CHAPTER VII

CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL AND POST-CONSTRUCTION STORM WATER MANAGEMENT

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7.01

AUTHORITY

7.01 AUTHORITY.

- This ordinance is adopted under the authority granted by <u>Section 60.627</u>, WI. Stats. This ordinance supersedes all provisions of an ordinance previously enacted under <u>Section 60.627</u>, WI. Stats., that relate to construction site erosion control and Stormwater management regulations. Except as otherwise specified in <u>Section 60.627</u>, WI. Stats. <u>Section 60.627</u>, WI. 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 Town of Beloit Board of Supervisors hereby designates the Department of Community Development to administer the provisions of this ordinance.
- 4. The requirements of this ordinance do not pre-empt more stringent erosion and sediment control 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 <u>Sections 281.16</u> and <u>283.33</u>, Wis. Stats.
 - b. Targeted non-agricultural performance standards promulgated in rules by the Wisconsin Department of Natural Resources under <u>Section NR 151.004</u>, Wis. Adm. Code.
- **7.02 FINDINGS OF FACT.** The Town of Beloit Board of Supervisors acknowledges that runoff from land disturbing construction activities carries a significant amount of sediment and other pollutants to the waters of the state in the Town of Beloit. The Town further acknowledges 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.
 - 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 draining facilities.

7.03 PURPOSE AND INTENT.

1. It is the purpose of this ordinance to maintain safe and healthful conditions; prevent and control water pollution; prevent and control soil erosion and sediment discharge; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and

land uses; preserve ground cover and scenic beauty; and promote sound economic growth by minimizing the amount of sediment and other pollutants carried off by or discharged from land disturbing activity to waters of the state in the Town of Beloit. It is also the intent of this ordinance to establish long-term, post construction runoff management requirements that will diminish the threats to public health as stated herein, specifically:

- a. Further the maintenance of safe and healthful conditions.
- b. Prevent and control 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; and control increases in scouring and transportation of particulate matter.
- d. Minimize the amount of pollutants discharged from the separate storm sewer to protect the waters of the state.
- 2. It is the intent of the Town of Beloit that this ordinance regulates construction and post-construction Stormwater discharges to waters of the state. This ordinance may be applied on a site-by-site basis. The Town of Beloit 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 the waters of the state. Where such plans are in conformance with the performance standards developed under Sections 281.16, Wis. Stats., for regional Stormwater management measures have been approved by the Town of Beloit, it is the intent of this ordinance that the approved Stormwater management plan be used to identify construction and post-construction management measures acceptable for the community.

7.04 APPLICABILITY AND JURISDICTION.

1. Applicability.

- a. Except as provided under par. (b), this ordinance applies to any construction site and a post-construction site whereupon one (1) acre or more of land disturbing construction activity occurs during construction.
- b. This ordinance does not apply to the following:
 - Transportation facilities, except transport facility construction projects that are part of a larger common plan of development such as local roads within a residential or industrial development.
 - ii. 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.
 - iii. A post-construction site with less than ten percent (10%) connected imperviousness, based on the area of land disturbance, provided the cumulative area of all impervious surface is less than one (1) acre. However, the exemption

- of this paragraph does not include exemption from the protective area standards of this ordinance.
- iv. Nonpoint discharges from agricultural facilities and practices.
- v. Nonpoint discharges from silviculture activities.
- vi. Routine maintenance for project sites that have less than five (5) acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.
- vii. Underground utility construction, but not including the construction of any above ground structures associated with utility construction.
- c. Notwithstanding the applicability requirements in par. (a), this ordinance applies to construction sites of any size that, as determined by the Community Development Department, 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.
- 2. <u>Jurisdiction</u>. This ordinance applies to land disturbing construction and post-construction activities on lands within the boundaries and jurisdiction of the Town of Beloit, as well as the extraterritorial division of land subject to an ordinance enacted pursuant to <u>Sections 236.45</u> (2) and (3), Wis. Stats.
- 3. <u>Exclusions</u>. This ordinance is not applicable to activities conducted by a state agency, as defined under <u>Sections 227.01 (1)</u>, Wis. Stats.

7.05 **DEFINITIONS.**

- 1. The following definitions shall be relevant to this ordinance:
 - a. Adequate Sod, or Self-Sustaining Vegetative Cover. 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.
 - b. <u>Administering Authority.</u> A governmental, employee, department, or a regional planning commission empowered under <u>Sections 60.627</u>, Wis. Stats., which is designated by the Town of Beloit Board of Supervisors to the Town's Community Development Department to administer this ordinance.
 - c. Agricultural Facilities and Practices. Has the meaning in Sections 281.16 (1) Wis. Stats.
 - d. Atlas 14. The National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Precipitation-Frequency Atlas of the United States, Volume 8 (Midwestern States), published in 2013.
 - e. <u>Best Management Practice (BMP).</u> 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.
 - f. <u>Business Day.</u> A day the Town Hall is routinely and customarily open for business.
 - g. <u>Cease and Desist Order.</u> A court-issued order to halt land disturbing construction activity that is being conducted without the required permit(s) or in violation of the permit(s) issued by the Community Development Department.
 - h. <u>Combined Sewer System.</u> A system for conveying both sanitary sewage and Stormwater runoff.

