vegetation as possible.
 - b. With the exception of those areas identified in the control plan, all disturbed ground not established to final grade within 14 days of the initial land disturbance, or left inactive for 14 days shall be stabilized by temporary or permanent seeding, sodding or equivalent control measures. Seeding should be completed within 24 hours of final grading. In areas determined to be environmentally sensitive because of steep slope, authority is granted to require immediate revegetation and erosion and sediment control measures. If temporary seeding is used, a permanent cover shall also be used as part of final site stabilization.
 - c. Runoff from areas adjacent to the site shall be diverted around disturbed areas where possible.
 - d. All land disturbance activities on the site shall be conducted in a logical sequence in accordance with the control plan to minimize the area of bare soil exposed at one time.
 - e. Cuts and fills shall be planned and constructed to minimize the length and steepness of slopes.
 - f. Channels and other concentrated flow areas shall be properly designed and constructed to control runoff within and from the site in a manner that will not erode the conveyance and receiving channel.
 - g. Sediment shall be contained on-site through the use of filter fabric fences, straw bale fences, sediment basins, or other methods approved by acceptance of the erosion and sediment control plan by Community Risk Management.

- h. Earth storage piles should be located no closer than 25 feet from drainage channels or roadways and no closer than 100 feet from perennial waters or wetlands.
- i. Earth storage piles located closer than 25 feet to a roadway or drainage channel or located closer than 100 feet to perennial waters and wetlands shall require silt fences or other suitable means if left more than five days. Earth storage piles located on slopes of 12 percent or greater shall meet the requirements of subsection (d)(9)b or runoff shall be contained within a silt fence or other approved measure.
- (10) Areas with natural existing slope at or greater than 30 percent are restricted development areas. No land disturbance activities shall occur within ten feet of these areas except for access roads or installation of utilities to building sites of less than 30 percent slope, or where slopes 30 percent or greater are less than 4,000 noncontiguous square feet in area. If encroachment into a restricted development area occurs for any of the exceptions indicated, adequate erosion and sediment control measures shall be installed as soon as practical. These areas shall be stabilized and not remain exposed without adequate erosion and sediment control measures in place.
- (11) To preserve restricted development areas, a ten-foot offset line shall be established from where the slope becomes 30 percent. The lot owner or developer shall have the ten-foot offset slope line staked at the site to adequately indicate the restricted areas. No land shall be disturbed or permits issued until these slope stakes are verified for accuracy by the City. Slope stakes shall remain until all disturbed areas on the lot or plat have been permanently stabilized.
- (e) *Technical standards*. All BMPs required for compliance with this article shall meet 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.
 - (3) Technical standards and methods approved by Community Risk Management.
- (f) Performance standards for construction sites under one acre.
 - (1) The responsible party shall comply with this section.
 - (2) *Erosion and sediment control practices*. Erosion and sediment control practices at each site where land disturbing construction activity is to occur shall be used to prevent or

reduce all of the following:

- a. The deposition of soil from being tracked onto streets by vehicles.
- d. The discharge of sediment from disturbed areas into on-site stormwater inlets.
- e. The discharge of sediment from disturbed areas into adjacent waters of the state.
- f. The discharge of sediment from drainage ways that flow off the site.
- g. The discharge of sediment by dewatering activities.
- h. The discharge of sediment eroding from soil stockpiles existing for more than 7 days.
- i. 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 subdivision.
- (3) *Location.* The BMPs shall be located so that treatment occurs before runoff enters waters of the state.
- (4) *Implementation*. The BMPs used to comply with this section shall be implemented as follows:
 - *a.* Erosion and sediment control practices shall be constructed or installed before land disturbing construction activities begin.
 - b. Erosion and sediment control practices shall be maintained until final stabilization.
 - c. Final stabilization activity shall commence when land disturbing construction activities cease and final grade has been reached on any portion of the site.
 - d. Temporary stabilization activity shall commence when land disturbing construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.
 - e. BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.
- (g) Performance standards for construction sites of one acre or more.
 - (1) Responsible party. The responsible party shall comply with this section and implement

the erosion and sediment control plan developed in accordance with section 105-29.

- (2) Erosion and sediment control plan. A written site-specific erosion and sediment control plan shall be developed in accordance with section 105-29 and implemented for each construction site. This plan shall include the following:
 - a. *Erosion and sediment control practices*. Erosion and sediment control practices at each site where land disturbing construction activity is to occur shall be used to prevent or reduce all of the following:
 - 1. The deposition of soil from being tracked onto streets by vehicles.
 - 2. The discharge of sediment from disturbed areas into on-site stormwater inlets.
 - 3. The discharge of sediment from disturbed areas into adjacent waters of the state.
 - 4. The discharge of sediment from drainage ways that flow off the site.
 - 5. The discharge of sediment by dewatering activities.
 - 6. The discharge of sediment eroding from soil stockpiles existing for more than 7 days.
 - 7. The discharge of sediment from erosive flows at outlets and in downstream channels.
 - 8. 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 subdivision.
 - 9. The transport by runoff into waters of the state of untreated wash water from vehicle and wheel washing.
 - b. Sediment performance standards. In addition to the erosion and sediment control practices under subsection (g)(2)a., the following erosion and sediment control practices shall be employed:
 - 1.BMPs that, by design, discharge no more than 5 tons per acre per year, or to the maximum extent practicable, of the sediment load carried in runoff from initial grading to final stabilization.
 - 2. 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 paragraph. Credit may be given toward meeting the sediment performance standard of this paragraph for limiting the duration or area, or both, of land disturbing construction activity, or for other appropriate mechanisms.
- 3. Notwithstanding subsection (g)(2)b.1., 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.
- c. *Preventive measures.* The erosion and sediment control plan shall incorporate all of the following:
 - 1. Maintenance of existing vegetation, especially adjacent to surface waters whenever possible.
 - 2. Minimization of soil compaction and preservation of topsoil.
 - 3. Minimization of land disturbing construction activity on slopes of 20 percent or more.
 - 4. Development of spill prevention and response procedures.
- d. Location. The BMPs used to comply with this section shall be located so that treatment occurs before runoff enters waters of the state. Regional treatment facilities, including the City's Isle La Plume Wastewater Treatment Plant should not be used for construction site sediment removal.
- (3) Implementation. The BMPs used to comply with this section shall be implemented as follows:
 - a. 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 subsection (e)(2).
 - b. Erosion and sediment control practices shall be maintained until final stabilization.
 - c. Final stabilization activity shall commence when land disturbing construction activities cease and final grade has been reached on any portion of the site.
 - d. Temporary stabilization activity shall commence when land disturbing construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.
 - e. BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

