CHAPTER 32 STORMWATER MANAGEMENT AND EROSION CONTROL

AN ORDINANCE TO AMEND PROVISIONS OF THE STORMWATER MANAGEMENT AND EROSION CONTROL CODE OF THE MUNICIPAL CODE OF THE CITY OF WAUKESHA, WISCONSIN

WHEREAS, The Wisconsin Department of Natural Resources grants and enforces all conditions associated with the City's Stormwater Permit; and

WHEREAS, The Wisconsin Department of Natural Resources requires certain changes to the Stormwater Management and Erosion Control Code; and

WHEREAS, Waukesha County Storm Water Advisory Committee has recommended changes to the County Stormwater Management and Erosion Control Ordinance consistent with the DNR's requirements and such changes will improve the City's and other surrounding community's Codes; and

WHEREAS, changes to numbering and formatting would make Code requirements easier to read and understand;

NOW, THEREFORE, THE COMMON COUNCIL OF THE CITY OF WAUKESHA DO ORDAIN AS FOLLOWS:

SECTION I. Chapter 32 of the Municipal Code is hereby amended to read in its entirety as follows:

Chapter 32

Stormwater Management and Erosion Control

(Rep. & recr. #34-05)

32.01 Authority

(a) This ordinance is adopted by the Common Council of the City of Waukesha under the authority granted by §62.234, Wis. Stat. This ordinance supersedes all conflicting and contradictory stormwater management regulations previously enacted under §62.23, Wis. Stat. that relates to erosion and sediment control and stormwater management regulations. Except as

specifically provided for in §62.234, Wis. Stat., §62.23, Wis. Stat. applies to this ordinance and to any amendments to this ordinance.

- (b) The provisions of this ordinance are deemed not to limit any other lawful regulatory powers of the City of Waukesha.
- (c) The Common Council of the City of Waukesha hereby designates the Director of Public Works ("Authority") to administer and enforce the provisions of this ordinance.
- (d) The requirements of this ordinance do not pre-empt stormwater management requirements that may be imposed by any of the following:
 - 1. Wisconsin Department of Natural Resources ("WDNR") administrative rules, permits or approvals including those authorized under §281.16 and §283.33, Wis. Stats.
 - 2. Targeted non-agricultural performance standards promulgated in rules by the WDNR under NR 151. Wisconsin Administrative Code.

32.02 Findings of Facts

The City of Waukesha finds that uncontrolled storm water runoff and construction site erosion from land development and land disturbing activity can have significant adverse impacts upon local water resources and the health, safety and general welfare of the community, and diminish the public enjoyment and use of natural resources.

Specifically, uncontrolled soil erosion and storm water runoff can:

- 1. Degrade physical stream habitat by increasing stream bank erosion, increasing stream bed scour, diminishing groundwater recharge and diminishing stream base flows and increasing stream temperatures;
- 2. Diminish 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 by increasing pollutant loads;
- 4. Reduce the quality of groundwater by increasing pollutant loading;
- 5. Threaten public health, safety, property, and general welfare by overtaxing storm sewers, drainage ways and other minor drainage facilities;

- 6. Threaten public health, safety, property, and general welfare by increasing major flood peaks and volumes;
- 7. Undermine floodplain management efforts by increasing the incidence and levels of flooding.
- 8. Diminish the public enjoyment of natural resources.

32.03 Purpose and Intent

- (a) **Purpose.** The general 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 the City of Waukesha from construction site erosion and post-construction storm water runoff. Specific purposes are to:
 - 1. Further the maintenance of safe and healthful 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; 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.
- **(b) Intent.** Through a single storm water permit process, this ordinance is intended to meet the current construction site erosion control and postconstruction 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 WDNR from adopting or enforcing more stringent storm water management requirements in future revisions of the Wisconsin Administrative Code.
- c) Regional Storm Water Management Plan. The City of Waukesha recognizes that the preferred method of addressing post-construction storm water runoff from land development activities is through the preparation and implementation of regional storm water management plans that cover hydrologic units, such as watersheds or subwatersheds. Accordingly, provisions have been incorporated into this ordinance to allow for the implementation of a regional storm water management plan in lieu of complying with certain on-site storm water management requirements.

32.04 Jurisdiction

This ordinance applies to land disturbing construction activity and post-construction land development and redevelopment sites within the boundaries of the City of Waukesha.

Subject to the requirements of §59.693(10), Wis. Stats., this ordinance supersedes any county ordinance for lands annexed to the City after the effective date of the county's ordinance, except when the county's ordinance is more restrictive than this ordinance.

32.05 Definitions

- (a) "Applicant" means any person or entity holding fee title to the property or their representative. The applicant shall become the "permit holder landowner" once a permit is issued as herein defined. The applicant shall sign the initial permit application form in accordance with subs. 1 through 5 below, after which the applicant may provide the AUTHORITY 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.
- **(b) "Authority"** means the Director of Public Works or his/her duly authorized representative.
- (b2) "Basement" means an enclosed space of any height below existing grade for a residential or commercial building, including crawlspaces, but not including spaces below buildings supported by pillars or stilts (e.g. for flood control purposes)
- (c) "Best management practice" (or "BMP") means structural and non-structural measures, practices, techniques or devices employed to <u>either</u> avoid or minimize sediment or other pollutants carried in runoff; or to reduce runoff volumes or peakflows.
- (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.

- (d2) "Connected Impervious Surface" means an impervious surface connected to the waters of the state via a separate storm sewer, an impervious flow path, or a minimally pervious flow path.
- (d3) "Construction Site" means an area where one or more land disturbing construction activities occur, including areas that may be part of a larger common plan of development or sale where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan.
- (e) "City mapping standards" means that the maps are drawn to national map accuracy standards using the Wisconsin State Plane Coordinate System, Wisconsin South Zone, and the most recent horizontal and vertical datums adopted by the Waukesha County Board. North American Datum 1927 (NAD27) and National Geodetic Vertical Datum of 1929 (NGVD-29).
- (e2) "Cropland" means land cultivated in annual agricultural crops including, but not limited to, corn and soybeans or small grain such as wheat or oats.
- (f) "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 section 32.11(a).
- **(g) "Dewatering"** means the removal of trapped water from a construction site to allow land development or utility installation activities to occur.
- (h) "Erosion" means the process of detachment, transport and deposition of soil, sediment or rock fragments by action of water, wind, ice or gravity.
- (i) "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.
- (j) "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. A description of the process of defining and delineating Environmental Corridors is set forth in the Southeastern Wisconsin Regional Planning Commission's Technical Record, Volume 4, No. 2 and is incorporated herein by reference.
- (k) "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.

- (l) "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 AUTHORITY.
- (m) "Final plat" means a map of a proposed condominium or subdivision to be recorded with the City of Waukesha Register of Deeds pursuant Wisconsin Statutes.
- (n) "GIS system of City of Waukesha" means the computerized mapping system that City of Waukesha makes available to the general public over the Internet.
- (n2) "Grassland/Meadow" means lands on which grass, alfalfa, hay, prairie or a similar ground cover has been growing for at least five (5) consecutive years prior to land disturbing activity.
- (o) "Groundwater recharge areas" means lands identified in a document published by the Southeastern Wisconsin Regional Planning Commission 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.
- (o2) "Highest Groundwater Table" means the upper limit of the zone of soil saturation caused by underlying groundwater at its highest level based on soil and site elevations in accordance with technical standards prescribed in this ordinance.

Note: The above definition recognizes that the elevation of the groundwater table will fluctuate by season and from year-to-year depending on weather patterns, topography and other site conditions, and that soilds solids and site evaluations are the best indicator of the Hughest Groundwater Table.

- (p) "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.
- (q) "Impervious surface" ("or imperviousness") 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, existing or proposed driveways, gravel or paved driveways, gravel or paved parking lots, roofs and streets shall be considered impervious surfaces at the time of application are typical examples of impervious surfaces. For purposes of this ordinance, the typical gravel driveways and other examples listed shall be considered entirely impervious unless specifically designed to encourage infiltration or storage of runoff. Existing gravel driveways or parking lots shall be considered 50% impervious for the purposes of determining the amount of additional new impervious area under section 32.06(b)2 of this code. If these surfaces are

specifically designed, built and maintained to encourage infiltration or storage of runoff, and the Authority determines they meet applicable requirements of section 32.10 of this code—14-341, they shall subsequently be designated by the Authority as a pervious surface.