- i. <u>Connected Imperviousness.</u> 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.
- j. <u>Construction Site.</u> An area upon which one (1) 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 (1) plan. A long-range planning document that describes separate construction projects, such as a twenty (20) year transportation improvement plan, is not a common plan of development.
- k. <u>Design Storm.</u> A hypothetical discrete rain storm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency and total depth of rainfall.
- I. <u>Development.</u> Residential, commercial, industrial or institutional land uses and associated roads.
- m. <u>Direct Conduits to Groundwater.</u> 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 fractures bedrock.
- n. <u>Division of Land.</u> The creation from one parcel of two (2) or more parcels or building sites of one (1) or fewer acres each in an area where such creation occurs at one time through the successive partition within a five (5) year period.
- o. <u>Effective Infiltration Area.</u> 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.
- p. <u>Erosion</u>. The process by which the land's surface is worn away by the action of wind, water, ice or gravity.
- q. <u>Erosion and Sediment Control Plan.</u> A comprehensive plan developed to address pollution caused by erosion and sedimentation of soil particles or rock fragments during construction.
- r. Exceptional Resource Waters. Waters listed in Sections NR 102.11, Wis. Admin. Code.
- s. <u>Extraterritorial.</u> The unincorporated area within three (3) miles of the corporate limits of a first, second or third class city, or within one and one half (1.5) miles of a fourth class city or village.
- t. <u>Filtering Layer.</u> Soil that is at least a three (3) foot deep layer with at least twenty percent (20%) fines; or at least a five (5) foot deep layer with at least ten percent (10%) fines; or an engineered soil with an equivalent level of protection as determined by the regulatory authority for the site.
- u. <u>Final Stabilization</u>. 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 seventy percent (70%) of the cover of the unpaved areas and areas not covered by permanent structures or that employ equivalent permanent stabilization measures.
- v. <u>Financial Guarantee</u>. A performance bond, maintenance bond, surety bond, irrevocable letter of credit, or similar guarantees submitted to the Town of Beloit by the responsible party to assure that requirements of the ordinance are carried out in compliance with the storm water management plan.
- w. Governing Body. The Town Board of Supervisors.
- x. <u>Impervious Surface</u>. 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.

- y. <u>In-fill.</u> 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.
- z. <u>Infiltration.</u> The entry of precipitation or runoff into or through the soil.
- aa. <u>Infiltration System.</u> 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 the flow.
- bb. <u>Land Disturbing Construction Activity.</u> Any man-made alteration of the land surface resulting in a change of 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.
- cc. <u>Landowner.</u> Any person holding free title, an easement or other interest in property, which allows the person to undertake cropping, livestock management, land disturbing construction activity or maintenance of storm water BMPs on the property.
- dd. <u>Maintenance Agreement.</u> A legal document that provides for long-term maintenance of Stormwater management practices.
- ee. <u>Maximum Extent Practicable.</u> The highest level of performance that is achievable but is not equivalent to a performance standard identified in this ordinance as determined in accordance with Section 7.06 of this ordinance.
- ff. <u>New Development.</u> Development resulting from the conversion of previously undeveloped land or agricultural land uses.
- gg. NRCS MSE3 or MSE4 Distribution. A specific precipitation distribution developed by the United States Department of Agriculture, Natural Resources Conservation Service using precipitation data from Atlas 14.
- hh. Off-Site. Located outside the property boundary described in the permit application.
- ii. On-Site. Located within the property boundary described in the permit application.
- jj. <u>Ordinary High-Water Mark.</u> Has the meaning given in <u>Section NR 115.03 (6)</u>, Wis. Adm. Code.
- kk. Outstanding Resource Waters. Waters listed in Section NR 102.10, Wis. Admin. Code.
- II. <u>Percent Fines.</u> The percentage of a given sample of soil, which passes through a #200 sieve.
- mm. <u>Performance Standard.</u> A narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.
- nn. <u>Permit.</u> A written authorization made by the Community Development Department to the applicant to conduct land disturbing construction activity or to discharge post-construction runoff to waters of the state.
- oo. <u>Permit Administration Fee.</u> A sum of money paid to the Town of Beloit by the permit applicant for the purpose of recouping the expenses incurred by the Town in administering the permit.
- pp. <u>Pervious Surface</u>. An area that releases as runoff a small portion of the precipitation that falls on it. Lawns, gardens, parks, forests or other similarly vegetated areas are examples of surfaces that typically are pervious.
- qq. Pollutant. Has the meaning given in Section 283.01 (13), Wis. Stats.
- rr. <u>Pollution</u>. Has the meaning given in <u>Section 281.01 (10)</u>, Wis. Stats.
- ss. <u>Post-Construction Site.</u> A construction site following the completion of land disturbing construction activity and final site stabilization.

- tt. <u>Pre-Development Condition.</u> The extent and distribution of land covered 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.
- uu. <u>Preventative Action Limit.</u> Has the meaning given in <u>Sections NR 140.05 (17)</u>, Wis. Admin. Code.
- vv. <u>Protective Area.</u> An area of land commencing at the top of a channel of lakes, streams or rivers, or at the delineation 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.
- ww. Redevelopment. Areas where development is replacing older development.
- xx. <u>Responsible Party.</u> The landowner or any other entity performing services to meet the requirements of this ordinance through a contract or other agreement.
- yy. <u>Runoff.</u> Storm water or precipitation including rain, snow, ice melt or similar water that moves on the land surface via sheet or channelized flow.
- zz. <u>Sediment.</u> Settleable solid material that is transported by runoff, suspended with runoff or deposited by runoff away from its original location.
- aaa. <u>Separate Storm Sewer.</u> 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:
 - i. Is designed or used for collecting water or conveying runoff.
 - ii. Is not part of a combined sewer system.
 - iii. Is not part of a publicly owned wastewater treatment works that provides secondary or more stringent treatment.
 - iv. Discharges directly or indirectly to waters of the state.
- bbb. <u>Silviculture Activity.</u> 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.
- ccc. <u>Site.</u> The entire area included in the legal description of the land on which the land disturbing construction activity is proposed in the permit application.
- ddd. <u>Stop Work Order.</u> An order issued by the Community Development Department which requires that all construction activity on the site be stopped.
- eee. <u>Stormwater Management Plan.</u> A comprehensive plan designed to reduce discharge of pollutants from Stormwater, after the site has undergone final stabilization, following completion of the construction activity.
- fff. <u>Stormwater Management System Plan.</u> A comprehensive plan designed to reduce the discharge or runoff and pollutants from hydrologic units on a regional or municipal scale.
- ggg. <u>Technical Standard.</u> A document that specifies design, predicted performance and operational and maintenance specifications for a material, device or method.
- hhh. <u>Top of the Channel.</u> 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 twelve percent (12%) continually for at least fifty (50) feet. If the slope of the land is twelve percent (12%) or less continually for the initial fifty (50) feet landward from the ordinary high-water mark, the top of the channel is the ordinary high water mark.
- iii. <u>Total Maximum Daily Load or "TMDL".</u> The amount of pollutants specified as a function of one (1) 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.