(Code 1980, § 14.29(E); Ord. No. 4911, § I(attch.), 1-14-2016)

Sec. 105-31. - Regulations of lands not otherwise subject to this article.

Notwithstanding any other provisions of this article, it shall be a violation of this article for any condition to be established, maintained or allowed to be maintained, that results in excessive erosion or transport of sediment to adjacent land, public streets or water bodies. Penalties and remedies may be sought for such activities as provided in section 113-2. Erosion is excessive when, contrary to the standards set forth in section 105-30, an unsafe condition results in the streets; undue sedimentation occurs in lakes, streams and drainage facilities; erosion endangers downstream property owners or their property; or the public health and safety or general welfare of the citizens of the City is harmed or endangered.

(Code 1980, § 14.29(D))

Secs. 105-32—105.49. – Reserved.

ARTICLE III. - POST-CONSTRUCTION STORMWATER MANAGEMENT

Sec. 105-50. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this article, except where the context clearly indicates a different meaning:

Adequate sod, or self-sustaining vegetative cover means maintenance of sufficient vegetation types and densities such that the physical integrity of the streambank or lakeshore is preserved. Self-sustaining vegetative cover includes grasses, forbs, sedges and duff layers of fallen leaves and woody debris.

Agricultural facilities and practices has the meaning given in Wis. Stat. § 281.16 (1).

Atlas 14 means 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 means a typical calendar year of precipitation as determined by the Wisconsin Department of Natural Resources for users of models such as WinSLAMM, P8 or equivalent methodology. The average annual rainfall is chosen from a department publication for the location closest to the municipality.

Best management practice or "BMP" means structural or non-structural measures, practices, techniques or devices employed to avoid or minimize sediment or pollutants carried in runoff to waters of the state.

Business day means a day the office of the City of La Crosse is routinely and customarily open for business.

Cease and desist order means 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 La

Crosse.

Combined sewer system means a system for conveying both sanitary sewage and stormwater runoff.

Community Risk Management means the La Crosse Fire Department's Division of Community Risk Management, or such successor department responsible for administering this Chapter.

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

Development means residential, commercial, industrial or institutional land uses and associated roads.

Direct conduits to groundwater means wells, sinkholes, swallets, fractured bedrock at the surface, mine shafts, non-metallic mines, tile inlets discharging to groundwater, quarries, or depressional groundwater recharge areas over shallow fractured bedrock.

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

Exceptional resource waters means waters listed in Wis. Admin. Code § NR 102.11.

Filtering layer means soil that has at least a 3-foot deep layer with at least 20 percent fines; or at least a 5-foot deep layer with at least 10 percent fines; or an engineered soil with an equivalent level of protection as determined by the regulatory authority for the site.

Final stabilization means 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 percent of the cover for the unpaved areas and areas not covered by permanent structures or that employ equivalent permanent stabilization measures.

Financial guarantee means a performance bond, maintenance bond, surety bond, irrevocable letter of credit, or similar guarantees submitted to the City of La Crosse by the responsible party to assure that requirements of the ordinance are carried out in compliance with the stormwater management plan.

Impervious surface means 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, gravel or paved parking lots and streets are examples of areas that typically are impervious.

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

Infiltration means the entry of precipitation or runoff into or through the soil.

Infiltration system means 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 pervious surfaces such as lawns, redirecting of rooftop downspouts onto lawns or minimal infiltration from practices, such as swales or road side channels designed for conveyance and pollutant removal only.

Land disturbing construction activity means any man-made alteration of the land surface resulting in a change in the topography or existing vegetative or non-vegetative 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.

Landowner means any person holding fee title, an easement or other interest in property, which allows the person to undertake cropping, livestock management, land disturbing construction activity or maintenance of stormwater BMPs on the property.

Maintenance agreement means a legal document that provides for long-term maintenance of stormwater management practices.

Maximum extent practicable means 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 section 105-58 of this article.

New development means development resulting from the conversion of previously undeveloped land or agricultural land uses.

NRCS MSE3 or MSE4 distribution means a specific precipitation distribution developed by the United States Department of Agriculture, Natural Resources Conservation Service, using precipitation data from Atlas 14.

Off-site means located outside the property boundary described in the permit application.

On-site means located within the property boundary described in the permit application.

Ordinary high-water mark has the meaning given in Wis. Admin. Code § NR 115.03 (6).

Outstanding resource waters means waters listed in Wis. Admin. Code § NR 102.10.

Percent fines means the percentage of a given sample of soil, which passes through a # 200 sieve.

Performance standard means a narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.

