

SUBCHAPTER IV: STORMWATER MANAGEMENT (2037 11/28/2000, 2280 05/13/2008)

14.61 AUTHORITY.

- (1) This ordinance is adopted by the Common Council under the authority granted by §62.234, Wis. Stats. This ordinance supersedes all provisions of an ordinance previously enacted under §62.23, Wis. Stats., that relate to stormwater management regulations. Except as otherwise specified in §62.234, Wis. Stats., §62.23, Wis. Stats., applies to this ordinance and to any amendments to this ordinance.
- (2) The provisions of this ordinance are deemed not to limit any other lawful regulatory powers of the same governing body.
- (3) **The Baraboo Common Council hereby designates the City Engineer to administer and enforce the provisions of this Ordinance, under the direction of the Public Safety Committee. The City Engineer may appoint assistants to aid in the performance of duties and may seek technical advice from the State and County agencies as to the adequacy of any proposed plan and permit application submitted to him or her.**
- (4) The requirements of this ordinance do not pre-empt more stringent stormwater management requirements that may be imposed by any of the following:
 - (a) Wisconsin Department of Natural Resources administrative rules, permits or approvals including those authorized under §§281.16 and 283.33, Wis. Stats.
 - (b) Targeted non-agricultural performance standards promulgated in rules by the Wisconsin Department of Natural Resources under §NR 151.004, Wis. Adm. Code.

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

- (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.

14.63 PURPOSE AND INTENT.

- (1) **PURPOSE.** The general purpose of this ordinance 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) **Promote the public health, safety, prosperity, and general welfare of the citizens of the City of Baraboo by conserving the soil, water, and related resources and control erosion and sedimentation.**
- (2) INTENT. It is the intent of the Common Council that this ordinance regulates post-construction storm-water discharges to waters of the state. This ordinance may be applied on a site-by-site basis. The Common Council recognizes, however, that the preferred method of achieving the stormwater performance standards set forth in this ordinance is through the preparation and implementation of comprehensive, systems-level stormwater management plans that cover hydrologic units, such as watersheds, on a municipal and regional scale. Such plans may prescribe regional stormwater devices, practices or systems, any of which may be designed to treat runoff from more than one site prior to discharge to waters of the state. Where such plans are in conformance with the performance standards developed under §281.16, Wis. Stats., for regional storm-ater management measures and have been approved by the Common Council, it is the intent of this ordinance that the approved plan be used to identify post-construction management measures acceptable for the community.

14.64 **APPLICABILITY AND JURISDICTION.**

(1) **APPLICABILITY.**

- (a) Where not otherwise limited by law, this ordinance 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 paragraph (b).
 - 1. A post-development construction site with one or more acres of land disturbing construction activity.
 - 2. A post-development commercial or industrial construction site with a gross aggregate area of 0.5 acres or more.
 - (b) A site that meets any of the criteria in this paragraph is exempt from the requirements of this ordinance.
 - 1. A redevelopment post-construction site with no increase in exposed parking lots or roads.
 - 2. A post-construction site with less than 10% connected imperviousness based on complete development of the post-construction site, provided the cumulative area of all parking lots and rooftops is less than one acre.
 - 3. Nonpoint discharges from agricultural facilities and practices.
 - 4. Nonpoint discharges from silviculture activities.
 - 5. Routine maintenance for project sites under 5 acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.
 - 6. Underground utility construction such as water, sewer, and fiberoptic lines. This exemption does not apply to the construction of any above ground structures associated with utility construction.
 - (c) Notwithstanding the applicability requirements in paragraph (a), this ordinance applies to post-construction sites of any size that, in the opinion of the City Engineer, 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.
- (2) **JURISDICTION.** This ordinance applies to post construction sites within the boundaries and jurisdiction of the City of Baraboo and, **to the extent allowed by law, to lands subject to extraterritorial plat approval jurisdiction as provided by Ch. 18 of this Code if said lands are within a drainage basin or watershed that discharges stormwater into the City.**

- (3) **EXCLUSIONS.** This ordinance is not applicable to activities conducted by a state agency, as defined under §227.01 (1), Wis. Stats., but also including the office of district attorney, which is subject to the state plan promulgated or a memorandum of understanding entered into under §281.33 (2), Wis. Stats.

14.65 DEFINITIONS.

- (1) **ADMINISTERING AUTHORITY** means the City of Baraboo Engineer, empowered under §62.234, Wis. Stats., that is designated by the Common Council to administer this ordinance.
- (2) **AGRICULTURAL FACILITIES AND PRACTICES** has the meaning given in §281.16, Wis. Stats.
- (3) **AGRICULTURAL LANDS** are lands 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, cranberry production, and wild crop harvesting and includes lands used for on-site structures necessary to carry out such activities.
- (4) **AVERAGE ANNUAL RAINFALL** means a calendar year of precipitation, excluding snow, which is considered typical.
- (5) **"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.
- (6) **BUSINESS DAY** means a day the office of the City Engineer is routinely and customarily open for business.
- (7) **CEASE AND DESIST ORDER** means a court-issued order to halt land disturbing construction activity that is being conducted without the required permit.
- (8) **CITY ENGINEER** means the governmental employee designated by the governmental body to administer this Ordinance, and includes any other governmental employees who are supervised by the administrator.
- (9) **CLOSED WATERSHED** shall mean a drainage basin or watershed which does not discharge storm-water during a storm of twenty-four (24) hour duration and two- (2) year recurrence interval occurring over the basin with the land in its predevelopment condition.
- (10) **COMBINED SEWER SYSTEM** means a system for conveying both sanitary sewage and stormwater runoff.
- (11) **COMMERCIAL LAND USE** shall mean use of the land for the retail or wholesale of goods or services.
- (12) **CONNECTED IMPERVIOUSNESS** means an impervious surface that is directly connected to a separate storm sewer or water of the state via an impervious flow path.
- (13) **CONTROL PLAN** is a written description approved by the City Engineer's authority, of methods for controlling sediment pollution from accelerated erosion on a development area and/or from erosion caused by accelerated runoff from a development area and controlling runoff.
- (14) **CUBIC YARDS** means the amount of material in excavation and/or fill measured by the method of "average end areas."
- (15) **CURVE NUMBER** shall mean as used in the runoff calculation methodology promulgated by the United States Soil Conservation Service National Engineering Handbook (see App. B).