- (r) "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.
- (s) "In-fill development" means land development that occurs where there was no previous land development and is surrounded by other existing land development;
- (t) "Infiltration" means the entry of precipitation or runoff into or through the soil.
- (u) "Infiltration system(s)" means a device or practice such as a basin, trench, rain garden, pervious pavement 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.
- (v) "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.
- (w) "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.
- (x) "Land disturbing activity" (or "disturbance") means any manmade 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—, or dredging related to stormwater BMP maintenance. Repaving is considered a land disturbing activity only if the subgrade material below the pavement is removed, replaced or significantly regraded.
- (x2) "Landowner")" (or "Owner") means any person or entity holding fee title to the property. Utility companies shall be deemed landowners of the subject property if they hold the appropriate easement or have established prescriptive rights under s.893.28(2) Wisconsin Statutes.
- (y) "Maximum Extent Practicable or MEP" means the highest level of performance a level of implementing best management practices to achieve a performance standard specified in this ordinance that that is achievable but is not equivalent to a performance standard identified in this Chapter and has been approved by the Authority but does not meet the standards of this

- <u>ordinance</u>. In determining when MEP has been achieved, the Authority 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.
- (z) "Navigable" has the meaning given in the City of Waukesha Shoreland and Floodland Protection Ordinance.
- (aa) "Nonmetallic mining" has the meaning specified under s. 295.11(3) Wisconsin Statutes
- **(bb) "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.
- (cc) Ordinary high water mark (OHWM)" has the meaning given in s. NR115 Wis. Admin. Code.
- (cc2) "Peakflow" means the maximum rate of discharge of a volume of water passing a given location during a given period of time.
- (**dd**) "Planned land use" means the land use designated in the latest version of the City of Waukesha land use plan.
- (dd2) "Permit Holder" means any person or entity issued a Storm Water Permit under this ordinance or their successors in interest with respect to the property to which the permit applies. (See also definition of "Applicant")
- (dd3) "Pervious surface" means an area that releases as runoff a small portion of precipitation that falls on it. Lawns, gardens, parks, forests and similar vegetated areas are examples of surfaces that typically are pervious.
- (ee) "Plat" means a map of a proposed condominium or subdivision.
- (ff) "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.
- (gg) "Pollution,", as per s. 283.01(1014) Wisconsin Statutes, means manmade or man-induced alteration of the chemical, physical, biological or radiological integrity of water.
- **(hh) "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.

- (ii) "Preventive action limit" has the meaning given in s. NR 140.05(17), Wis. Admin. Code.
- (jj) "Publicly funded" means a land <u>disturbing or land</u> development <u>activity</u>, such as a public road or municipal building, that is being funded solely by a <u>Town, City, Village, County, State or Federal governmental unit unit of government</u>. 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.
- (jj2) "Qualified professional" means a Professional Landscape Architect, Professional Hydrologist, or Professional Engineer licensed in Wisconsin, or a person certified in erosion control planning, implementation or inspection.
- (kk) "Redevelopment" means land development that replaces previous land development of similar impervious conditions.
- (II) "Regional storm water management plan" means a planning document, adopted by a local unit of government, that coordinates storm water management activities for an entire drainage area or watershed, including future land development activities within the watershed. The plan may prescribe the use of BMPs for individual development sites and for selected points within the watershed to meet the goals and objectives of the plan.
- (mm) "Regulatory agency" means a public agency that the Authority 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.
- (nn) "Responsible party" means the landowner or any person or entity holding fee title to the property or acting as the owner's 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.
- (oo) "Road" as used in section 32.06 of this ordinance, means any access drive that serves more than two (2) residences or businesses.
- (**pp**) "Runoff" means water from rain, snow or ice melt, or dewatering that moves over the land surface via sheet or channelized flow.
- (pp2) "Sediment" means settleable solid material that is transported by runoff, suspended within runoff, or deposited by runoff away from its original location.
- (qq) "Shoreland" has the meaning given in the City of Waukesha Shoreland and Floodland Protection Ordinance.
- (**rr**) "Site" means the entire area included in the legal description of the subject property. which the land disturbing or land development activity will occur.

- (ss) "Stabilized" means that all land disturbing activities are completed and that a uniform, perennial vegetative cover has been established on at least 7080% of the soil surface or other surfacing material is in place and the risk of further soil erosion is minimal, as determined by the Authority.
- (tt) "Storm drainage system" means a publicly-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.
- (uu) "Storm water" has the same meaning as the term "runoff".
- (vv) "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 Authority.
- (ww) "Storm water permit" means a written authorization made by the Authority 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.
- (xx) "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. 236.0302(12) Wisconsin Statutes or a more restrictive definition adopted by a local unit of government.
- (xx2) "Targeted Performance Standard" or "Targeted Non-Agricultural Performance Standard" means a performance standard that will apply in a specific area, where additional practices beyond those contained in this chapter are necessary to meet water quality standards.
- (yy) "Technical standard" means a document that specifies design, predicted performance and operation and maintenance requirements for a material, device or method.
- (zz) "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.

- (zz2) "TR-55" means the United States department of agriculture, natural resources conservation service (previously soil conservation service), Urban Hydrology for Small Watersheds, Second Edition, Technical Release 55, June 1986, which is incorporated by reference for this chapter.
- (aaa) "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, groundwater, or any combination of these items.
- (bbb) "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.
- (ccc) "Waters of the state" has the meaning given in s. 2834.01 (4820), Wisconsin Statutes.
- (ddd) "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.
- (eee) "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".
- (fff) "Working day" means any day the office of the Authority is routinely and customarily open for business, and does not include Saturday, Sunday and any official city holidays.

32.06 Storm Water Permit Applicability and Exemptions

- (a) Construction Site Erosion Control. Unless otherwise exempted under sub. (c) below, a storm water permit under section 32.07 of this Code shall be required and all erosion control provisions of this ordinance shall apply to all proposed land disturbing activity that meets any of the following:
 - 1. Disturbs a total land surface area of 3,000 square feet or more;
 - 2. Involves excavation or filling, or a combination of excavation and filling, in excess of 400 cubic yards of material;

- 3. 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 300 feet or more; or
- 4. <u>Involves the maintanence</u>maintenance of an existing stormwater BMP; or
- 54. Land disturbing activity regardless of size that the City of Waukesha requires as a condition of approval, or that the City determines is likely to cause an adverse impact to an environmentally sensitive area or other property.
- **(b) Storm Water Management.** Unless otherwise exempted in this ordinance, a storm water permit under section 32.07 of this Code shall be required and all storm water management. including storm water management plans, and other provisions of this ordinance shall apply to all proposed land development activity that meet any of the following:
 - 1. Is a subdivision plat;
 - 2. Is a certified survey map or any other land development activity that 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 that may be constructed at different times (existing gravel surfaces shall be considered 50% impervious for purposes of determining the increase in impervious surface area);
 - 3. Involves the construction of any new public or private road;
 - 4. Disturbs a total land surface area of one acre or more; or
 - 45. Is a land development activity, regardless of size, that the City of Waukesha 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 reoccurring discharges of storm water, or violating any other storm water management standard set forth in this ordinance.

(c) Exemptions.

- 1. <u>Exempt Fromfrom All Requirements</u>. The following activities shall be exempt from all of the requirements of this ordinance:
 - A. Land disturbing activities directly involved in the planting, growing and harvesting of any plant grown for human or livestock consumption and pasturing or yarding of livestock, including sod farms and tree nurseries.
 - 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), Wis. Stats., or a memorandum of

understanding entered into under s. 281.33 (2), Wis. Stats. <u>This includes City</u> <u>Highway right-of-ways where the State has assumed all stormwater related responsibilities during the planning or construction phases through a written agreement.</u>

- C. Routine maintenance for project sites under five (5) acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.
- 2. <u>Exempt Fromfrom Erosion Control Requirements</u>. The following land disturbing activities shall be exempt from the erosion control provisions of sub. (a) of this section:
 - A. Those activities the Authority determines are required for the construction of individual one and two family residential buildings under COM. 21SPS 321.125 Wis. Admin. Code-, unless the proposed or actual land disturbance is one (1) acre or greater.
 - 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. Exempt From Storm Water Management Requirements
 - A. Underground utility construction such as water, sewer and fiberoptic lines. This exemption does not apply to the construction of any above ground structures associated with utility construction.
 - B. Land developments that comply with all of the following: (1) disturb less than 1.0 acre of land; with (2) have impervious surfaces that make up less than 10% of the site planned to be impervious surfaces; (3) add less than 0.50 acres of impervious surface area; and (4) the total cumulative area of all impervious surface areas is less than 1 acre using based on the development's calculated final build-out condition.
 - C. Off-Site Best Management Practices ("BMP(s)"). The requirement has been satisfied through the use of off-site BMP(s). Off-site BMP(s) 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.

D. Internally Drained Sites. The site is internally drained and will not discharge runoff from the site after development occurs.

32.07 Storm Water Permit Process Application, Land Divisions and Zoning

(a) **Permit Required.** A storm water permit under sub. (b) shall be obtained before any person commences a land disturbing or land development activity, pursuant to the applicability and exemption provisions of Section 32.06.

(b) Storm Water Permit Application.

