

CHAPTER 48 POST-CONSTRUCTION STORMWATER MANAGEMENT

Sec. 48-1. – Authority.

- (a) This chapter is adopted by the Common Council under the authority granted by §62.234, Wis. Stats. This chapter supersedes all provisions of an ordinance previously enacted under §62.23, Wis. Stats., that relate to stormwater management regulations. Except as otherwise specified in §62.234, Wis. Stats., §62.23, Wis. Stats., applies to this chapter and to any amendments to this chapter.
- (b) The provisions of this chapter are deemed not to limit any other lawful regulatory powers of the same governing body.
- (c) The Common Council hereby designates the administering authority to administer and enforce the provisions of this chapter.
- (d) The requirements of this chapter do not pre-empt more stringent stormwater management requirements that may be imposed by any of the following:
 - (1) Wisconsin Department of Natural Resources 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 Wisconsin Department of Natural Resources under §NR 151.004, Wis. Adm. Code.
 - (3) Chapter 7-Subdivision Design and Improvements-Dodge County Land Use Code for lands of the city located in Dodge County.
 - (4) Columbia County Land and Water Conservation Department standards for lands of the city located in Columbia County.

Sec. 48-2. – Findings of Fact.

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

- (a) Reduce capacity of storm infrastructure to safely convey water through the city and increase flooding impacts to property, homes, parks and infrastructure.
- (b) Degrade physical stream habitat by increasing stream bank erosion, increasing streambed scour, diminishing groundwater recharge, diminishing stream base flows and increasing stream temperature.
- (c) Diminish the capacity of lakes, channels, creeks and streams to support fish, aquatic life, recreational and water supply uses by increasing pollutant loading of sediment, suspended solids, nutrients, heavy metals, bacteria, pathogens, and other urban pollutants.
- (d) Alter wetland communities by changing wetland hydrology and by increasing pollutant loads.
- (e) Reduce the quality of surface water and groundwater by increasing pollutant loading.
- (f) Threaten public health, safety, property and general welfare by overtaxing storm

sewers, drainage ways, and other minor drainage facilities.

Sec. 48-3. – Purpose and Intent.

- (a) **Purpose.** The general purpose of this chapter is to establish long-term, post-construction runoff management requirements that will diminish the threats to public health, safety, welfare, and the aquatic environment. Specific purposes are to:
 - (1) Further the maintenance of safe and healthy conditions.
 - (2) Prevent and control the adverse effects of stormwater; prevent and control soil erosion; prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and land uses; preserve ground cover and scenic beauty; and promote sound economic growth.
 - (3) Control exceedance of the safe capacity of existing drainage facilities and receiving water bodies; prevent undue channel erosion; and control increases in the scouring and transportation of particulate matter.
 - (4) Reduce flooding impacts throughout the city
 - (5) Minimize the amount of pollutants discharged from the separate storm sewer to protect the waters of the state.
- (b) **Intent.** It is the intent of the Common Council that this chapter regulates post-construction stormwater discharges to waters of the state. This chapter may be applied on a site-by-site basis. The Common Council recognizes, however, that the preferred method of achieving the stormwater performance standards set forth in this chapter is through the preparation and implementation of comprehensive, systems-level stormwater management plans that cover hydrologic units, such as watersheds, on a municipal and regional scale. Such plans may prescribe regional stormwater devices, practices, or systems, any of which may be designed to treat runoff from more than one site prior to discharge to waters of the state. Where such plans are in conformance with the performance standards developed under §281.16, Wis. Stats., for regional stormwater management measures and have been approved by the Common Council, it is the intent of this chapter that the approved stormwater management plan be used to identify post-construction management measures acceptable for the community.

Sec. 48-4. – Applicability and Jurisdiction.

- (a) **Applicability.**
 - (1) Except as provided under par. (2), this chapter applies to a post-construction site whereupon 20,000 sf or more of land disturbing construction activity occurs during construction, or the construction of the project results in an increase of 7,500 square feet or more of added impervious area, whichever situation is more stringent.
 - (2) A site that meets any of the criteria in this paragraph is exempt from the requirements of this chapter:
 - a. A post-construction site with less than ten percent connected imperviousness, based on the area of land disturbance, provided the cumulative area of all impervious surfaces is less than 7,500 square feet.

However, the exemption of this paragraph does not include exemption from the protective area standard of this chapter.