- (16) DESIGN STORM means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency, and total depth of rainfall.
- (17) DEVELOPMENT means residential, commercial, industrial or institutional land uses, and associated roads.
- (18) DIVISION OF LAND means the creation from one parcel of [number] or more parcels or building sites of [number] or fewer acres each in area where such creation occurs at one time or through the successive partition within a 5-year period.
- (19) 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.
- (20) EROSION means the process by which the land's surface is worn away by the action of wind, water, ice or gravity.
- (21) EXCEPTIONAL RESOURCE WATERS means waters listed in §NR 102.11, Wis. Adm. Code.
- (22) **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.**
- (23) EXTRATERRITORIAL means the unincorporated area within 3 miles of the corporate limits of a first, second, or third class city, or within 1.5 miles of a fourth class city or village.
- (24) **EXISTING GRADE means the vertical location of the existing ground surface prior to excavation of filling.**
- (25) **FILL means any act by which earth, sand, gravel, rock or any other material is deposited, placed, replaced, pushed, dumped, pulled, transported or moved by humans to a new location and shall include the conditions resulting therefrom.**
- (26) 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% of the cover, for the unpaved areas and areas not covered by permanent structures, or employment of equivalent permanent stabilization measures.
- (27) FINANCIAL GUARANTEE means a performance bond, maintenance bond, surety bond, irrevocable letter of credit, or similar guarantees submitted to the City Engineer by the responsible party to assure that requirements of the ordinance are carried out in compliance with the stormwater management plan.
- (28) GOVERNING BODY means the Baraboo City Council.
- (29) **GRADING is altering the elevation of the land surface by stripping, excavating, filling, stockpiling of soil materials or any combination thereof and shall include the land from which the material was taken or upon which it was placed.**
- (30) **HYDROLOGIC SOIL GROUP shall mean as used in the runoff calculation methodology promulgated by the United States Soil Conservation Service National Engineering Handbook (see Appendix C).**
- (31) 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, parking lots, and streets are examples of areas that typically are impervious.
- (32) **INDUSTRIAL LAND USE shall mean exterior storage areas, loading and unloading areas, equipment washing areas or other area or surface directly associated with an industrial process or a land use activity covered under the Wisconsin Pollutant Discharge Elimination System.**

- (33) IN-FILL AREA means an undeveloped area of land located within existing development.
- (34) INFILTRATION means the entry of precipitation or runoff into or through the soil.
- (35) 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.
- (36) KARST FEATURE means an area or surficial geologic feature subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, seeps, or swallets.
- (37) 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.
- (38) **LAND OCCUPIER OR OCCUPIER OF LAND** means any person, partnership, firm or corporation that has a fee simple interest in the land either as sole owner, as a tenant in common or a joint tenant or holds as a trustee, assignee, or holds as a land contract vendee.
- (39) **LAND USERS** are those who use land, individually or collectively as owners, operators, lessors, renters, occupiers who are providing a service that requires access or alterations of the land in order to perform the service, or by other arrangement which gives them the responsibility of private or public land use.
- (40) MAINTENANCE AGREEMENT means a legal document that provides for long-term maintenance of stormwater management practices.
- (41) "MEP" or MAXIMUM EXTENT PRACTICABLE means a level of implementing best management practices in order to achieve a performance standard specified in this ordinance which takes into account the best available technology, cost effectiveness and other competing issues such as human safety and welfare, endangered and threatened resources, historic properties and geographic features. MEP allows flexibility in the way to meet the performance standards and may vary based on the performance standard and site conditions.
- (42) NEW DEVELOPMENT means development resulting from the conversion of previously undeveloped land or agricultural land uses.
- (43) OFF-SITE means located outside the property boundary described in the permit application.
- (44) ON-SITE means located within the property boundary described in the permit application.
- (45) ORDINARY HIGH-WATER MARK has the meaning given in §NR 115.03(6), Wis. Adm. Code.
- (46) OUTSTANDING RESOURCE WATERS means waters listed in §NR 102.10, Wis. Adm. Code.
- (47) **PARCEL** is all contiguous lands under the ownership or control of a land occupier or land user.
- (48) **PEAK FLOW** is the maximum rate of flow of water at a given point in a channel, watercourse, or conduit resulting from the predetermined storm or flood.
- (49) PERCENT FINES means the percentage of a given sample of soil, which passes through a # 200 sieve.
- (50) PERFORMANCE STANDARD means a narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.

- (51) PERMIT means a written authorization made by the City Engineer to the applicant to conduct land disturbing construction activity or to discharge post-construction runoff to waters of the state.
- (52) **PERMITTEE means any person to whom a permit is issued under this Ordinance.**
- (53) PERMIT ADMINISTRATION FEE means a sum of money paid to the City Engineer by the permit applicant for the purpose of recouping the expenses incurred by the authority in administering the permit.
- (54) **PERSON is any individual, corporation, partnership, joint venture, agency, unincorporated association, municipal corporation, county, or state agency within Wisconsin, the federal government, or any combination thereof.**
- (55) 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.
- (56) POLLUTANT has the meaning given in §283.01(13), Wis. Stats.
- (57) POLLUTION has the meaning given in §281.01(10), Wis. Stats.
- (58) POST-CONSTRUCTION SITE means a construction site following the completion of land disturbing construction activity and final site stabilization.
- (59) 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. For the purposes of this ordinance, predevelopment conditions shall mean land which has runoff characteristics equivalent to runoff curve numbers of: 30, 58, 71, and 78.
- (60) PREVENTIVE ACTION LIMIT has the meaning given in §NR 140.05(17), Wis. Adm. Code.
- (61) **PUBLIC LANDS mean all lands that are subject to regulation by the City, including, but not limited to:**
- (a) **All lands owned or controlled by the City, and**
 - (b) **All land, within the boundaries or extraterritorial control of the City, which are owned by another unit of government if that unit of government is acting in a proprietary rather than governmental function.**
- (64) **RECURRENCE INTERVAL of a storm of given intensity and duration is the average period of time between storms of the same duration and equal or greater intensity.**
- (65) REDEVELOPMENT means areas where development is replacing older development.
- (66) **REMOVAL means cutting vegetation to the ground or stumps, complete extraction, or killing by spraying.**
- (67) RESPONSIBLE PARTY means any entity holding fee title to the property or other person contracted or obligated by other agreement to implement and maintain post-construction stormwater BMPs.
- (68) 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.
- (69) **SEDIMENT is solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity or ice, and has come to rest on the earth's surface at a different site.**
- (70) **SEDIMENTATION is the transportation and deposition of sediment that may ultimately degrade water quality by the presence of suspended solid particles, derived from soils by erosion or discharged into surface**