- 1. To request a storm water permit under this ordinance, the applicant shall submit a complete application, which shall include all of the following:
 - A. A completed and signed application on a form provided by the City of Waukesha for that purpose;
 - B. The applicable fee(s);
 - C. A site plan map in accordance with section 32.10(c);
 - D. An erosion control plan in accordance with section 32.09(d);
 - E. A storm water management plan in accordance with section 32.10(e) for those land development activities that meet any of the applicability criteria of section 32.06(b), and the documentation required related to off-site BMP(s), if applicable;
 - F. A maintenance agreement in accordance with section 32.12; and
 - G. A financial assurance as required by the Authority, in accordance with section 32.08(c).
- 2. The City of Waukesha may require map items listed in sub. (b)(1)(A)—(G) of this section to be submitted in a digital form, if available, including georeferencing map data to the public land survey system in accordance with city mapping standards.
- 3. Review procedures for a storm water permit application shall be in accordance with sub. (d) of this section.
- (c) Fees. Application and review fees under this ordinance shall be in accordance with the following:

- 1. All fees shall be established by the Department of Public Works and approved by the City of Waukesha Common Council.
- 2. Fee amounts shall be based on the actual and direct costs of administering this ordinance.
- 3. A fee schedule shall be available for review and public distribution.
- 4. All publicly funded land disturbing and land development activities within the jurisdiction of this ordinance shall be exempt from the fees under this section.

(d) Application Review Processes.

- 1. <u>Less Than One Acre Of Land Disturbance</u>. Upon submittal of a complete permit application under sub. (b) above, the applicant authorizes the Authority to enter upon the subject site to obtain information needed to administer this ordinance and the following procedures shall apply:
 - A. Within 10 working days from the date the Authority receives the application, the Authority shall inform the applicant whether the application materials are approved or disapproved based on the requirements of this ordinance.
 - B. If all requirements of this ordinance have been met through the application, the Authority shall approve the application and issue a permit or exemption. If all requirements of this ordinance have not been met, the Authority shall state in writing the reasons for disapproval.
 - C. If within the 10 working days, the Authority determines that the application is not complete or requests additional information from the applicant or another source such as another regulatory agency, the Authority shall have 10 working days from the date the additional information is received to review and act on the application. The Authority shall inform the applicant when additional information is requested from another source.
 - D. Failure of the Authority to inform the applicant that additional information is needed or of a decision within 10 working days shall be deemed to mean approval of the application and the applicant may proceed as if a permit had been issued.
- 2. One Acre Oror Greater Oof Land Disturbance. Upon submittal of a complete application under sub. (b) above, the applicant authorizes the Authority to enter upon the subject site to obtain information needed to administer this ordinance and the following procedures shall apply:
 - A. Within 20 working days from the date the Authority receives the application, the Authority shall inform the applicant whether the application

materials are approved or disapproved based on the requirements of this ordinance.

- B. If all requirements of this ordinance have been met through the application, the Authority shall approve the application and issue a permit. If all requirements of this ordinance have not been met, the Authority shall state in writing the reasons for disapproval.
- C. If within the 20 working days, the Authority determines that the application is not complete or requests additional information from the applicant or another source (such as another regulatory agency), the Authority shall have 20 working days from the date the additional information is received to review and act on the application. The Authority shall inform the applicant when additional information is requested from another source.
- D. Failure of the Authority to inform the applicant that additional information is needed or of a decision within the 20 working days shall be deemed to mean approval of the application and the applicant may proceed as if a permit had been issued.

32.08 Storm Water Permit Requirements and Procedures

- (a) 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 section 32.14. 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:
 - 1. 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, rules, deed restrictions and other regulations. The Authority may condition the issuance of a storm water permit on the applicant first obtaining all other required permits.
 - 2. <u>Approved Plans</u>. 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.
 - 3. <u>Plan Modifications</u>. The Authority shall be notified of any significant modifications proposed to be made to the approved plans. The Authority 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 sub. (6) below and the Authority are subject to enforcement action.

- 4. <u>Notification</u>. The Authority shall be notified at least 2 working days before any work is commenced in conjunction with approved plans. The Authority shall also be notified of proposed plan modifications under sub. 3 above. Permit holders must notify the Authority within 1 working day of completing construction of a storm water Best Management Practice (BMP). The Authority may require additional notification according to a schedule established by the Authority so that practice installations can be inspected during construction.
- 5. <u>Access</u>. The Authority shall be permitted access to the site for the purpose of inspecting the property for compliance with the approved plans and other permit requirements.
- 6. Project Engineer/Landscape Architect. The permit holder shall provide an engineer licensed in the state of Wisconsin to oversee and verify be responsible for achieving compliance with approved construction plans, including the erosion control plan, stormwater management plan, the inspection plan, the inspection log requirements under sub. 7 below, implementation of the approved stormwater BMP construction inspection plan under 32.10(e)10. of this code-14-341(g)10. below, and verification of construction in accordance with sub. (d) below. The Authority may exempt sites from this requirement in whilewhole or in part if the Authority determines the environmental risk are limited, and engineering oversight is not necessary during contruction to ensure compliance with this ordinance. If warm season or wetland plantings are involved, the permit holder shall also provide a landscape architect or other applicable native vegetation specialist qualified professional to oversee and verify the planting process and its successful establishment.
- 7. <u>Inspection Log.</u> The permit holder shall provide a qualified professional to conduct inspections and maintain an inspection log for the site. All BMP(s) 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. Where land disturbing activity is one (1) acre or greater, or approved plans involve the installation of a stormwater BMP, 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 an sediment control measures and the installation of storm water management BMP(s), 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 subs. 8 and 9 below. The inspector shall not be the same person charged with installing the required BMPs. The permit holder shall maintain a copy of the inspection log at the construction site or via the Internet, and shall notify the Authority of the

method of availability upon permit issuance. If the inspection log is maintained on site, the Authority may view or obtain a copy at any time during normal business hours until permit termination under sub. (b) of this section. If the inspection log is made available via the Internet, the permit holder shall notify the Authority of the appropriate Internet address and any applicable access codes, and shall maintain the availability of the log until permit termination under sub. (b) of this section.

- 8. <u>BMP Maintenance</u>. The permit holder shall maintain and repair all BMP(s) within 24 hours of inspection, or upon notification by the Authority, unless the Authority approves a different time line. 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 sub. (b) of this section. The permit holder, upon approval by the Authority, 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.
- 9. 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 Authority may order immediate repairs or clean-up within road right-of-ways or other public lands if the Authority determines that such damage is caused by activities regulated by a permit under this ordinance. With the approval of the landowner, the Authority may also order repairs or cleanup on other affected property.
- 10. <u>Emergency Work</u>. The permit holder authorizes the Authority, in accordance with the enforcement procedures under section 32.14, to perform emergency 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 sub. (c) of this section or to a special assessment or charge against the property as authorized under subch. VII of ch. 66, Wisconsin Statutes
- 11. <u>Permit Display</u>. 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 sub. (b) of this section.
- 12. Other Requirements. The Authority may impose other permit requirements that the Authority determines are necessary to ensure compliance with this ordinance, and may require a preconstruction or plan implementation meeting prior to issuance of a Stormwater Permit.
- (b) Storm Water Permit Issuance, Duration, Amendments, Transfer and Termination.

- 1. Permit issuance. The Authority shall issue a permit to the applicant after verifying that all applicable conditions of this ordinance as well as conditions set forth in permits administered by other state and local government agencies which pertain to the construction site have been met. The Authority may delay issuance of a storm water permit if the Authority determines that the proposed construction timelines and BMP(s) will not comply with the erosion control plan requirements under section 32.09 or the purposes of the ordinance under section 32.03, including proposed late season new road construction with grass swales. Where needed to ensure timely compliance with construction site stabilization requirements, the Authority may issue multiple or phased Stormwater Permits, such as one for land disturbing activities in accordance with an approved Erosion Control Pland under this ordinance, followed by one for land development activities, in accordance with and approved Stormwater Management Plan under this ordinance.
- 2. <u>Permit duration</u>. The Authority 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. The applicant shall notify the Authority of any changes to the proposed schedule prior to permit issuance.
- 3. <u>Permit amendments</u>. The Authority may amend any terms of a storm water permit if the Authority determines it is necessary to ensure compliance with this ordinance. The permit holder may request an amendment extending the permit expiration date by filing a completed form provided by the Authority at least 2 weeks prior to the expiration of the permit. The Authority may impose an appropriate fee for processing this request. The Authority may require additional erosion control or storm water management measures as a condition of granting a permit amendment.

4. Permit transfer.

- A. Voluntary. The Authority 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 Authority 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 sub. (c) of this section.
- B. Involuntary. Upon the death or dissolution of a permit holder, foreclosure or other involuntary transfer of ownership of property subject to a permit, the storm water permit and all associated rights and obligations shall automatically transfer to the new landowner. The Authority may retain and utilize the financial assurances of the former owner for the purposes set forth in sub. (c) below, and may require additional financial assurances from the new owner.

5. <u>Permit termination</u>. The Authority shall issue a permit termination letter to the permit holder upon releasing the financial assurance under sub. (c) of this section, 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 WDNR and shall serve as the "Notice of Termination" under s.s. NR 216.55 Wis. Admin. Code.

(c) Financial Assurance.