- b. A regional stormwater facility has been previously approved and constructed that meets the requirements of this chapter with all site runoff for the proposed post-construction site directed to the regional facility. If the regional facility does not meet the requirements of this chapter the difference in stormwater requirements for post-construction sites will be required for the proposed site.
 - c. Agricultural facilities and practices.
 - d. Underground utility construction, but does not include the construction of any above ground structures associated with utility construction.
 - e. Routine maintenance for project sites that have no increase in impervious area. Routine maintenance does not include installation of utilities or any subgrade alterations that include undercutting of subsoils, import or export of fill.
 - f. Paving of a gravel surface or mill and overlay of a paved area with no alterations to the subgrade or increase of impervious areas.
- (3) Notwithstanding the applicability requirements in par. (2), this chapter applies to post-construction sites of any size that, as determined by the administering authority, are likely to result in runoff that exceeds the safe capacity of the existing drainage facilities or receiving body of water, causes undue channel erosion, or increases water pollution by scouring or the transportation of particulate matter.
- (b) **Jurisdiction.** This chapter applies to post construction sites within the boundaries and jurisdiction of the City of Columbus.
- (c) **Exclusions.** This chapter is not applicable to activities conducted by a state agency, as defined under §227.01(1), Wis. Stats.

Sec. 48-5. – Definitions.

- (a) “Adequate sod, or self-sustaining vegetative cover” means maintenance of sufficient vegetation types and densities such that the physical integrity of the streambank or lakeshore is preserved. Self-sustaining vegetative cover includes grasses, forbs, sedges, and duff layers of fallen leaves and woody debris.
- (b) “Administering authority” means a governmental employee, or a regional planning commission empowered under §62.234, Wis. Stats., that is designated by the Common Council to administer this Chapter.
- (c) “Agricultural facilities and practices” has the meaning given in §281.16(1), Wis. Stats.
- (d) “Atlas 14” means the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Precipitation-Frequency Atlas of the United States, Volume 8 (Midwestern States), published in 2013.
- (e) “Average annual rainfall” means a typical calendar year of precipitation as determined by the Wisconsin Department of Natural Resources for users of models such as WinSLAMM, P8 or equivalent methodology. The average annual rainfall is chosen from a department publication for the location closest to the municipality.

- (f) “Best management practice” or “BMP” means structural or non-structural measures, practices, techniques, or devices employed to avoid or minimize sediment or pollutants carried in runoff to waters of the state.
- (g) “Business day” means a day the office of the administering authority is routinely and customarily open for business.
- (h) “Cease and desist order” means a court-issued order to halt land disturbing construction activity that is being conducted without the required permit or in violation of a permit issued by the administering authority.
- (i) “Combined sewer system” means a system for conveying both sanitary sewage and stormwater runoff.
- (j) “Connected imperviousness” means an impervious surface connected to the waters of the state via a separate storm sewer, an impervious flow path, or a minimally pervious flow path.
- (k) “Design storm” means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency and total depth of rainfall.
- (l) “Development” means residential, commercial, industrial, or institutional land uses and associated roads.
- (m) “Direct conduits to groundwater” means wells, sinkholes, swallets, fractured bedrock at the surface, mine shafts, non-metallic mines, tile inlets discharging to groundwater, quarries, or depressional groundwater recharge areas over shallow fractured bedrock.
- (n) “Division of land” means the creation from one parcel of two or more parcels or building sites in area where such creation occurs at one time or through the successive partition within a 5-year period.
- (o) “Drain Tile” means a pipe that is defined by SPS 321.17
- (p) “Effective infiltration area” means the area of the infiltration system that is used to infiltrate runoff and does not include the area used for site access, berms, or pretreatment.
- (q) “Erosion” means the process by which the land’s surface is worn away by the action of wind, water, ice or gravity.
- (r) “Exceptional resource waters” means waters listed in §NR 102.11, Wis. Adm. Code.
- (s) “Extraterritorial” means the unincorporated area within three miles of the corporate limits of a first-, second-, or third-class city, or within one and a half miles of a fourth-class city or village.
- (t) “Filtering layer” means soil that has at least a 3-foot-deep layer with at least 20 percent fines; or at least a 5-foot-deep layer with at least 10 percent fines; or an engineered soil with an equivalent level of protection as determined by the regulatory authority for the site.
- (u) “Final stabilization” means that all land disturbing construction activities at the construction site have been completed and that a uniform perennial vegetative cover has been established with a density of at least 70 percent of the cover for the unpaved areas and areas not covered by permanent structures or that employ equivalent permanent stabilization measures.
- (v) “Financial guarantee” means a performance bond, maintenance bond, surety bond, irrevocable letter of credit, or similar guarantees submitted to the administering