waters from other sources; or the deposition of water borne sediments in stream channels, lakes, reservoirs, or on floodplains, usually because of a decrease in the velocity of the water.

- (71) **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 draining to a stormwater treatment device or system.
 - (d) Discharges directly or indirectly to waters of the state.
- (72) **SITE** means the entire area included in the legal description of the land on which the land disturbing construction activity occurred.
- (73) **STOP WORK ORDER** means an order issued by the City Engineer which requires that all construction activity on the site be stopped.
- (74) **STORM(WATER) RUNOFF** is the water derived from rains falling within a tributary drainage basin, flowing over the surface of the ground or collected in channels, watercourses or conduits.
- (75) **STORM SEWER** is a closed conduit for conducting collected stormwater.
- (76) **STORMWATER DRAINAGE FACILITY** is any element in a stormwater drainage system that is made or improved by humans.
- (77) **STORMWATER DRAINAGE SYSTEM** is all facilities used for conducting stormwater to, through, and 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 and pumping stations.
- (78) **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.
- (79) **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.
- (80) **STRUCTURAL MEASURES** are works of 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.
- (81) **TECHNICAL STANDARD** means a document that specifies design, predicted performance, and operation and maintenance specifications for a material, device or method.
- (82) **TOP OF THE CHANNEL** means an edge, or point on the landscape, landward from the ordinary high-water mark of a surface water of the state, where the slope of the land begins to be less than 12% continually for at least 50 feet. If the slope of the land is 12% or less continually for the initial 50 feet, landward from the ordinary high-water mark, the top of the channel is the ordinary high-water mark.
- (83) **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.

(84) TYPE II DISTRIBUTION means a rainfall type curve as established in United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published 1973. The Type II curve is applicable to all of Wisconsin and represents the most intense storm pattern.

(85) WATERS OF THE STATE has the meaning given in §281.01 (18), Wis. Stats.

14.66 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 ordinance:

- (1) Technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under Subch. V of Ch. NR 151, Wis. Adm. Code.
- (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 City Engineer.
- (3) In this ordinance, the following year and location has been selected as average annual rainfall: Madison, 1981 (Mar.12-Dec. 2).

14.67 PERFORMANCE STANDARDS.

- (1) RESPONSIBLE PARTY. The responsible party shall implement a post-construction stormwater management plan.
- (2) PLAN. A written stormwater management plan in accordance with 14.69 shall be developed and implemented for each post-construction site.
- (3) REQUIREMENTS. The plan required under sub. (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. For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on the average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this subdivision.
 2. For redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on the average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this subdivision.
 3. For in-fill development under 5 acres that occurs within 10 years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this subdivision.
 4. For in-fill development that occurs 10 or more years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this subdivision.
 5. Notwithstanding Subs. 1. to 4., if the design cannot achieve the applicable total suspended solids reduction specified, the stormwater management plan shall include a written and site-specific

explanation why that level of reduction is not attained and the total suspended solids load shall be reduced to the maximum extent practicable.

(b) Peak Discharge.

1. By design, BMPs shall be employed to maintain or reduce the peak runoff discharge rates from the post-construction site, according the following standards:
 - a. **Limit peak flow rates of storm runoff after development to seventy five percent (75%) of that which would have resulted from the same storm occurring over the site with the land in its predevelopment condition, for storms of twenty-four (24) hour duration and recurrence intervals of two (2), five (5), ten (10), and twenty- five (25) years**
 - b. **Not increase the peak flow rates of storm runoff after development to that which would have resulted from the same storm occurring over the site with the land in its predevelopment condition, for storms of twenty-four (24) hour duration and a recurrence interval of 50-years.**
 - c. **On sites where on-site detention is used for runoff control, safely contain and safely pass the runoff of a 100- year storm of any duration.**
2. **Predevelopment Conditions shall mean land which has runoff characteristics equivalent to runoff Curve Numbers (CN) in Table 1:**

Table 1-Pre-Development Conditions
Runoff Curve Numbers

Hydrologic Soil Group	A	B	C	D
Runoff Curve Number	30	58	71	78

3. This subsection of the ordinance does not apply to any of the following:
 - a. A post-construction site where the change in hydrology due to development does not increase the existing surface water elevation at any point within the downstream receiving water by more than 0.01 of a foot for the 2-year, 24-hour storm event.
 - b. A redevelopment post-construction site.
 - c. An in-fill development area less than 5 acres.
- (c) Runoff Volume. **In the case of closed watersheds, the volume of storm runoff resulting from the ten-(10) year storm of twenty-four (24) hour duration shall not be greater after development than would have resulted from the same storm occurring over the site with the land in its pre-development condition.**
- (d) Infiltration. BMPs shall be designed, installed, and maintained to infiltrate runoff to the maximum extent practicable in accordance with the following, except as provided in Subs. 5. through 8.
 1. For residential developments one of the following shall be met:
 - a. Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90% 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 1% of the project site is required as an effective infiltration area.
 - b. Infiltrate 25% of the post-development runoff from the two-year -24 hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes and not composite curve numbers as defined in TR-55. However,

when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.