- jjj. <u>TP-40. Technical Paper No. 40</u>, Rainfall Frequency Atlas of the United States, published in 1961.
- kkk. <u>TR-55.</u> The United States Department of Agriculture, Natural Resources Conservation Service (previously soil conservation service), Urban Hydrology for Small Watersheds, Second Edition, <u>Technical Release 55</u>, <u>June 1986</u>, which is incorporated by reference for this ordinance.
- III. <u>Transportation Facility.</u> A highway, a railroad, a public mass-transit system, a public-use airport, a public trail or any other public work for transportation purposes such as harbor improvements under <u>Section 85.095 (1) (b)</u>, Wis. Stats. "Transportation Facility" does not include building sites for the construction of public buildings and buildings that are places of employment that are regulated by the Department pursuant to <u>Section 281.33</u>, Wis. Stats.
- mmm. TSS. Total suspended soils.
- nnn. <u>Type II Distribution.</u> A rainfall type curve as established in the "United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published in 1973".
- ooo. <u>Waters of the State</u>. Includes those portions of Lake Michigan, Lake Superior within the boundaries of the state, and all lakes, bays, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or ground water, natural or artificial, public or private, within the state or its jurisdiction.
- **APPLICABILITY OF MAXIMUM EXTENT PRACTICABLE.** Maximum extent practicable applies when a person who is subject to a performance standard of this ordinance demonstrates to the Community Development Department Staff'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.

7.07 <u>TECHNICAL STANDARDS.</u>

- 1. All BMPs required for compliance with this ordinance shall meet design criteria, standards and specifications based on any of the following:
 - Design guidance and technical standards identified or developed by the Wisconsin Department of Natural Resources under <u>Subchapter V of Chapter NR 151</u>, Wis. Adm. Code.
 - b. 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 prediction distribution, and when considering the geographic location of the site and the period of disturbance.
 - c. Technical standards and methods approved by the Community Development Department.
- 2. The following methods shall be used in designing the water quality, peak discharge, and infiltration components of storm water practices needed to meet the water quality standards of this ordinance:

- Consistent with the technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under <u>Subchapter V of Chapter NR 151</u>, Wis. Admin. Code.
- b. Where technical standards have not been identified or developed by the Wisconsin Department of Natural Resources, other technical standards may be used provided that the methods have been approved by the administering authority.

7.08 PERFORMANCE STANDARDS FOR CONSTRUCTION SITES UNDER ONE (1) ACRE.

- 1. Responsible Party. The responsible party shall comply with this ordinance.
- 2. <u>Erosion and Sediment Control Practices.</u> 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 if the total land disturbed is three thousand (3,000) sf. or greater:
 - a. The deposition of soil from being tracked onto streets by vehicles;
 - b. The discharge of sediment from disturbed areas into on-site storm water inlets;
 - c. The discharge of sediment from disturbed areas into adjacent waters of the state;
 - d. The discharge of sediment from drainage ways that flow off the site;
 - e. The discharge of sediment by dewatering activities;
 - f. The discharge of sediment eroding from soil stockpiles existing for more than seven (7) days;
 - g. 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. <u>Location.</u> The BMPs shall be located so that treatment occurs before runoff enters waters of the state.
- 4. <u>Implementation.</u> The BMPs used to comply with this ordinance 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 activities cease and final grade has been reached on any portion of the site.
 - d. Temporary stabilization activity shall commence when land disturbing activities have temporarily ceased and will not resume for a period exceeding fourteen (14) calendar days.
 - e. BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

7.09 PERFORMANCE STANDARDS FOR CONSTRUCTION SITES OF ONE (1) ACRE OR MORE.

1. <u>Responsible Party.</u> The responsible party shall comply with this ordinance and implement the erosion and sediment control plan developed in accordance with Section 7.12 of this ordinance.

- 2. <u>Erosion and Sediment Control Plan.</u> A written site-specific erosion and sediment control plan shall be developed in accordance with Section 7.12 of this ordinance and implemented for each construction site.
- 3. <u>Erosion and Other Pollutant Control Requirements.</u> The erosion and sediment control plan required under Section 7.09 (2) shall include the following:
 - a. 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:
 - i. The deposition of soil from being tracked onto streets by vehicles.
 - ii. The discharge of sediment from disturbed areas into on-site storm water inlets.
 - iii. The discharge of sediment from disturbed areas into adjacent waters of the state.
 - iv. The discharge of sediment from drainage ways that flow off the site.
 - v. The discharge of sediment by dewatering activities.
 - vi. The discharge of sediment eroding from soil stockpiles existing for more than seven (7) days.
 - vii. The discharge of sediment from erosive flows at outlets and in downstream channels.
 - viii. The transport by runoff into the 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 the constructing of bridge footings or BMP installations, are not prohibited by this subdivision.
 - ix. The transport by runoff into the waters of the state of untreated wash water from vehicle and wheel washing.
 - b. <u>Sediment Performance Standards.</u> In addition to the erosion and sediment control practices under Section 7.09 (3) (a), the following erosion and sediment control practices shall be employed:
 - i. BMPs that, by design, discharge no more than five (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.
 - ii. 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 of area, or both, of land disturbing construction activity, or for other appropriate mechanisms.
 - iii. Notwithstanding Subd. 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. <u>Preventative Measures.</u> The erosion and sediment control plan shall incorporate all of the following:
 - i. Maintenance of existing vegetation, especially adjacent to surface waters whenever possible.
 - ii. Minimization of soil compaction and preservation of topsoil.

