Resolution No. 17-19

Resolution to Enact Amended Polk County Stormwater and Erosion Control Ordinance

TO THE HONORABLE CHAIRPERSON AND SUPERVISORS OF THE COUNTY BOARD OF THE COUNTY OF POLK:

Ladies and Gentlemen:

WHEREAS, on December 20, 2005, the Polk County Board of Supervisors enacted Ordinance no. 96-05, entitled Stormwater Management and Erosion Control Ordinance; and

WHEREAS, on March 27, 2019, the Environmental Services Committee, as the planning committee, opened and held a public hearing on the proposed amendments to the Stormwater and Erosion Control Ordinance; and

WHEREAS, after considering any public input received in the public hearing, the Polk County Environmental Services Committee recommends the Polk County Board of Supervisors to enact the attached, amended, Stormwater and Erosion Control Ordinance.

NOW THEREFORE BE IT RESOLVED, the Polk County Board of Supervisors, pursuant to the authority under Wisconsin Statute § 59.693 and § 92.07(15), ordains that the amended Stormwater and Erosion Control Ordinance, attached hereto and incorporated herein, is enacted.

NOW THEREFORE BE IT FURTHER RESOLVED, the Polk County Board of Supervisors directs the County Clerk to publish, pursuant to Wisconsin Statute § 59.14(1) the Ordinance enacted herein and that the amended Ordinance shall become effective upon publication.

Fiscal Impact Note:

Legal Impact Note: No legal impact other than to amend the current Stormwater and Erosion Control Ordinance.

Malia Malone
Corporation Counsel

Resolution No. 17-19

Resolution to Enact Amended Polk County Stormwater and Erosion Control Ordinance

Offered on the 16th day of April, 2019.

Signed and sponsored by:

BY: _____
Brad Olson, Supervisor, District #1

_____
Doug Route, Supervisor, District #2

_____
James Edgell, Supervisor, District #8

_____
Kim O'Connell, Supervisor, District #9

Dean Johansen, Chair,
Supervisor, District #3,

Chris Nelson, Supervisor, District #4

Tracy LaBlanc, Supervisor, District #5

Brian Masters, Supervisor, District #6

Michael Prichard, Supervisor, District #7

Larry Jepsen, Supervisor, District #10

Jay Luke, 1st Vice Chair,
Supervisor, District #11

Michael Larsen, Supervisor, District #12

Russell Arcand, Supervisor, District #13

John Bonneprise, 2nd Vice Chair,
Supervisor, District #14

Joe DeMulling, Supervisor, District #15

Reviewed By County Administrator:
Approved as to Form and Execution:

Nick Osborne

Excerpt of Minutes

At its regular business meeting on the 16th day of April, 2019 the Polk County Board of Supervisors acted upon Resolution No. 17-19: Resolution to Enact Amended Polk County Stormwater and Erosion Control Ordinance
, as follows:

- ☐ Adopted by majority of the members of the board of supervisors by a vote of _____ in favor and _____ against.
- ☑ Adopted by unanimous voice vote.
- ☐ Defeated: _____
- ☐ Other: _____
_____
_____.

SIGNED BY:

Dean Johansen, County Board Chairperson

ATTEST:

Sharon Jorgenson, County Clerk

CERTIFIED COPY OF POLK COUNTY RESOLUTION

STATE OF WISCONSIN

COUNTY OF POLK

I Sharon E. Jorgenson, Polk County Clerk do hereby certify that the attached hereto and incorporated herein is a full, true and correct copy of Resolution No. 17-19: Resolution to Enact Amended Polk County Stormwater and Erosion Control Ordinance adopted by the Polk County Board of Supervisors at its regular business meeting held on April 16, 2019.

Sharon E. Jorgenson 4/16/19

Sharon E. Jorgenson, Polk County Clerk Date

Polk County Board of Supervisors
Ordinance No. 05-19
Stormwater and Erosion Control Ordinance

NOW THEREFORE, BE IT ORDAINED that the Polk County Board of Supervisors enacts Ordinance No. 05-19, Stormwater and Erosion Control Ordinance, attached hereto and incorporated herein.

Polk County Board of Supervisors
Ordinance No. 05-19
Stormwater and Erosion Control Ordinance

Funding Source/ Funding Amount:	Not Applicable
Date Reviewed as to Appropriations:	Not Applicable
Committee Recommendation as To Appropriation:	Not Applicable
Effective Date:	Upon Passage and Publication
Dated Submitted To County Board	First Reading: April 16, 2019
Submitted and Sponsored By	
Review By County Administrator: ☐ Recommended ☐ Not Recommended ☒ Reviewed Only Nick Osborne, County Administrator	Review By Corporation Counsel: ☐ Approved as to Form ☒ Recommended ☐ Not Recommended ☐ Reviewed Only Malia Malone, Corporation Counsel

County Board Action

At its regular business meeting on the 16 day of April, 2019 the Polk County Board of Supervisors considered and acted on the above ordinance, Ordinance No. 05-19: Manure and Water Quality Management Ordinance, as follows:

- ☐ Enacted by simple majority of the board of supervisors by a vote of _____ in favor and _____ against.
- ☒ Enacted by unanimous vote.
- ☐ Defeated by a vote of _____ in favor and _____against.
- ☐ Defeated by voice vote.
- ☐ Action Deferred by Procedural Action, as follows: _____

SIGNED BY:

Dean Johansen, County Board Chairperson

Attest:

Sharon Jorgenson, County Clerk

Certification of Publication

Ordinance No. 05-19: Stormwater and Erosion Control Ordinance, was published pursuant to Wisconsin Statutes § 59.14(1) in the Inter-County Leader on the 1st day of May, 2019.

Sharon Jorgenson Dated: 4-16-19

Sharon Jorgenson, County Clerk

EXECUTIVE SUMMARY

STORMWATER AND EROSION CONTROL ORDINANCE 05-19

This ordinance is intended to replace Stormwater Management and Erosion Control Ordinance 96-05 adopted by the Polk County Board on Dec. 20, 2005. It serves to meet the urban stormwater runoff control requirements of DNR Administrative Rule NR-151, and is administered by the Polk County Land & Water Resources Department (LWRD). This updated ordinance was reviewed by the Polk County Environmental Services Committee (ESC). It is similar to the old ordinance in terms of scope, with the exception that agricultural uses are now exempt. A public hearing was held at the ESC meeting on March 27th, at which time no comments were received from the public and the ESC approved it for passage to the April 16, 2019 Polk County Board meeting.

Submitted by: Tim Ritten, Director

Polk County LWRD

A complete copy of Ordinance 05-19 may be obtained by contacting the Polk County Clerk Office, located at 100 Polk County Plaza, Suite 110, Balsam Lake, WI 54810 or by calling 715-485-9226.

The complete document may also be viewed online on the Polk County Website at www.co.polk.wi.us under the Ordinances page or on the Land and Water Resources page.

SUBCHAPTER XXX.XX: STORMWATER AND EROSION CONTROL
Ordinance 05-19

Section 1. Title, Statutory Authority, Declaration of Policy, Jurisdiction, Exemptions and Applicability, Definitions

1.01. Title. This ordinance shall be known as the Polk County Stormwater and Erosion Control Ordinance, and is hereinafter referred to as the Ordinance.

1.02. Statutory Authority. This ordinance is adopted by the Polk County Board under the authority granted by Sections 59.693 and 92.07(15) and Chapter 236 Wisconsin Statutes

1.03. Declaration of Policy.

a. *Findings*. Uncontrolled storm water runoff and construction site erosion from land development and land disturbing activity can have significant adverse impacts upon local surface and ground water resources and the health, safety and general welfare of the community, and diminish the public enjoyment and use of natural resources within Polk County. Specifically, uncontrolled soil erosion and storm water runoff can:

1. Degrade stream habitat by increasing stream bank erosion, increasing stream bed scour, diminishing groundwater recharge, diminishing stream base flows and increasing stream temperatures;
2. Reduce the capacity of lakes and streams to support fish, aquatic life, recreational and water supply uses by increasing pollutant loadings of sediment, suspended solids, nutrients, heavy metals, bacteria, pathogens and other urban pollutants;
3. Alter wetland communities by changing wetland hydrology and increasing pollutant loads;
4. Reduce the quality of groundwater by increasing pollutant loading;
5. Threaten public health, safety, property, and general welfare by increasing runoff volumes and peak flood flows and overburdening storm sewers, drainage ways and other storm drainage systems;
6. Undermine floodplain management efforts by increasing the incidence and levels of flooding.

b. *Purpose*. The purpose of this ordinance is to establish regulatory requirements for land development and land disturbing activities aimed to minimize the threats to public health, safety, welfare, and the natural resources of Polk County from construction site erosion and post-construction storm water runoff. Specific purposes are to:

1. Further the maintenance of safe and healthy conditions.
2. Prevent and control the adverse effects of storm water; prevent and control soil erosion; prevent and control water pollution; protect spawning grounds, fish and aquatic life; establish erosion control and storm water standards for building sites, placement of structures and land uses; and preserve ground cover and scenic beauty.
3. Control exceedance of the safe capacity of existing drainage facilities and receiving water bodies; prevent undue channel erosion; control increases in the scouring and transportation of particulate matter; and prevent conditions that endanger property.

c. *Intent*. Through a single storm water permit process, this ordinance is intended to meet the current construction site erosion control and post-construction storm water management regulatory requirements of Subchapter III of both NR 151 and NR 216 Wis. Admin. Code on the effective date of this ordinance. Nothing in this ordinance prevents the Wisconsin Department of Natural Resources from adopting or enforcing more stringent storm water management requirements in future revisions of Wis. Admin. Code.

1. Provisions have also been incorporated to coordinate the storm water permit requirements of this ordinance with other county and town zoning and land division regulations.

1.04. Jurisdiction

a. *Jurisdictional Boundaries*. This ordinance applies to all unincorporated lands within the jurisdictional boundaries of Polk County, unless a town board (list available at the LWRD office):

1. Adopts an ordinance that complies with the minimum standards established by the Wisconsin Department of Natural Resources and is at least as restrictive as this ordinance, as determined by the LWRD; and

2. Provides reasonable notice to the LWRD of the effective date of the town ordinance and the enforcement contact(s), if not the LWRD.

b. *Newly Annexed Areas.* If any area within the jurisdiction described in (a) above is annexed by a city or village, the provisions of this ordinance shall continue in effect and shall be enforced after annexation by the annexing city or village unless any of the following occurs:
   1. The city or village enacts, administers and enforces an ordinance for the annexed area that complies with the minimum standards established by the Wisconsin Department of Natural Resources and is at least as restrictive as this ordinance, as determined by the LWRD; or
   2. After annexation, the city or village requests that this ordinance, as it applies to the annexed area, continues to be in effect and enforced by the LWRD and the LWRD agrees to enforce the ordinance.

1.05. Exemptions and Applicability

a. *Exemptions.*
   1. Exempt From All Requirements. The following activities shall be exempt from all of the requirements of this ordinance:
      (a). Agricultural facilities and practices.
      (b). Land development and land disturbing activities exempted by state or federal law, including highway construction and other projects conducted by a state agency, as defined under s. 227.01 (1), Wisconsin Statutes, or under a memorandum of understanding entered into under s. 281.33 (2), Wisconsin Statutes To recognize an exemption under this paragraph, the LWRD may require documentation of the person(s) and regulatory agency charged with enforcing erosion control and storm water management for the project.
      (c). Land disturbing activity directly involved in the installation and maintenance of private on-site waste disposal systems.
      (d). If another regulatory agency is enforcing erosion control and storm water management provisions that the LWRD determines are at least as restrictive as those contained in this ordinance, the applicant may request an exemption from any or all provisions of this ordinance. The LWRD may require the applicant to submit documentation relating to the project, including any or all of the following:
         (i) A copy of the proposed plans certified as approved by a regulatory agency. Said plans shall also be stamped by a professional engineer licensed in Wisconsin, stating that the design of all best management practices comply with this ordinance and all applicable technical standards.
         (ii) Contact information for the applicant or for person(s) representing the applicant and charged with overseeing the implementation of the approved plans, including certifying construction.
         (iii) A copy of the permit issued by the regulatory agency and contact information for the person(s) charged with permit enforcement duties.
         (iv) A copy of design summaries, as-built documents and construction certification pursuant to Sec. 8 (d) for all storm water BMPs constructed as part of the project.
         (v) A copy of a recorded maintenance agreement in accordance with Sec.13 for all storm water management facilities constructed as part of the project.
         (vi) Other items that the LWRD determines are necessary to ensure compliance equal to the requirements of this ordinance.
   2. Exempt From Erosion Control Requirements Only. The following land disturbing activities shall be exempt from the erosion control provisions of sub. (a) above:
      (a). Those activities the LWRD determines are required for the construction of individual one and two family residential buildings under COM. 21.125 Wis. Admin. Code.
      (b). Nonmetallic mining activities that are covered under a nonmetallic mining reclamation permit under NR 135 Wis. Admin. Code.
      (c). Placement of underground pipe or other utility that is plowed or bored into the ground outside areas of channelized runoff.