- 1. <u>Purpose</u>. The Authority may 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.
- 2. <u>Type and Authority</u>. The Authority 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 Authority 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.
- 3. <u>Amount</u>. The amount of the financial assurance shall be determined by the Authority and shall not exceed the estimated cost of completing the approved erosion control and storm water management plans.
- 4. <u>Exemption</u>. Publicly funded land disturbing or land development activities shall be exempt from providing a financial assurance.
- 5. <u>Security</u>. The Authority 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.
- 6. <u>Conditions for Release</u>. The Authority shall release the financial assurance, and issue a termination letter in accordance with sub. (b)(5) of this section, only after determining full compliance with the permit and this ordinance, including the following:
 - A. Accepting an "as-built" survey certified pursuant to sub. (d)(1) of this section,
 - B. Accepting verification of construction and plantings (if applicable) pursuant to sub. (d)(2) of this section;
 - C. Completing a satisfactory final inspection pursuant to sub. (e) of this section:
 - D. Receiving a copy of the recorded maintenance agreement <u>and any applicable addenda</u> pursuant to section 32.12.

- 7. <u>Partial Releases</u>. The permit holder may apply for and receive a partial release of the financial assurance requirements of this subsection if the various construction components and requirements are completed to the satisfaction of the Authority.
- 8. <u>Amounts Withheld</u>. The Authority shall retain sufficient funds from the financial assurance amount to recompense the City for: any costs incurred by the Authority to complete installation or maintenance of BMP(s); through enforcement action prior to the transfer of maintenance responsibilities through an approved maintenance agreement; or for other unpaid fees or costs incurred by the Authority associated with the enforcement of this ordinance.
- 9. <u>Other Financial Assurances</u>. The financial assurance provisions of this section shall be in addition to any other financial assurance requirements of the City for other site improvements.

(d) Construction and Planting Verification.

- 1. <u>As-built Survey</u>. To ensure compliance with this ordinance and to serve as a basis for the engineering verification under sub. 2 of this subsection, an as-built survey shall be completed in accordance with Authority 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 Authority for all storm water management BMP(s), bridges and culverts pursuant to section 32.10(d)(6)(D), and other permanent BMP(s) or practice components as deemed necessary by the Authority to ensure its long-term maintenance. The Authority may require a digital submittal of the as-built survey, in accordance with Authority standards.
- 2. <u>Verification</u>. A professional engineer licensed in the State of Wisconsin shall verify, in accordance with Authority standards, that the engineer has successfully completed all site inspections outlined in the approved plans and that the construction of all storm water management BMP(s), as determined by the Authority, 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 <u>native plant specialist qualified professional</u> shall verify the planting process and its successful establishment, in accordance with Authority standards.
- 3. <u>Design Summaries</u>. 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 Authority as part of the verification under sub. 2 of this subsection.
- **(e) Final Inspection.** After completion of construction, the Authority 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 Authority determines that any of the applicable requirements have not been met, the Authority shall notify the permit holder of the changes necessary to meet the requirements and the time frame in which the requirements must be met. At the request of the permit holder, the Authority shall provide a notification of noncompliance or a report of final inspection in written or electronic form.

32.09 Erosion Control Plan Requirements

- (a) General Erosion Control Plan Requirements and Performance Standards. An erosion control plan shall describe how the permit holder and other responsible party will minimize, to the maximum extent practicable, 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:
 - 1. All erosion control plans and associated BMP(s) shall comply with the planning, design, implementation and maintenance requirements of this ordinance.
 - 2. All erosion control plans <u>submitted after 1/1/2013</u> 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<u>discharge</u> no more than 5 tons per acre per year, or to the maximum extent practicable, of the <u>sediment load carried in runoff</u>, from initial grading to final stabilization until the site is <u>stabilized</u>.
 - 3. Erosion and sediment control BMP(s) may be used alone or in combination to meet the 80% sediment reduction goal-requirements of this section. Plans that comply with the guiding principles described in sub. (b) of this section and the specific erosion control plan requirements described in sub. (c) of this section shall be determined by the Authority as meeting the 80% sediment reduction goal. The Authority may give credit toward meeting the requirements of this section for limiting the duration or area, or both, of land disturbing construction activity, or for other appropriate mechanisms.
 - 4. The Authority may recognize other methods for determining compliance with the 80% with sediment reduction goalsperformance standards as they are standardized, including any methods that may come from the procedures under subch. V. of ch. NR 151, Wis. Adm. Code.
 - 5. If BMP(s) cannot be designed and implemented to meet the sediment performance standard, the plan shall include a written, site-specific explanation of why

the sediment performance standard cannot be met and how the sediment load will be reduced to the maximum extent practicable.

- 6. Erosion and sediment control BMP(s) must be constructed or installed before land disturbing construction begins.
- **(b) 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:
 - 1. Propose grading that best fits the terrain of the site, avoiding steep slopes, wetlands, floodplains and environmental corridors; and complies with any applicable regulatory setbacks from these areas.
 - 2. Minimize, through project phasing and construction sequencing, the time the disturbed soil surface is exposed to erosive forces.
 - 3. Minimize soil compaction, the loss of trees and other natural vegetation and the size of the disturbed area at any one time;
 - 4. 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;
 - 5. Emphasize the use of BMPs that prevent soil detachment and transport over those aimed to reduce soil deposition (also known as sedimentation) or repair erosion damage.
 - 6. Develop spill prevention and response procedures.
- (c) Specific Erosion Control Plan Requirements. To the maximum extent practicable, erosion control plans shall comply with the minimum requirements set forth in subs. 1 17 of this subsection. The Authority may establish more stringent erosion and sediment control requirements than the minimum requirements set forth in this subsection if the Authority determines that an added level of protection is needed to protect an environmentally sensitive area or other property, or to address any plan modifications approved or required by the Authority.
 - 1. <u>Access Drives and Tracking</u>. Provide access drive(s) for construction vehicles that minimize tracking of soil off site using BMP(s) such as stone tracking pads, tire washing or grates. Minimize runoff and sediment from adjacent areas from flowing down or eroding the access drive.
 - 2. <u>Diversion of Upslope Runoff</u>. Divert excess runoff from upslope land, rooftops or other surfaces, if practicable, using BMP(s) such as earthen diversion berms, silt fence and downspout extenders. Prevent erosion of the flow path and the outlet.

- 3. <u>Inlet Protection</u>. Protect inlets to storm drains, culverts and other storm water conveyance systems from siltation until the site is stabilized.
- 4. <u>Soil Stockpiles</u>. 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 Authority. Control sediment from soil stockpiles. Any soil stockpile that remains for more than <u>30-7</u> days shall be stabilized.
- 5. <u>Cut and Fill Slopes</u>. Minimize the length and steepness of proposed cut and fill slopes and stabilize them as soon as practicable.
- 6. <u>Channel Flow.</u> <u>During construction, Ttrap sediment in channelized flow before discharge from the site using BMPS such as sediment traps and sediment basins. <u>Complete final grading and Sstabilize open channels in accordance with Authority standards as soon as practicable, but in no event later than the first ground freeze or snow cover in the fall.</u></u>
- 7. <u>Outlet Protection</u>. 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.
- 8. <u>Overland Flow</u>. Trap sediment in overland flow before discharge from the site using BMPs such as silt fence and vegetative filter strips.
- 9. <u>Site Dewatering</u>. Treat pumped water to remove sediment prior to discharge from the site, using BMPs such as sediment basins and portable sediment tanks.
- 10. <u>Dust Control</u>. 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.
- 11. <u>Topsoil Application</u>. Save existing topsoil and reapply a minimum of 4 inches to all disturbed areas for final stabilization, unless otherwise approved by the Authority, 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.
- 12. <u>Waste Material</u>. 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.
- 13. <u>Sediment Cleanup</u>. 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.

- 14. <u>Final Site Stabilization</u>. 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.
- 15. <u>Temporary Site Stabilization</u>. 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.
- 16. <u>Removal of Practices</u>. All temporary BMP(s) such as silt fences, ditch checks and sediment traps shall be removed as soon as all disturbed areas have been stabilized.
- 17. Site Drainage. Site drainage plans shall comply with the provisions of section 32.10(d)(6).
- 18. Stormwater BMP Data. When a Stormwater Permit involves the maintenance iof an existing BMP, including the removal of accumulated sediment, the Authority may require additional support data such as before/after surveys, design and construction details, and oversight by a professional engineer licensed in Wisconsin.
- (d) Erosion Control Plan Contents. An erosion and sediment control plan shall, at a minimum, contain the following:
 - 1. Sites Less than One Acre of Total Land Disturbance.
 - A. A narrative describing the proposed land disturbing activity, construction timeline and sequencing, temporary BMP(s) 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;
 - B. 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 BMP(s), 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;
 - C. The name, address and daytime phone number of the person(s) charged with installing and maintaining all BMP(s);

- D. 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
- E. Other information determined to be necessary by the Authority to ensure compliance with the requirements of this chapter.
- 2. Sites One Acre or Greater in Total Land Disturbance.
 - A. A site map in accordance with section 32.10(c);
 - B. A map at a scale of 1 inch equals no more than 100 feet (unless otherwise noted), delineating and labeling the following applicable items:
 - (i) North arrow, graphic scale, draft date, name and contact information for project engineer or planner and designation of source documents for all map features.
 - (ii) 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;
 - (iii) Proposed building envelopes and other land area to be disturbed and size in acres;
 - (iv) 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;
 - (v) Temporary access drive and specified surface material and minimum depth;
 - (vi) Temporary flow diversion devices for upslope or roof runoff until site is stabilized;
 - (vii) Temporary sediment trapping devices for site perimeter and inlets to culverts and storm drains:
 - (viii) Temporary settling basin or other BMP to be used for site dewatering during utility or other subsurface work;

- (ix) Temporary soil stockpile sites indicating setbacks from nearby water resources or environmental corridors and the proposed erosion protection methods;
- (x) Detailed drawings and cross-sections for any sediment traps, basins or other major cut or fill areas requested by the Authority, showing side slopes and elevations;
- (xi) Final stabilization measures for open channels and erosion protection for pipe and channel inlets, outlets and emergency spillways;
- (xii) 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;
- (xiii) 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 BMP(s) used to stabilize the site;
- (xiv) 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 BMP(s) proposed in the plan;
- (xv) Location of soil evaluations with surface elevations and unique references to supplemental soil evaluations report forms in accordance with section 32.11(e). A separate map shall show estimated highest seasonal-ground water table depths and soil textures down to planned excavation depths with sufficient references to the proposed site plan.