- iii. Minimization of land disturbing construction activity on slopes of twenty percent (20%) or more.
- iv. Development of spill prevention and response procedures.
- d. <u>Location</u>. The BMPs used to comply with this ordinance shall be located so that treatment occurs before runoff enters the waters of the state.
- 4. <u>Implementation.</u> The BMPs used to comply with this ordinance 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 development in this ordinance.
 - b. Erosion and sediment control practices shall be maintained until final stabilization.
 - c. Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.
 - d. Temporary stabilization activity shall commence when land disturbing activities have temporarily ceased and will not resume for a period exceeding fourteen (14) calendar days.
 - e. BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

7.10 PERFORMANCE STANDARDS FOR POST-CONSTRUCTION STORMWATER STANDARDS.

- 1. Responsible Party. The responsible party shall comply with this ordinance.
- 2. <u>Storm Water Management Plan.</u> A written storm water management plan in accordance with Section 7.13 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 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 ordinance, whichever is more stringent.
- 4. Requirements. The storm water management plan required under Sub. (2) shall include the following:
 - a. <u>Total Suspended Solids.</u> BMPs shall be designed, installed and maintained to control total suspended solids carried in runoff from the post-construction site as follows:
 - i. BMPs shall be designed in accordance with Table 1., or to the maximum extent practicable as provided in Subd. ii.
 - ii. 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% | | |
| In-fill Development | 80% | | |
| Redevelopment | 40% of load from parking areas and roads | | |

- iii. <u>Maximum Extent Practicable.</u> 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.
- iv. <u>Off-Site Drainage.</u> When designing BMPs, runoff draining to the BMP from off-site shall be taken into account in determining the treatment efficiency of the practice. Any impact on the efficiency shall be compensated for by increasing the size of the BMP accordingly.

b. Peak Discharge.

i. By design, BMPs shall be employed to maintain or reduce the one (1) year, two (2) year, ten (10) year and one hundred (100) year, twenty-four (24) hour post-construction peak runoff discharge rates to the one (1) year, two (2) year, ten (10) year and one hundred (100) year, twenty-four (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. On a case-by-case basis, the administering authority may allow the use of TP-40 precipitation depths and the Type II distribution.

<u>Table 2. Maximum Pre-Development Runoff Curve Numbers</u>

| Runoff Curve Number | | Hydrologic Soils | | |
|---------------------|----------|------------------|----------|----------|
| | <u>A</u> | <u>B</u> | <u>C</u> | <u>D</u> |
| Woodland | 30 | 55 | 70 | 77 |
| Grassland | 39 | 61 | 71 | 78 |
| Cropland | 55 | 69 | 78 | 83 |

- ii. This subsection of the ordinance does not apply to any of the following:
 - A. A post-construction site where the discharge is directly into a lake over five thousand (5,000) acres or a stream or river segment draining more than five hundred (500) square miles.
 - B. Except as provided under Section 7.10 (3), a redevelopment post construction site
 - C. An in-fill development area less than five (5) acres.

c. Infiltration.

- i. <u>Best Management Practices.</u> BMPs shall be designed, installed, and maintained to infiltrate runoff in accordance with the following or to the maximum extent practicable:
 - A. <u>Low imperviousness</u>. For development, up to forty percent (40%) connected imperviousness, such as parks, cemeteries, and low density residential development, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least ninety percent (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 one percent of the post-construction site is required as an effective infiltration area.
- B. Moderate imperviousness. For development with more than forty percent (40%) and up to eighty percent (80%) 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 seventy-five percent (75%) 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 two percent (2%) of the post- construction site is required as an effective infiltration area.
- C. <u>High imperviousness</u>. For development with more than eighty percent (80%) connected imperviousness, such as commercial strip malls, shopping centers, and commercial downtowns, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least sixty percent (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 two percent (2%) of the post-construction site is required as an effective infiltration area.
- ii. <u>Pre-development.</u> The pre-development condition shall be the same as specified in Table 2 of the Peak Discharge section of this ordinance.

iii. Source Areas.

- A. <u>Prohibitions.</u> Runoff from the following areas may not be infiltrated and may not qualify as contributing to meeting the requirements of this ordinance unless demonstrated to meet the conditions identified in Section 7.10 (4)(c)6:
- B. Areas associated with a tier 1 industrial facility identified in <u>Section NR 216.21</u> (2)(a), including storage, loading and parking. Rooftops may be infiltrated with the concurrence of the regulatory authority.
- C. Storage and loading areas of a tier 2 industrial facility identified in <u>Section NR</u> 216.21 (2)(b).
- D. Fueling and vehicle maintenance areas. Runoff from rooftops of fueling and vehicle maintenance areas may be infiltrated with the concurrence of the regulatory authority.
- iv. <u>Exemptions.</u> 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:
 - A. Parking areas and access roads less than five thousand (5,000) square feet for commercial development.
 - B. Parking areas and access roads less than five thousand (5,000) square feet for industrial development not subject to the Prohibitions under par a. except as provided under Section 7.10 (3), redevelopment post-construction sites.
 - C. In-fill development areas less than five (5) acres.
 - D. Roads on commercial, industrial and institutional land uses, and arterial residential roads.

d. Location of Practices.

- i. Prohibitions. Infiltration practices may not be located in the following areas:
 - A. Areas within one thousand (1,000) feet upgradient or within one hundred (100) feet downgradient of direct conduits to groundwater.

- B. Areas within four hundred (400) feet of a community water system well as specified in <u>Section NR 811.16 (4)</u> or within the separation distances listed in <u>Section NR 812.08</u> 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.
- C. Areas where contaminants of concern, as defined in <u>Section NR 720.03(2)</u>, are present in the soil through which infiltration will occur.

ii. Separation distances.

A. 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 |

- B. Notwithstanding par. i., applicable requirements for injection wells classified under Chapter NR 815 shall be followed.
- C. <u>Infiltration rate exemptions.</u> 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:
 - 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 five (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.
- e. <u>Alternate Use.</u> 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 ordinance.
- f. Groundwater Standards.
 - i. Infiltration systems designed in accordance with this ordinance 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 Chapter 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.