Permit means a written authorization made by the City of La Crosse to the applicant to conduct land disturbing construction activity or to discharge post-construction runoff to waters of the state.

Permit administration fee means a sum of money paid to the City of La Crosse by the permit applicant for the purpose of recouping the expenses incurred by the authority in administering the

permit.

Pervious surface means 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 Wis. Stat. § 283.01 (13).

Pollution has the meaning given in Wis. Stat. § 281.01 (10).

Post-construction site means a construction site following the completion of land disturbing construction activity and final site stabilization.

Pre-development condition means 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 Wis. Admin. Code § NR 140.05 (17).

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, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. Protective area does not include any area of land adjacent to any stream enclosed within a pipe or culvert, so that runoff cannot enter the enclosure at this location.

Redevelopment means areas where development is replacing older development.

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

Runoff means 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 means 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 part of a publicly owned wastewater treatment works that provides secondary or more stringent treatment.
- d. Discharges directly or indirectly to waters of the state.

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

Stop work order means an order issued by the Fire Department - Fire Prevention & Building Safety Department or Director of Engineering & Public Works which requires that all construction activity on the site be stopped.

Stormwater management plan means a comprehensive plan designed to reduce the discharge of pollutants from stormwater, after the site has under gone final stabilization, following completion of the construction activity.

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

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

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

Total maximum daily load or "TMDL" means 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 means Technical Paper No. 40, Rainfall Frequency Atlas of the United States, published in 1961.

TR-55 means 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, which is incorporated by reference for this chapter.

Transportation facility means 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 Wis. Stat. § 85.095 (1)(b). "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 Wis. Stat. § 281.33.

TSS means total suspended solids.

Type II distribution means a rainfall type curve as established in the "United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published in 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.

Cross reference— Definitions and rules of construction, § 1-2.

Sec. 150-51. - Penalties, enforcement officers and citations.

- (a) Forfeiture. Any person, including a responsible party, who violates, disobeys, omits, neglects or refuses to comply with any of the provisions of this article shall be subject to a forfeiture of not less than \$100.00 nor more than \$1,000.00 plus the costs of prosecution for each violation. Each day that a violation exists or continues shall constitute a separate offense. The City may also seek an order to restore the property to the condition required by this article.
- (b) Injunction. 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.

(c) Enforcement.

- (1) Any land disturbing construction activity or post-construction runoff initiated after the effective date of the ordinance from which this article is derived by any person, firm, association, or corporation subject to the ordinance provisions shall be deemed a violation unless conducted in accordance with the requirements of this article.
- (2) The Director of Engineering & Public Works 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.
- (3) Upon receipt of written notification The Director of Engineering & Public Works under subsection (c)(2), the responsible party shall correct work that does not comply with the stormwater management plan or other provisions of the responsible party's permit. The responsible party shall make corrections as necessary to meet the specifications and schedule set forth by the Director of Engineering & Public Works. in the notice.
- (4) 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 Director of Engineering & Public Works, or its designee may enter the land and take emergency actions necessary to prevent such damage. The costs incurred by the Director of Engineering & Public Works plus interest and legal costs shall be billed to the responsible party.
- (5) The Director of Engineering & Public Works are authorized to post a stop work order on all land disturbing construction activity that is in violation of this article, or to request the Legal Department to obtain a cease and desist order in any court with jurisdiction.
- (6) The Director of Engineering & Public Works may revoke a permit issued under this article for noncompliance with ordinance provisions.
- (7) Any permit revocation, stop work order, or cease and desist order shall remain in effect unless retracted by the Director of Engineering & Public Works, or by a court with jurisdiction.
- (8) The Director of Engineering & Public Works is authorized to refer any violation of this article, or a stop work order or cease and desist order issued pursuant to this article, to the

Legal Department for the commencement of further legal proceedings in any court with jurisdiction.

- (d) Performance of Work by the City. When the Director of Engineering & Public Works 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 Director of Engineering & Public Works and or a party designated by the Director of Engineering & Public Works or Community Risk Management 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 stormwater management plan. The Director of Engineering & Public Works and 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 section 150-59(m). Where such a security has not been established, or where such a security is insufficient to cover these costs, the costs and expenses, plus interest at the rate authorized by Board of Public Works, 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.
- (e) Enforcement officers and citations: The following persons are hereby authorized to enforce the provisions of this article and may issue citations as provided for in Wis. Stat. § 800.02(2) for violations of this article:
 - (1) The Chief of Police.
 - (2) The Fire Chief.
 - (3) The Director of Engineering & Public Works.
 - (4) Such other City officers or City employees who are assigned enforcement responsibilities for this chapter.

Cross reference— General penalty for ordinance violations, § 1-7.

Sec. 105-52. - Authority.

This article is adopted under the authority granted by Wis. Stat. § 62.234.

Sec. 105-53. - Findings.

(a) Findings.

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:

- (1) Degrade physical stream habitat by increasing stream bank erosion, increasing streambed scour, diminishing groundwater recharge, diminishing stream base flows and increasing stream temperature.
- (2) 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.
- (3) Alter wetland communities by changing wetland hydrology and by increasing pollutant loads.
- (4) Reduce the quality of groundwater by increasing pollutant loading.
- (5) Threaten public health, safety, property and general welfare by overtaxing storm sewers, drainage ways, and other minor drainage facilities.
- (6) Threaten public health, safety, property and general welfare by increasing major flood peaks and volumes.
- (7) Undermine floodplain management efforts by increasing the incidence and levels of flooding.
- (8) Affect well-head areas and aquifers.

Sec. 150-54 – Purpose.