2. For non-residential development, including commercial, industrial, and institutional development, one of the following shall be met:
 - a. Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60% 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% of the project site is required as an effective infiltration area.
 - b. Infiltrate 10% of the runoff from the two-year - 24 hour design storm with a type II distribution. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes, and not composite curve numbers as defined in TR-55. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the project site is required as an effective infiltration area.
3. Pre-development condition shall be the same as in par. (b).
4. 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 Sub. 8. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.
5. Exclusions. The runoff from the following areas are prohibited from meeting the requirements of this paragraph:
 - a. Areas associated with tier 1 industrial facilities identified in §NR 216.21(2)(a), Wis. Adm. Code, including storage, loading, rooftop, and parking.
 - b. Storage and loading areas of tier 2 industrial facilities identified in §NR 216.21(2) (b), Wis. Adm. Code.
 - c. Fueling and vehicle maintenance areas.
 - d. Areas within 1000 feet upgradient or within 100 feet downgradient of karst features.
 - e. Areas with less than 3 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock, except this Sub. 5.e. does not prohibit infiltration of roof runoff.
 - f. Areas with runoff from industrial, commercial, and institutional parking lots and roads and residential arterial roads with less than 5 feet separation distance from the bottom of the infiltration system to the elevation of seasonal high groundwater or the top of bedrock.
 - g. Areas within 400 feet of a community water system well as specified in §NR 811.16 (4), Wis. Adm. Code, or within 100 feet of a private well as specified in §NR 812.08(4), Wis. Adm. Code, for runoff infiltrated from commercial, industrial, and institutional land uses or regional devices for residential development.
 - h. Areas where contaminants of concern, as defined in §NR 720.03(2), Wis. Adm. Code are present in the soil through which infiltration will occur.

- i. Any area where the soil does not exhibit one of the following soil characteristics between the bottom of the infiltration system and the seasonal high groundwater and top of bedrock: at least a 3-foot soil layer with 20% fines or greater; or at least a 5-foot soil layer with 10 percent fines or greater. This does not apply where the soil medium within the infiltration system provides an equivalent level of protection. This Sub. 5.i. does not prohibit infiltration of roof runoff.
6. Exemptions. The following are not required to meet the requirements of this paragraph:
 - a. Areas where the infiltration rate of the soil is less than 0.6 inches/hour measured at the site.
 - b. Parking areas and access roads less than 5,000 square feet for commercial and industrial development.
 - c. Redevelopment post-construction sites.
 - d. In-fill development areas less than 5 acres.
 - e. Infiltration areas during periods when the soil on the site is frozen.
 - f. Roads in commercial, industrial and institutional land uses, and arterial residential roads.
 7. Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation, such alternate use shall be given equal credit toward the infiltration volume required by this paragraph.
 - a. Infiltration systems designed in accordance with this paragraph shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to ground water and shall maintain compliance with the preventive action limit at a point of standards application in accordance with Ch. NR 140, Wis. Adm. Code. 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 Sub. par. a., the discharge from BMPs shall remain below the enforcement standard at the point of standards application.

(e) Protective Areas.

1. "Protective area" means an area of land that commences at the top of the channel of lakes, streams, and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this paragraph, "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.
 - a. For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in §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 highly susceptible wetlands, 50 feet. Highly susceptible wetlands include the following types: fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes, and seasonally flooded basins. Wetland boundary delineations shall be made in accordance with §NR 103.08(1m). This paragraph does not apply to wetlands that have been completely filled in accordance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in accordance with all

applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed.

- e. 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 wetlands dominated by invasive species such as reed canary grass.
 - f. In §1.a., d. and e., determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in §NR 103.03.
 - g. For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.
2. This paragraph applies to post-construction sites located within a protective area, except those areas exempted pursuant to Sub. 4.
3. 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% 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 occur.
 - c. Best 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.
4. This paragraph does not apply to:
- a. Redevelopment post-construction sites.
 - b. In-fill development areas less than 5 acres.
 - c. Structures that cross or access surface waters such as boat landings, bridges, and culverts.
 - d. Structures constructed in accordance with §59.692(1v), Wis. Stats.
 - e. Post-construction sites from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.
- (f) **DRAINAGE SYSTEM.** Where **conditions are such that the depth to the water table is three (3) feet or greater during at least nine (9) months of the year, the stormwater drainage system for the site shall include grassed swales for area drainage and underground perforated drainage pipe for storm runoff conveyance, except on industrial and commercial sites, or sites where the City Engineer finds the above to be impracticable.**
- (g) **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.
- (h) **SWALE TREATMENT FOR TRANSPORTATION FACILITIES.**

1. Applicability. Except as provided in Sub. 2., transportation facilities that use swales for runoff conveyance and pollutant removal meet all of the requirements of this section, if the swales are designed to the maximum extent practicable to do all of the following:
 - 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. Carry runoff through a swale for 200 feet or more in length that is designed with a flow velocity no greater than 1.5 feet per second for the peak flow generated using either a 2-year, 24-hour design storm or a 2-year storm with a duration equal to the time of concentration as appropriate. If a swale of 200 feet in length cannot be designed with a flow velocity of 1.5 feet per second or less, then the flow velocity shall be reduced to the maximum extent practicable.
2. Exemptions. The City Engineer may, consistent with water quality standards, require other provisions of this section be met on a transportation facility with an average daily travel of vehicles greater than 2,500 and where the initial surface water of the state that the runoff directly enters is any of the following:
 - a. Outstanding resource waters.
 - b. Exceptional resource waters.
 - c. Waters listed in §303(d) of the federal clean water act that are identified as impaired in whole or in part, due to nonpoint source impacts.
 - d. Waters where targeted performance standards are developed under §NR 151.004, Wis. Adm. Code, to meet water quality standards.

(4) GENERAL CONSIDERATIONS FOR ON-SITE AND OFF-SITE STORMWATER MANAGEMENT MEASURES. The following considerations shall be observed in managing runoff:

- (a) 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.
- (b) 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.

(5) LOCATION AND REGIONAL TREATMENT OPTION.