- ii. Notwithstanding Par. i., the discharge from BMPs shall remain below the enforcement standard at the point of standards application.
- g. <u>Pretreatment</u>. 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 Subd. f. Pretreatment options may include, but are not limited to, oil and grease separation, sedimentation, biofiltration, filtration, swales or filter strips.
- h. <u>Maximum Extent Practicable.</u> Where the conditions of Subd. 3. and 4. limit or restrict the use of infiltration practices, the performance standard of Section 7.10 (4)(c) shall be met to the maximum extent practicable.

5. Protective Areas.

- a. <u>Definition</u>. In this ordinance, "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 ordinance, "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.
 - i. For outstanding resource waters and exceptional resource waters, seventy five (75) feet.
 - ii. For perennial and intermittent streams identified on a U.S. Geological Survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, fifty (50) feet.
 - iii. For lakes, fifty (50) feet.
 - iv. For wetlands not subject to Par. v. or vi., fifty (50) feet.
 - v. For highly susceptible wetlands, seventy five (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.
 - vi. For less susceptible wetlands, ten percent (10%) of the average wetland width, but no less than ten (10) feet nor more than thirty (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.
 - vii. In Pars. iv. to vi., 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 Section NR 103.03.
 - viii. Wetland boundary delineation shall be made in accordance with <u>Section NR</u> <u>103.08</u> (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.

- ix. For concentrated flow channels with drainage areas greater than one hundred thirty (130) acres, ten (10) feet.
- x. Notwithstanding Pars. i. to ix., the greatest protective area width shall apply where rivers, streams, lakes and wetlands are contiguous.
- b. <u>Applicability.</u> This ordinance applies to post-construction sites located within a protective area, except those areas exempted pursuant to Subd. d.
- c. <u>Requirements.</u> The following requirements shall be met:
 - i. Impervious surfaces shall be kept out of the protective area entirely or to the maximum extent practicable. If there is no practical alternative to locating an impervious surface in the protective area, the storm water management plan shall contain a written, site-specific explanation.
 - ii. Where land disturbing construction activity occurs within a protective area, adequate sod or self-sustaining vegetative cover of seventy percent (70%) or greater shall be established and maintained where no impervious surface is present. 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.
 - iii. BMPs such as filter strips, swales, or wet detention ponds, that are designed to control pollutants from non-point sources, may be located in the protective area.
- d. Exemptions. This ordinance does not apply to any of the following:
 - i. Except as provided in this ordinance, redevelopment post-construction sites.
 - ii. In-fill development areas less than five (5) acres.
 - iii. Structures that cross or access surface water such as boat landings, bridges, and culverts.
 - iv. Structures constructed in accordance with Section 59.692 (1v), Wis. Stats.
 - v. Areas of post-construction sites from which the runoff does not enter the surface water, including wetlands, without first being treated by a BMP to meet the local ordinance requirements for total suspended solids and peak flow reduction, except to the extent that vegetative ground cover is necessary to maintain bank stability.
- 6. <u>Fueling and Maintenance Areas.</u> Fueling and vehicle maintenance areas shall have BMPs designed, installed, and maintained to reduce petroleum within runoff, so that the runoff that enters waters of the state contains no visible petroleum sheen, or to the maximum extent practicable.
- 7. <u>General Considerations for Stormwater Management Efforts.</u> The following considerations shall be observed in on-site and off-site runoff management:

- 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 ordinance.
- b. Emergency overland flow for all storm water facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.

8. BMP Location.

- a. To comply with the performance standards required under Section 7.10 of this ordinance, BMPs may be located on–site or off–site as part of a regional storm water device, practice or system, but shall be installed in accordance with Section NR 151.003, Wis. Adm. Code.
- b. The Town of Beloit may approve off-site management measures provided that all of the following conditions are met:
 - i. The Town of Beloit determines that the post-construction runoff is covered by a storm water management system plan that is approved by the Town of Beloit and that contains management requirements consistent with the purpose and intent of this ordinance.
 - ii. 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 storm water 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.
 - D. Where a regional treatment option exists such that the Town of Beloit exempts the applicant from all or part of the minimum on-site storm water management requirements, the applicant shall be required to pay a fee in an amount determined in negotiation with the Town. In determining the fee for post-construction runoff, the Town of Beloit shall consider an equitable distribution of the cost for land, engineering design, construction, and maintenance of the regional treatment option.
- 9. <u>Additional Requirements.</u> The Town of Beloit may establish storm water management requirements more stringent than those set forth in this ordinance if the Town or its designee determines that the requirements are needed to control storm water quantity or control flooding, comply with federally approved total maximum daily load requirements, or control pollutants associated with existing development or redevelopment.

7.11 PERMITTING REQUIREMENTS, PROCEDURES AND FEES.

- 1. <u>Permit Required.</u> No responsible party may commence a land disturbing construction activity subject to this ordinance without receiving prior approval of an erosion and sediment control plan for the site and a permit from the Community Development Department.
- 2. <u>Permit Application and Fees.</u> Unless specifically excluded by this ordinance, any responsible party desiring a permit shall submit to the Community Development Department a permit application on a form provided by the Town of Beloit for that purpose.