- authority by the responsible party to assure that requirements of the ordinance are carried out in compliance with the stormwater management plan.
- (w) “Governing body” means the City Council of the City of Columbus.
 - (x) “Impervious surface” means an area that releases as runoff all or a large portion of the precipitation that falls on it, except for frozen soil. Rooftops, sidewalks, driveways, gravel or paved parking lots and streets are examples of areas that typically are impervious.
 - (y) “In-fill” means an undeveloped area of land located within an existing urban area, surrounded by development or development and natural or man-made features where development cannot occur.
 - (z) “Infiltration” means the entry of precipitation or runoff into or through the soil.
 - (aa) “Infiltration system” means a device or practice such as a basin, trench, rain garden or swale designed specifically to encourage infiltration, but does not include natural infiltration in pervious surfaces such as lawns, redirecting of rooftop downspouts onto lawns or minimal infiltration from practices, such as swales or roadside channels designed for conveyance and pollutant removal only.
 - (bb) “Land disturbing construction activity” means any man-made alteration of the land surface resulting in a change in the soil subgrade, topography or existing vegetative or non-vegetative soil cover, that may result in runoff and lead to an increase in soil erosion and movement of sediment into waters of the state. Land disturbing construction activity includes clearing and grubbing, demolition, excavating, pit trench dewatering, filling, and grading activities.
 - (cc) “Land owner” means any person holding fee title or other interest in property, which allows the person to undertake any land disturbing or construction activity or maintenance of stormwater BMPs on the property.
 - (dd) “Maintenance agreement” means a legal document that provides for long-term maintenance of stormwater management practices.
 - (ee) “New development” means development resulting from the conversion of previously undeveloped land or agricultural land uses.
 - (ff) “NRCS MSE3 or MSE4 distribution” means a specific precipitation distribution developed by the United States Department of Agriculture, Natural Resources Conservation Service, using precipitation data from Atlas 14.
 - (gg) “Off-site” means located outside the property boundary described in the permit application.
 - (hh) “On-site” means located within the property boundary described in the permit application.
 - (ii) “Ordinary high-water mark” has the meaning given in §NR 115.03(6), Wis. Adm. Code.
 - (jj) “Outstanding resource waters” means waters listed in §NR 102.10, Wis. Adm. Code.
 - (kk) “Percent fines” means the percentage of a given sample of soil, which passes through a # 200 sieve.
 - (ll) “Performance standard” means a narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.
 - (mm) “Permit” means a written authorization made by the administering authority to the applicant to conduct land disturbing construction activity or to discharge post-

- construction runoff from a parcel.
- (nn) “Permit administration fee” means a sum of money paid to the administering authority by the permit applicant for the purpose of recouping the expenses incurred by the authority in administering the permit.
- (oo) “Pervious surface” means an area that releases as runoff a small portion of the precipitation that falls on it. Lawns, gardens, parks, forests, or other similar vegetated areas are examples of surfaces that typically are pervious.
- (pp) “Pollutant” has the meaning given in §283.01(13), Wis. Stats.
- (qq) “Pollution” has the meaning given in §281.01(10), Wis. Stats.
- (rr) “Post-construction site” means a construction site following the completion of land disturbing construction activity and final site stabilization.
- (ss) “Pre-development condition” means the extent and distribution of land cover types present before the initiation of land disturbing construction activity, if all land uses prior to development activity are managed in an environmentally sound manner.
- (tt) “Preventive action limit” has the meaning given in §NR 140.05(17), Wis. Adm. Code.
- (uu) “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.
- (vv) “Redevelopment” means areas where development is replacing older development. Redevelopment is further defined as:
- Construction, alteration or improvement exceeding 5,000 square feet of land disturbance performed on sites where the existing site is predominantly developed as commercial, industrial, institutional or multifamily residential uses and the creation or expansion of new impervious surface is more than 7,500 square feet but does not exceed 20,000 square feet.
 - Should the site have more than 20,000 square feet or more of new impervious surface then the project will be a mix of new development and redevelopment with the first 12,500 square feet requiring treatment considered redevelopment and the excess considered new development.
- (ww) “Responsible party” means the landowner or any other entity performing services to meet the requirements of this chapter through a contract or other agreement.
- (xx) “Roof Drain Pipe” means a drain pipe installed either on the surface or underground that is connected to and receives water from the roof and or gutter system of a structure and discharges water from drain pipe.
- (yy) “Runoff” means stormwater or precipitation including rain, snow or ice melt or similar water that moves on the land surface via sheet or channelized flow.
- (zz) “Separate storm sewer” means a conveyance or system of conveyances including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, constructed channels or storm drains, which meets all of the following criteria:
- Is designed or used for collecting water or conveying runoff.
 - Is not part of a combined sewer system.
 - Is not part of a publicly owned wastewater treatment works that provides secondary or more stringent treatment.
 - Discharges directly or indirectly to waters of the state.