3. Exemption from stormwater requirements only.
   (a) The LWRD may exempt a site or a portion of a site from meeting certain technical requirements of this ordinance in accordance with Sec. 5.05.

b. *Applicability.*
   1. Construction Site Erosion Control. Unless otherwise exempted under this ordinance, a storm water permit shall be required and all erosion control and other provisions of this ordinance shall apply to all proposed land disturbing activity that meets any of the following:
      (a). Disturbs a total land surface area of 1 acre or more; or disturbs a total land surface area of 0.5 acres within the shoreland district with direct drainage to water resource.
      (b). Involves excavation or filling, or a combination of excavation and filling, in excess of 500 cubic yards of material; or
      (c). Involves the laying, repairing, replacing, or enlarging of an underground utility, pipe or other facility, or the disturbance of road ditch, grass swale or other open channel for a distance of 1000 feet or more; or
      (d). Is a land disturbing activity, regardless of size, that the LWRD determines is likely to cause an adverse impact to an environmentally sensitive area or other property, or may violate any other erosion control standard set forth in this ordinance.
   2. Storm Water Management. Unless otherwise exempted in this ordinance, a storm water permit shall be required and all storm water management and other provisions of this ordinance shall apply to all proposed land development activity that meet any of the following:
      (a). Is a subdivision plat; or
      (b). Is a certified survey map or any other land development activity that may ultimately result in the addition of <u>0.5 acres or greater of impervious surfaces</u>, including smaller individual sites that are part of a common plan of development that may be constructed at different times; or
      (c). Involves the construction of any new public or private road; or
      (d). Is a land development activity, regardless of size, that the LWRD determines is likely to cause an adverse impact to an environmentally sensitive area or other property. For purposes of this section, adverse impacts shall include causing chronic wetness on other property due to violating any storm water management standard set forth in this ordinance.

1.06. <u>Definitions</u>

a. *"Applicable review authorities"* means the Town, the County Zoning Administrator or the County Park and Planning Commission, depending on the type of project and its location.

b. "*Applicant*" means any person or entity holding fee title to the property or their representative. The applicant shall become the "permit holder" once a permit is issued. The applicant shall sign the initial permit application form in accordance with subs. 1 through 5 below, after which the applicant may provide the LWRD written authorization for others to serve as the applicant's representative:
   1. In the case of a corporation, by a principal executive officer of at least the level of vice president or by the officer's authorized representative having overall responsibility for the operation of the site for which a permit is sought.
   2. In the case of a limited liability company, by a member or manager.
   3. In the case of a partnership, by the general partner.
   4. In the case of a sole proprietorship, by the proprietor.
   5. For a unit of government, by a principal executive officer, ranking elected official or other duly authorized representative.

c. "*Best management practice*" (or "BMP") means structural and non-structural measures, practices, techniques or devices employed to avoid or minimize sediment or other pollutants carried in runoff.

d. "*Common plan of development*" means all lands included within the boundary of a certified survey map or subdivision plat created for the purpose of development or sale of property where integrated, multiple, separate and distinct land developing activity may take place at different times by future owners.

e. "*County Zoning Administrator*" means the county staff person designated the County Zoning Administrator.

f. "*CSM*" means Certified Survey Map.
g. "*Design storm*" means a hypothetical depth of rainfall that would occur for the stated return frequency (i.e. once every 2 years or 10 years), duration (i.e. 24-hours) and timing of distribution (i.e. type II). All values are based on the historical rainfall records for the area. Design storms used in this ordinance are summarized in Sec. 6.
h. "*Dewatering*" means the removal of trapped water from a construction site to allow land development or utility installation activities to occur.
i. "*DNR*" means Department of Natural Resources.
j. "*Erosion*" means the process of detachment, transport and deposition of soil, sediment or rock fragments by action of water, wind, ice or gravity.
k. "*Effective infiltration area*" means the area of the infiltration system that is used exclusively to infiltrate runoff and does not include the area used for site access, berms or pretreatment.
l. "*Environmental corridor* (primary and secondary)" means a composite of the best individual elements of the natural resource base including surface water, streams, and rivers and their associated floodlands and shorelands; woodlands, wetlands and wildlife habitat; areas of ground water discharge and recharge; organic soils, rugged terrain and high relief topography; and significant geological formations and physiographic features.
m. "*Environmentally sensitive area*" means any area that, due to the natural resources present or the lack of filtering capacity, is more susceptible to the adverse impacts of sediment and other pollutants associated with erosion and urban runoff. Examples include environmental corridors, direct hydrologic connections to lakes, streams, wetlands, groundwater or other water resources, or very coarse or shallow soils above groundwater or bedrock.
n. "*Filtering layer*" means soil that has at least a 3-foot deep layer with at least 20% that passes through a #200 sieve (fines); or at least a 5-foot deep layer with at least 10% that passes through a #200 sieve (fines); or another medium exists with an equivalent level of protection, as determined by the LWRD.
o. "*Final plat*" means a map of a proposed condominium or subdivision to be recorded with the Polk County Register of Deeds pursuant Wisconsin Statutes.
p. "*GIS system of Polk County*" means the computerized mapping system that Polk County makes available to the general public over the Internet.
q. "*Groundwater recharge areas*" means lands identified as groundwater recharge areas; or where, prior to any land disturbing or land development activity, precipitation or runoff could only leave the area by infiltrating the ground, thereby recharging the groundwater.
r. "*Illicit connection*" means any drain or conveyance, whether on the surface or subsurface, which allows an illegal non-storm water discharge to enter the storm drain system, including but not limited to: sewage, process wastewater and wash water, any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been allowed, permitted, or approved by a government agency, prior to the adoption of this ordinance.
s. "*Impervious surface*" means an area that releases all or a large portion of the precipitation that falls on it, except for frozen soil. Conventional rooftops and asphalt or concrete sidewalks, driveways, parking lots and streets are typical examples of impervious surfaces. For purposes of this ordinance, typical gravel driveways and other examples listed shall be considered impervious unless specifically designed to encourage infiltration or storage of runoff.
t. "*Impracticable*" means that complying with a specific requirement would cause undue economic hardship and that special conditions exist that are beyond the control of the applicant and would prevent compliance.
u. "*In-fill development*" means land development that occurs where there was no previous land development and is surrounded by other existing land development;
v. "*Infiltration*" means the entry of precipitation or runoff into or through the soil.
w. "*Infiltration system(s)*" 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.

x. "*Karst features*" 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.

y. "*Land development activity*" or "*land development*" means any construction related activity that may ultimately result in the addition of impervious surfaces, such as the construction of buildings, roads, parking lots and other structures.

z. "*Land disturbing activity*" (or "disturbance") means any man-made alteration of the land surface that may result in a change in the topography or existing vegetative or non-vegetative soil cover, or may expose soil and lead to an increase in soil erosion and movement of sediment. Land disturbing activity includes clearing and grubbing for future land development, excavating, filling, grading, building construction or demolition, and pit trench dewatering.

aa. "*LWRD*" means the Land & Water Resources Department of Polk County. The LWRD Director supervises the daily activities of the Department, including the administration of this ordinance.

bb. "*Mannings Equation*" $V = \left[\frac{1.486}{n}\right] R^{2/3} S^{1/2}$

V= velocity in feet per second
n= roughness coefficient, indicates resistance to flow
R= hydraulic radius, calculated as area in square feet
S= slope of the energy grade

cc. "*Maximum Extent Practicable or MEP*" means a level of implementing best management practices to achieve a performance standard specified in this ordinance that has been approved by the LWRD. In determining when MEP has been achieved, the LWRD shall take 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.

dd. "*Navigable*" means all lakes, ponds, flowages, rivers and streams in Polk County shall be presumed to be navigable if they are listed in the Wisconsin Department of Natural Resources' publication Surface Waters Resources of Polk County, or are shown on the United States Geological Survey Quadrangle Maps. Lakes, ponds, flowages, rivers and streams not included in these documents may also be determined to be navigable. Also, Lake Superior, Lake Michigan, all natural inland lakes within Wisconsin and all streams, ponds, sloughs, flowages and other waters within the territorial limits of this State, including the Wisconsin portion of boundary waters, which are navigable under the laws of this State. Under Section 281.31(2)(d), Wisconsin Statutes, notwithstanding any other provision of law or administrative rule promulgated there under, shoreland ordinances required under Section 59.692, Wisconsin Statues, and Chapter NR 115, Wisconsin Administrative Code do not apply to lands adjacent to farm drainage ditches if:

1. Such lands are not adjacent to a natural navigable stream or river;
2. The drainage ditch was not a navigable stream before ditching; and such lands are maintained in agricultural use.

ee. "*No Net Increase*" means no more runoff may leave the site after development, as did before development.

ff. "*Nonmetallic mining*" means all of the following: (a) Operations or activities for the extraction from the earth for sale or use by the operator of mineral aggregates or nonmetallic minerals such as stone, sand, gravel, asbestos, beryl, clay, feldspar, peat, talc and topsoil, including such operations or activities as excavation, grading and dredging. (b) On-site processes that are related to the extraction of mineral aggregates or nonmetallic minerals, such as stockpiling of materials, blending mineral aggregates or nonmetallic minerals with other mineral aggregates or nonmetallic minerals, crushing, screening, scalping and dewatering, removed or disturbed, for the purposes of providing adequate vegetative cover and stabilization of soil conditions to achieve a land use specified in an approved nonmetallic mining reclamation plan.

gg. "*NRCS*" means Natural Resources Conservation Service

hh. "*Off-site BMP*" means best management practice(s) that are located outside of the boundaries of the site covered by a permit application. Off-site BMPs are usually installed as part of a regional storm water management plan approved by a local government.

ii. "*Ordinary high water mark (OHWM)*" "means the point on the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristics.

jj. "*Planned land use*" means the land use designated in the latest version of the Polk County land use plan.

kk. "*Plat*" means a map of a proposed condominium or subdivision,

ll. "*Pollutant*", as per s. 283.01(13) Wisconsin Statutes, means any dredged spoil, solid waste, incinerator residue, sewage, garbage, refuse, oil, sewage sludge, munitions, chemical wastes, biological materials, radioactive substance, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water.

mm. "*Pollution*", as per s. 283.01(10) Wisc. Statutes, means man-made or man- induced alteration of the chemical, physical, biological or radiological integrity of water.

nn. "*Preliminary plat*" means a map showing the salient features of a proposed condominium or subdivision submitted to an approving authority for purposes of preliminary consideration.

oo. "*Preventive action limit*", as per s. NR 140.05(17), Wis. Admin. Code, means a numerical value expressing the concentration of a substance in groundwater which is adopted under s. 160.15, Stats., and s. NR 140.10, 140.12 or 140.20.

pp. "Publicly funded" means a land development, such as a public road or municipal building that is being funded solely by a unit of government. It does not include new roads or other structures built with private funds, or a combination of public and private funds, and subsequently dedicated to a unit of government.

qq. "*Redevelopment*" means land development that replaces previous land development of similar impervious conditions.