- a. The responsible party that will undertake a land disturbing construction activity subject to this ordinance shall submit an application for a permit and an erosion and sediment control plan that meets the requirements of this ordinance, and shall pay an application fee to the Community Development Department in the amount specified from time to time by resolution. By submitting an application, the applicant is authorizing the Community Development Department Staff to enter the site to obtain information required for the review of the erosion and sediment control plan.
- b. The storm water management plan shall be prepared to meet the requirements of this ordinance, the maintenance agreement shall be prepared to meet the requirements of this ordinance, the financial guarantee shall meet the requirements of this ordinance, and fees shall be those established by the Town of Beloit as set forth in this ordinance or set by resolution as the Town Board deems necessary.
- 3. <u>Permit Application Review and Approval.</u> The Community Development Department Staff shall review any permit application that is submitted with erosion and sediment control plan, and the required fee. The following approval procedure shall be used:
 - a. Within ten (10) business days of the receipt of a complete permit application, as required by Sub. (2), the Community Development Department Staff shall inform the applicant whether the application and erosion and sediment control plan or Stormwater management plan are approved or disapproved based on the requirements of this ordinance.
 - b. If the permit application and erosion and sediment control plan or Stormwater management plan are approved, the Community Development Department Staff shall issue the permit.
 - c. If the permit application or erosion and sediment control plan or Stormwater management plan are disapproved, the Community Development Department Staff shall state in writing the reasons for disapproval.
 - d. Community Development Department Staff may request additional information from the applicant. If additional information is submitted, the Community Development Department shall have ten (10) business days from the date the initial information is received to inform the applicant that the erosion and sediment control plan or Stormwater management plan are either approved or disapproved.
 - e. Failure by the Community Development Department to inform the permit applicant of a decision within ten (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 has been issued.
- 4. <u>Surety Bond.</u> As a condition of approval and the issuance of a permit, the Community Development Department 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.
- 5. <u>Permit Requirements for Erosion and Sediment Control.</u> All permits shall require the responsible party to:
 - a. Notify the Community Development Department within forty-eight (48) hours of commencing any land disturbing construction activity.
 - b. Notify the Community Development Department of completion of any BMPs within fourteen (14) days after their installation.

- c. Obtain permission in writing from the Community Development Department prior to any modification pursuant to Section 7.11 (3) of the erosion and sediment control plan.
- d. Install all BMPs as identified in the approved erosion and sediment control plan.
- e. Maintain all road drainage systems, storm water drainage systems, BMPs and other facilities identified in the erosion and sediment control plan.
- f. Repair any siltation or erosion damage to adjoining surfaces and drainage ways resulting from land disturbing construction activities and document repairs in a site inspection log.
- g. Inspect the BMPs within twenty-four (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.
- h. 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 conduction the inspection, and a description of the present phase of the construction at the site.
- i. Allow the Community Development Department Staff to enter the site for the purposes 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.
- 6. Permit Requirements for Stormwater Management. 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 Community Development Department may suspend or revoke a permit for violation of a permit condition, following written notification to the responsible party. An action by the Community Development Department to suspend or revoke this permit may be appealed in accordance with this ordinance
 - 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 Community Development Department at least ten (10) business days before commencing any work in conjunction with the Stormwater management plan, and within ten (10) business days upon completion of the Stormwater management practices. If required as a special condition under Sub. (7), the responsible party shall make additional notification according to a schedule set forth by the Community Development Department so that practice installations can be inspected during construction.
 - d. Practice installations required as part of this ordinance shall be certified "as built" or "record" drawings by a licensed professional engineer. Completed Stormwater management practices must pass a final inspection by the Community Development Department or its designee to determine if they are in accordance with the approved storm water management plan and ordinance. The Community Development Department 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 Community Development Department of any significant modifications it intends to make to an approved Stormwater management

- plan. The Community Development Department 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.
- 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 Town of Beloit, or are transferred to subsequent private owners as specified in the approved maintenance agreement.
- g. The responsible party authorizes the Community Development Department to perform any work or operations necessary to bring Stormwater management measures into conformance with the approved storm water management plan, and consents to a special assessment or charge against the property as authorized under Subch. VII of Chapter 66, Wis. Stats., or to charging such costs against the financial guarantee posted under this ordinance.
- h. If so directed by the Town or their designee, 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.
- i. The responsible party shall permit property access to the Community Development Department or its designee for the purpose of inspecting the property for compliance with the approved Stormwater management plan and this permit.
- j. Where site development or redevelopment involves changes in direction, increases in peak rate and/or total volume of runoff from a site, the Community Development Department may require the responsible party to make appropriate legal arrangements with affected property owners concerning the prevention of endangerment to property or public safety.
- k. The responsible party is subject to the enforcement actions and penalties detailed in this ordinance if the responsible party fails to comply with the terms of this permit.
- 7. <u>Permit Conditions.</u> Permits issued under this ordinance may include conditions established by the Community Development Department Staff in addition to the requirements set forth in Sub. (5&6), where needed to assure compliance with the performance standards of this ordinance.
- 8. Permit Duration for Erosion Control Permits. Permits issued under this ordinance shall be valid for a period of one hundred eighty (180) days, or the length of the building permit or other construction authorizations, whichever is longer, from the date of issuance. The Community Development Department Staff may grant one extension not to exceed one hundred eighty (180) days cumulatively. The Community Development Department Staff may require additional BMPs as a condition of an extension if they are necessary to meet the requirements of this ordinance.
- 9. <u>Permit Duration for Stormwater Management Permits.</u> Permits issued under this ordinance shall be valid from the date of issuance through the date the Community Development Department notifies the responsible party that all stormwater management practices have passed the final inspection required in this ordinance.

10. <u>Maintenance</u>. The responsible party throughout the duration of the construction activities shall maintain all BMPs necessary to meet the requirements of this ordinance until the site has undergone final stabilization.

7.12 <u>EROSION AND SEDIMENT CONTROL PLAN, STATEMENT AND AMENDMENTS.</u>

1. <u>Erosion and Sediment Control Plan Statement.</u> For each construction site identified under Section 7.04 (1)(c), an erosion and sediment control plan statement shall be prepared. This statement shall be submitted to the Community Development Department. 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 this ordinance. A site map shall also accompany the erosion and sediment control plan statement.