- (aaa) “Silviculture activity” means activities including tree nursery operations, tree harvesting operations, reforestation, tree thinning, prescribed burning, and pest and fire control. Clearing and grubbing of an area of a construction site is not a silviculture activity.
- (bbb) “Site” means the entire area included in the legal description of the land on which the land disturbing construction activity occurred.
- (ccc) “Stop work order” means an order issued by the administering authority which requires that all construction activity on the site be stopped.
- (ddd) “Storm Events” mean the precipitation amounts that occur over a 24-hour period that have a specified recurrence interval for Columbia County, Wisconsin. For example, one-year, two-year, 10-year, and 100-year storm events mean the precipitation amounts that occur over a 24-hour period that have a recurrence interval of 1, 2, 10, and 100 years, respectively. The amounts associated with these events are further defined as follows:
- 1-year, 24-hour storm event = 2.43 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution.
 - 2-year, 24-hour storm event = 2.76 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution.
 - 5-year, 24-hour storm event = 3.38 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution.
 - 10-year, 24-hour storm event = 3.96 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution.
 - 25-year, 24-hour storm event = 4.88 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution.
 - 50-year, 24-hour storm event = 5.66 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution.
 - 100-year, 24-hour storm event = 6.52 inches over 24 hours duration using the MSE4 NRCS Rainfall Distribution.
- (eee) “Stormwater management plan” means a comprehensive plan designed to reduce the discharge of pollutants from stormwater, after the site has undergone final stabilization, following completion of the construction activity.
- (fff) “Stormwater management system plan” is a comprehensive plan designed to reduce the discharge of runoff and pollutants from hydrologic units on a regional or municipal scale.
- (ggg) “Technical standard” means a document that specifies design, predicted performance and operation and maintenance specifications for a material, device or method.
- (hhh) “Top of the channel” means an edge, or point on the landscape landward from the ordinary high- water mark of a surface water of the state, where the slope of the land begins to be less than 12 percent continually for at least 50 feet. If the slope of the land is 12 percent or less continually for the initial 50 feet landward from the ordinary high- water mark, the top of the channel is the ordinary high-water mark.
- (iii) “Total maximum daily load” or “TMDL” means the amount of pollutants specified as a function of one or more water quality parameters, that can be discharged per day into a water quality limited segment and still ensure attainment of the applicable water quality standard.

- (jjj) “TP-40” means Technical Paper No. 40, Rainfall Frequency Atlas of the United States, published in 1961.
- (kkk) “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.
- (lll) “Transportation facility” means a highway, a railroad, a public mass transit facility, a public-use airport, a public trail, or any other public work for transportation purposes such as harbor improvements under §85.095(1)(b), Wis. Stats. “Transportation facility” does not include building sites for the construction of public buildings and buildings that are places of employment that are regulated by the Department pursuant to §281.33, Wis. Stats.
- (mmm) “TSS” means total suspended solids.
- (nnn) “Type II distribution” means a rainfall type curve as established in the “United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published in 1973”.
- (ooo) “Waters of the state” includes all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction.

Sec. 48-6. – Technical Standards.

The following methods shall be used in designing the water quality, peak discharge, and infiltration components of stormwater practices needed to meet the water quality standards of this chapter:

- (a) Consistent with the technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under subchapter V of chapter NR 151, Wis. Adm. Code.
- (b) Where technical standards have not been identified or developed by the Wisconsin Department of Natural Resources, other technical standards may be used provided that the methods have been approved by the administering authority.
- (c) When designing any BMP within the City of Columbus for the purposes of satisfying the peak discharge, water quality, or infiltration requirements of this ordinance, at a minimum, the Post-Construction and Construction Technical Standards of the WDNR Technical Standards must be followed.
- (d) All work that occurs in the City of Columbus right of way or public lands shall follow the City of Columbus technical standards as set forth in the City Code of Ordinances.

Sec. 48-7. – Performance Standards.