rr. "*Regulatory agency*" means a public agency that the LWRD recognizes as having the legal authority to review and approve erosion control and storm water management plans and enforce their implementation, with requirements at least as restrictive as this ordinance.

ss. "*Responsible party*" means any person or entity holding fee title to the property or acting as the owners representative, including any person, firm, corporation or other entity performing services, contracted, subcontracted or obligated by other agreement to design, implement, inspect, verify or maintain the BMPs and other approved elements of erosion control and storm water plans and permits under this ordinance.

tt. "*Road*" as used in Sec. 6 of this ordinance, means any access drive that serves more than two (2) residences or businesses.

uu. "*Runoff*" means water from rain, snow or ice melt, or dewatering that moves over the land surface via sheet or channelized flow.

vv. "*Shoreland*" means the area landward of the ordinary high water mark within the following distances: 1,000 feet from a lake, pond or flowage; and 300 feet from a river or stream or to the landward side of the floodplain, whichever distance is greater.

ww. "*Site*" means the entire area included in the legal description of which the land disturbing or land development activity will occur.

xx. "*Stabilized*" means that all land disturbing activities are completed and that a uniform, perennial vegetative cover has been established on at least 70% of the soil surface or other surfacing material is in place and the risk of further soil erosion is minimal, as determined by the LWRD.

yy. "*Storm drainage system*" means a publicly or privately-owned facility by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters,

curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

zz. "*Storm water*" means the same as "*Runoff.*"

aaa. "*Storm water BMP*" means any best management practice that is designed to collect or manage the quantity or quality of storm water runoff for an indefinite time period and is incorporated into an approved storm water management plan to meet the requirements of this ordinance. This term is a subset of the term "best management practice" and distinct in that the BMPs require long-term maintenance. Some examples include, but are not limited to wet or dry detention basin, infiltration trench or basin, bio-retention basin, stilling basin, green roof, filter strip, artificial wetland, rain garden or any combination of these or other permanent storm water management practices, as determined by the LWRD.

bbb. "*Storm water permit*" means a written authorization made by the LWRD to the applicant to conduct land disturbing or land development activities in accordance with the requirements of this ordinance. A storm water permit regulates both construction site erosion and post-construction storm water runoff from a site.

ccc. "*Subdivision*" means a division of a lot, parcel or tract of land by the owner thereof or the owner's agent for the purpose of sale or of building development that meets the subdivision definition criteria under s. 236.03(12) Wisconsin Statutes or a more restrictive definition adopted by a local unit of government.

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

eee. "*Top of channel*" means an edge, or point on the landscape, commencing 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.

fff. "*Unnecessary Hardship*" means present only where, in the absence of a variance, compliance with the strict letter of the restrictions governing area, setbacks, frontage, height, bulk or density would unreasonably prevent the owner from using the property for a permitted purpose or would render conformity with such restrictions unnecessarily burdensome

ggg. "*Utility*" means a wire, pipe, tube or other conduit designed to distribute or collect a product or service, including but not limited to electricity, natural gas, oil, telecommunications, drinking water, storm water, sewage, or any combination of these items.

hhh. "*Warm season and wetland plantings*" means seed or plant stock that are native to a prairie or wetland setting. These types of plantings usually take a couple of years to get established and require diligent removal of invasive species during this time. Upon maturity, warm season plants generally have a deep root system, which enhances infiltration.

iii. "*Waters of the state*", as per s. 281.01 (18), Wisconsin Statutes, includes those portions of Lake Michigan and Lake Superior within the boundaries of this state, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction

jjj. "*Wetlands*" means an area where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions

kkk. "*Woodland*" means an area where a grouping of 10 or more trees exist that have trunk diameters of at least 4 inches at four feet above the ground surface. The boundaries of a woodland shall be defined by the canopy, commonly referred to as the "drip line".

lll. "*Working day*" means any day the office of the LWRD is routinely and customarily open for business, and does not include Saturday, Sunday and any official county holidays.

Section 2. Storm Water Permit Process

2.01. Permit Required. A storm water permit shall be obtained before any person commences a land disturbing or land development activity, pursuant to the applicability and exemption provisions of Sec.

1. Based upon the scope of the project, a certification of compliance under Sec. 2.03 below will also be required as part of the permit process.

2.02. Storm Water Permit Application.

a. To request a storm water permit under this ordinance, the applicant shall submit a complete application, which shall include all of the following:
   1. A completed and signed application on a form provided by the LWRD for that purpose;
   2. The applicable fee(s), unless exempted under Sec. 2.04.
   3. A site plan map in accordance with Sec. 5.03;
   4. A final erosion control plan in accordance with Sec. 4;
   5. A final storm water management plan in accordance with Sec. 5 for those land development activities that meet any of the applicability criteria of Sec. 1.05(b)), and the documentation required under Sec. 10(e)2.D. related to a off-site BMP's, if applicable;
   6. A maintenance agreement in accordance with Sec. 7; and
   7. A financial assurance, in accordance with Sec. 3.

b. The LWRD may require map items listed above to be submitted in a digital form, if available, including geo-referencing map data to the public land survey system in accordance with county mapping standards.

c. Review procedures for a storm water permit application shall be in accordance with Sec. 2.05.

2.03. Certification of Compliance for Final Plat or CSM.

a. *Applicability.* The LWRD shall certify compliance with this section prior to county approval of any final plat. In addition, certification of compliance shall be required prior to county approval of any certified survey map (CSM) that meets any one of the following:
   1. The site plan may ultimately result in the addition of 0.5 acres or greater of impervious surfaces, including smaller individual sites that are part of a common plan of development;
   2. Includes the construction of any new public or private road; or
   3. Other land development activities as determined by the LWRD under Sec. 2.

b. *Review Items.* To obtain certification of compliance, the applicant shall submit a final plat or CSM to the LWRD for review. The LWRD shall review submittals for compliance with all of the following items based on preliminary or final site plans and storm water management plans:
   1. Location and size of drainage easements and other areas set aside for storm water management, and the associated language describing use restrictions;
   2. Setback requirements from wells, structures, steep slopes, road right-of-ways and other items related to the location of storm water management facilities;
   3. Location of access drives and associated easements and use restrictions to ensure adequate access to storm water management facilities for future maintenance;
   4. Utility easements as they may affect the grading and erosion control plans;
   5. The final maintenance agreement in accordance with Sec. 7 for all storm water BMP's; and
   6. Other items that the LWRD determines are necessary to achieve compliance with this ordinance

c. *Review Process.* Review procedures for certification of compliance for final plat or CSM shall be as described in Sec. 2.05 (a) below.

2.04. Fees. Application and review fees under this ordinance shall be in accordance with the following:

a. All fees shall be established by the LWRD and approved by the County Board through the annual budget process.

b. Fee amounts shall be based on the actual and direct LWRD costs of administering this ordinance.

c. A fee schedule shall be available for review and public distribution.

d. All publicly funded land disturbing and land development activities within the jurisdiction of this ordinance shall be exempt from the fees under this section.

2.05. Application Review Processes.

a. *Storm Water Certification of Compliance.* Upon submittal of a complete application under Sec. 2.02 above or a final plat or CSM under Sec. 2.03 above, the applicant is authorizing the LWRD to enter

upon the subject site to obtain information needed to administer this ordinance and the following procedures shall apply:

1. The LWRD shall have 15 working days from the date the LWRD receives the application to issue a review letter to the applicable review authorities and the applicant based on the requirements of this ordinance.
2. If within the 15 working days, the LWRD determines that the application is not complete or requests additional information from the applicant or another source (such as another regulatory agency), the LWRD shall have 10 working days from the date additional information is received to review . The LWRD shall inform the applicant and the applicable review authorities when additional information is requested from another source
3. If the LWRD does not notify the applicant of missing information within the 15 working days, the applicant may continue pursuing other applicable approvals or deed recording without the certification of compliance.
4. If within the 15 working days, the LWRD notifies the applicable review authorities that the application under Sec. 2.02(c). above is not complete, information has been requested from another source, or recommended changes or objections to the application need to be addressed before other approvals can proceed, then the applicable review authorities may:
   (a). At the request of the applicant, grant an extension to the review period, if needed, to allow more time for the LWRD review process to be completed or to address LWRD recommendations, requirements or objections to the application; or
   (b). Disapprove the application, plat or CSM.

b. *Storm Water Permit: Less Than 1 Acre But Greater Than One-Half Acre Land Disturbance and Applicability Exemptions.* Upon submittal of a complete permit application under Sec. 2.03 above or applicability exemption application under Sec. 1.05, the applicant is authorizing the LWRD to enter upon the subject site to obtain information needed to administer this ordinance and the following procedures shall apply:

1. Within 15 working days from the date the LWRD receives the application, the LWRD shall inform the applicant whether the application materials are approved or disapproved based on the requirements of this ordinance.
2. If all requirements of this ordinance have been met through the application, the LWRD shall approve the application and issue a permit or exemption. If all requirements of this ordinance have not been met, the LWRD shall state in writing the reasons for disapproval.
3. If within the 15 working days, the LWRD determines that the application is not complete or requests additional information from the applicant or another source (such as another regulatory agency), the LWRD shall have 10 working days from the date the additional information is received to review and act on the application. The LWRD shall inform the applicant when additional information is requested from another source.
4. Failure of the LWRD to inform the applicant of missing information or of a decision within 15 working days shall be deemed to mean approval of the application and the applicant may proceed as if a permit had been issued.

c. *Storm Water Permit: Equal To Or Greater Than 1 Acre Land Disturbance and Technical Exemptions.* Upon submittal of a complete application under sub. (b) above or a technical exemption application under Sec. 1.05, the applicant is authorizing the LWRD to enter upon the subject site to obtain information needed to administer this ordinance and the following procedures shall apply:

1. Within 15 working days from the date the LWRD receives the application, the LWRD shall inform the applicant whether the application materials are approved or disapproved based on the requirements of this ordinance.
2. If all requirements of this ordinance have been met through the application, the LWRD shall approve the application and issue a permit. If all requirements of this ordinance have not been met, the LWRD shall state in writing the reasons for disapproval.
3. If within the 15 working days, the LWRD determines that the application is not complete or requests additional information from the applicant or another source (such as another regulatory

agency), the LWRD shall have 15 working days from the date the additional information is received to review and act on the application. The LWRD shall inform the applicant when additional information is requested.

4. Failure of the LWRD to inform the applicant of missing information or of a decision within the 15 working days shall be deemed to mean approval of the application and the applicant may proceed as if a permit had been issued.