- (a) Purpose and intent.
 - (1) *Purpose*. The general purpose of this 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:
 - a. Further the maintenance of safe and healthful conditions.
 - b. 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.
 - c. 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.
 - d. Minimize the amount of pollutants discharged from the separate storm sewer to protect the waters of the state.
 - (2) 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 City 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 Wis. Stat. § 281.16, 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.

Sec. 105-55. – Applicability and jurisdiction.

- (a) Applicability and jurisdiction.
 - (1) Applicability. Where not otherwise limited by law, this article applies after final stabilization to a site of land disturbing construction activity meeting any of the criteria in this paragraph, unless the site is otherwise exempt under subsections (a)(2) or (c).
 - a. A post-construction site that had a quarter (¼) or more acres of land disturbing construction activity.
 - b. A post-construction site that had 400 or more cubic yards of excavation, fill, or a combination of the two.
 - c. A post-construction site that had 300 or more feet of new utility or other open trench disturbance.
 - d. A post-construction site that added more than ten percent impervious surface to the landscape (roofs, pavement, etc.) and has a total surface imperviousness at or exceeding 40 percent of the site.
 - e. A post-construction site that creates a new public or private road.
 - f. All new subdivision plats.
 - (2) A site that meets any of the criteria in this paragraph is exempt from the requirements of this article.
 - a. A post-construction site with less than 10 percent connected imperviousness based on complete development of the post-construction site, provided the cumulative area of all impervious surfaces is less than one acre.
 - b. Nonpoint discharges from agricultural facilities and practices.
 - Underground utility construction such as water, sewer and fiber optic lines;
 this exemption does not apply to the construction of any above ground
 structures associated with utility construction.
 - (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 Director of Engineering

& Public Works, is 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 post construction sites within the boundaries and jurisdiction of the City of La Crosse, as well as the extraterritorial division of land subject to an ordinance enacted pursuant to Wis. Stat. § 236.45(2) and (3).
- (c) Exclusions. This article is not applicable to activities conducted by a state agency, as defined under Wis. Stat. § 227.01 (1).

Sec. 105-56 - Administration.

- (a) Delegation of authority. The Council herewith designates Community Risk Management and the Director of Engineering & Public Works to administer and enforce the provisions of this article under the direction of the Board of Public Works andmay appoint assistants to aid in the performance of the Director's duties and may seek technical advice as needed from the La Crosse County Land Conservation Department as to the adequacy of any proposed plan and permit application submitted to the Director.
- (b) Administrative duties. In the administration and enforcement of this article, the Director of Public Works and Engineering shall perform the following duties:
 - (1) Keep an accurate record of all plan data received, plans approved, permits issued, inspections made and other official actions and make a periodic permit activity report to the Board of Public Works.
 - (2) Review all plans and permit applications received when accompanied with the necessary information and the appropriate fee and issue the permits required by section 105-59 in accordance with the procedure as set forth in this article, but only when the runoff will be controlled to meet the standards of section 105-61.
 - (3) Investigate all complaints made to the application of this article.
 - (4) Revoke any permit granted under this article if it is found that the holder of the permit has misrepresented any material fact in the permit application or plan; has failed to comply with the plan as originally approved or as modified in writing subsequently by the Director of Public Works and Engineering; or has violated any of the other conditions of the permit as issued to the applicant.
 - (5) Make periodic inspections of sites to verify implementation of approved stormwater management plans and to enforce post-construction runoff permit conditions.
 - (6) Issue stop work orders for violations of approved stormwater management plans not corrected within 24 hours of notification.
- (c) Other duties. In the administration and enforcement of this article, the Director of Engineering & Public Works shall perform the following duties:

- (1) The Director of Engineering & Public Works shall perform all aspects of this article where the stormwater management plan is prepared for all plats, subdivisions or certified survey maps, except the constrution site erosion control permit applications shall be reviewed by Community Risk Management.
- (d) Inspection authority. The Director of Public Works and Engineering is authorized to enter upon any public or private lands affected by this article to inspect the land prior to permit issuance for the purpose of determining whether to approve the stormwater management plan, and after permit issuance to determine compliance with this article. If permission cannot be received from the land occupier or user, entry by the Chief Inspector shall be in accordance with Wis. Stat. § 66.0119.

Sec. 150-57. - Appeals.

- (a) Authority. The City Board of Zoning Appeals shall:
 - (1) Shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made by the Director of Public Works and Engineering in administering this article.
 - (2) May authorize, upon appeal, 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 ordinance 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 may be made by any person aggrieved or by any officer, department or board of the City affected by the order, or requirement, decision or determination made by the Director of Public Works and Engineering . Such appeals shall be filed with the secretary with a complete copy to the Director of Public Works and Engineering within 30 days after the date of the written notice of the decision or order of the Director of Public Works and Engineering .

Sec. 105-58. - Applicability of Maximum Extent Practicable.

Maximum extent practicable applies when a person who is subject to a performance standard of this article demonstrates to Community Risk Management'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.

Sec. 150-59. - 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 Director of Public Works and Engineering prior to commencing the proposed activity.
- (b) Permit application and fees. Unless specifically excluded by this section, any responsible party

desiring a permit shall submit to the Director of Public Works and Engineering a permit application made on a form provided by the Director of Engineering & Public Works for that purpose, and shall pay an application fee in the amount provided in a fee schedule established by the Common Council, that may be from time to time modified by resolution.