- (a) **Responsible Party.** The responsible party shall comply with this section.
- (b) **Stormwater Management Plan.** A written stormwater management plan in accordance with Sec. 48-9 shall be developed and implemented for each post-

construction redevelopment or new development or combination of development types for the site.

- (c) **Maintenance of Effort.** For redevelopment sites where the redevelopment will be replacing older existing development that was subject to post-construction performance standards of NR 151 in effect on or after October 1, 2004, the responsible party shall meet the total suspended solids reduction, peak flow control, infiltration, and protective areas standards applicable to the older development or meet the redevelopment standards of this chapter, whichever is more stringent.
- (d) **Requirements.** The stormwater management plan required under sub. (2) shall include the following:
 - (1) **Total Suspended Solids.** BMPs shall be designed, installed and maintained to control total suspended solids carried in runoff from the post-construction site as follows:
 - a. BMPs shall be designed in accordance with Table 1. or to the maximum extent practicable as provided in subd. 2. The design shall be based on an average annual rainfall, as compared to no runoff management controls.

| Table 1. TSS Reduction Standards | |
|---|--|
| Development Type | TSS Reduction |
| New Development | 80 percent |
| In-fill development | 80 percent |
| Redevelopment | 60 percent of load from all impervious areas defined as redevelopment. |

- b. **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 practice. Any impact on the efficiency shall be compensated for by increasing the size of the BMP accordingly to meet the requirements in table 1.
 - c. This shall require the use of a continuous model such as WinSLAMM, or approved equivalent, and the use of approved grain size distribution curves and rainfall data.
 - d. For redevelopment by design, reduce by 60% of the TSS loads leaving the redeveloped site based on average annual rainfall, as compared to no runoff management controls.
- (2) **Peak Discharge – New Development and Infill Development.**
 - a. By design, BMPs shall be employed to maintain or reduce the 1-year, 2-year, 10-year, and 100-year, 24-hour post-construction peak runoff discharge rates to the 1- year, 2-year, 10-year, and 100-year, 24-hour pre-development peak runoff discharge rates respectively. In addition development shall reduce the 25-year, 24-hour post construction peak runoff to be at or below the 5-year, 24-hour pre development peak runoff rate. The runoff curve numbers in Table 2. shall be used to represent the

actual pre-development conditions. At a minimum the peak discharges shall be calculated using TR-55 runoff curve number methodology, Atlas 14 precipitation depths, and the appropriate NRCS soil parameters for the site.

Wisconsin MSE4 precipitation distribution.

| Table 2. Maximum Pre-Development Runoff Curve Numbers | | | | |
|--|-----------------------|----|----|----|
| Runoff Curve Number | Hydrologic Soil Group | | | |
| | A | B | C | D |
| Woodland | 30 | 55 | 70 | 77 |
| Grassland | 39 | 61 | 71 | 78 |
| Cropland | 51 | 68 | 78 | 83 |

2. **Off-Site Drainage.** When designing BMPs, runoff draining to the BMP from off- site shall be taken into account in determining the treatment capacity of the practice. Off-site drainage shall be compensated for by designing the size of the BMP safely pass the off-site runoff through BMP without reduction of peak runoff for only the off-site portion.
 3. Discharge points from peak runoff drainage exiting BMPs shall not concentrate flow that cause adverse impacts to adjacent property. All exiting storm water will be required to be dissipated or dispersed in a manner that is equal to or less than preexisting conditions.
 4. Uncontrolled or untreated runoff from a new development site can not exceed 10 percent of the total increase in runoff regardless if standards are met for this chapter.
- (3) **Peak Discharge – Redevelopment.**
- a. By design, BMPs shall be employed to reduce the 10-year; 24-hour post-construction peak runoff discharge rates by 50% as compared to the existing conditions for the entire parcel prior to redevelopment.
 - b. Redevelopment standards for peak discharge shall apply for any redevelopment and shall comply with Sec. 48-7(d)(2) b and c.
 - c. Resurfacing of a parking lot is not considered redevelopment for the purpose of this ordinance, nor is pulverizing and overlay of bituminous pavement. However, if the base course (granular material below pavement) is disturbed, the resurfacing shall be considered redevelopment.
- (4) **Infiltration.**
- a. **Best Management Practices.** BMPs shall be designed, installed, and maintained to infiltrate runoff in accordance with the following:
 1. **Low imperviousness.** For development up to 40 percent

connected imperviousness, such as parks, cemeteries, and low-density residential development, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90 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 one percent of the post-construction site is required as an effective infiltration area.