Section 3. Storm Water Permit Requirements

3.01. General Permit Requirements. Storm water permits shall be subject to all of the requirements of this section. Violation of any permit requirement shall cause the permit holder and any other responsible party to be subject to enforcement action under Sec. 9. Upon issuance of a storm water permit, the permit holder and any other responsible party shall be deemed to have accepted these requirements. General requirements include all of the following:

a. *Other Permits*. Compliance with a storm water permit does not relieve the permit holder or other responsible party of the responsibility to comply with other applicable federal, state, and local laws and regulations. The LWRD may require the applicant to obtain other permits or plan approvals prior to issuing a storm water permit.

b. *Approved Plans*. All best management practices shall be installed and maintained in accordance with approved plans and construction schedules. A copy of the approved plans shall be kept at the construction site at all times during normal business hours.

c. *Plan Modifications*. The LWRD shall be notified of any significant modifications proposed to be made to the approved plans. The LWRD may require proposed changes to be submitted for review prior to incorporation into the approved plans or implementation. Any modifications made during plan implementation without prior approval by the project engineer under Sec. 3.01 (f) below and the LWRD are subject to enforcement action.

d. *Notification*. The LWRD shall be notified at least 2 working days before commencing any work in conjunction with approved plans. The LWRD shall also be notified of proposed plan modifications under Sec. 3.01 (c), and within 1 working day of completing construction of a storm water BMP. The LWRD may require additional notification according to a schedule established by the LWRD so that practice installations can be inspected during construction.

e. *LWRD Access*. The LWRD or its designee shall be permitted access to the site for the purpose of inspecting the property for compliance with the approved plans and other permit requirements.

f. *Project Engineer/Landscape Architect/Individual*. An individual permit holder involved in individual construction projects creating an additional 7000 sq. ft. or less of impervious surfaces may obtain a permit for a project that is designed and constructed as outlined in Appendix X – Rain Garden Design. All others shall provide an engineer/ Landscape Architect licensed in the state of Wisconsin to be responsible for achieving compliance with approved construction plans, including the implementation of the approved inspection plan and verification of construction in accordance with Sec. 3.04 below. If warm season or wetland plantings are involved, the permit holder shall also provide a landscape architect or other qualified professional to oversee and verify the planting process and its successful establishment.

g. *Inspection Log*. The permit holder shall provide a qualified professional to conduct inspections and maintain an inspection log for the site. All best management practices shall be inspected within 24 hours after each rain event of 0.5 inch or more that results in runoff, or at least once each week. The inspection log shall include the name of the inspector, the date and time of inspection, a description of the present phase of construction, the findings of the inspection, including an assessment of the condition of erosion and sediment control measures and the installation of storm water management BMPs, and any action needed or taken to comply with this ordinance. The inspection log shall also include a record of BMP maintenance and repairs conducted under Sec. 3.01 (h) and Sec. 3.01 (i). The permit holder shall maintain a copy of the inspection log at the construction site or via the Internet, and shall notify the LWRD of the method of availability upon permit issuance. If the inspection log is maintained on site, the LWRD may view or obtain a copy at any time during normal business hours

until permit termination under Sec. 3.02. If the inspection log is made available via the Internet, the permit holder shall notify the LWRD of the appropriate Internet address and any applicable access codes, and shall maintain the availability of the log until permit termination under Sec. 3.02

h. *BMP Maintenance*. The permit holder shall maintain and repair all best management practices within 24 hours of inspection, or upon notification by the LWRD, unless the LWRD approves a longer period due to weather conditions. All BMP maintenance shall be in accordance with approved plans and applicable technical standards until the site is stabilized and a permit termination letter is issued under Sec. 3.02. The permit holder, upon approval by the LWRD, shall remove all temporary erosion control practices such as silt fence. The permit holder, in accordance with approved plans and applicable technical standards, shall maintain permanent storm water management practices until maintenance responsibility is transferred to another party or unit of government pursuant to the recorded maintenance agreement.

i. *Other Repairs*. The permit holder shall be responsible for any damage to adjoining properties, municipal facilities or drainage ways caused by erosion, siltation, runoff, or equipment tracking. The LWRD may order immediate repairs or clean-up within road right-of-ways or other public lands if the LWRD determines that such damage is caused by activities regulated by a permit under this ordinance. With the approval of the landowner, the LWRD may also order repairs or clean-up on other affected property.

j. *Emergency Work.* The permit holder authorizes the LWRD, in accordance with the enforcement procedures under Sec. 9, to perform any work or operations necessary to bring erosion control or storm water management practices into conformance with the approved plans and consents to charging such costs against the financial assurance pursuant to Sec. 3.03 below or to a special assessment or charge against the property as authorized under Subch. VII of Ch. 66, Wisconsin Statutes

k. *Permit Display.* The permit holder shall display the storm water permit in a manner that can be seen from the nearest public road and shall protect it from damage from weather and construction activities until permit termination under Sec. 3.02.

l. *Other Requirements*. The LWRD may include other permit requirements that the LWRD determines are necessary to ensure compliance with this ordinance

3.02. <u>Storm Water Permit Issuance, Duration, Amendments, Transfer and Termination.</u>

a. *Permit issuance*. The LWRD shall issue a permit to the applicant after verifying that all applicable conditions of this ordinance and possibly other related permits have been met, including the submittal of contact information for all responsible parties and the submittal of the financial assurance under Sec. 3.03. The LWRD may delay issuance of a storm water permit if the LWRD determines that the proposed construction timelines and best management practices will not comply with the erosion control plan requirements under Sec. 4 or the purposes of the ordinance under Sec. 1.03.(b), including proposed late season new road construction with grass swales.

b. *Permit duration*. The LWRD shall establish an expiration date for all storm water permits based on the construction schedules in the approved erosion control and storm water management plans and follows 5 year timelines outlined in Act 243. The applicant shall notify the LWRD of any changes to the proposed schedule prior to permit conflict.

c. *Permit amendments*. The LWRD may amend any terms of a storm water permit, including extending the permit expiration date, if the LWRD determines it is necessary to ensure compliance with this ordinance. The applicant shall request an amendment to a storm water permit at least 2 weeks before permit expiration on a form provided by the LWRD for that purpose and shall pay the corresponding fee. The LWRD may require additional erosion control or storm water management measures as a condition of granting a permit amendment.

d. *Permit transfer*. The LWRD may transfer a storm water permit issued under this ordinance to a new applicant upon a written request from the applicant and payment of the corresponding fee. The permit transfer shall not take effect until the LWRD verifies in writing that the new applicant has satisfied all conditions of this ordinance, including an updated list of responsible parties and the submittal of a new financial assurance under Sec. 3.03.

e. *Permit termination*. The LWRD shall issue a permit termination letter to the permit holder upon releasing the financial assurance under Sec. 3.03 which shall serve as documentation that all conditions of this ordinance have been satisfied and the permit has been terminated. A copy of this letter shall also be sent to the Wisconsin Department of Natural Resources and shall serve as the "Notice of Termination" under s.s. NR 216.55 Wis. Admin. Code.

3.03. Financial Assurance.

a. *Purpose*. The LWRD shall require the applicant to submit a financial assurance to ensure compliance with the approved erosion control and storm water management plans and other storm water permit requirements.
b. *Type and Authority*. The LWRD shall determine the acceptable type and form of financial assurance, which may include cash, a bond, an escrow account or irrevocable letter of credit. The LWRD shall, upon written notice to the permit holder, be authorized to use the funds to complete activities required in the approved plans or this ordinance if the permit holder or other responsible party defaults or does not properly implement the requirements.
c. *Amount*. The amount of the financial assurance shall be determined by the LWRD and shall not exceed the estimated cost of completing the approved erosion control and storm water management plans.
d. *Exemption*. Publicly funded land disturbing or land development activities shall be exempt from providing a financial assurance.
e. *Security*. The LWRD shall provide the permit holder or other responsible party a written statement outlining the purpose of the financial assurance, the applicable amount and type received and all of the conditions for release.
f. *Conditions for Release*. The LWRD shall release the financial assurance, and issue a termination letter in accordance with Sec. 3.02 (e), only after determining full compliance with the permit and this ordinance, including the following:
    1. Accepting an "as-built" survey certified pursuant to Sec. 3.04 (a),
    2. Accepting verification of construction pursuant to Sec. 3.04 (b);
    3. Completing a satisfactory final inspection pursuant to Sec. 3.05;
    4. Receiving a copy of the recorded maintenance agreement pursuant to Sec. 7 of this ordinance.
g. *Partial Releases*. The permit holder may apply for a partial release of the financial assurance based on the completion or partial completion of various construction components or satisfaction of individual requirements noted above.
h. *Amounts Withheld*. The LWRD shall withhold from the financial assurance amount released to the permit holder any costs incurred by the LWRD to complete installation or maintenance of best management practices through enforcement action or prior to the transfer of maintenance responsibilities through an approved maintenance agreement, or other unpaid fees or costs incurred by the LWRD associated with the enforcement of this ordinance.
i. *Other Financial Assurances*. The financial assurance provisions of this ordinance shall be in addition to any other financial assurance requirements of the local community for other site improvements. Any arrangements made to share financial assurances with the local community shall be made at the discretion of the LWRD and shall be at least as restrictive the requirements in this ordinance.

3.04. Construction and Planting Verification.

a. *As-built Survey*. To ensure compliance with this ordinance and to serve as a basis for the engineering verification under Sec. 3.04 (b), an as-built survey shall be completed in accordance with LWRD standards and certified as accurate by a registered land surveyor or an engineer licensed in the State of Wisconsin. As-built plans shall be submitted to the LWRD for all storm water management BMPs, bridges and culverts pursuant to Sec. 5.04 (f) 4. below, and other permanent best management practices or practice components as deemed necessary by the LWRD to ensure its long-term maintenance. The LWRD may require a digital submittal of the as-built survey, in accordance with LWRD standards.
b. *Verification*. A professional engineer licensed in the State of Wisconsin shall verify, in accordance with LWRD standards, that the engineer has successfully completed all site inspections outlined in the

approved plans and that the construction of all storm water management BMPs, as determined by the LWRD, comply with the approved plans and applicable technical standards or otherwise satisfy all the requirements of this ordinance. If warm season or wetland plantings are involved, a landscape architect or other qualified professional shall verify the planting process and its successful establishment, in accordance with LWRD standards.

c. *Design Summaries*. Any changes noted in the as-built survey or final design data compared to the design summaries approved with the final storm water management plans shall be documented and resubmitted to the LWRD as part of the verification under Sec. 3.04 (b).

3.05. Final Inspection. After completion of construction, the LWRD shall conduct a final inspection of all permitted sites to determine compliance with the approved plans and other applicable ordinance requirements, including ensuring the site is stabilized. If, upon inspection, the LWRD determines that any of the applicable requirements have not been met, the LWRD shall notify the permit holder what changes would be necessary to meet the requirements. At the request of the permit holder, the LWRD shall provide a notification of noncompliance or a report of final inspection in written or electronic form.

Section 4. Erosion Control Plan Requirements

4.01. General Erosion Control Plan Requirements and Performance Standards. An erosion control plan shall describe how the permit holder and other responsible party will minimize, soil erosion and the transport of sediment from land disturbing activities to waters of the state or other property. To meet this requirement, the following performance standards shall apply:

a. All erosion control plans and associated BMPs shall comply with the planning, design, implementation and maintenance requirements of this ordinance.

b. All erosion control plans shall by design, achieve to the maximum extent practicable, a reduction of 80% of the sediment load carried in runoff, on an average annual basis, as compared with no sediment or erosion controls, until the site is stabilized.

c. Erosion and sediment control BMPs may be used alone or in combination to meet the 80% sediment reduction goal. Plans that comply with the guiding principles described in Sec. 4.02 below and the specific erosion control plan requirements described in Sec. 4.03 below shall be determined by the LWRD as meeting the 80% sediment reduction goal.

d. The LWRD may recognize other methods for determining compliance with the 80% sediment reduction goals as they are standardized, including any methods that may come from the procedures under Subch. V. of Ch. NR 151, Wis. Adm. Code.

4.02. Guiding Principles for Erosion Control. To satisfy the requirements of this section, an erosion control plan shall, to the maximum extent practicable, adhere to the following guiding principles:

a. Propose grading that best fits the terrain of the site, avoiding steep slopes, wetlands, floodplains and environmental corridors;

b. Minimize, through project phasing and construction sequencing, the time the disturbed soil surface is exposed to erosive forces.

c. Minimize soil compaction, the loss of trees and other natural vegetation and the size of the disturbed area at any one time;

d. Locate erosion control BMPs prior to runoff leaving the site or entering waters of the state and outside of wetlands, floodplains, primary or secondary environmental corridors or isolated natural areas

e. Emphasize the use of BMPs that prevent soil detachment and transport over those aimed to reduce soil deposition (sedimentation) or repair erosion damage.