- (1) Unless otherwise excepted by this section, a permit application must be accompanied by a stormwater management plan, a maintenance agreement, a refundable financial guarantee, and a non-refundable permit administration fee.
- (2) The stormwater management plan shall be prepared to meet the requirements of subsection (k) and section 105-61, the maintenance agreement shall be prepared to meet the requirements of subsection (I), the financial guarantee shall meet the requirements of subsection (m), and fees shall be those set forth in a fee schedule established by the Common Council, that may be from time to time modified by resolution.
- (c) Review and approval of permit application. The Director of Engineering & Public Works 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 ten business days of the receipt of a complete permit application, the Director of Engineering & Public Works 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, by the Director of Engineering & Public Works shall issue the permit.
 - (3) If the stormwater permit application, plan or maintenance agreement is disapproved, the Director of Engineering & Public Works shall detail in writing the reasons for disapproval.
 - (4) The Director of Engineering & Public Works may request additional information from the applicant. If additional information is submitted, the Director of Public Works and Engineering have 10 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.
 - (5) Failure by the Director of Public Works and Engineering to inform the permit applicant of a decision within 10 business days of a required submittal shall be deemed to mean approval of the submittal and the applicant may proceed as if a permit had been issued.
- (f) 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 Director of Engineering & Public Works may suspend or revoke a permit for violation of a permit condition, following written notification of the responsible party. An action by the Director of Engineering & Public Works to suspend or revoke this permit may be appealed in accordance with section 115-57.

- (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 non-structural stormwater management measures in accordance with the approved stormwater management plan and this permit.
- (3) The responsible party shall notify the Director of Public Works and Engineering at least 10 business days before commencing any work in conjunction with the stormwater management plan, and ten business days upon completion of the stormwater management practices. If required as a special condition under subsection (h), the responsible party shall make additional notification according to a schedule set forth by the Director of Engineering & Public Works 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. Completed stormwater management practices must pass a final inspection by the Director of Engineering & Public Works or its designee to determine if they are in accordance with the approved stormwater management plan and ordinance. The Director of Engineering & Public Works 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 Director of Engineering & Public Works of any significant modifications it intends to make to an approved stormwater management plan. The Director of Engineering & Public Works may require that the proposed modifications be submitted to it 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 accordance with the stormwater management plan or until the practices are transferred to subsequent private owners whom agree to maintain them as specified in the approved maintenance agreement.
- (7) The responsible party authorizes the Director of Engineering & Public Works 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 Wis. Stat. ch. 66, subch. VII (Wis. Stat. § 66.0701 et seq.) or to charging such costs against the financial guarantee posted under subsection (m).
- (8) If so directed by the Director of Engineering & Public Works, the responsible party shall repair at the responsible party's own expense all damage to adjoining municipal facilities and drainage ways 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 Director of Engineering & Public Works 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 Director of Public Works and Engineering 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 is subject to the enforcement actions and penalties detailed in this article, if the responsible party fails to comply with the terms of this permit.
- (h) Permit conditions. Permits issued under this section may include conditions established by the Director of Public Works Engineering in addition to the requirements needed to meet the performance standards in section 150-61 or a financial guarantee as provided for in subsection (m).
- (i) Permit duration. Permits issued under this section shall be valid from the date of issuance through the date the Director of Public Works and Engineering notifies Community Risk Management and the responsible party that all stormwater management practices have passed the final inspection.
- (i) Certificate of Occupancy. Community Risk Management shall not issue a Certificate of Occupancy prior to notification by the Director of Public Works & Engineering that all stormwater management practices have passed the final inspection, unless a financial guarantee acceptable to the City has been submitted.
- (j) No permits to violators. Applicants having outstanding orders, notices, or unpaid fees relative to this article or other ordinances enforced by the City shall not be issued any additional permits, prior to such orders, notices, or fees being corrected and/or paid to the Director of Public Works & Engineering's satisfaction, except that the Chief Inspector may issue permits to applicants with outstanding orders, notices or unpaid fees when the permit is required to comply with an outstanding order or notice from the City.
- (k) Stormwater management plan.
 - (1) Plan requirements. The stormwater management plan required shall contain at a minimum the following information:
 - a. 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.
 - 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.
 - c. Pre-development site conditions, including:
 - 1. One or more site maps at a scale of not less than one inch equals 20 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 of one foot intervals; 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 devices; 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 floodway and 100 year floodplain; location of wells and wellhead protection areas covering the project area and delineated pursuant to Wis. Admin. Code NR 811.16.

- 2. Hydrology and pollutant loading computations as needed to show compliance with performance standards. 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).
- d. Post-development site conditions, including:
 - 1. 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.
 - 2. Explanation of any restrictions on stormwater management measures in the development area imposed by wellhead protection plans and ordinances.
 - 3. One or more site maps at a scale of not less than one inch equals 20 feet showing the following:
 - A. Post-construction pervious areas including vegetative cover type and condition.
 - B. Impervious surfaces including all buildings, structures, and pavement.
 - C. Post-construction topographic contours of the site at a scale not to at one foot intervals.
 - D. Post-construction drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site.
 - E. Locations, dimensions, and ownership of drainage easements.
 - F. Locations of maintenance easements specified in the maintenance agreement.

- G. Flow path and direction for all stormwater conveyance devices.
- H. 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 drainage way.
- J. 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.
- 4. 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).
- 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.
- e. A description and installation schedule for the stormwater management practices needed to meet the performance standards in section 150-61.
- f. A maintenance plan developed for the life of each stormwater management practice including the required inspections, inspection schedule, quantitative description of what constitutes a failure, resultant required maintenance activities and a list on contact information for the party or parties responsible for the inspection and maintenance of the device.
- g. Cost estimates for the construction, operation, and maintenance of each stormwater management practice.
- h. Other information requested in writing by the Director of Engineering & Public Works to determine compliance of the proposed stormwater management measures with the provisions of this article.
- i. All site investigations, plans, designs, computations, and drawings shall be certified by a professional engineer to be prepared in accordance with accepted engineering practice and requirements of this section.
- (2) Alternate requirements. The Director of Public Works and Engineering may prescribe alternative submittal requirements for applicants seeking an exemption to on-site

stormwater management performance standards.