2. **Moderate imperviousness.** For development with more than 40% and up to 80% connected imperviousness, such as medium and high density residential, multi-family development, industrial and institutional development, and office parks, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 75% of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2% of the post-construction site is required as an effective infiltration area.

3. **High imperviousness.** For development with more than 80% connected imperviousness, such as commercial strip malls, shopping centers, and commercial downtowns, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 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 post-construction site is required as an effective infiltration area.

- b. **Pre-development.** The pre-development condition shall be the same as specified in Table 2 of the Peak Discharge section of this ordinance.

- c. **Source Areas.**

1. **Prohibitions.** Runoff from the following areas may not be infiltrated and may not qualify as contributing to meeting the requirements of this section unless demonstrated to meet the conditions identified in Sec. 48-7(d)(3)f:

- i. Areas associated with a tier 1 industrial facility identified in §NR 216.21(2)(a), including storage, loading, and parking. Rooftops may be infiltrated with the concurrence of the administering authority.
- ii. Storage and loading areas of a tier 2 industrial facility identified in §NR 216.21(2)(b).
- iii. **Fueling and vehicle maintenance areas.** Runoff from rooftops of fueling and vehicle maintenance areas may be infiltrated with the concurrence of the administering authority.

2. **Exemptions.** Runoff from the following areas may be credited

toward meeting the requirement when infiltrated:

- i. Parking areas and access roads less than 7,500 square feet for commercial development.
- ii. Parking areas and access roads less than 7,500 square feet for industrial development not subject to the Prohibitions under par a.
- iii. Except as provided under Sec. 48-7(c), redevelopment of post-construction sites.
- iv. In-fill development areas less than 1 acre.

d. **Location of Practices.**

1. **Prohibitions.** Infiltration practices may not be located in the following areas:

- i. Areas within 1000 feet upgradient or within 100 feet downgradient of direct conduits to groundwater.
- ii. Areas within 400 feet of a community water system well as specified in §NR 811.16(4) or within the separation distances listed in §NR. 812.08 for any private well or non-community well for runoff infiltrated from commercial, including multi-family residential, industrial and institutional land uses or regional devices for one- and two-family residential development.
- iii. Areas where contaminants of concern, as defined in §NR 720.03(2), are present in the soil through which infiltration will occur.

2. **Separation distances.**

- i. Infiltration practices shall be located so that the characteristics of the soil and the separation distance between the bottom of the infiltration system and the elevation of seasonal high groundwater or the top of bedrock are in accordance with Table 3:

| Table 3. Separation Distances and Soil Characteristics | | |
|---|--|---|
| Source Area | Separation Distance to groundwater or bedrock | Soil Characteristics |
| Industrial, Commercial, Institutional Parking Lots and Roads | 5 feet or more | Filtering Layer |
| | | |
| Roofs Draining to Subsurface Infiltration Practices | 1 foot or more | Native or Engineered Soil with Particles Finer than Coarse Sand |

| | | |
|-----------------------------------|----------------|-----------------|
| | | |
| All Other Impervious Source Areas | 3 feet or more | Filtering Layer |

- ii. Notwithstanding par. 2., applicable requirements for injection wells classified under ch. NR 815 shall be followed.
- 3. **Infiltration rate exemptions.** Infiltration practices located in the following areas may be credited toward meeting the requirements under the following conditions, but the decision to infiltrate under these conditions is not required:
 - i. Where the infiltration rate of the soil measured at the proposed bottom of the infiltration system is less than 0.6 inches per hour using a field test method and the least permeable soil horizon to 5 feet below the proposed bottom of the infiltration system is less than required infiltration rate.
 - ii. **Alternate Use.** Where alternate uses of storm water runoff are employed, such as for toilet flushing, laundry, or irrigation or storage on green roofs where an equivalent portion of the runoff is permanently captured permanently such alternate use shall be given equal credit toward the infiltration volume required by this section.
- e. **Groundwater Standards.**
 - 1. Infiltration systems designed in accordance with this section shall 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 ch. NR 140. However, if site specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration.
 - 2. Notwithstanding par. 1., the discharge from BMPs shall remain below the enforcement standard at the time of application.
- f. **Pretreatment.** Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with subd. e. Pretreatment options may include, but are not limited to, oil and grease separation, sedimentation, biofiltration, filtration, swales or filter strips.
- g. Redevelopment standards for infiltration shall apply for any

redevelopment site that increases impervious area by 7,500 square feet.