2. Erosion and Sediment Control Plan Requirements.

- a. An erosion and sediment control plan shall be prepared and submitted to the Community Development Department.
- b. The erosion and sediment control plan shall be designed to meet the performance standards in Sections 7.08, 7.09 and other requirements of this ordinance.
- c. 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:
 - i. 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 the start and end dates for construction.
 - ii. 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.
 - iii. 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.
 - iv. 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.
 - v. Calculations to show the compliance with the performance standard in Section 7.09 (3)(b)(i).
 - vi. Existing data describing the surface soil as well as subsoils.
 - vii. Depth to groundwater, as indicated by Natural Resources Conservation Service soil information where available.
 - viii. Name of the immediate named receiving water from the United States Geological Service 7.5 minute series topographic maps.
- d. The erosion and sediment control plan shall include a site map. The site map shall include the following items and shall be at scale not greater than one hundred (100) feet per inch and at a contour interval not to exceed five (5) feet.

- i. Existing topography, vegetative cover, natural and engineered drainage systems, roads and surface waters. Lakes, streams, wetlands, channels, ditches and other watercourses on and immediately adjacent to the site shall be shown. Any identified one hundred (100) year flood plains, flood fringes and floodways shall also be shown.
- ii. Boundaries of the construction site.
- iii. Drainage patterns and approximate slopes anticipated after major grading activities.
- iv. Areas of soil disturbance.
- v. Location of major structural and non-structural controls identified in the erosion and sediment control plan.
- vi. Location of areas where stabilization BMPs will be employed.
- vii. Areas which will be vegetated following land disturbing construction activities.
- viii. 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 (1/4) mile downstream of the construction site.
- ix. Area(s) used for infiltration of post-construction storm water runoff.
- x. An alphanumeric or equivalent grid overlying the entire construction site map.
- e. 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 the 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 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:
 - 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.
 - ii. Description of structural practices to divert flow away from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from the site. Unless otherwise specifically approved in writing by the Community Development Department Staff, structural measures shall be installed on upland soils.
 - iii. Management of overland flow at all areas of the construction site, unless otherwise controlled by outfall controls.
 - iv. Trapping of sediment in channelized flow.
 - v. Staging land disturbing construction activities to limit exposed soil areas subject to erosion.
 - vi. Protection of downslope drainage inlets where they occur.
 - vii. Minimization of tracking at all vehicle and equipment entry and exit locations of the construction site.
 - viii. Clean up of off-site sediment deposits.
 - ix. Proper disposal of building and waste material.
 - x. Stabilization of drainage ways.
 - xi. Installation of permanent stabilization practices as soon as possible after final grading.

- xii. Minimization of dust to the maximum extent practicable.
- f. 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 watercourse so that the natural physical and biological characteristics and functions are maintained and protected.
- 3. <u>Erosion and Sediment Control Plan Amendments.</u> The applicant shall amend the erosion and sediment control plan if any of the following occur:
 - a. 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.
 - b. The action required by the erosion and sediment control plan fails to reduce the impacts of pollutants carried by construction site runoff.
 - c. The Community Development Department notifies the applicant of changes needed in the erosion and sediment control plan.

7.13 STORMWATER MANAGEMENT PLAN.

- 1. <u>Stormwater Management Plan Requirements.</u> The Stormwater management plan required under Section 7.10 (2) 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. <u>Pre-development site conditions, including:</u>
 - One or more site maps at a scale of not less than one (1) inch equals fifty (50) feet. The site maps shall show the following: site location and legal property description; predominant soil types and hydrologic soil groups; existing cover type and condition; topographic contours of the site at a scale not to exceed 1:50 feet; topography and drainage network including enough of the contiguous properties to show runoff patterns onto, through and from the site; watercourses that may affect or be affected by runoff from the site; flow path and direction for all storm water conveyance sections; watershed boundaries used in hydrology determinations to show compliance with performance standards; lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site; limits of the one hundred (100) year floodplain; location of wells and wellhead protection areas covering the project area and delineated pursuant to Section NR 811.16, Wis. Adm. Code.
 - ii. 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:
 - i. 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.
 - ii. Explanation of any restrictions on Stormwater management measures in the development area imposed by wellhead protection plans and ordinances.
 - One or more site maps at a scale of not less than one (1) inch equals fifty (50) iii. feet showing the following: post-construction pervious areas including vegetative cover type and condition; impervious surfaces including all buildings, structures, and pavement; post-construction topographic contours of the site at a scale not to exceed 1:50 feet; post-construction drainage network including enough of the contiguous properties to show runoff patterns onto, through and from the site; locations and dimensions of drainage easements; locations of maintenance easements specified in the maintenance agreement; flow path and direction for all Stormwater conveyance sections; location and type of all storm water 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; 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.
 - iv. 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).
 - v. Results of investigations of soils and groundwater required for the placement and design of storm water management measures. Detailed drawings including cross-sections and profiles of all permanent storm water conveyance and treatment practices.
- e. A description and installation schedule for the storm water management practices needed to meet the performance standards in this ordinance.
- f. A maintenance plan developed for the life of each storm water management practice including the required maintenance activities and maintenance activity schedule.
- g. Cost estimates for the construction, operation, and maintenance of each storm water management practice.
- h. Other information requested in writing by the Community Development Department 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. <u>Alternate Requirements.</u> The Community Development Department may prescribe alternative submittal requirements for applicants seeking an exemption to on-site Stormwater management performance standards under this ordinance.

7.14 STORMWATER MAINTENANCE AGREEMENT.

- Maintenance Agreement Required. The maintenance agreement required under this
 ordinance for Stormwater management practices shall be an agreement between the Town
 of Beloit 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. <u>Agreement Provisions.</u> The maintenance agreement shall contain the following information and provisions and be consistent with the maintenance plan required by this ordinance:
 - 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 this ordinance.
 - c. Identification of the responsible party(s), organization or city, county, town or village responsible for long term maintenance of the storm water management practices identified in the storm water management plan required under this ordinance.
 - d. Requirement that the responsible party(s), organization, or city, county, town or village shall maintain storm water management practices in accordance with the schedule included in this ordinance.
 - e. Authorization for the Community Development Department 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 Town of Beloit 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 this ordinance, as responsible for long term maintenance of the Stormwater management practices, shall be notified by the Community Development or Public Works Department(s) of maintenance problems which require correction. The specified corrective actions shall be undertaken within a reasonable time frame as set by the Community Development Department.
 - h. Authorization of the Community Development Department to perform the corrected actions identified in the inspection report if the responsible party designated under this ordinance does not make the required corrections in the specified time period. The Town Finance Director/Treasurer shall enter the amount due on the tax rolls and collect the money as a special charge against the property pursuant to <u>Subch. VII of Chapter 66</u>, Wis. Stats.