4.03. Erosion Control Plan Best Management Practices. The following applicable minimum requirements shall be addressed in erosion control plans to the maximum extent practicable.

a. *Access Drives and Tracking*. Provide access drive(s) for construction vehicles that minimize tracking of soil off site using BMPs such as stone tracking pads, tire washing or grates. Minimize runoff and sediment from adjacent areas from flowing down or eroding the access drive.

b. *Diversion of Upslope Runoff.* Divert excess runoff from upslope land, rooftops or other surfaces, if practicable, using BMPs such as earthen diversion berms, silt fence and downspout extenders. Prevent erosion of the flow path and the outlet.
c. *Inlet Protection.* Protect inlets to storm drains, culverts and other storm water conveyance systems from siltation until the site is stabilized.
d. *Soil Stockpiles.* Locate soil stockpiles away from channelized flow and no closer than 25 feet from roads, ditches, lakes, streams, ponds, wetlands or environmental corridors, unless otherwise approved by the LWRD. Control sediment from soil stockpiles. Any soil stockpile that remains for more than 30 days shall be stabilized.
e. *Cut and Fill Slopes.* Minimize the length and steepness of proposed cut and fill slopes and stabilize them as soon as practicable.
f. *Channel Flow.* Trap sediment in channelized flow before discharge from the site using BMPS such as sediment traps and sediment basins. Stabilize open channels in accordance with LWRD standards as soon as practicable.
g. *Outlet Protection.* Protect outlets from erosion during site dewatering and storm water conveyance, including velocity dissipation at pipe outfalls or open channels entering or leaving a storm water management facility.
h. *Overland Flow.* Trap sediment in overland flow before discharge from the site using BMPs such as silt fence and vegetative filter strips.
i. *Site Dewatering.* Treat pumped water to remove sediment prior to discharge from the site, using BMPs such as sediment basins and portable sediment tanks.
j. *Dust Control.* Prevent excessive dust from leaving the construction site though construction phasing and timely stabilization or the use of BMPs such as site watering and mulch – especially with very dry or fine sandy soils.
k. *Topsoil Application.* Save existing topsoil and reapply a minimum of 4 inches to all disturbed areas for final stabilization, unless otherwise approved by the LWRD, such as for temporary seeding or storm water infiltration BMPs. If adequate topsoil does not exist on the site to meet this requirement, it shall be imported.
l. *Waste Material.* Recycle or properly dispose all waste and unused building materials in a timely manner. Control runoff from waste materials until they are removed or reused.
m. *Sediment Cleanup.* By the end of each workday, clean up all off-site sediment deposits or tracked soil that originated from the permitted site. Flushing shall not be allowed unless runoff is treated before discharge from the site.
n. *Final Site Stabilization.* All previous cropland areas where land disturbing activities will not be occurring under the proposed grading plans, shall be stabilized upon permit issuance. Stabilize all other disturbed areas within 7 days of final grading and topsoil application. Large sites shall be treated in stages as final grading is completed in each stage. Any soil erosion that occurs after final grading or the application of stabilization measures must be repaired and the stabilization work redone.
o. *Temporary Site Stabilization.* Any disturbed site that remains inactive for greater than 7 days shall be stabilized with temporary stabilization measures such as soil treatment, temporary seeding or mulching. For purposes of this subsection, "inactive" means that no site grading, landscaping or utility work is occurring on the site and that precipitation events are not limiting these activities. Frozen soils do not exclude the site from this requirement.
p. *Removal of Practices.* Remove all temporary BMPs such as silt fences, ditch checks and sediment traps as soon as all disturbed areas have been stabilized.
q. *Site Drainage.* Site drainage plans shall comply with the provisions of Sec. 5.04 (f) below.
r. *Additional consideration.* The LWRD may establish more stringent erosion and sediment control requirements than the minimums set forth in this section if the LWRD determines that an added level of protection is needed to protect an environmentally sensitive area or other property, or to address a change made during plan implementation.

4.04. Final Erosion Control Plan Contents. The following shall be the minimum requirements for items to be included in a final erosion and sediment control plan:

a. *Sites Less than One Acre of Total Land Disturbance.*
   1. A narrative describing the proposed land disturbing activity, construction timeline and sequencing, temporary BMPs to be used to minimize off-site impacts during the construction phase, and proposed methods to stabilize the site following construction in accordance with the requirements of this ordinance;
   2. A survey map or scaled site plan drawing of sufficient clarity showing a north arrow, the location of proposed land disturbance, direction of flow for runoff entering and leaving the disturbed area, upslope drainage area (if known), proposed BMPs, existing and proposed slopes, ground cover, buildings, roads, access drives, property boundaries, drainage ways, water bodies, trees, culverts, utilities and other structures within 50 feet of the proposed land disturbance;
   3. The name, address and daytime phone number of the person(s) charged with installing and maintaining all best management practices;
   4. For underground utility installations, the plans must delineate where utilities will be installed, show the location of the open cut and the topography in the area, and list the total lineal feet to be installed and the lineal feet that will be done by open cut; and
   5. Other information determined to be necessary by the LWRD to ensure compliance with the requirements of this chapter.

b. *Sites One Acre or Greater in Total Land Disturbance.*
   1. A site map in accordance with Sec. 5.03 unless specified or modified below;
   2. A map at a scale of 1 inch equals no more than 100 feet (unless otherwise noted), delineating and labeling the following applicable items:
      (a). North arrow, graphic scale, draft date, name and contact information for project engineer or planner and designation of source documents for all map features.
      (b). Proposed site topography at contour intervals not to exceed two feet, proposed percent slope for all open channels and side slopes and all proposed runoff discharge points from the site;
      (c). Proposed building envelopes and other land area to be disturbed and size in acres;
      (d). All woodland areas, those proposed to be lost or transplanted during construction and acres or numbers of each. For woodlands proposed to be lost, show individual trees larger than eight (8) inches in diameter that are located within twenty (20) feet of proposed grading boundaries;
      (e). Temporary access drive and specified surface material and minimum depth;
      (f). Temporary flow diversion devices for upslope or roof runoff until site is stabilized;
      (g). Temporary sediment trapping devices for site perimeter and inlets to culverts and storm drains;
      (h). Temporary settling basin or other BMP to be used for site dewatering during utility or other subsurface work;
      (i). Temporary soil stockpile sites indicating setbacks from nearby water resources or environmental corridors and the proposed erosion protection methods;
      (j). Detailed drawings and cross-sections for any sediment traps, basins or other major cut or fill areas requested by the LWRD, showing side slopes and elevations;
      (k). Final stabilization measures for open channels and erosion protection for pipe and channel inlets, outlets and emergency spillways;
      (l). Location of proposed utilities, including: standard cross-section for buried utilities, associated easements, labeling the type of utility and notes on erosion control and restoration plans;
      (m). Final site stabilization instructions for all other disturbed areas, showing areas to be stabilized in acres, depth of applied topsoil, seed types, rates and methodology, fertilizer, sod or erosion matting specifications, maintenance requirements until plants are well established, and other BMPs used to stabilize the site;
      (n). Detailed construction notes clearly explaining all necessary procedures to be followed to properly implement the plan, including estimated starting date of grading, timing and sequence of construction or demolition, any construction stages or phases, utility installation, dewatering

plans, refuse disposal, inspection requirements, and the installation, use, and maintenance of best management practices proposed in the plan;

(o). Location of soil evaluations with surface elevations and unique references to supplemental soil evaluations report forms in accordance with Sec. 6.05. A separate map shall show estimated seasonal water table depths and soil textures down to planned excavation depths with sufficient references to the proposed site plan.

(p). Other items specified by the LWRD as necessary to ensure compliance with this ordinance.

3. Summary of design data for any structural BMP such as sediment basins or sediment traps. A professional engineer, licensed in the State of Wisconsin, shall stamp and sign a statement approving all designs and certifying that they have read the requirements of this ordinance and that, to the best of their knowledge, the submitted plans comply with the requirements;
4. Supporting information for the plan reviewer only:
   (a). A narrative summary of the erosion control plan, briefly explaining the overall plan and, any unique information that led to the selection of BMPs and how the plan meets the guiding principles under Sec. 4.02 and the specific requirements under Sec. 4.03;
   (b). Open channel design and stabilization data to support the selected BMPs for stabilization;
   (c). Soil evaluation reports, in accordance with the standards in Sec. 6.05, with unique references and elevations that match the map under Sec 4.05.(b) 2 (o) above.
   (d). Estimated time soil stockpiles will exist to support the selected BMPs for erosion control;
   (e). Documentation that proposed utility locations and installation scheduling has been coordinated with the affected utility companies.
   (f). Documentation of any other calculations used to demonstrate compliance with the performance standards in this section.

4.05 **<u>The Approved Erosion Control Plan must be followed throughout construction.</u>**

Section 5. Storm Water Management Plan Requirements

5.01. <u>General Storm Water Management Plan Requirements</u>. A storm water management plan shall describe how the permit holder and other responsible party will meet the storm water management requirements of this section and other related requirements in this ordinance. All storm water management plans and associated BMPs shall comply with the planning, design, implementation and maintenance requirements described in this ordinance to achieve a no net increase in runoff from the disturbed site.

5.02. <u>Guiding Principles for Storm Water Management</u>. To satisfy the requirements of this section, a storm water management plan shall, to the maximum extent practicable, adhere to the following guiding principles:

a. Preserve natural watershed boundaries and drainage patterns;
b. Reserve adequately sized areas for storm water infiltration, detention and treatment early in the site planning process;
c. Locate storm water BMPs prior to runoff leaving the site or entering waters of the state, and outside of wetlands, floodplains, primary or secondary environmental corridors or isolated natural areas;
d. Minimize soil compaction and maintain pre-development groundwater recharge areas;
e. Minimize impervious surfaces and have them drain to vegetated areas for pollutant filtering and infiltration;
f. Emphasize vegetated swales, warm season and wetland plantings, and low flow velocities for storm water conveyance, treatment and infiltration, especially for transportation related projects;
g. Allow for different storm water management strategies for cleaner runoff (i.e. roofs) versus more polluted runoff (i.e. heavily used streets and parking lots);
h. Provide for emergency overflow in all storm water BMP designs;
i. Distribute storm water bio-retention and infiltration BMPs throughout the site plan for large land developments;

5.03. Site Plan Map Requirements. A site plan map and supporting data of site conditions at a scale of 1 inch equals no more than 50 feet (unless otherwise noted) shall delineate or display all the following applicable items:

a. Development title, graphic scale and north arrow;
b. Property location description by public land survey system (1/4 section, section, township, range, county);
c. Location map (smaller scale) showing the site location within a public land survey section or subdivision, oriented the same as par. d below;
d. Ownership boundaries, bearings, lengths and other survey references that will accurately identify the sites location, in accordance with s. 236 Wisconsin Statutes and county mapping standards for all land divisions;
e. Lot numbers and dimensions, including outlots for all land divisions;
f. Name and complete contact information for the applicant, landowner, developer and project engineer;
g. Surveyor's certificate, signed, dated and sealed for all land divisions;
h. Sheet numbers and revision dates on every page;
i. Existing site topography at a contour interval not to exceed 2 feet, including spot elevations for physical features such as culvert (invert elevations), retaining walls, road and ditch centerlines and topographic high and low points;
j. Location and name, if applicable, of all lakes, streams, channels, ditches, and other water bodies or areas of channelized flow on or adjacent to the site;
k. Location and name, if applicable, of all wetlands and identification of source of delineation. For final land divisions, these boundaries shall be field verified;
l. Boundaries of shoreland zones and the ordinary high water mark (OHWM) for any navigable water body as defined by the Polk County Shoreland Protection Zoning Ordinance. For final land divisions, the OHWM boundaries shall be field verified;
m. Boundaries and elevation of the 100-year floodplains, flood fringes and floodways, as defined by the Polk County Shoreland Protection Zoning Ordinance. For final land divisions, these boundaries and elevations shall be field verified;
n. Boundaries and soil symbol for each soil mapping unit and the identification of all hydric soils as defined by the USDA-Natural Resources Conservation Service;
o. Locations of all available soil borings or soil profile evaluations with unique references to supplemental data report forms;
p. Location of primary and secondary environmental corridors, as defined by the Northwestern Wisconsin Regional Planning Commission. For final land divisions, these boundaries shall be field verified;
q. Location and description of isolated natural area boundaries as defined by the Northwestern Wisconsin Regional Planning Commission, woodland areas and other vegetative cover types;
r. Location and descriptive notes for existing and proposed structures within 50 feet of the property boundaries and their proposed use, including, but not limited to buildings and foundations, roads, parking areas, fence lines, access lanes, culverts (include size and type), above ground utilities and retaining walls;
s. Location and descriptive notes for other known existing site features including, but not limited to rock outcrops or other karst features, tile drains, buried utilities, dumps, landfills, manure or other waste storage facilities;
t. Boundaries and descriptive notes for all applicable setbacks and for "protective areas", as specified in Sec. 5.04 of this ordinance;
u. Location and descriptive notes for any existing or proposed easements, right-of-ways, vision corners or other known site restrictions. Road right-of ways and building setbacks shall be in compliance with all applicable administrative codes, adopted plans and ordinances;
v. Location and descriptive notes for existing and proposed public dedications of parcels or right-of-ways;
w. Location and descriptive notes for preplanned building or waste disposal sites, when limited by site features;

x. Location and documentation of any existing well and delineation of any applicable regulatory setbacks, in accordance with Ch. NR 811 and 812 Wis. Admin. Code;
y. Notes describing source documents, date and measure of accuracy for all applicable mapping features noted above;
z. Other site information that the LWRD determines is necessary to administer this ordinance. Note: The LWRD will provide the applicant with a written checklist of the above items, including guidance on which items are applicable to the proposed project. Items may need to be displayed on more than one map for purposes of clarity.