(xvi) Spill prevention and response procedures.

- (xvii) Other items specified by the Authority as necessary to ensure compliance with this ordinance.
- C. Narrative Summary, Reports and Supporting Documentation. The following shall be submitted with the information required for the Storm Water Management Plan under sub (c) of this section:

- (i) A narrative summary of the erosion control plan which briefly explains the overall plan and also provides any unique information that led to the selection of BMP(s) and how the plan meets the guiding principles under sub. (b) and the specific requirements under sub. (c) of this section;
- (ii) 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;
- (iii) Open channel design and stabilization data to support the selected BMP(s) for stabilization;
- (iv) Soil evaluation reports, in accordance with the standards in Section 32.11(e), with unique references and elevations that match the map under sub. (2)(B)(xv) of this subsection.
- (v) Estimated time soil stockpiles will exist to support the selected BMP(s) for erosion control;
- (vi) Documentation that proposed utility locations and installation scheduling has been coordinated with the affected utility companies.
- (vii) Documentation of any other calculations used to demonstrate compliance with the performance standards in this section.

32.10 Storm Water Management Plan Requirements

- (a) General Storm Water Management Plan Requirements. A storm water management plan shall describe how the permit holder and other responsible parties will meet the storm water management requirements of this section and other related requirements in this ordinance. All storm water management plans and associated BMP(s) shall comply with the planning, design, implementation and maintenance requirements described in this ordinance.
- **(b) Guiding Principles for Storm Water Management.** To satisfy the requirements of this section, a storm water management plan shall, to the maximum extent practicable, adhere to the following guiding principles:
 - <u>1</u>A. Preserve natural watershed boundaries and drainage patterns;

- **2B**. Reserve adequately sized areas for storm water infiltration, detention and treatment early in the site planning process;
- <u>3</u>C. Locate storm water BMP(s) 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:
- <u>4D</u>. Minimize soil compaction and maintain pre-development groundwater recharge areas:
- <u>5</u>E. Minimize impervious surfaces and have them drain to vegetated areas for pollutant filtering and infiltration;
- <u>6</u>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;
- **7G.** Allow for different storm water management strategies for cleaner runoff such as roofs versus more polluted runoff found in heavily used streets and parking lots;
- <u>8H.</u> Provide for emergency overflow in all storm water BMP designs;
- <u>9</u>4. Distribute storm water bioretention and infiltration BMP(s) throughout the site plan for large land developments.
- (c) Site Plan Map Requirements. A site plan map and supporting data of site conditions drawn to a scale of 1 inch equals no more than 100 feet shall delineate or display all the following applicable items:
 - 1. Development title, graphic scale and north arrow;
 - 2. Property location description by public land survey system (1/4 section, section, township, range, county);
 - 3. Location map, which may be drawn to a smaller scale than the site plan map, showing the site location within a public land survey section or subdivision, oriented the same as par. 4 below;
 - 4. Ownership boundaries, bearings, lengths and other survey references that will accurately identify the sites location, in accordance with §236 Wis. Stats. and county mapping standards for all land divisions;
 - 5. Lot numbers and dimensions, including outlots for all land divisions;
 - 6. Name and complete contact information for the applicant, landowner, developer and project engineer;

- 7. Surveyor's certificate, signed, dated and sealed for all land divisions;
- 8. Sheet numbers and revision dates on every page;
- 9. 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;
- 10. 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;
- 11. Location and name, if applicable, of all wetlands and identification of source of delineation. For final land divisions, these boundaries shall be field verified; prior to approval of final land divisions, erosion control plans or stormwater management plans;
- 12. Boundaries of shoreland zones and the ordinary high water mark (OHWM) for any navigable water body as defined by section 22.05(142) of the Zoning Code. For final land divisions, the OHWM boundaries shall be field verified;
- 13. Boundaries and elevation of the 100-year floodplains, flood fringes and floodways, as defined by section 24.02 of the Floodland Zoning Code. For final land divisions, these boundaries and elevations shall be field verified;
- 14. 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;
- 15. Locations of all available soil borings or soil profile evaluations with unique references to supplemental data report forms;
- 16. Location of primary and secondary environmental corridors, as defined by the Southeastern Wisconsin Regional Planning Commission. For final land divisions, these boundaries shall be field verified:
- 17. Location and description of isolated natural area boundaries as defined by the Southeastern Wisconsin Regional Planning Commission, woodland areas and other vegetative cover types;
- 18. 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;
- 19. 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;

- 20. Boundaries and descriptive notes for all applicable setbacks and for "protective areas", as specified in sub. (d)(4) of this section;
- 21. Location and descriptive notes for any existing or proposed easements, right-ofways, 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;
- 22. Location and descriptive notes for existing and proposed public dedications of parcels or right-of-ways;
- 23. Location and descriptive notes for preplanned building or waste disposal sites, when limited by site features;
- 24. 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;
- 25. Notes describing source documents, date and measure of accuracy for all applicable mapping features noted above;
- 26. Other site information that the Authority determines is necessary to administer this ordinance.
- (d) Specific Storm Water Management Plan Requirements and Performance Standards. All storm water management plans and associated BMP(s) shall meet the following minimum requirements to the maximum extent practicable. All requirements apply to each subwatershed or stormwater discharge point independently and cannot be averaged for the site. Runoff draining into the stormwater BMP from off-site must be accounted for hydraulically in any BMP design. For redevelopment sites where the redevelopment replaces older development that was subject to the stormwater management requirements of this Chapter on or after October 1, 2004, the responsible party shall meet the total suspended solids reduction, peak flow control, infiltration, and protective area standards applicable to the older development or meet the current requirements of this Chapter, whichever are more stringent. The applicant shall meet with the Authority prior to preparing a storm water management plan to determine the applicability of these requirements early in the site planning process.
 - 1. <u>Peak Discharge</u>. <u>A. Minimum requirement.</u> 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 predevelopment discharge rates for the <u>1-year</u>, 2-year, 10-year, and 100-year, 24-hour design storms. Modeling requirements for this provision are further described in section 32.11.

B. Peak Discharge Exemptions. Certain sites or portions of sites may be exempted from the peak discharge requirements of this subsection as determined by the Authority.

2. <u>Total Suspended Solids.</u>

- A. 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:
 - (i.) For new land development and in-fill development, 80% reduction in total suspended solids load;
 - (ii.) For redevelopment, 40% reduction of total suspended solids load from parking areas and roads.;
 - (iii.) For infill development no less than ≥ 5 acres, 80% reduction of total suspended solids load;
 - (iv.) For in-fill development greater than < 5 acres that occurs prior to October 1, 2012, 40 % reduction of total suspended solids load;
 - (iv.) For in fill development <u>less than < 5 acres</u> that occurs after October 1, 2012, 80% reduction of total suspended solids load.
- B. Maximum Extent Practicable. If the design standard cannot meet a total suspended solids reduction performance standard of this section, the storm water management plan shall include a written, site-specific explanation of why the total suspended solids reduction performance standard cannot be met and why the total suspended solids loads will be reduced only to the maximum extent practicable. The Authority may not require any person to exceed the applicable total suspended solids reduction performance standard to meet the requirements of maximum extent practicable.
- C. Off-site Drainage. When designing BMPs, runoff draining to the BMP from off-site shall be taken into account in determining the treatment efficiency of the practices. Any impact on the efficiency shall be compensated for by increasing the size of the BMP accordingly.
- 3. <u>Infiltration</u>. BMP(s) shall be designed, installed, and maintained to infiltrate runoff in accordance with the following <u>requirements performance standards in Table 1</u>, except as provided in subs. (EFD) through (HI) of this subsection. below.

A. Residential. For residential developments one of the following shall be met:

- (i.) Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90% of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 1% of the project site is required as an effective infiltration area.
- (ii.) 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 section 32.11. 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. Nonresidential. For non-residential development, including commercial, industrial and institutional development, one of the following shall be met:
- (i) 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.
- (ii) 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.
- A. Low imperviousness. For development with up to 40 percent connected imperviousness, such as parks, cemeteries and low density residential development, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90 percent of the predevelopment infiltration volume, based on average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than one percent of the post-construction site is required as an effective infiltration area.
- B. Moderate imperviousness. For development with more than 40 percent and up to 80 percent connected imperviousness, such as medium and high density residential, multi-family development, industrial and institutional development, and office parks, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 75 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the post-construction site is required as an effective infiltration area.
- C. High imperviousness. For development with more than 80 percent connected imperviousness, such as commercial strip malls, shopping centers, and commercial downtowns, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60

percent of the pre-development infiltration volume, based on an average annual rainfall.