(5) **Protective Areas.**

- a. **Definition.** In this section, “protective area” means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in this section, “protective area” does not include any area of land adjacent to any stream enclosed within a pipe or culvert, so that runoff cannot enter the enclosure at this location.
1. For outstanding resource waters and exceptional resource waters, 75 feet.
 2. For perennial and intermittent streams identified on a U.S. Geological Survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.
 3. For lakes, 50 feet.
 4. For wetlands not subject to par. 5. or 6., 50 feet.
 5. For highly susceptible wetlands, 75 feet. Highly susceptible wetlands include the following types: calcareous fens, sedge meadows, open and coniferous bogs, low prairies, coniferous swamps, lowland hardwood swamps, and ephemeral ponds.
 6. For less susceptible wetlands, 10 percent of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include degraded wetland dominated by invasive species such as reed canary grass; cultivated hydric soils; and any gravel pits, or dredged material or fill material disposal sites that take on the attributes of a wetland.
 7. In pars. 4. to 6., determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in §NR 103.03.
 8. Wetland boundary delineation shall be made in accordance with §NR. 103.08(1m). This paragraph does not apply to wetlands that have been filled in compliance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in compliance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after a fill has been placed. Where there is a legally authorized wetland fill, the protective area standard need not be met in that location.
 9. For concentrated flow channels with drainage areas greater than 10 acres, 10 feet.
 10. Notwithstanding pars. 1. to 9., the greatest protective area width shall apply where rivers, streams, lakes and wetlands are contiguous.

- b. **Applicability.** This section applies to post-construction sites located within a protective area, except those areas exempted pursuant to subd. d.
 - c. **Requirements.** The following requirements shall be met:
 - 1. Impervious surfaces shall be kept out of the protective area entirely. If there is no practical alternative to locating an impervious surface in the protective area, the stormwater management plan shall contain a written, site-specific explanation.
 - 2. Where land disturbing construction activity occurs within a protective area, adequate sod or self-sustaining vegetative cover of 70% or greater shall be established and maintained where no impervious surface is present. The adequate sod or self-sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat, and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non-vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion such as on steep slopes or where high velocity flows occur.
 - 3. BMPs such as filter strips, swales, or wet detention ponds, that are designed to control pollutants from non-point sources, may be located in the protective area.
 - d. **Exemptions.** This section does not apply to any of the following:
 - 1. Except as provided under Sec. 48-7(c), redevelopment of post-construction sites.
 - 2. In-fill development areas less than 1 acre.
 - 3. Structures that cross or access surface water such as boat landings, bridges, and culverts.
- (6) **Fueling and Maintenance Areas.** Fueling and vehicle maintenance areas shall have BMPs designed, installed, and maintained to remove petroleum within runoff, so that the runoff that enters waters of the state contains no visible petroleum sheen. Fueling areas shall meet all containment requirements of local, state and federal requirements.
- (7) **Swale Treatment for Transportation Facilities.**
- a. **Requirement.** Except as provided in subd. b., transportation facilities that use swales for runoff conveyance and pollutant removal are exempt from the requirements of local ordinance requirements for peak flow control, total suspended solids control, and infiltration, if the swales are designed to do all the following:
 - 1. **Swales shall be vegetated.** However, where appropriate, non-vegetative measures may be employed to prevent erosion or provide for runoff treatment, such as rock riprap stabilization or check dams.
 - 2. Swales shall comply with sections V.D. (Velocity and Depth) and V.E. (Swale Geometry Criteria) with a swale treatment length if

that specified in section V.H. (Pre-Treatment) of the Wisconsin Department of Natural Resources technical standard 1005 “Vegetated Infiltration Swales”, dated December 2017, or a superseding document.

b. **Other requirements.**

1. Notwithstanding subd. 1., the administering authority may, consistent with water quality standards, require that other requirements, in addition to swale treatment, be met on a transportation facility with an average daily traffic rate greater than 2,500 and where the initial surface water of the state that the runoff directly enters is one of the following:
 - i. An outstanding resource water.
 - ii. An exceptional resource water.
 - iii. Waters listed in section 303 (d) of the Federal Clean Water Act are identified as impaired in whole or in part, due to non-point source impacts.
 - iv. Water where targeted performance standards are developed pursuant to §NR 151.004, Wis. Adm. Code.

(8) **Drain Tile or Roof Drain Pipe.** Prior to any installation of drain tile or roof drain pipe within the City of Columbus, plans for the drain tile or roof drain pipe construction, along with any relevant design data, must be submitted to the administering authority for review and approval as applicable to the requirements of this chapter.