5.04. Specific Storm Water Management Plan Technical Requirements and Performance Standards. All storm water management plans and associated BMPs shall meet the following minimum requirements to the maximum extent practicable. It is highly recommended that the applicant meet with the LWRD prior to preparing a storm water management plan to determine the applicability of these requirements early in the site planning process. A cover sheet stamped and signed by a professional engineer registered in the State of Wisconsin indicating that all plans and supporting documentation have been reviewed and approved by the engineer and certifying that they have read the requirements of this ordinance and that, to the best of their knowledge, the submitted plans comply with the requirements.

a. *Peak Discharge.*
   1. Minimum requirement. To minimize downstream bank erosion and the failure of downstream conveyance systems, the calculated post-development peak storm water discharge rate shall not exceed the calculated pre-development discharge rates for the 2-year, 10-year, and 100-year, 24-hour design storms. Modeling requirements for this provision are further described in Sec. 6.
   2. Release Rate Per Acre. The LWRD may establish a maximum allowable release rate on a per acre basis that would supersede the requirements of sub. A. above for certain watersheds after the necessary hydrologic modeling is completed and the maximum release rate is established. Note: A detailed watershed-based hydrologic analysis can generate a more accurate peak discharge rate for the protection of downstream properties from increased flooding due to the addition of impervious surfaces.
   3. Peak Discharge Exemptions. Certain sites or portions of sites may be exempted from the peak discharge requirements of this subsection in accordance with sub. (e) below.

b. *Total Suspended Solids.*
   1. By design, each storm water management plan shall meet the following post-development total suspended solids reduction targets, based on average annual rainfalls, as compared to no runoff management controls.
      (a). For new land development, 80% reduction in total suspended solids load;
      (b). For redevelopment, 40% reduction of total suspended solids load;
      (c). For in-fill development, 80% reduction of total suspended solids load.

c. *Infiltration.* BMPs shall be designed, installed, and maintained to infiltrate runoff in accordance with the following requirements, except as provided in subs. E. through H. below.
   1. Residential. 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 100% 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 volume from the 2-year, 24-hour design storm with a type II distribution. Separate runoff curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes, not composite curve numbers, as prescribed in Sec. 6. 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. Non-residential. 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 post-development runoff volume from the 2-year, 24-hour design storm. Separate curve numbers for pervious and impervious surfaces shall be used to calculate runoff volumes, 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. Modeling. Refer to Sec. 6 for details on calculating runoff volumes and pre-development conditions.
4. Pretreatment. Pretreatment shall be required before infiltrating parking lot and road runoff from commercial, industrial and institutional areas. 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. H below. Pretreatment options may include, but are not limited to, oil/grease separators, sedimentation or bioretention basins, filtration swales or filter strips. All designs shall comply with the technical standards in Sec. 6. Note: To achieve the infiltration requirement for the parking lots or roads, "maximum extent practicable" should not be interpreted to require significant topography changes that create an excessive financial burden. To minimize potential groundwater impacts, it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollutant source areas such as parking lots.
5. Infiltration Exclusions. Infiltration of runoff shall not be credited toward meeting the requirements of this subsection for the following:

(a). Runoff from outdoor material storage and loading docks for tier 1 and tier 2 industrial facilities, as identified in NR 216(2) Wis. Admin. Code.

(b). Runoff from fueling and vehicle maintenance areas, not including rooftops and canopies.

(c). Infiltration of runoff within 1000 feet up-gradient or within 100 feet downgradient of karst features.

(d). Infiltration of runoff from any area except rooftops with less than 3 feet separation distance from the top of the filtering layer to the elevation of seasonal high groundwater or the top of bedrock.

(e). Infiltration of runoff from industrial, commercial and institutional parking lots and roads and residential arterial roads with less than 5 feet separation distance from top of the filtering layer to the elevation of seasonal high groundwater or the top of bedrock.

(f). Areas within 400 feet of a community water system well as specified in s. NR 811.16(4), Wis. Adm. Code, or within 100 feet of a private well as specified in s. NR 812.08(4), Wis. Adm. Code, for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development, not including rooftop runoff.

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

(h). Areas associated with tier 1 industrial facilities identified in s. NR 216.21 (2) (a), including storage, loading, rooftop and parking.

(i). Any area where the soil does not exhibit one of the following 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% fines or greater. This paragraph does not apply where the soil medium within the infiltration system provides an equivalent level of protection and does not prohibit infiltration of roof runoff.

6. Infiltration Exemptions. The infiltration requirements of this subsection do not apply to frozen soil conditions and may be exempted if soils have a measured infiltration rate of less than 0.6 inches per hour and the LWRD determines it would be impracticable to modify existing soil conditions. Other sites may be exempted in accordance with Sec. 5.05.

7. Alternate runoff uses. Where storage and reuse of runoff are employed, such as to support green roofs, landscape watering, toilet flushing, laundry or irrigation, such alternate uses shall be given equal credit toward the infiltration volume required by this section.
8. Groundwater protection.
   (a). Infiltration systems designed in accordance with this subsection 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 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). The discharge from BMPs shall remain below the enforcement standard at the point of standards application.
   (c). No storm water BMP shall be installed that meets the definition of an injection well under Chapter NR 812 Wis. Admin. Code.
   (d). All storm water BMPs shall comply with the provisions of any applicable wellhead protection plan for a community water supply under Chapter NR 811 Wis. Admin. Code.

d. *Protective Areas.*
1. Definitions. "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 section, "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 (minimums listed below).
   (a). For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in Chapter NR 103 Wis. Admin. Code, the protective area extends 75ft back from it.
   (b). For perennial and intermittent streams identified on the Polk County GIS system, 50 feet. If there is a discrepancy between the Polk County GIS system and the applicable United States Geological Survey 7.5-minute series topographic map, the more stringent stream identification shall apply.
   (c). For lakes, 50 feet.
   (d). For highly susceptible wetlands, as determined by the LWRD, 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 Chapter NR 103 Wis. Admin. Code. 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 Sec. 5.04 (d) 1 (a) (d) (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 Chapter NR 103 Wis. Admin. Code.
   (g). For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.
2. Requirements. The following requirements shall be met for all land development activity located within a protective area:
   (a). Impervious surfaces shall be kept out of the protective area, except for boathouses and walkways authorized under shoreland and floodland zoning. The erosion control plan shall

contain a written site-specific explanation for any parts of the protective area that are disturbed during construction.

(b). Where land disturbing activity occurs within a protective area, and where no impervious surface is present, adequate sod or self-sustaining vegetative cover of 70% plant density 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, but shall not encroach into wetlands, floodplains or primary or secondary environmental corridors.

3. Protective Area Exemptions. The protective area requirements of this subsection may be exempted in accordance with sub. (e). below and do not apply to the following:

(a). Structures that cross or access surface waters such as boat landings, bridges and culverts;

(b). Structures constructed in accordance with s. 59.692(1v), Wisconsin Statutes; and

(c). Sites where runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.

e. *Fueling and Vehicle Maintenance Areas.* Fueling and vehicle maintenance areas shall 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.

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

1. Drainage easement. Perpetual drainage easements or other deed restrictions shall be recorded on the property to preserve major storm water flow paths and permanent storm water BMP locations. Covenants in these areas shall not allow buildings or other structures and shall prevent any grading, filling or other activities that interrupt or obstruct flows in any way. Covenants shall also specify maintenance responsibilities and authorities in accordance with Sec. 7.

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

3. Street drainage. All street drainage shall be designed to prevent concentrated flows from crossing the traffic lanes to the maximum extent practicable. Design flow depths at the road centerline for on-street drainage, shall not exceed six (6) inches during the peak flows generated by the 100-year, 24 hour design storm, using planned land use conditions for the entire contributing watershed area.

4. Bridges and cross-culverts. All new or modified bridges and cross-culverts shall comply with applicable design standards and regulations, facilitate fish passage and prevent increased flooding or channel erosion upstream or downstream from the structure. Design flow depths at the road centerline for all crossings shall not exceed six (6) inches during the peak flows generated by the 100-year, 24-hour design storm, using planned land use conditions for the entire contributing watershed area. All predevelopment runoff storage areas within the flow path upstream of bridges and cross-culverts shall be preserved and designated as drainage easements, unless compensatory storage is provided and accounted for in modeling. As-built documentation shall be submitted in accordance with Sec.3 for all new or modified structures that are located within a mapped floodplain or that the LWRD determines to be necessary to maintain floodplain modeling for the applicable watershed.

5. Subsurface drainage. Basement floor surfaces shall be built one (1) foot above the seasonal high water table elevation, as documented in the submitted soil evaluations, and shall avoid hydric soils as much as possible. The LWRD shall be notified of any drain tiles that are uncovered during construction, which the LWRD may require to be restored or connected to other drainage systems. No discharge of groundwater from tile lines, sump pumps or other means shall be allowed onto

another person's land or any public space without the written approval of the owner or unit of government.

6. Open channels. All open channel drainage systems shall at a minimum be designed to carry the peak flows from a 10-year, 24-hour design storm using planned land use for the entire contributing watershed area. Side slopes shall be no steeper than 3h: 1v unless otherwise approved by the LWRD for unique site conditions. Open channels that carry runoff from more than 130 acres shall at a minimum be designed to carry the peak flows from a 25-year, 24-hour design storm.
7. Storm sewers. All storm sewers shall be designed in accordance with applicable community technical standards and specifications.
8. Structure protection and safety. Flows generated by the 100-year, 24-hour design storm under planned land use conditions may exceed the design capacity of conveyance systems, but shall not come in contact with any buildings. For buildings designed for human occupation on a regular basis, the following additional requirements shall apply:
   (a). The lowest elevation of the structure that is exposed to the ground surface shall be a minimum of two (2) feet above the maximum water elevation produced by the 100-year, 24 hour design storm, including flows through any storm water BMP that may temporarily or permanently store water at a depth of greater than one (1) foot; and
   (b). The structure shall be set back at least 50 feet horizontally from any storm water BMP that may temporarily or permanently store water at a depth of greater than one (1) foot. Setback distance shall be measured from the closest edge of water at the elevation produced by the 100-year, 24-hour design storm.