However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the post-construction site is required as an effective infiltration area.

<u>Table 1</u>

Post-development Infiltration Performance Standards

Percent Connected Impervious Surface	Description/Example land uses	Post-development Infiltration Volume a	Maximum Effective Infiltration Area
<u>Up to 40%</u>	Description: Low Imperviousness Example land uses: low density residential parks, cemeteries	90% of pre- development b	1% of site
>40% up to 80%	Description: Medium Imperviousness Example land uses: medium and high density residential, multi family residential, industrial, institutional, office park	75% of pre- development	2% of site
>80%	Description: High Imperviousness Example land uses: commercial strip malls, shopping centers, commercial downtowns	60% of pre- development	2% of site

^a All percentages are based on average annial annual rainfall.

- <u>AC</u>. Modeling. Refer to section 32.11(a) for details on calculating runoff volumes and pre-development conditions.
- BD. 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) of this subsection. 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 section 32.11(b).

b To avoid downstream flooding and chronic wetness issues from stormwater discharges, the post development infiltration volume for low density residential developments shall not be less than 25% of the 2-year, 24 hour storm, in accordance with subsection 7. below.

- <u>CE</u>. Infiltration <u>ExclusionsProhibitions</u>. <u>Infiltration ofDue to potential for groundwater contamination</u>, runoff shall not be <u>infiltrated and will not be</u> credited toward meeting the requirements of this subsection for the following:
 - (i). Runoff from outdoor material storage <u>areas</u>, <u>and</u>-loading docks <u>and</u> <u>parking areas</u> for tier 1 and tier 2-industrial facilities, as identified in NR 216 <u>-2121(2)(a)</u> Wis. Admin. Code. <u>Parking lot runoff from tier 2 facilities</u> may be infiltrated if the Authority determines the runoff will not contain pollutants that are likely to contaminate storm water after considering the factors set forth in <u>NR 216.27(3)(i)</u>.
 - (ii). Runoff from outdoor material storage areas and loading docks for tier 2 industrial facilities, as identified in NR216.21(2)(b).
 - (iii). Runoff from fueling and vehicle maintenance areas, not including rooftops and canopies.
 - (iiiv). Infiltration of runoff within 1000 feet upgradient or within 100 feet downgradient of karst features.
 - _(iv). 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.
 - _(v). 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.
 - (vi). Infiltration of runoff from any other impervious 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.
 - (vi). Areas within 400 feet of a community water system well as specified in s. NR 811.16(4)12(5)(d)6., Wis. Adm. Code, or within 100 feet of a private well as specified in s. NR 812.08(4)(d), Wis. Adm. Code, for runoff infiltrated from commercial, industrial and institutional land uses or regional devices for residential development, not including rooftop runoff.
 - (vii). 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.

<u>DE.</u> <u>Separation Distances Infiltration BMPs shall be located so the characteristics of the soil and separation distance between the bottom of the infiltration BMP and the elevation of the highest groundwater table or the top of the bedrock are in accordance with Table 2.</u>

<u>Table 2</u>
Infiltration BMP Separation Distances and Soil Characteristics

Source Area	Groundwater or Bedrock Seperation Distance	Soil Charachteristics
Industrial, commercial, and institutional parking lots and roads	5 feet or more	Filtering Layer
Residental arterial roads	5 feet or more	Filtering Layer
Roofs draining to <i>subsurface</i> infiltration practices	1 foot or more	Native or engineered soil with particles finer than course sand
Roofs draining to surface infiltration practices	Not applicable	Not applicable
All other impervious source areas	3 feet or more	Filtering Layer

EF. Infiltration Exemptions. The infiltration requirements of this subsection do not apply to: may be exempted by The Authority where:

(i) Frozen soil conditions.

(ii) Soils The soils at the proposed bottom of an infiltration system that have a measured infiltration rate of less than 0.6 inches per hour using a scientifically credible field testing method; and the Authority determines it would be impracticable to modify existing soil conditions, based on soil profile evaluations extending five (5) feet below the proposed bottom of the infiltration system.

Note: USDA soil textures of sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay are generally considered unsuitable for infiltration and would require replacement or modification.

- (iii) Soils where the least permeable soil horizon to 5 feet below the proposed bottom of the infiltration system is one of the following: sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay or clay.
- (ivii) Except as provided in Section 32.10(d), Rredevelopment sites.
- (iv) In fill development areas less than 5 acres.
- (vi) Parking areas and access roads less than 5,000 square feet for commercial development.
- (vii) Parking areas and access roads less tha 5,000 square feet not subject to the prohibitions of subsection F of this section.
- (viii) Roads in commercial, industrial, and institutional land uses, and arterial residential roads.
- FG. Alternate runoff uses. Where storage and reuse of runoff are employed, such as to support green roofs, landscape watering, toilet flushing, laundry or irrigation, or storage on green roofs where an equivelant portion of the runoff is captured permanently by rooftop vegetation, such alternate uses shall be given equal credit toward the infiltration volume required by this section.
- **GH**. Groundwater protection.
 - (i). 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.
 - (ii). The discharge from BMP(s) shall remain below the enforcement standard at the point of standards application.
 - (iii). No storm water BMP shall be installed that meets the definition of an injection well under Chapter NR 812 Wis. Admin. Code. All stormwater BMPs shall comply with the applicable provisions of Chapter NR 815 Wis. Admin. Code relating to injection wells.

- (iv). All storm water BMP(s) shall comply with the provisions of any applicable wellhead protection plan for a community water supply under Chapter NR 811 Wis. Admin. Code.
- HJ. Maximum Extent Practicable. Where the conditions of subs. F I limit or restrict the use of infiltration practices, the performance standards of this section shall be met to the maximum extent practicable.

4. Protective Areas.

A. "Protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. "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.

- (i). 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, 75 feet.
- (ii). For perennial and intermittent streams identified on the City of Waukesha GIS system, 50 feet. If there is a discrepancy between the City of Waukesha GIS system and the applicable United States Geological Survey 7.5-minute series topographic map, the more stringent stream identification shall apply.
- (iii). For lakes, 50 feet.
- (iv) For wetlands not subject to (v.), 50 feet.
- (iv). For highly susceptible wetlands, as determined by The Authority, 50-75 feet. Highly susceptible wetlands include the following types: calcareous fens, sedge meadows, bogs, low prairies, conifer swamps, lowland hardwood swamps, and ephermeral ponds. 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.

- (vi) Wetland boundary delineations shall be made in accordance with the Cahpter 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.
- (v<u>ii</u>). For less susceptible wetlands, 10 percent of the average wetland width, but no less than 10 feet nor more than 30 feet, <u>unless otherwise</u> required by state or federal law or this Municipal Code another applicable regulation. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.

(viii.) For wetlands not subject to (ivv) or (vii), 50 feet.

(viiix). In sSubd. (A)(i), (ivv) and (viii) and (viix), do 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. Wetland boundary delineation shall be made in accordance with Chapter NR 103.08(1m) Wis. Admin. Code. dDeterminations 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 103.03 Wis. Admin. Code.

 $(\underline{x}\underline{v}\underline{i})$. For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.

- B. Requirements. The following requirements shall be met for all land development activity located within a protective area:
 - (i). Impervious surfaces shall be kept out of the protective area entirely, or to the maximum extent practicable, except for walkways structures, as authorized and defined under shoreland and floodland zoning. If there is no practical alternative to locating a nonexempt impervious surface in the protective area, the storm water management plan shall contain a written, site-specific explanation- and a technical

<u>exemption may applied for under sub.</u> (e) <u>below.</u> The erosion control plan shall contain a written site-specific explanation for any parts of the protective area that are disturbed during construction.

- (ii). 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% 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.
- (iii.) 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.
- C. Protective Area Exemptions. The protective area requirements of this subsection may be exempted and do not apply to the following:
 - (i). Structures that cross or access surface waters such as boat landings, bridges and culverts;
 - (ii). Structures constructed in accordance with §59.692(1v), Wis. Stats.;
 - (iii). Sites where runoff does not enter the surface water, <u>including</u> wetlands, without first being treated by a BMP to meet the total suspended solids requirement under sub. 2 . above the peak discharge requirements <u>under sub. 1 . above</u>, except to the extent that vegetative ground cover is necessary to maintain bank stability;

Note: It is recommended that seeding of non-aggressive vegetation cover be used in the protective areas. Vegetation that is flood and drought tolerant and can provide long term bank stability because of an extensive root system is preferable. Vegetation cover can be measured using the line transect method described in the University of Wisconsin Extension publication number A3533, titled "Estimating Residue Using the Line Transect Method".

(iv). Except as provided under Section 32.10(d), Rredevelopment sites; and

(v). In-fill development areas less than 5 acres.