(I) Maintenance agreement.

- (1) Maintenance agreement required. The maintenance agreement for stormwater management practices shall be an agreement between the City of La Crosse and the responsible party to provide for maintenance of stormwater practices beyond the duration 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. The responsible party shall file the agreement and providing a certified copy to the City of La Crosse Clerk, with copies to the Director of Engineering and Public Works.
- (2) Agreement provisions. The maintenance agreement shall contain the following information and provisions and be consistent with the maintenance plan required:
 - a. Identification of the stormwater facilities and designation of the drainage area served by the facilities.
 - b. A schedule for regular inspection, maintenance triggers, and required maintenance of each aspect of the stormwater management system consistent with the stormwater management plan.
 - Identification of the responsible party(s) responsible for long term maintenance of the stormwater management practices identified in the stormwater management plan.
 - d. Requirement that the responsible party(s) shall maintain stormwater management practices in accordance with the schedule.
 - e. 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.
 - f. A requirement on the Director of Engineering and Public Works 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.
 - g. Agreement that the party designated as responsible for long term maintenance of the stormwater management practices, shall be notified by the Director of Engineering & Public Works of maintenance problems which require correction. The specified corrective actions shall be undertaken within a reasonable time frame as set by the Director of Engineering & Public Works.
 - h. Authorization for the Director of Engineering & Public Works to perform the corrected actions identified in the inspection report if the responsible party

does not make the required corrections in the specified time period. The Director of Engineering & Public Works shall enter the amount due on the tax rolls and collect the money as a special charge against the property as provided in section 150-51(d).

(m) Financial guarantee.

- (1) Establishment of the guarantee. The Director of Engineering & Public Works may require the submittal of a financial guarantee, the form and type of which shall be acceptable to the Board of Public Works. The financial guarantee shall be in an amount determined by the Director of Engineering and Public Works to be 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 Director of Engineering and Public Works 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 administering authority that the requirements of this article have not been met.
- (2) *Conditions for release*. Conditions for the release of the financial guarantee are as follows:
 - a. The Director of Engineering & Public Works shall release the portion of the financial guarantee established under this section, less any costs incurred by the Director of Engineering & Public Works to complete installation of practices, upon submission of "as built plans" by a Professional Engineer. The Director of Engineering & Public Works may make provisions for a partial pro-rata release of the financial guarantee based on the completion of various development stages.
 - b. The Director of Engineering & Public Works shall release the portion of the financial guarantee established under this section to assure maintenance of stormwater practices, less any costs incurred by the Director of Engineering & Public Works, at such time that the responsibility for practice maintenance is passed on to another entity via an approved maintenance agreement.

Cross reference— Persons indebted to City not to be issued permit, license or lease, § 2-292.

Sec. 150-61. - Standards and criteria.

- (a) 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 section:
 - (1) Technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under Wis. Admin. Code ch. NR 151, subch. V.
 - (2) 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 Director of Engineering and Public Works.

- (b) *Performance standards*.
 - (1) Responsible party. The responsible party shall implement a post-construction stormwater management plan that incorporates the requirements of this section.
 - (2) *Plan*. A written stormwater management plan in accordance with section 150-60(k) shall be developed and implemented for each post-construction site.
 - (3) Maintenance of effort. For redevelopment sites where the redevelopment will be replacing older development that was subject to post-construction performance standards of Wis. Admin. Code ch. NR 151 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.
 - (4) Requirements. The plan required under subsection (b)(2) shall include the following:
 - a. *Total suspended solids*. BMPs shall be designed, installed and maintained to control total suspended solids carried in runoff from the post-construction site as follows:
 - 1. BMPs shall be designed in accordance with Table 1. or to the maximum extent practicable as provided in subsection (b)(4)a.2. The design shall be based on an average annual rainfall, as compared to no runoff management controls.

Table 1. TSS Reduction Standards				
Development Type	TSS Reduction			
New Development	80 percent			
In-fill development	80 percent			
Redevelopment	40 percent of load from parking areas and roads			

- 2. Maximum Extent Practicable. If the design cannot meet a total suspended solids reduction performance standard of Table 1., the stormwater management plan shall include a written, site-specific explanation of why the total suspended solids reduction performance standard cannot be met and why the total suspended solids load will be reduced only to the maximum extent practicable.
- Off-Site Drainage. When designing BMPs, runoff draining to the BMP from
 offsite 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.

4. Pollutant loading models such as DETPOND, WinSLAMM, P8 or equivalent methodology may be used to evaluate the efficiency of the design in reducing total suspended solids. Use the most recent version of the model and the rainfall files and other parameter files identified for Wisconsin users unless directed otherwise by the regulatory authority.

b. *Peak discharge*.

1. By design, BMPs shall be employed to maintain or reduce the 2-year, 24-hour; and the 10-year, 24-hour post-construction peak runoff discharge rates to the 2-year, 24-hour; and the 10-year, 24-hour pre-development peak runoff discharge rates respectively, or to the maximum extent practicable. The runoff curve numbers in Table 2. shall be used to represent the actual pre-development conditions. Peak discharges shall be calculated using TR-55 runoff curve number methodology, Atlas 14 precipitation depths, and the appropriate NRCS Wisconsin MSE3 or MSE4 precipitation distribution. Where the pre-development condition is a combination of woodland, grassland, or cropland, the runoff curve number should be pro-rated by area.