5.05. <u>Storm Water management Plan Exemptions</u>.

a. *Exemption Criteria.* Following the provisions of this subsection, the LWRD may exempt a site or a portion of a site from meeting certain technical requirements of this section if the LWRD determines that one or more of the following applies:
   1. Off-Site BMP(s). The requirement has been satisfied through the use of off-site BMP(s). Off-site BMPs could be installed beyond the boundaries of the property covered by the application as part of a regional storm water management plan or through other legal arrangements. However, to be eligible for this exemption, the off-site BMP(s) must treat runoff from the site covered by the application;
   2. Internally Drained Sites. The site is internally drained and will not discharge runoff from the site after development occurs; or
   3. Site Conditions. It is impracticable to meet the requirement due to site conditions such as slopes, soils, proximity to structures or desirable trees, limited site dimensions, surrounding land uses, the potential for groundwater contamination, public health or safety problems, or other factors beyond the control of the applicant. No site shall be entitled to an exemption under this paragraph due solely to the size of the proposed land development activity in relation to the parcel size. However, the LWRD shall provide special consideration in granting exemptions under this paragraph for the following sites:
      (i) Redevelopment sites.
      (ii) In-fill development areas less than 5 acres.
      (iii) Highway projects where limited public right-of-way land is available for the installation of storm water BMPs.
      (iv) Land developments with less than 10% of the site planned to be impervious surfaces and the total cumulative area of all impervious areas is less than 1 acre using the final build-out condition and 0.5 acres in Shoreland Management Area.

b. *Appeal.* If the applicant does not agree with any determination of the LWRD under this subsection, the applicant may appeal the decision pursuant to the procedures in Sec. 9.

5.06. Storm Water Management Plan Requirements. Final storm water management plans shall contain the following applicable items:

a. Drafting date and contact information for the project engineer, with all other mapping elements and scale consistent with the site plan map;
b. Location of existing and proposed storm water discharge points;
c. Delineation and labeling of all proposed impervious areas and accompanying area computations;
d. Final design drawings of all proposed storm water BMPs with unique references to support documentation, prepared in accordance with minimum LWRD standards and of sufficient clarity for those responsible for site grading, including:
    1. Plan views showing the location of proposed BMPs in combination with the site plan map at a scale of 1 inch equals no more than 100 feet;
    2. Additional detail plan view drawings at a scale of 1 inch equals no more than 40 lineal feet, showing proposed 2 foot contours and all critical design features and elevations;
    3. Detailed cross-sections and profiles of each BMP showing all critical design features, side slopes, structures, soil profiles and applicable elevations, including seasonal high water table;
    4. Detailed drawings or material specifications for inlets or outlets.
e. Type, size, location and cross-sections of all pipes, open channels, grade stabilization structures and other proposed storm water conveyance systems, with unique references to support documentation;
f. Location and dimensions of proposed drainage easements;
g. Location, dimensions and surfacing material or soils data of proposed access lanes and delineation of easements needed to allow future maintenance of all storm water BMPs in accordance with Sec. 7 below. The minimum width of any access easement shall be 15 feet;
h. Location of soil borings and soil profile evaluations with surface elevations and unique references to supplemental data sheets, as needed to determine feasibility of any proposed storm water BMP and to comply with applicable technical standards;
i. Detailed construction notes explaining all necessary procedures to be followed to properly implement the plan, including planting and landscaping specifications, timing and sequencing of construction and any temporary measures needed to protect BMPs during the construction phase;
j. A detailed construction inspection plan, outlining the critical elements in the plan that need to be surveyed or inspected by a representative of the project engineer, the LWRD or the town, and the timing and notification requirements involved.
k. A final storm water BMP maintenance agreement in accordance with Sec. 7
l. Support documentation summarized in accordance with LWRD standards, including but not limited to:
    1. A narrative summary of the storm water management plan, briefly explaining any unique information that led to the selection of BMPs, how the proposed plan meets the guiding principles under sub. (b) above, and the specific storm water planning requirements under sub.(d) above.
    2. Maps of existing and proposed watersheds, sub-watersheds, Tc/Tt flow paths, soil types, hydrologic soil groups, land uses/cover type and accompanying runoff curve numbers within the site and draining into the site from adjacent properties, with unique references to hydrology data summaries and a description of the ultimate receiving water body(s) for off-site discharges;
    3. Pre-development and post-development hydrology and pollutant loading (if applicable) data for each watershed, such as peak flows and runoff volumes, as needed to meet the requirements of this ordinance. All major assumptions used in developing input parameters shall be clearly stated and cross-referenced to the maps under par. B. above;
    4. Impervious surface maps and calculations of runoff volumes and effective infiltration areas, in accordance with Sec. 5.04 (c) above.
    5. Hydraulic and hydrologic data summaries for all existing and proposed pipes, open channels, grade stabilization structures and other storm water conveyance systems, and the necessary documentation to demonstrate compliance with the site drainage requirements under Sec. 5.04 (e) above.
    6. BMP design data for each proposed BMP, showing how it complies with applicable technical standards and the requirements of this ordinance;

7. Soil evaluation reports, following the standards in Sec. 6.05, with matching references to map features showing their location and elevations;
8. Cost estimates for the installation of proposed storm water BMPs, which shall serve as a basis for the financial assurance. The applicant may use average costs for BMP installations in the county rather than specific estimates, upon approval by the LWRD.
9. For sites where changes are proposed in storm water flow paths, or where proposed storm water discharges may otherwise have a significant negative impact on downstream property owner(s), the LWRD may require the applicant to submit written authorization or complete other legal arrangements with the affected property owner(s); and

m. Other items deemed necessary by the LWRD to ensure compliance with the requirements of this ordinance.

Section 6. Technical Standards and Specifications

6.01. Hydrologic and Hydraulic Computations.

a. *Models*. All computations of runoff volumes and peak flow rates used in the development of erosion control and storm water management plans in accordance with this ordinance shall be based on United States Department of Agriculture - Natural Resources Conservation Service (NRCS) methodology. Models such as SLAMM, P8 or other LWRD approved models may be used to evaluate the efficiency of the design in reducing total suspended solids to meet this ordinance. Models such as RECARGA or other LWRD approved models may be used to evaluate the efficiency of the design in meeting the infiltration requirements of this ordinance.

b. *Rainfall depths.* Rainfall depths shall be obtained from NOAA Atlas 14.

c. *Runoff curve numbers*. All computations of pre-development conditions as specified in this ordinance shall use those NRCS runoff curve numbers assigned for a "good" hydrologic condition for each land cover type. For lands where the pre-development land use was cropland, the following NRCS curve number values shall be used as maximums. See NR 152 Appendix B 5.07 (4) (b) (1).

d. *Average annual rainfalls*. All modeling involving average annual rainfall or runoff volumes shall use rainfall data from the Minneapolis area between March 28 and December 6, 1959 as the typical annual rainfall pattern for Polk County. Note: The data noted above is taken from NR 151.12(b).

e. *Rainfall distribution*. All peak flow calculations shall use MSE3 or MSE4 as appropriate rainfall distribution patterns, as defined in NRCS methodologies.

f. *Other methods*. All velocity and peak flow computations for open channels and storm sewer pipe flows shall be based on Manning's Formula. Flow routing, culvert design, weir and orifice flow and other related hydraulic computations used to design storm water management facilities shall be based on standard applicable engineering formulas. Any design data or methodology proposed to be used for hydrologic or hydraulic computations other than those prescribed in this ordinance shall be approved by the LWRD. Revisions or updates to the rainfall depths and distribution prescribed above may be allowed upon approval by the applicable regulatory agencies and the LWRD.

6.02. Best Management Practice (BMP) Design Standards.

a. The design, installation and maintenance of all BMPs used to meet the requirements of this ordinance shall comply with the technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under subchapter V of ch. NR 151, Wis. Adm. Code.

b. Where BMP standards have not been identified or developed under Sec. 6.02 (a), the LWRD may approve the use of other available standards, such as those from other states or the USDA-Natural Resources Conservation Service.

6.03. Technical Guidelines. The LWRD may adopt technical guidelines to facilitate the consistent administration of certain provisions of this ordinance.

a. Examples of technical guidelines that the LWRD has published in the past include sample storm water BMP maintenance agreements, channel & slope stabilization design charts, hydrology and BMP design

data summary tables, as-built survey specifications, outlet design guidance, sample cross-sections and sample storm water management plan documents.

6.04. Construction Specifications. The construction or installation of all BMPs and BMP components shall comply with all applicable manufacturers and industry standards and specifications, including but not limited to those published by ASTM and the USDA - Natural Resources Conservation Service (NRCS).

6.05. Soil Evaluations. All soil profile evaluations and forms submitted for review by the LWRD under the provisions of this ordinance shall be completed in accordance with Chapter COM 85 Wis. Admin. Code and any applicable standards under Sec. 6.02. Where there are no specific standards for the number, location or depth of soil profile evaluations for a proposed BMP, the LWRD shall determine the minimum requirements based on the design of the BMP and the likely variability of the on-site soils.

6.06. Availability. Copies of all technical references made in this section shall be available for review and distribution through the LWRD office during normal business hours, or over the Internet. Fees may be charged for hard copies of these items.

6.07. Future Revisions or Updates. The technical references in this section are made a part of this ordinance and shall be updated periodically in order to keep current with field experiences, research, technological advances and the development of related technical standards by other agencies and units of government. Any future revisions of the documents incorporated herein are also made part of this ordinance unless otherwise acted upon by the LWRD.

Section 7. Maintenance of Storm Water BMPs

7.01. Maintenance Agreement Required. A maintenance agreement shall be required for all permanent storm water BMPs installed to comply with the requirements of this ordinance. The maintenance agreement shall be independent of all other restrictions or covenants and shall comply with all provisions of this section.

7.02. Agreement Provisions. The maintenance agreement shall, at a minimum, contain the following information and provisions:

a. *Ownership.* Identification of the owner(s) of the land parcel(s) where the storm water BMP(s) is located. Ownership shall be the same as those assigned maintenance responsibilities under Sec. 7.02 (f), unless otherwise designated in a regional storm water management plan and approved by the applicable unit(s) of government. For subdivisions, all storm water BMPs shall be located on outlots. For all privately owned outlots, ownership shall be by proportional undividable interest for all properties that are within the control of the applicant and drain to the BMP. However, the applicant may combine ownership of more than one BMP within the site;

b. *Location.* A legal description and survey map of the storm water BMP location(s), showing associated drainage or access easements required to maintain the BMP;

c. *Design.* Detailed drawings of each storm water BMP and a general description of its purpose and design, including but not limited to BMP dimensions and elevations, inlet and outlet designs and elevations and the drainage area served by the BMP. If possible, use as-built survey information.

d. *Maintenance plan.* A description of all long term maintenance activities that will likely be required for each BMP included in the agreement, and an estimated time interval between each activity;

e. *Access.* Authorization for vehicle access, including a minimum 15-foot wide access easement dedicated to the local municipality and connecting to a public road right-of-way, to allow for future BMP maintenance work. The access easement shall be of adequate soil conditions or surfacing to withstand loads produced by standard construction equipment, and shall not include any area where channelized flow of runoff occurs or where storm water may pond to a depth greater than six (6) inches during a 100-year, 24-hour design storm.

f. *Maintenance responsibility.* Identification of the person(s), organization, municipality or other entity responsible for long-term maintenance of the storm water BMP. The assignment of maintenance responsibilities for a privately owned storm water BMP shall, at a minimum, include all properties that are within the control of the applicant and drain to the BMP. However, the applicant may combine the maintenance responsibilities of more than one BMP within the site;

g. *Inspections*. Authorization for access to the property by representatives of the local municipality or their designee and Polk County to conduct inspections of the BMP, monitor its performance and maintenance, and notify the designated entity when maintenance or repair activities are necessary. A statement shall also be included that says, upon written notification by the local municipality or their designee, that the entity under Sec. 7.02 (f) shall, at their own cost and within a reasonable time period, have a BMP inspection conducted by a qualified professional, file a report and complete any maintenance or repair work recommended in the report;

h. *Municipal maintenance*. Authorization for the local municipality or their designee to carry out any maintenance activities and associated inspections if the entity identified under Sec. 7.02 (f) does not perform the required activity within the specified time period in the notification or if the local municipality does not accept the work conducted by the designated entity;

i. *Special assessment*. A statement that the applicable local unit of government may exercise their statutory authority to levy and collect a special assessment or charge pursuant to subch. VII of ch. 66 Wisconsin Statutes, or s. 60.0627, Wisconsin Statutes for towns, for any services carried out relating to Sec. 7.02 (g) or Sec. 7.02 (h);

j. *Binding agreement*. A statement confirming that the entire agreement shall remain binding on all subsequent owners of the property upon which the storm water BMP is located and that the restrictions shall run with the land and on any other property which is subject to maintenance responsibility in the agreement.