- 5. <u>Fueling and Vehicle Maintenance Areas</u>. Fueling and vehicle maintenance areas shall have BMP(s) designed, installed and maintained to reduce petroleum within runoff, such that the runoff that enters waters of the state contains no visible petroleum sheen, or to the maximum extent practicable.
- 6. <u>Site Drainage</u>. Measures shall be implemented to ensure proper site drainage, prevent property damage and protect public health and safety, including the following minimum requirements:
 - A. Drainage easement. Perpetual drainage easements or other deed restrictions shall be recorded on the property to preserve major 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 section 32.12.
 - B. 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.
 - C. Street drainage. All street drainage shall be designed to prevent concentrated flows from crossing the traffic lanes to the maximum extent practicable. Design flow depths at the road 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.
 - D. Bridges and cross-culverts. All new or modified bridges and cross-culverts shall comply with applicable design standards and regulations, facilitate fish passage and prevent increased flooding or channel erosion upstream or downstream from the structure. 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 section 32.08 for all new or modified structures that are located

within a mapped floodplain or that the Authority determines to be necessary to maintain floodplain modeling for the applicable watershed.

- E. Subsurface drainage. <u>To avoid property property and other damages from groundwater</u>, aAll buildings planned for human occupation on a regular basis shall meet all of the following:
 - (i) Basement floor surfaces shall be built one (1) foot above the seasonal highest groundwater table elevation, as documented in the submitted soil evaluations, and shall in accordance with the Authority. On sloped sites, basements may be allowed to partially below the highest groundwater table only on the upslope side if they meet the Authority drainage system standards for design, discharge, engineering oversight, and long-term maintenance. For these sites the 1-foot groundwater separation will be enforced at the further downslope point in the basement.
 - (ii) avoid Avoid hydric soils as much as possible.
 - (iii) The Authority shall be notified of any drain tiles that are uncovered during construction, which the Authority may require to be restored or connected to other drainage systems.
 - (iv)- 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.
- F. 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 Authority 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.
- G. Storm sewers. All storm sewers shall be designed in accordance with the City of Waukesha's technical standards and specifications. For sites where the Authority determines the post development stormwater discharge flow paths will be significantly different than the pre-development conditions, or where proposed storm water discharges may otherwise have a significant negative impact on one or more downstream property owners, the Authority may require the applicant to submit written authorization, record a drainage easement, or complete other legal arrangements with the affected property owner(s) prior to permit issuance. For purposes of this subsection, "significantly different" means one or more of the

stormwater discharge flow paths would move to a different location than they were prior to development, and "significant negative impact" means stormwater discharge flow quantity or depth would increase a sufficient amount to cause ponding or other damage to the property.

- H. 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:
 - (i) (Am. #6-06) 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 <u>surface</u> 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
 - (ii) The structure shall be set back at least 40 feet horizontally from any storm water BMP that may temporarily or permanently store water at a depth of greater than one (1) foot-, including any internally drained area with a significant contributing watershed and/-or limited runoff storage capacity, as determined by the Authority. Setback distance shall be measured from the closest edge of water at the elevation produced by the 100-year, 24-hour design storm- The Authority may exempt existing structures and structures with no basement from this requirement if the Authority determines other site risks are minimal based on soil and site conditions.
- 7. <u>Additional Requirements</u>. The Authority may establish more stringent requirements than the minimums set forth in this section, such as addressing thermal impacts of storm water, <u>downstream flooding</u>, a total maximum daily load (<u>TMDL</u>) standard for a watershed, other applicable state or federal laws, and order of any court of <u>competent jurisdiction</u>, or chronic wetness conditions, if the Authority determines that an added level of protection is needed to protect:
 - A. A cold water stream, outstanding water resource or exceptional water resource.
 - B. An environmentally sensitive area.
 - C. A downstream property.

- D. Public health or safety.
- (e) Storm Water Management Plan Contents Requirements. Storm water management plans shall contain the following items, if applicable:
 - 1. Drafting date and contact information for the project engineer, with all other mapping elements and scale consistent with the site plan map;
 - 2. Location of existing and proposed storm water discharge points;
 - 3. Delineation and labeling of all proposed impervious areas and accompanying area computations;
 - 4. Final design drawings of all proposed storm water BMP(s) with unique references to support documentation, prepared in accordance with minimum Authority standards and of sufficient clarity for those responsible for site grading, including:
 - A. Plan views showing the location of proposed BMP(s) in combination with the site plan map at a scale of 1 inch equals no more than 100 feet;
 - B. 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;
 - C. 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;
 - D. Detailed drawings or material specifications for inlets or outlets.
 - 5. 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;
 - 6. Location and dimensions of proposed drainage easements;
 - 7. 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 BMP(s) in accordance with section 32.12(b). The minimum width of any access easement shall be 15 feet;
 - 8. Location of soil borings and soil profile evaluations with surface elevations and unique references to supplemental data sheets <u>including highest groundwater table</u>, as needed to determine feasibility of any proposed storm water BMP and to comply with applicable technical standards;

- 9. 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 BMP(s) during the construction phase;
- 10. A detailed <u>stormwater BMP</u> construction inspection plan, outlining the critical elements in the plan that need to be surveyed or inspected by a representative of the project engineer, or the Authority, and the timing and notification requirements involved.
- 11. A storm water BMP maintenance agreement in accordance with section 32.12;
- 12. Support documentation summarized in accordance with Authority standards, including but not limited to:
 - A. A narrative summary of the storm water management plan, briefly explaining any unique information that led to the selection of BMP(s), and how the proposed plan meets the guiding principles under sub. (b) of this section and the specific storm water planning requirements under sub. (d) of this section.
 - B. Maps of existing and proposed watersheds, subwatersheds, 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;
 - C. 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;
 - D. Impervious surface maps and calculations of runoff volumes and effective infiltration areas, in accordance with sub. (d)(3) of this section.
 - E. 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 sub. (d)(6) of this section.
 - F. BMP design data for each proposed BMP, showing how it complies with applicable technical standards and the requirements of this ordinance;
 - G. Soil evaluation reports, following the standards in section 32.11(e), with matching references to map features showing their location and elevations;

- H. 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
- I. Cost estimates for the installation of proposed storm water BMP(s), which shall serve as a basis for the financial assurance under section 32.08(c) above. The applicant may use average costs for BMP installations in the county rather than specific estimates, upon approval by the Authority.
- J. 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 Authority may require the applicant to submit written authorization or complete other legal arrangements with the affected property owner(s); and
- 13. Other items deemed necessary by the Authority to ensure compliance with the requirements of this chapter.

32.11 Technical Standards and Specifications

(a) Hydrologic and Hydraulic Computations.

- 1. <u>Models</u>. 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 Source Load And Management Model ("SLAMM"), P8 or other approved models may be used to evaluate the efficiency of the design in reducing total suspended solids to meet this ordinance. <u>Models distributed and- or supported and approved for use by the Wisconsin Department of Natural Resources may</u> shall be used to determine compliance with calculating soil <u>loss on construction sites.</u>
- 2. <u>Rainfall depths</u>. To determine compliance with this ordinance, the following design storm rainfall depths shall be used, which are derived from NRCS publications and extrapolated for City of Waukesha:

	1-year	2-year	10-year	100-year
Design Storm	24-hour	24-hour	24-hour	24-hour
Rainfall Depth	2.32.4 inches	2.7 inches	4.03.81 inches	5.66.18 inches

3. <u>Runoff curve numbers</u>. All computations of predevelopment 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 predevelopment land use was cropland, ttFor lands where the predevelopment land use was woodland, grassland/meadow, or cropland, the following NRCS curve number values shall be used as maximums:

Soil Hydrologic Group	A	В	C	D
Woodland	<u>30</u>	<u>55</u>	<u>70</u>	<u>77</u>
Grassland	<u>39</u>	<u>61</u>	<u>71</u>	<u>78</u>
NRCS Runoff Curve Number Cropland	56 55	70 69	79 78	83

- 4. <u>Average annual rainfalls</u>. All modeling involving average annual rainfall or runoff volumes shall use rainfall data from the Milwaukee area between March 28 and December 6, 1969 as the typical annual rainfall pattern for the City of Waukesha-, unless otherwise prescribed in BMP design standards.
- 5. <u>Rainfall distribution</u>. All peak flow calculations shall use <u>Type IIMSE3</u> rainfall distribution patterns, as defined in NRCS methodologies.
- 6. Other methods. All velocity and peak flow computations for open channels and storm sewer pipe flows shall be based on the formula commonly known as "Manning's Formula" used to mathematically predict hydraulic flow rates through channels. 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 Authority. Revisions or updates to the rainfall depths and distribution prescribed above may be allowed upon approval by the applicable regulatory agencies, and the Authority.

(b) Best Management Practice (BMP) Design Standards.