Table 2. Maximum Pre-Development Runoff Curve Numbers					
Runoff Curve Number	Hydrologic Soil Group				
	A	В	С	D	
Woodland	30	55	70	77	
Grassland	39	61	71	78	
Cropland	55	69	78	83	

- 2. This subsection (b)(4)b. does not apply to any of the following.
 - A. A post-construction site where the discharge is directly to the Mississippi, Black, or La Crosse Rivers (not via a municipal stormwater facility). (Commentary: Hydraulic models such as HEC- RAS or another methodology may be used to determine the change in surface water elevations

c. Safe outlet.

- 1. By design, the site shall provide for the safe passage of run-off from events up to and including the 100 year, 24-hour event. Safe passage implies buildings in and around the site will not be negatively impacted by run-off from the site.
- 2. If peak flow for any event up to the ten year, 24 hour event causes increased discharge to a City-owned stormwater facility as compared to existing, it must be demonstrated that the City system can handle the additional flow without causing undue impact. The new stormwater shall do no harm to others.

d. Infiltration.

- Best Management Practices. BMPs shall be designed, installed, and maintained to infiltrate runoff in accordance with the following or to the maximum extent practicable:
 - A. Low imperviousness. For development up to 40 percent connected imperviousness, such as parks, cemeteries, and low density residential development, infiltrate sufficient runoff volume so that the postdevelopment infiltration volume shall be at least 90 percent of the predevelopment infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than one percent of the post-construction site is required as an effective infiltration area.
 - B. Moderate imperviousness. For development with more than 40 percent and up to 80 percent connected imperviousness, such as medium and high density residential, multi-family development, industrial and institutional development, and office parks, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 75 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the postconstruction site is required as an effective infiltration area.
 - C. High imperviousness. For development with more than 80 percent 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 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the post-construction site is required as an effective infiltration area.
- 2. *Pre-development*. The pre-development condition shall be the same as specified in Table 2 of the Peak Discharge section of this article.

3. Source Areas.

- A. *Prohibitions*. Runoff from the following areas may not be infiltrated and may not qualify as contributing to meeting the requirements of this section:
 - Areas associated with a tier 1 industrial facility identified in Wis. Admin. Code § NR 216.21 (2)(a), including storage, loading and parking. Rooftops may be infiltrated with the concurrence of the regulatory authority.
 - ii. Storage and loading areas of a tier 2 industrial facility identified in Wis. Admin. Code § NR 216.21 (2)(b). Runoff from the employee and guest parking and rooftop areas of a tier 2 facility may be infiltrated with the concurrence of the regulatory authority; runoff from the parking area may require pretreatment. Fueling and vehicle maintenance areas. Runoff from rooftops of fueling and vehicle maintenance areas may be infiltrated with the concurrence of the regulatory authority.
- B. Exemptions. Runoff from the following areas may be credited toward meeting the requirement when infiltrated, but the decision to infiltrate runoff from these source areas is optional:
 - i. Parking areas and access roads less than 5,000 square feet for commercial development.
 - ii. Parking areas and access roads less than 5,000 square feet for industrial development not subject to the Prohibitions under par i.
 - Except as provided under subsection (b)(3), redevelopment postconstruction site.
 - iv. An in-fill development area less than 5 acres.
- C. Roads on commercial, industrial and institutional land uses and arterial residential roads.

4. Location of Practices.

- A. Prohibitions. Infiltration practices may not be located in the following areas:
 - i. Areas within 1,000 feet upgradient or within 100 feet downgradient of direct conduits to groundwater.
 - ii. Areas within 400 feet of a community water system well as specified in Wis. Admin. Code § NR 811.16 (4) or within the separation distances listed in Wis. Admin. Code § NR 812.08 for any

private well or non-community well for runoff infiltrated from commercial, including multi-family residential, industrial and institutional land uses or regional devices for one- and two-family residential development.

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

B. Separation distances.

i. 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		

- ii. Notwithstanding subsection (b)(4)d.4.B.i, applicable requirements for injection wells classified under Wis. Admin. Code ch. NR 815 shall be followed.
- C. Infiltration rate exemptions. Infiltration practices located in the following areas may be credited toward meeting the requirements under the following conditions, but the decision to infiltrate under these conditions is optional:
 - i. Where the infiltration rate of the soil measured at the proposed bottom of the infiltration system is less than 0.6 inches per hour using a scientifically credible field test method.

- ii. Where the least permeable soil horizon to 5 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.
- 5. Alternate Use. Where alternate uses of runoff are employed, such as for toilet flushing, laundry, or irrigation or storage on green roofs where an equivalent portion of the runoff is captured permanently by rooftop vegetation, such alternate use shall be given equal credit toward the infiltration volume required by this section.

6. Groundwater Standards.

- A. Infiltration systems designed in accordance with this section shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with Wis. Admin. Code 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.
- B. Notwithstanding subsection (b)(4)d.6.A., the discharge from BMPs shall remain below the enforcement standard at the point of standards application.
- 7. Pretreatment. 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 (b)(4)d.6. Pretreatment options may include, but are not limited to, oil and grease separation, sedimentation, biofiltration, filtration, swales or filter strips.
- 8. Maximum Extent Practicable. Where the conditions of subsections (b)(4)d.3. and 4. limit or restrict the use of infiltration practices, the performance standard of this subsection (b)(4)d. shall be met to the maximum extent practicable.

e. Protective areas.

- 1. Applicability. This subsection e. applies to post-construction sites located within a protective area, except those areas exempted pursuant to subsection (g)(3)e.4.
- 2. Measurement of Protective Areas. This paragraph designates the widths of protective areas. Where more than one designation may apply, the greatest width controls and the greatest protective area width shall apply where rivers, streams, lakes and wetlands are contiguous.