- (a) The BMPs may be located on-site or off-site as part of a regional stormwater device, practice or system.
- (b) Post-construction runoff within a 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 ordinance. Post-construction BMPs may be located in non-navigable surface waters.
- (c) Except as allowed under par. (d), post-construction runoff from new development shall meet the post-construction performance standards prior to entering a navigable surface water.
- (d) 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 ordinance if:
 1. The BMP was constructed prior to the effective date of this ordinance and the BMP either received a permit issued under Ch. 30, Stats., or the BMP did not require a Ch. 30, Wis. Stats., permit; and
 2. The BMP is designed to provide runoff treatment from future upland development.

- (e) Runoff from existing development, redevelopment and in-fill areas shall meet the post-construction performance standards in accordance with this paragraph.
 - 1. To the maximum extent practicable, BMPs shall be located to treat runoff prior to discharge to navigable surface waters.
 - 2. Post-construction BMPs for such runoff may be located in a navigable surface water if allowable under all other applicable federal, state, and local regulations such as Ch. NR 103, Wis. Adm. Code and Ch. 30, Wis. Stats.
 - (f) The discharge of runoff from a BMP, such as a wet detention pond, or after a series of such BMPs is subject to this chapter.
 - (g) The City Engineer may approve off-site management measures provided that all of the following conditions are met:
 - 1. The City Engineer determines that the post-construction runoff is covered by a storm-water management system plan that is approved by the City of Baraboo and that contains management requirements consistent with the purpose and intent of this ordinance.
 - 2. The off-site facility meets all of the following conditions:
 - a. The facility is in place.
 - b. 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 ordinance.
 - c. The facility has a legally obligated entity responsible for its long-term operation and maintenance.
 - (h) Where a regional treatment option exists such that the City Engineer exempts the applicant from all or part of the minimum on-site stormwater management requirements, the applicant shall be required to pay a fee in an amount determined in negotiation with the City Engineer. In determining the fee for post construction runoff, the City Engineer shall consider an equitable distribution of the cost for land, engineering design, construction, and maintenance of the regional treatment option.
- (6) ALTERNATE REQUIREMENTS. The City Engineer has established the following stormwater management requirements more stringent than those set forth in order to provide an added level of protection for sensitive resources.

14.68 PERMITTING REQUIREMENTS, PROCEDURES AND FEES.

- (1) **PERMIT REQUIRED.** Unless specifically excluded by this Ordinance, no land occupier or land user may undertake a land disturbing activity subject to this Ordinance without receiving a permit from the City Engineer prior to commencing the proposed activity. The Building Inspector shall not issue a building permit or construction site permit involving any land disturbing activity unless and until a determination has been made by the City Engineer whether a permit is required under this subchapter. Each land occupier or land user desiring to undertake a regulated activity subject to this ordinance shall submit to the City Engineer an application for a permit together with the appropriate fee required by the fee schedule as adopted by the City of Baraboo Common Council.
- (2) **PERMIT APPLICATION AND FEES.** Unless specifically excluded by this ordinance, any responsible party desiring a permit shall submit to the City Engineer a permit application made on a form provided by the City Engineer for that purpose.
 - (a) Exceptions to these requirements are as follows:

1. **The owner and occupier of public lands are exempt from payment of any permit fees;**
 2. **For its convenience, the City Engineer may enter into an agreement with public or private utilities and governmental units to waive the need for a permit for each individual land disturbing activity, if the utility or governmental unit will agree to adopt and follow a procedure for each land disturbing activity that meets all applicable standards contained in this Ordinance. Further, the agreement shall provide that in the event that a utility or governmental unit activity fails to meet the standard, the agreement shall terminate and the utility or governmental unit shall be subject to the penalties set forth herein.**
 - (b) Unless otherwise excepted by this ordinance, a permit application must be accompanied by a storm-water management plan, a maintenance agreement, and a non-refundable permit administration fee.
 - (c) The stormwater management plan shall be prepared to meet the requirements of 14.67 and 14.69, the maintenance agreement shall be prepared to meet the requirements of 14.70, the financial guarantee shall meet the requirements of 14.71, and fees shall be those established by the Common Council as set forth in 14.72.
- (3) **REVIEW AND APPROVAL OF PERMIT APPLICATION.** The City Engineer 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:
- (a) Within 30 calendar days of the receipt of a complete permit application, including all items as required by Sub. (2), the City Engineer shall inform the applicant in writing whether the application, plan, and maintenance agreement are approved or disapproved based on the requirements of this ordinance.
 - (b) If the stormwater permit application, plan, and maintenance agreement are approved, or if an agreed upon payment of fees in lieu of stormwater management practices is made, the City Engineer shall issue the permit.
 - (c) If the stormwater permit application, plan or maintenance agreement is disapproved, the City Engineer shall detail in writing the reasons for disapproval.
 - (d) The City Engineer may request additional information from the applicant. If additional information is submitted, the City Engineer shall have 30 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.
 - (e) Failure by the City Engineer to inform the permit applicant of a decision within 30 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.
- (4) **PERMIT REQUIREMENTS.** All permits issued under this ordinance shall be subject to the following conditions, and holders of permits issued under this ordinance shall be deemed to have accepted these conditions. The City Engineer may suspend or revoke a permit for violation of a permit condition, following written notification of the responsible party. An action by the City Engineer to suspend or revoke this permit may be appealed in accordance with 14.75.
- (a) 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.
 - (b) 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.
 - (c) The responsible party shall notify the City Engineer at least 2 business days before commencing any work in conjunction with the stormwater management plan, and within ten business days upon completion of the stormwater management practices. If required as a special condition under Sub. (5), the responsible party shall

make additional notification according to a schedule set forth by the City Engineer so that practice installations can be inspected during construction.