1. The design, installation and maintenance of all BMP(s) 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.

- 2. Where BMP standards have not been identified or developed under sub. 1 above, the Authority may approve the use of other available standards, such as those from other states or the USDA-Natural Resources Conservation Service.
- **(c) Technical Guidelines.** The Authority may adopt technical guidelines to facilitate the consistent administration of certain provisions of this ordinance. The Authority shall seek the expertise and input from other agencies in the development and maintenance of technical guidelines under this subsection.
- (d) Construction Specifications. The construction or installation of all BMP(s) 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).
- (e) Soil Evaluations. All soil profile evaluations and forms submitted for review by the Authority under the provisions of this ordinance shall be completed in accordance with Chapter COM 85SPS 385 Wis. Admin. Code and any applicable state or Authority standards, under sub. (b) above. Where there are no specific standards for the number, location or depth of soil profile evaluations for a proposed BMP, the Authority shall determine the minimum requirements based on the design of the BMP and the likely variability of the on-site soils.
- **(f) Future Revisions or Updates.** The technical standards and specifications in this section 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 standards and specifications incorporated herein are also made part of this ordinance unless otherwise acted upon by the Authority.

32.12 Maintenance of Storm Water BMP's; Maintenance Agreement of Agreement for Storm Water BMPs

(a) Maintenance Agreement Required. A maintenance agreement shall be required for all permanent storm water BMP(s) 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. The maintenance agreement shall be recorded with the County Register of Deeds as a property restriction so that it is binding upon all subsequent owners of the land served by the storm water management practices. For sites where the existing drainage system meets the requirements of this ordinance, the Authority may require a maintenance agreement on pre-existing BMPs or internally drained areas to ensure the preservation and maintenance of the existing drainage system.

- **(b) Agreement Provisions.** The maintenance agreement shall, at a minimum, contain the following information and provisions:
 - 1. 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 sub. (6) of this subsection, unless otherwise designated in a regional storm water management plan and approved by the applicable unit(s) of government. For subdivisionsnew land divisions, plats and certified survey maps, 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;
 - 2. <u>Location</u>. A legal description and survey map of the storm water BMP location(s), showing associated drainage or access easements required to maintain the BMP;
 - 3. <u>Design</u>. 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.
 - 4. <u>Maintenance plan</u>. 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; <u>No maintenance plan may include provision for pumping groundwater from a well to maintain proposed pond water levels, unless approved by the Authority to ensure compliance with this ordinance.</u>
 - 5. 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.
 - 6. <u>Maintenance responsibility</u>. 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;

- 7. <u>Inspections</u>. Authorization for access to the property by representatives of the City of Waukesha 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 states, upon written notification by the City of Waukesha, that the entity under sub. (6) of this subsection shall, at their own cost and within a reasonable time period, have a BMP inspection conducted <u>annually</u> by a qualified professional, or more frequently upon written notification by the Authority, file a report and complete any maintenance or repair work recommended in the report;
- 8. <u>Municipal maintenance</u>. Authorization for the City of Waukesha or its designee to carry out any maintenance activities and associated inspections if the entity identified under par. 6 above 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;
- 9. <u>Special assessment</u>. A statement that the City of Waukesha may exercise their statutory authority to levy and collect a special assessment or charge pursuant to subch. VII of ch. 66-66.0627 Wisconsin Statutes, for any services carried out relating to sub. (7) or (8) of this subsection;
- 10. <u>Maintenance Performance Security</u>. The City of Waukesha may, at its discretion, require the submittal of a cash escrow, letter of credit, or performance security prior to issuance of the permit to ensure that the storm water practices are maintained by the responsible party and for expenses incurred by the City of Waukesha for services carried out related to sub. (7) or (8) of this subsection. The amount of the maintenance performance security shall be determined by the City of Waukesha, not to exceed ten (10) years of the maintenance costs estimated in the storm water plan.

Conditions for the release of maintenance performance security are as follows: The maintenance performance security, minus any costs incurred by the City of Waukesha to conduct required maintenance, design, engineering, preparation, checking and review of designs, plans and specifications; supervision and inspection to ensure that construction is in compliance with applicable plans, specifications, regulations and ordinances; and legal, administrative and fiscal work undertaken to assure and implement such compliance, shall be released at such time that the responsibility for practice maintenance is passed on to another private entity, via an approved maintenance agreement, or to the City of Waukesha.

11. <u>Restrictions Running With The Land</u>. A statement confirming that the entire agreement shall be binding on all subsequent owners of the property upon which the storm water BMP is located and that the restrictions set forth herein shall run with the

land and on any other property which is subject to maintenance responsibility in the agreement.

- 12. <u>Agreement modifications</u>. Sole authorization for the City of Waukesha 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.
- 13. Other. Other information as determined to be necessary by the Authority to ensure compliance with this ordinance.

(c) Agreement Form, Approval and Recording.

- 1. <u>Form.</u> The Authority shall provide the applicant with sample maintenance agreement forms that comply with the requirements of this section.
- 2. <u>Approval</u>. The Authority 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 Authority shall notify the applicant what changes are needed in order to comply, in accordance with the plan review procedures in section 32.07(d).
- 3. Recording. Upon certification of compliance with subs. (1) and (2) of this subsection by the Authority, the maintenance agreement shall be recorded at the Waukesha 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 Authority approval.
- 4. <u>Copy</u>. The permit holder shall provide a copy of the recorded agreement, including evidence of the actual recording(s), to the Authority as a condition of release of the financial assurance under section 32.08(c).
- (d) 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 under section 32.08(b).

32.13 Illicit Discharges

(a) Prohibitions.

- 1. <u>Discharges</u>. Except for storm water and other discharges specifically exempted under sub. (b) below, 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.
- 2. <u>Connections</u>. 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.
- **(b) Exemptions.** The following activities are exempt from the provisions of this section unless found to have an adverse impact on the storm water:
 - 1. Discharges authorized by a permit issued by the WDNR.
 - 2. Discharges resulting from fire fighting firefighting activities.
 - 3. 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.
- **(c) Notice of Violation.** Whenever the Authority finds a violation of this section, the Authority may order compliance by written notice of violation to the responsible party. Such notice may require without limitation:
 - 1. The elimination of illicit connections or discharges;
 - 2. That violating discharges, practices, or operations shall cease and desist;
 - 3. The abatement or remediation of storm water pollution or contaminated hazards and the restoration of any affected property;
 - 4. 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 section 32.14.

32.14 Enforcement

(a) **Prohibited Practices.** Noncompliance with any requirement of this ordinance shall be deemed a violation, and shall subject the responsible party to enforcement action under this section.

- (b) Violations. The Authority 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; required remedial action 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 Authority 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:
 - 1. <u>Forfeiture</u>. Any violator shall be subject to a forfeiture of not less than \$100 or more than \$500 plus the cost of prosecution for each violation. Each day that a violation exists shall constitute a separate offense.
 - 2. <u>Stop Work Order</u>. Any violator is subject to an order to stop all work except that which is determined by the Authority as necessary as a corrective action to bring the site into compliance.
 - 3. <u>Permit Revocation</u>. The Authority 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 City to be charged against the financial assurance.
 - 4. <u>Injunction</u>. The City may enforce the provisions of this ordinance by a temporary restraining order, injunction and other such relief as a court may order.
 - 5. <u>Declared nuisances</u>. 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 City may apply to any court of competent jurisdiction to restrain or abate such nuisance.
 - 6. <u>Emergency Action</u>. The Authority may enter upon the property and take any necessary emergency action if the Authority determines that the site in violation is an immediate threat to public health, safety, welfare, the environment or downstream property. Any cost incurred by the Authority as a result of this action shall be billed to the permit holder or other responsible party or subtracted from the financial assurance. The Authority shall provide reasonable notice to the permit holder and other responsible party after exercising this authority. The Authority may also enter upon the property and take any necessary emergency action if the permit holder or other violator refuses to take corrective action pursuant to written order of the Authority and fails to file an appeal of the reasonableness of the order with the City of Waukesha Board of Zoning Appeals pursuant to sub. (c) of this section within the time limits set forth in the order.

7. <u>Citation</u>. The City elects to also use the citation method of enforcement under section 800.02(2), Wis. Stats. as incorporated by Chapter 25 of this Code, for violations of this ordinance, including those for which a statutory counterpart exists.

(c) Appeals.

- 1. <u>Authority</u>. The City of Waukesha Board of Zoning Appeals shall act as the review and appeal authority for any order, requirement, decision or determination by the Authority under this ordinance.
- 2. <u>Procedure</u>. The rules, procedures, duties and powers of the Board of Zoning Appeals shall be as provided in the Municipal Code of Ordinances and the provisions of \$62.23(7)(e)1.—(7)(e)15., Wis. Stats. shall apply to any review or appeal under this ordinance.
- 3. <u>Variances</u>. Upon appeal, the Board of Zoning Appeals 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.
- 4. <u>Who May Appeal</u>. Appeals to the Board of Zoning Appeals may be taken by any aggrieved person or by an officer, Department, board, or bureau of the City affected by any decision of the Authority.

32.15 Validity

(a) Repeal of conflicting Ordinances.

This ordinance repeals all provisions of an ordinance previously enacted under §62.234, Wis. Stats., 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 Authority.

(b) 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.

Passed the	day of	, 2018.
		Shawn N. Reilly, Mayor
		Attest:
		Circ. I. Washin Circ. Chals
		Gina L. Kozlik, City Clerk

SECTION II. This ordinance shall take effect the day after publication.