7.15 FINANCIAL GUARANTEE.

1. <u>Establishment of the Guarantee.</u> The Town of Beloit may require the submittal of a financial guarantee, the form and type of which shall be acceptable to the Town Board. The financial guarantee shall be in an amount determined by the Community Development Department 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 Town of Beloit 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 Community Development Department 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 Town of Beloit shall release the portion of the financial guarantee established under this ordinance, less any costs incurred by the Town to complete installation of practices, upon submission of "as built plans" or "record" drawings by a licensed professional engineer. The Town Board may make provisions for a partial pro-rata release of the financial guarantee based on the completion of various development stages.
 - b. The Town Board shall release the portion of the financial guarantee established under this ordinance to assure maintenance of storm water practices, less any costs incurred by the Town, at such time that the responsibility for practice maintenance is passed on to another entity via an approved maintenance agreement.
- **7.16 FEE SCHEDULE.** The fees referred to in other sections of this ordinance shall be established by the Town of Beloit Board of Supervisors and may from time to time be modified by resolution. A schedule of fees established by the Town of Beloit Board of Supervisors shall be available for view in the Town Clerk's Office.
- 7.17 INSPECTION. If land disturbing construction activities are occurring without a permit required by this ordinance, the Community Development Department Staff may enter the land pursuant to the provisions of Sections 66.0119 (1), (2) and (3), Wis. Stats. Community Development Department Staff shall inspect any construction site that holds a permit under this ordinance at least two (2) times per month between March 1 and October 31, and at least one (1) time per month between November 1 and February 28 to ensure compliance with the approved erosion and sediment control plan.

7.18 ENFORCEMENT FOR CONSTRUCTION EROSION AND SEDIMENT CONTROL.

- 1. The Community Development Department Staff may post a stop work order if any of the following occurs:
 - a. Land disturbing construction activity regulated under this ordinance is occurring without a permit.
 - b. The 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 ordinance or fails to comply with the erosion and sediment control plan or permit conditions, the Community Development Department Staff 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 Community Development Department Staff, or if a responsible party violates a stop work order posted under Sub. (1), the Community Development Department Staff may request the Town Attorney to obtain a cease and desist order in any court with jurisdiction.
- 4. The Board of Adjustment may retract the stop work order issued under Sub. (1) or the permit revocation under Sub. (2).
- 5. After posting a stop work order under Sub. (1), the Community Development Department Staff may post a notice of intent to the responsible party of its intent to perform work necessary to comply with this ordinance. The Community Development Department Staff may go on the land and commence work after issuing the notice of intent. The cost of the work performed under this ordinance by the Community Development Department Staff or their contractor, plus interest at the rate authorized by the Town of Beloit Board of Supervisors shall be billed to the responsible party. In the event the responsible party fails to pay the amount due, the Town Finance Director/Treasurer shall enter the amount due on the tax rolls and collect as a special assessment against the property pursuant to <u>Subch. VII of Chapter 66</u>, Wis. Stats.
- 6. Any person violating any of the provisions of this ordinance shall be subject to a forfeiture of not less than Five Hundred Dollars (\$500.00) nor more than Two Thousand Five Hundred Dollars (\$2,500.00) and the cost of prosecution for each violation. Each day a violation exists shall constitute a separate offense.
- 7. 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 resorting to injunctional proceedings. Injunctional orders are authorized pursuant to Section 60.627, Wis. Stats.

7.19 ENFORCEMENT FOR POST-CONSTRUCTION STORMWATER MANAGEMENT.

- 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 Community Development Department 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 which may be taken.
- 3. Upon receipt of written notification from the Community Development Department 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 Town of Beloit 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 Town of Beloit may enter the land and take emergency actions necessary to prevent such damage. The costs incurred by the Town plus interest and legal costs shall be billed to the responsible party.
- 5. The Town of Beloit 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 Town Attorney to obtain a cease and desist order in any court with jurisdiction.
- 6. The Community Development Department 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 Town of Beloit or by a court with jurisdiction.
- 8. The Town of Beloit is authorized to refer any violation of this ordinance, or a stop work order or cease and desist order issued pursuant to this ordinance, to the Town 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 ordinance shall be subject to a forfeiture of not less than Fifty Dollars (\$50.00) dollars nor more than One Thousand Dollars (\$1,000.00) dollars 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 resorting to injunctional proceedings.
- 11. When the Town of Beloit 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 Community Development Department or a party designated by the Town of Beloit 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 Town of Beloit 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 this ordinance. 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.

7.20 **APPEALS.**

- 1. Board of Adjustment. The Board of Adjustment:
 - a. Shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made by the Community Development Department Staff in administering this ordinance except for cease and desist orders obtained under Section 7.18 (3) of this ordinance.

- May authorize, upon appeal, variances from the provisions of this ordinance 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 an unnecessary hardship;
- c. Shall use the rules, procedures, duties and powers authorized by statute in hearing and deciding appeals and authorizing variances.
- 2. Who May Appeal? Appeals to the Board of Adjustment may be taken by any aggrieved person or by an office, department, board or bureau of the Town of Beloit affected by any decision of the Town of Beloit Board of Supervisors or the Community Development Department.
- **7.21 SEVERABILITY.** If a court of competent jurisdiction judges any section, clause, provision or portion of this ordinance unconstitutional or invalid, the remainder of the ordinance shall remain in force and not be affected by such judgement.
- **7.22 EFFECTIVE DATE.** This ordinance shall be in force and effect from and after its adoption and publication.