- (d) Practice installations required as part of this ordinance shall be certified "as built" by a licensed professional engineer. Completed stormwater management practices must pass a final inspection by the City Engineer or its designee to determine if they are in accordance with the approved stormwater management plan and ordinance. The City Engineer 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.
 - (e) The responsible party shall notify the City Engineer of any significant modifications it intends to make to an approved stormwater management plan. The City Engineer may require that the pro-proposed modifications be submitted to it for approval prior to incorporation into the storm-water management plan and execution by the responsible party.
 - (f) The responsible party shall maintain all stormwater management practices in accordance with the stormwater management plan until the practices either become the responsibility of the Common Council, or are transferred to subsequent private owners as specified in the approved maintenance agreement. The responsible party authorizes the City Engineer to perform any work or operations necessary to bring stormwater management measures into conformance with the approved stormwater management plan, and consents to a special assessment or charge against the property as authorized under Subch. VII of Ch. 66, Wis. Stats., or to charging such costs against the financial guarantee posted under 14.71.
 - (g) If so directed by the City Engineer, 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 storm-water management plan.
 - (h) The responsible party shall permit property access to the City Engineer or its designee for the purpose of inspecting the property for compliance with the approved stormwater management plan and this permit.
 - (i) Where site development or redevelopment involves changes in direction, increases in peak rate and/or total volume of runoff from a site, the City Engineer may require the responsible party to make appropriate legal arrangements with affected property owners concerning the prevention of endangerment to property or public safety.
 - (j) The responsible party is subject to the enforcement actions and penalties detailed in 14.74, if the responsible party fails to comply with the terms of this permit.
- (5) Permit Conditions. In addition to the requirements needed to meet the performance standards in 14.67 or a financial guarantee as provided for in 14.71, **all permits issued under this Ordinance shall be issued subject to the following conditions and requirements and any permittee who begins to perform any land disturbing activity authorized by permit shall be deemed to have accepted all of these conditions:**
- (a) **That all land disturbances, construction and development will be done pursuant to the control plan as approved by the City Engineer.**
 - (b) **That the permittee shall file a notice of completion of all land disturbing activities and/or the completion of installation of all on-site detention facilities within 10 days after completion.**
 - (c) **That approval in writing must be obtained from the City Engineer prior to any modifications to the approved control plan**
 - (d) **That the permittee will be responsible for maintaining all roads, road rights of way, streets, runoff, and drainage facilities and drainage ways as specified in the approved plan until they are accepted and become the responsibility of a governmental entity.**

- (e) That the permittee will be responsible for repairing any damage at his or her expense to all adjoining surfaces and drainage ways caused by runoff and/or sedimentation resulting from activities which are not in compliance with the approved plan.
 - (f) That the permittee must provide and install at his or her expense all drainage, and runoff control improvements as required by this Ordinance and the approved control plan, and also must bear his or her proportionate share of the total cost of off site improvements to drainage ways based upon the existing developed drainage area or planned development of the drainage area, as determined by the City Engineer, in accordance with Ch. 18 of this Code.
 - (g) That no work will be done on the site during any period of time that the average hourly wind velocity at the location of the land disturbing activity exceeds twenty (20) miles per hour, unless provision has been made to eliminate dust and blowing dirt.
 - (h) That no portion of the land which undergoes the land disturbing activity will be allowed to remain uncovered for greater than two (2) weeks after notice is given to the City Engineer that the land disturbing activity is completed.
 - (i) That the permittee agrees to permit the City Engineer to enter onto the land regulated under this Ordinance for the purpose of inspecting for compliance with the approved control plan and permit.
 - (j) That the permittee authorizes the City Engineer to perform any work or operations necessary to bring the condition of the lands into conformity with the approved control plan or plan as modified by the City Engineer and further consents to the City of Baraboo placing the total of the costs and expenses of such work and operations upon the tax roll as a special tax against the property.
- (6) Permit Duration. Permits issued under this section shall be valid for a period beginning with the date of issuance by the City Engineer and extending **six months from the date of issuance. All work must be completed prior to the expiration date of the permit. However, the City Engineer is authorized to extend the expiration date of the permit if he or she finds that such an extension will not cause an increase in runoff. The City Engineer is further authorized to modify the plans if necessary to prevent any increase in runoff resulting from any extension.**

14.69 STORMWATER MANAGEMENT PLAN.

- (1) **PLAN REQUIREMENTS.** The stormwater management plan required under 14.67(2) **shall contain any such information that the City Engineer may need to determine requirements for runoff control. The plan** 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.
 - (b) 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 one or more site maps at a scale of not less than one inch equals 100 feet. The site maps shall show the following:
 - 1. Site location and legal property description;
 - 2. Predominant soil types and hydrologic soil groups;
 - 3. Existing cover type and condition;

4. **Existing impervious surfaces and structures;**
5. Topographic contours of the site at a scale not to exceed five feet;
6. Topography and drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site;
7. Watercourses that may affect or be affected by runoff from the site;
8. Flow path and direction for all stormwater conveyance sections;
9. Watershed boundaries used in hydrology determinations to show compliance with performance standards;
10. Lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site;
11. Limits of the 100 year floodplain;
12. Location of wells and wellhead protection areas covering the project area and delineated pursuant to §NR 811.16, Wis. Adm. Code.

(d) Post-development site conditions, including:

1. **Name, address, and telephone number of the land occupier, along with the name and telephone number of the party responsible for maintaining erosion control structures.**
2. **Limits of natural floodplain(s), based on a 100-year flood, if any.**
3. **A timing schedule indicating the anticipated starting and completion dates of the development sequence and the time of exposure of each area of soil disturbing activity prior to the completion of effective measures for erosion and sediment control.**
4. 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.
5. Explanation of any restrictions on stormwater management measures in the development area imposed by wellhead protection plans and ordinances.
6. One or more site maps at a scale of not less than 1 inch equals 100 feet showing the following:
 - a. Post-construction pervious areas including vegetative cover type and conditions (**description shall be in such terms as: lawn, turfgrass, shrubbery, trees, forest cover, riprap, mulch, etc.**);
 - b. **Makeup of proposed surface soil (upper six inches) on areas not covered by buildings, structures, or pavement (description shall be in such terms as: original surface soil, subsoil, sandy, heavy clay, stony, etc.);**
 - c. Impervious surfaces including all buildings, structures, and pavement, shown in square feet or to scale on a plan map;
 - d. Post-construction **vertical topography at a contour interval suitable to the site and as approved by the City Engineer up to a maximum five (5) foot contour interval;**
 - e. Post-construction drainage network including enough of the contiguous properties to show runoff patterns onto, through, and from the site; locations and dimensions of drainage easements;
 - f. Locations of maintenance easements specified in the maintenance agreement;
 - g. Flow path and direction for all stormwater conveyance sections;