k. *Agreement modifications*. Sole authorization for the unit of government named under sub. i. above to modify the provisions of the agreement upon 30-day notice to the current owner(s) and other parties responsible for maintenance of the storm water BMP. Any changes made to the agreement shall maintain the minimum items listed in this subsection and ensure the long term maintenance of the BMP;

l. *Other*. Other information as determined to be necessary by the LWRD to ensure compliance with this ordinance. Note: Many of the above noted activities may be carried out in accordance with an intergovernmental working agreement under s. 66.30 Wisconsin Statutes

7.03. Agreement Form, Approval and Recording.

a. *Form*. The LWRD shall provide the applicant with sample maintenance agreement forms that comply with the requirements of this section.

b. *Approval*. The LWRD shall review and approve the form and content of all maintenance agreements proposed under this ordinance and ensure compliance with all provisions of this section. If the agreement does not comply, the LWRD shall notify the applicant what changes are needed in order to comply, in accordance with the plan review procedures in Sec. 2.05.

c. *Recording*. Upon certification of compliance with Sec. 7.03 (a). and Sec. 7.03 (b) by the LWRD, the maintenance agreement shall be recorded at the Polk County Register of Deeds referencing any plat, certified survey or other ownership transfer device pertaining to land which contains the subject storm water BMP or is subject to maintenance responsibility in the approved agreement. For new land divisions, the recording of the maintenance agreement shall occur simultaneously with the recording of the land division. However, no storm water BMP maintenance agreement shall be recorded prior to LWRD approval. The LWRD may require that the County Zoning Administrator or the LWRD record the agreement.

d. *Copy*. The permit holder shall provide a copy of the recorded agreement, including evidence of the actual recording(s), to the LWRD as a condition of release of the financial assurance under Sec. 3.03

7.04. Maintenance Responsibilities Prior to a Maintenance Agreement. The permit holder and other responsible party shall be responsible for the maintenance of all storm water BMPs prior to permit termination.

Section 8. Illicit Discharges

8.01. Prohibitions.

a. *Discharges*. Except for storm water and other discharges specifically exempted under Sec. 8.02, no discharge, spilling or dumping of substances or materials shall be allowed into receiving water bodies or onto driveways, sidewalks, parking lots or other areas that drain into the storm drainage system.

b. *Connections*. The construction, use, maintenance or continued existence of illicit connections to the storm drainage system is prohibited. This prohibition expressly includes, without limitation, illicit connections made prior to the adoption of this ordinance, regardless of whether the connection was permissible under law or practice applicable or prevailing at the time of connection.

8.02. Exemptions. The following activities are exempt from the provisions of this section unless found to have an adverse impact on the storm water:

a. Discharges resulting from firefighting activities.

b. Discharges from uncontaminated ground water, potable water source, roof drains, foundation drain and sump pump, air conditioning condensation, springs, lawn watering, individual residential car washing, water main and hydrant flushing and swimming pools if the water has been dechlorinated.

8.03. Notice of Violation. Whenever the LWRD finds a violation of this section, the LWRD may order compliance by written notice of violation to the responsible party. Such notice may require without limitation:

a. The elimination of illicit connections or discharges;

b. That violating discharges, practices, or operations shall cease and desist;

c. The abatement or remediation of storm water pollution or contaminated hazards and the restoration of any affected property;

d. Any responsible party that fails to comply with a notice of violation under this section, shall be subject to further enforcement action under the provisions of Sec. 9.

Section 9. Enforcement

9.01. Prohibited Practices. Not complying with any requirement of this ordinance shall be deemed a violation, and shall subject the responsible party to enforcement action under this section. Prohibited practices shall include, but are not limited to:

a. Any land disturbing or land development activity prior to:
   1. Obtaining a storm water permit;
   2. Notifying the LWRD a minimum of 2 working days in advance of land disturbance for sites that have obtained a storm water permit; or
   3. Installing those BMPs identified in the approved plans to be installed prior to any land disturbing or land developing activity.

b. Failing to obtain LWRD certification of compliance in accordance with section 2 of this ordinance.

c. Failing to comply with all permit conditions, erosion control or storm water management requirements and approved plans in accordance with this ordinance.

d. Failing to maintain BMPs until permit termination.

e. Failing to comply with any notice of violation.

9.02. Violations. The LWRD shall notify the permit holder of any violation in writing, and copy any other known responsible party involved in the violation. The written notice shall be hand delivered to the permit holder or sent to the last known address, with a reasonable attempt to verify that the permit holder received it. The notice shall describe the violation, remedial action(s) needed and a schedule for all remedial action to be completed. Any enforcement measures shall continue until compliance is achieved or as ordered by the court. The LWRD is authorized to use the following methods of

enforcement in any combination thereof against any applicant or responsible party that is found to be in violation of any provision of this ordinance:

a. *Forfeiture*. Any violator shall be subject to a forfeiture of not less than $100 or more than $1000 plus the cost of prosecution for each violation. Each day that a violation exists shall constitute a separate offense.
b. *Stop Work Order*. Any violator is subject to an order to stop all work except that which is needed as a corrective action to bring the site into compliance.
c. *Permit Revocation*. The LWRD may revoke a permit issued under this ordinance. Upon loss of the permit, all construction shall cease and the site shall be stabilized, with any costs incurred by the County to be charged against the financial assurance.
d. *Injunction*. The County, or any person affected by activities regulated under this ordinance, may enforce the provisions of this ordinance by a temporary restraining order, injunction and other such relief as a court may order.
e. *Declared nuisances*. Any land disturbing or land development activity carried out in violation of the provisions of this Ordinance is hereby declared to be a nuisance per se, and the county may apply to any court of competent jurisdiction to restrain or abate such nuisance.
f. *Emergency Action*. The LWRD may enter upon the property and take any necessary emergency action if the LWRD determines that the site in violation is an immediate threat to public health, safety, welfare, the environment or downstream property, or if the permit holder or other violator refuses to take the corrective action as ordered by the LWRD. Any cost incurred by the LWRD as a result of this action shall be billed to the permit holder or other responsible party or subtracted from the financial assurance. The LWRD shall provide reasonable notice to the permit holder and other responsible party after exercising this authority.
g. *Citation*. The County elects to also use the citation method of enforcement under Section 66.0113 of the Wisconsin Statutes for violations of this ordinance, including those for which a statutory counterpart exists. The procedures contained in Section 66.0113(3) of the Wisconsin Statutes, relating to the options of an alleged violator and default are adopted and incorporated herein by reference.
    1. Authority to issue a citation under this ordinance shall be limited to the LWRD Director or his/her designee. The authority delegated to such official or employees to issue citations may only be granted or revoked by the County Board. This subsection does not preclude the County or any authorized officer from proceeding under any other ordinance or law or by any other enforcement method to enforce any ordinance regulation or order.
    2. The schedule of cash deposits including penalty assessment, jail assessment, crime lab assessment, drug/law enforcement assessment, any applicable domestic abuse or consumer information assessments or any other assessment applicable by law for use with citations issued under this section shall be as adopted by the County Board from time to time and such schedule shall be on file in the Offices of the Sheriff, LWRD, County Clerk and Clerk of Court and receipts shall be given for cash deposits. The citation shall contain the following information:
        (a). The name and address of the alleged violator.
        (b). The factual allegations describing the alleged violation.
        (c). The time and place of the offense.
        (d). The section of the ordinance violated.
        (e). A designation of the offense in such a manner as can be reasonably understood by a person making a reasonable effort to do so.
        (f). The time at which the alleged violator may appear in court.
        (g). A statement which, in essence, informs the alleged violator:
            (i) That a cash deposit based on the schedule established by the County Board, from time to time, and on file in the office of the County Clerk, be made to and deposited with the Clerk of the Polk County Circuit Court or the Sheriff's Department prior to the time of the scheduled court appearance.
            (ii) That if a deposit is made, no appearance in court is necessary unless he is subsequently summoned or the citation requests a court appearance.

(iii) That if a cash deposit is made and the alleged violator does not appear in court, he will be deemed to have entered a plea of no contest and submitted to a forfeiture, a penalty assessment, a jail assessment crime lab assessment and drug/law enforcement assessment and any applicable domestic abuse or consumer information assessments. If the court does not accept the plea of no contest, a summons will be issued commanding him or her to appear in court to answer the complaint.

(iv) That if no cash deposit is made and the alleged violator does not appear in court at the time specified, the court may issue a summons or a warrant for the defendant's arrest or consider the nonappearance to be a plea of no contest and enter judgment or an action may be commenced to collect the forfeiture, penalty assessment, jail assessment, crime lab assessment and drug/law enforcement assessment and any applicable domestic abuse or consumer information assessments.

(v) That if the court finds that the violation involves an ordinance that prohibits conduct that is the same as or similar to conduct prohibited by state statute punishable by fine or imprisonment or both, and that the violation resulted in damage to the property of or physical injury to a person other than the alleged violator, the court may summon the alleged violator into court to determine if restitution shall be ordered.

(h). A direction that if the alleged violator elects to make a cash deposit, the statement which accompanies the citation shall be signed to indicate that the statement required under sub. g. above has been read. Such statement shall be sent or brought with the cash deposit.

(i). Such other information as the County deems necessary.

9.03. Appeals.

a. *Authority.* The Board of Adjustment shall act as the review and appeal authority for any order, requirement, decision or determination by the LWRD under this ordinance.

b. *Procedure.* The rules, procedures, duties and powers of the Board of Adjustment shall be as provided in the County Code of Ordinances and the provisions of §59.694, Wisconsin Statutes shall apply to any review or appeal under this ordinance.

c. *Variances.* Upon appeal, the Board of Adjustment may authorize variances from the provisions of this ordinance which are not contrary to the public interest or the purposes of this ordinance, and where owing to special conditions beyond the control of the applicant, a literal enforcement of this ordinance will result in unnecessary hardship.

d. *Who May Appeal.* Appeals to the Board of Adjustment may be taken by any aggrieved person or by an officer, department, board, or bureau of the County affected by any decision of the LWRD.

Section 10. Validity

10.01. Repeal of conflicting Ordinances. This ordinance repeals all provisions of an ordinance previously enacted under s. 59.693 relating to construction site erosion control and storm water management regulations. Wherever there may be a conflict with other county ordinances relating to erosion control, storm water management or site drainage, the more restrictive provision shall apply, as determined by the LWRD.

10.02. Declaration of severability. The several sections, subsections and paragraphs of this Ordinance are hereby declared to be severable. If any section, subsection, or paragraph or subparagraph of this Ordinance shall be declared by a decision of a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the other provisions of the Ordinance, or of the section of which the invalid portion or paragraph may be a part.

APPENDIX X

Rain Garden Design

Assess the site and determine if the runoff from impervious areas will go one or more directions

For each direction impervious surface runoff will travel, calculate the total impervious area in square feet, then multiply by the appropriate factor found in Table 1, based on soil and slope, to get the square footage of rain garden required.

Runoff from impervious surfaces must be piped or channeled to the rain gardens.

Table

	0-4% Slope	5-7% Slope	8-12% Slope
Rain garden	(3-5" Deep)	(6-7" Deep)	(8" Deep)
Silty or sandy soil	0.34	0.25	0.16
Clayey soil	0.43	0.32	0.20

Examples of rain garden layout and plant lists: (copy out of "Rain Gardens, a how-to manual for homeowners") - available from DNR Service Centers, Publication PUB-WT-776 2003 and from county UW Extension Offices, Publication GWQ037, R-06-03-5M-100-S, also see DNR Practice Standard 1009 Rain Garden. Sept. 2018.

Effective date: Following passage and publication by the County Board, this Ordinance shall be in full force and effect in all areas described in Section 1.04.

All references to the Wisconsin Administrative Code and to Wisconsin Statutes is intended to incorporate any amendments as may occur in the future.

Adoption. Passed and approved by the Board of Supervisors of Polk County, Wisconsin, this XXXXXXX

Highlighted areas are beyond minimum requirements of NR151