- A. For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in Wis. Admin. Code ch. NR 103.04, 75 feet.
- B. 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.
- C. For lakes, 50 feet.
- D. For wetlands, 50 feet.
- E. 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.
- For less susceptible wetlands, 10 percent of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include: degraded wetland 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.
- G. For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.
- 3. Wetland specific criteria. In determining protective areas of wetlands under subsection (b)(4)e.2., the following control:
 - A. In subsections (b)(4)e.2.D to F, 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 Wis. Admin. Code § NR 103.03.
 - B. Wetland boundary delineation shall be made in accordance with Wis. Admin. Code § NR 103.08 (1m). This paragraph does not apply to wetlands that have been completely filled in compliance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in compliance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after a fill has been placed. Where there is a legally authorized wetland fill, the protective area standard need not be met in that location.
- 4. Requirements. The following requirements shall be met:
 - A. Impervious surfaces shall be kept out of the protective area to the maximum extent practicable. The stormwater management plan shall contain a written site-specific explanation for any parts of the protective

area that are disturbed during construction.

- B. 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 percent 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. Non-vegetative 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 occurBest management practices such as filter strips, swales, or wet detention basins that are designed to control pollutants from non- point sources may be located in the protective area.
- 5. Exemptions. This subsection (b)(4)e. does not apply to:
 - A. Redevelopment post-construction sites.
 - B. In-fill development areas less than five acres.
 - C. Structures that cross or access surface waters such as boat landings, bridges and culverts.
 - D. Structures constructed in accordance with Wis. Stat. § 59.692(1v).
 - E. Post-construction site from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.
- f. 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.
- g. Swale treatment for transportation facilitates.
 - 1. Requirement. Except as provided in subsection (b)(4)g.2., transportation facilities that use swales for runoff conveyance and pollutant removal are exempt from the requirements of local ordinance requirements for peak flow control, total suspended solids control, and infiltration, if the swales are designed to do all of the following or to the maximum extent practicable:
 - A. Be vegetated. However, where appropriate, non-vegetative measures may be employed to prevent erosion or provide for runoff treatment, such as rock riprap stabilization or check dams.
 - B. Swales shall comply with sections V.F. (Velocity and Depth) and V.G. (Sale Geometry Criteria) with a swale treatment length as long as that specified

in section V.C. (Pre-Treatment) of the Wisconsin Department of Natural Resources technical standard 1005 "Vegetated Infiltration Swales", dated May 2007, or a superseding document. Transportation facility swale treatment does not have to comply with other sections of technical standard 1005.

- 2. Exemptions. the Director of Public Works and Engineering may, consistent with water quality standards, require other that other requirements, in addition to swale treatment, be met on a transportation facility with an average daily travel of vehicles greater than 2500 and where the initial surface water of the state that the runoff directly enters is any of the following:
 - A. An outstanding resource water.
 - B. An exceptional resource water.
 - C. Waters listed in section 303(d) of the Federal Clean Water Act that are identified as impaired in whole or in part, due to nonpoint source impacts.
 - D. Waters where targeted performance standards are developed under Wis. Admin. Code NR 151.004 to meet water quality standards.
- (c) General consideration 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.
- (d) Location and regional treatment option.
 - (1) The BMPs may be located on-site or off-site as part of a regional stormwater device, practice or system, provided legal authority and/or drainage easements are in place along the entire conveyance system to off-site devices.
 - (2) Post-construction runoff within non-navigable surface water that flows into a BMP, such as a wet detention pond, is not required to meet the performance standards of this chapter. Post-construction BMPs may be located in non-navigable surface waters.
 - (3) Except as allowed under subsection (d)(5)b, post-construction runoff from new development shall meet the post-construction performance standards prior to entering navigable surface water.
 - (4) Post-construction runoff from any development within a navigable surface water that

flows into a BMP is not required to meet the performance standards of this section if:

- a. The BMP was constructed prior to the effective date of the ordinance from which this article is derived and the BMP either received a permit issued under Wis. Stat. ch. 30 or the BMP did not require a Wis. Stat. ch. 30, permit; and
- b. The BMP is designed to provide runoff treatment from future upland development.
- (5) Runoff from existing development, redevelopment and in-fill areas shall meet the post-construction performance standards in accordance with the following:
 - a. To the maximum extent practicable, BMPs shall be located to treat runoff prior to discharge to navigable surface waters.
 - b. Post-construction BMPs for such runoff may be located in navigable surface water if allowable under all other applicable federal, state and local regulations such as Wis. Admin. Code ch. NR 103 and Wis. Stat. ch. 30.
- (6) The discharge of runoff from a BMP, such as a wet detention pond, or after a series of such BMPs is subject to this section.
- (7) the Director of Public Works and Engineering may approve off-site management measures provided that all of the following conditions are met:
 - a. The Director of Engineering & Public Works determines that the post-construction runoff is covered by a stormwater management system plan that is approved by the City of La Crosse and that contains management requirements consistent with the purpose and intent of this 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 this section.
 - 3. The facility has a legally obligated entity responsible for its long- term operation and maintenance.
 - 4. Where a regional treatment option exists such that the Director of Engineering & Public Works 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. In determining the fee for post-construction runoff, the Director of Public Works and Engineering shall consider an equitable distribution of the cost for land, engineering design, construction, and maintenance of the regional treatment option.

(e) Alternative requirements. The Director of Engineering & Public Works may establish stormwater management requirements more stringent than those set forth in this section if the Director of Engineering & Public Works determines that an added level of protection is needed to protect sensitive resources.