- h. Location and type of all stormwater management conveyance and treatment practices, including the on-site and off-site tributary drainage area;
- i. 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;
- k. Location of proposed land disturbing activity, proposed disturbance of protective cover, any proposed additional structure on the site, areas to be seeded or mulched, areas to be vegetatively stabilized and areas to be left undisturbed;
 - l. Elevations, dimensions, locations of all proposed soil disturbing activities including where topsoil will be stockpiled, so it will not contribute to erosion and sedimentation;
- m. The finished grade, stated in feet horizontal to the vertical, or cut and fill slopes;
- n. Kinds of utilities and proposed areas of installation;
- 7. 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). This section should include:
 - a. Estimated peak flow rates and surface runoff of the area based on two (2), five (5), ten (10), twenty-five (25), fifty (50), and one hundred (100) year recurrence interval storm events. Peak flows based upon the recurrence interval of synthetic storm frequency events shall be required in the event that storm runoff or stream flow data is not available in the area;
 - b. Areas used in the TR-55 computations, clearly marked and labeled in a consistent manner;
 - c. The storm event recurrence interval and discharge rate in cubic feet per second which the design of plans for the site location is based upon;
 - d. Proposed provisions to carry runoff to the nearest adequate outlet, such as a curbed street, storm drain or natural drainage way, including the routing of roof drainage;
 - e. Design computations and applicable assumptions for all structural measures for erosion and sediment pollution control and water management. Volume and velocity of flow must be given for all surface water conveyance measures and pipe outfalls. Surface runoff computations shall be submitted to the City Engineer in accordance with current administrative guidelines approved by the Public Safety Committee;
 - f. Estimate of cost of erosion and sediment control and water management structures and features;
 - g. Provisions for maintenance of control facilities including easements to insure short as well as long term stormwater management. The future maintenance plan shall describe the recommended periods for inspection and maintenance as well as list the responsible parties

to perform the work. Anticipated costs for regular maintenance shall be included in the plan;

h. Seeding mixtures and rates, lime, and fertilizer application rates, and kind and quantity of mulching for both temporary and permanent vegetative control measures.

8. **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 14.67.
 - (f) A maintenance plan developed for the life of each stormwater management practice including the required maintenance activities and maintenance activity schedule.
 - (g) Cost estimates for the construction, operation, and maintenance of each stormwater management practice.
 - (h) Other information requested in writing by the City Engineer to determine compliance of the proposed stormwater management measures with the provisions of this ordinance.
 - (i) All site investigations, plans, designs, computations, and drawings shall be certified by a licensed professional engineer to be prepared in accordance with accepted engineering practice and requirements of this ordinance.
- (2) **ALTERNATE REQUIREMENTS.** The City Engineer may prescribe alternative submittal requirements for applicants seeking an exemption to on-site stormwater management performance standards under §14.67(5).
- (3) **PLANS PREPARED BY CITY ENGINEER.** As an alternative to submitting the control plan for parcels of 0.5 acre or less, as specified in §14.64(1) the City Engineer may, if time permits, prepare a runoff control plan for the applicant's proposed land disturbing activity, adequate to meet the appropriate standards of §14.67. The City Engineer may require the applicant to submit any data or information that is necessary to prepare such a plan. Also, the applicant must submit the permit application and appropriate application fee as specified in §14.72. In addition to the permit application fee, the applicant must pay the plan preparation fee as specified in the schedule as adopted by the Common Council.

14.70 MAINTENANCE AGREEMENT.

- (1) **MAINTENANCE AGREEMENT REQUIRED.** The maintenance agreement required under §14.68(2) for stormwater management practices shall be an agreement between the City Engineer and the responsible party to provide for maintenance of stormwater practices beyond the duration period of this permit. The maintenance agreement shall be filed with the County Register of Deeds as a property deed restriction so that it is binding upon all subsequent owners of the land served by the stormwater management practices.
- (2) **AGREEMENT PROVISIONS.** The maintenance agreement shall contain the following information and provisions and be consistent with the maintenance plan required by §14.69(1)(f):
- (a) Identification of the stormwater facilities and designation of the drainage area served by the facilities.
 - (b) A schedule for regular maintenance of each aspect of the stormwater management system consistent with the stormwater management plan required under §14.67(2).

- (c) Identification of the responsible party(s), organization or city, county, town or village responsible for long term maintenance of the stormwater management practices identified in the stormwater management plan required under §14.67(2).
- (d) Requirement that the responsible party(s), organization, or city, county, town or village shall maintain stormwater management practices in accordance with the schedule included in par. (b).
- (e) Authorization for the City Engineer 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 City Engineer 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 under par. (c), as responsible for long term maintenance of the stormwater management practices, shall be notified by the City Engineer of maintenance problems which require correction. The specified corrective actions shall be undertaken within a reasonable time frame as set by the City Engineer.
- (h) Authorization of the City Engineer to perform the corrected actions identified in the inspection report if the responsible party designated under par. (c) does not make the required corrections in the specified time period. The City Engineer shall enter the amount due on the tax rolls and collect the money as a special charge against the property pursuant to Subch. VII of Ch. 66, Wis. Stats.

14.71 FINANCIAL GUARANTEE.

- (1) ESTABLISHMENT OF THE GUARANTEE. The City Engineer may require the submittal of a financial guarantee, the form and type of which shall be acceptable to the City Engineer. The financial guarantee shall be in an amount determined by the City Engineer 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 City Engineer 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 writ-ten notice to the responsible party by the administering authority that the requirements of this ordinance have not been met.
- (2) CONDITIONS FOR RELEASE. Conditions for the release of the financial guarantee are as follows:
 - (a) The City Engineer shall release the portion of the financial guarantee established under this section, less any costs incurred by the City Engineer to complete installation of practices, upon submission of "as built plans" by a licensed professional engineer. The City Engineer may make provisions for a partial pro-rata release of the financial guarantee based on the completion of various development stages.
 - (b) The City Engineer shall release the portion of the financial guarantee established under this section to assure maintenance of stormwater practices, less any costs incurred by the City Engineer, at such time that the responsibility for practice maintenance is passed on to another entity via an approved maintenance agreement.

14.72 FEES.

- (1) FEE SCHEDULE. The fees referred to in other sections of this ordinance shall be established by the City Engineer and may from time to time be modified by resolution. A schedule of the fees established by the City Engineer shall be available for review in the City Clerk's office.
- (2) CONSULTANT SERVICES. If the City retains the services of professional consultants, including, but not limited to planners, engineers, architects, attorneys, environmental specialists, and/or other experts to assist the City in its review of a proposed permit application and/or runoff control plan, and/or if the City Engineer prepares or assists in the preparation of a runoff control plan for the development, the applicant/

developer may be required to reimburse the City for the City Engineer's time and for the costs incurred by the City to retain the services of such professional consultants and such reimbursement shall be in addition to the permit fees and other fees paid by the applicant/developer. The applicant/ developer shall reimburse the City for said costs promptly upon being invoiced for the same and the City may withhold issuance of a permit or delay final approval of a permit until the said costs and fees are reimbursed to the City in full. If the costs and fees are not reimbursed to the City within 30 days of the date of billing, an additional administrative collection charge of 10% of the charge shall be added to the amount due, plus interest shall accrue thereon at the rate of 1% per month until paid and such charge shall be extended upon the current or next tax roll as a charge against the subject property for current services as provided in §66.60(16), Wis. Stats. The City may require the applicant/developer to enter into an agreement providing for the reimbursement to the City for said costs and the said agreement may require the applicant/developer to file with the City an Irrevocable Letter of Credit or other appropriate sureties meeting the approval of the City Attorney equal to the estimated cost of said services.

14.73 **ADMINISTRATION.** In the administration and enforcement of this Ordinance, the City Engineer 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 Public Safety Committee.
- (2) Prepare plans for runoff control when requested to do so by the permit application pursuant to §14.68, but only after the appropriate fee is received.
- (3) Review all plans and permit applications received when accompanied with the necessary information and the appropriate fee and issue the permits required by §14.68(1) of this Code in accordance with the procedure as set out in this Code, but only when the erosion, sedimentation and runoff will be controlled to meet the standards of §14.67.
- (4) Investigate all complaints made to the application of this Ordinance.
- (5) Revoke any permit granted under this Ordinance if it is found that the holder of the permit has misrepresented any material fact in his or her permit application or plan; or has failed to comply with the plan as originally approved or as modified in writing subsequently by the City Engineer; or has violated any of the other conditions of the permit as issued to the applicant.

14.74 **ENFORCEMENT.**

- (1) Any land disturbing construction activity or post-construction runoff initiated after the effective date of this ordinance 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 ordinance.
- (2) The City Engineer shall notify the responsible party by certified mail of any non-complying 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 that may be taken.
- (3) Upon receipt of written notification from the City Engineer under Sub. (2), the responsible party shall correct work that does not comply with the stormwater management plan or other provisions of this permit. The responsible party shall make corrections as necessary to meet the specifications and schedule set forth by the City Engineer in the notice.
- (4) If the violations to a permit issued pursuant to this ordinance are likely to result in damage to properties, public facilities, or waters of the state, the City Engineer may enter the land and take emergency actions necessary to prevent such damage. The costs incurred by the City Engineer plus interest and legal costs shall be billed to the responsible party.

- (5) The City Engineer is authorized to post a stop work order on all land disturbing construction activity that is in violation of this ordinance, or to request the City Attorney to obtain a cease and desist order in any court with jurisdiction.
- (6) The City Engineer may revoke a permit issued under this ordinance for non-compliance with ordinance provisions.
- (7) Any permit revocation, stop work order, or cease and desist order shall remain in effect unless retracted by the City Engineer or by a court with jurisdiction.
- (8) The City Engineer is authorized to refer any violation of this ordinance, or of a stop work order or cease and desist order issued pursuant to this ordinance, to the City Attorney for the commencement of further legal proceedings in any court with jurisdiction.
- (9) Any person, firm, association, or corporation who does not comply with the provisions of this Code shall be subject to a forfeiture of not less than \$50 or more than \$500 per offense, together with the costs of prosecution. Each day that the violation exists shall constitute a separate offense.
- (10) Compliance with the provisions of this ordinance 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 re-sorting to injunctive proceedings.
- (11) When the City Engineer determines that the holder of a permit issued pursuant to this ordinance has failed to follow practices set forth in the stormwater management plan, or has failed to comply with schedules set forth in said stormwater management plan, the City Engineer or a party designated by the City Engineer may enter upon the land and perform the work or other operations necessary to bring the condition of said lands into conformance with requirements of the approved plan. The City Engineer 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 §14.61 of this Code. Where such a security has not been established, or where such a security is insufficient to cover these costs, the costs and expenses shall be entered on the tax roll as a special charge against the property and collected with any other taxes levied thereon for the year in which the work is completed.

14.75 **APPEALS.**

- (1) **BOARD OF PUBLIC WORKS.** The Board of Public Works (Public Safety Committee) shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made by the City Engineer in administering this ordinance. The committee shall use the rules, procedures, duties, and powers authorized by §62.14, Wis. Stats., §1.24 of this Code, and such other powers and duties assigned by the Council. Upon appeal, the committee may authorize variances from the provisions of this ordinance that are not contrary to the public interest, and where owing to special conditions a literal enforcement of the ordinance will result in unnecessary hardship.
- (2) **WHO MAY APPEAL.** Appeals to the committee may be taken by any aggrieved person or by an officer, department, board, or bureau of the City of Baraboo affected by **the order, requirement, decision or determination made by the City Engineer. For the purpose of this Ordinance, aggrieved person shall include applicant and property owners who own land that is subject to the Ordinance.**

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

EFFECTIVE DATE. This ordinance shall be in force and effect from and after its adoption and publication. The above and foregoing ordinance was duly adopted by the Common Council of the City of Baraboo on the 13th day of May, 2008.