1. Drain Tile or roof drain pipe discharges are not to occur within fifteen feet of a property line.
2. Drain Tile or roof drain pipe discharges are not to occur within fifteen feet of the road or street right-of-way.

(9) **Sump Pump Discharges.** Sump pump discharges are to follow these requirements:

1. Sump pump discharges are not to occur within fifteen feet of a property line.
2. Sump pump discharges are not to occur within fifteen feet of the road or street right-of-way.
3. If storm sewer laterals are present, sump pump discharges shall be connected to the storm sewer laterals, if storm sewer or storm sewer lateral are not available, sump pump discharges to storm sewer are not required.
4. Direct connections to the curb are not allowed.
5. If storm inlet is located near the property a direct connection may be allowed by stormwater permit approval and by obtaining a work in right of way permit.
6. No sump pump discharge shall cause a nuisance or public safety issues in the public right of way.
7. A nuisance shall include but not be limited to discharging pumped water

directly onto sidewalk or driveway apron or causing discharge water to run directly over sidewalk or down driveway apron into the street curb and gutter.

- (10) **Oil and Grease Control.** For new development or redevelopment sites that include commercial or industrial land uses and all other land uses where the potential for pollution by oil and/or grease exists, the first one-half inches of runoff will be treated using oil and grease removal technology available at the time of development. Specifically, oil and grease removal shall be required for:
- a. All parking facilities exposed to the elements that have a cumulative number of parking stalls greater than or equal to 25.
 - b. Sites with exposed drive-up windows or any other sites deemed high potential for oil and grease deposition by the administering authority shall also receive treatment regardless of parking stall number for areas directly related to the travel path of the drive through window lane or lanes.
 - c. Oil and grease requirements shall apply to any commercial or industrial areas that we not paved areas that are improved to paved areas.
 - d. Paved outdoor storage areas that are in excess of 4,000 square feet.
- (11) **Driveway Culvert Construction.** For any projects where an existing driveway culvert is being replaced with a new driveway culvert, the new driveway culvert at a minimum shall be of the same size as the original culvert. Acceptable driveway culvert materials are Reinforced Concrete, Corrugated Metal Pipe, ADS Pipe, or approved equal. Any culverts replaced in the right of way will be required to be Reinforced Concrete Pipe unless approved otherwise by the administering authority. Any work including the provision of an in-kind or new driveway culvert will require a driveway permit through the City of Columbus. For any work requiring a new driveway culvert that is not in-kind, or any new culvert not in-kind, the submission of calculations showing that the culverts are sized properly and not creating erosive velocities for flooding of subject parcel or adjacent parcels will be required by of the City of Columbus.
- (12) **Drainage Culvert Construction.** For any culvert located in a channel, swale, creek, stream other water feature a determination of the required permitting process will be required. Applicant shall follow all requirements for local, state, federal permitting related to shoreland zoning, wetlands, navigable water way requirements. Hydraulic design of all pipes and culverts will be required along with any required approved permits prior to start of construction.
- (13) **Channels / Swales.** Where open channels are utilized in either the minor or major drainage system, they shall be designed so as to minimize maintenance requirements and maximize safety. For any new or redesign of existing channels or swales the requirements shall include the following:
- a. In drainageways and drainageway easements, accumulations of water shall not inundate beyond the limits of the drainageway or drainageway easement. Hydraulic analysis will be required with design submittal
 - b. Easements will be required for any channel or swale design that

carries runoff across a property, easement shall be created at adequate size to provide adequate size to allow maintenance.

- c. Slopes and bottoms of channel / swale shall be designed to be stable and minimize erosion.

(e) **General Considerations for Stormwater Management Measures.** The following considerations shall be observed in on-site and off-site runoff management:

- (1) Natural topography and land cover features such as natural swales, natural depressions, native soil infiltrating capacity, and natural groundwater recharge areas shall be preserved and used to meet the requirements of this section.
- (2) Emergency overland flow for all stormwater facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.
- (3) **Flow Impedance in Stormwater Management Easements/Drainageways.** Flow within easements dedicated for the drainage/conveyance of stormwater runoff shall be maintained by the land owner of said drainage so as not impede flow causing potential flooding to neighboring properties. Failure to ensure that these drainageways are maintained and free of debris will result in fines from the administering authority. If costs are incurred by the city for any maintenance or removal of obstructions performed, the land owner will reimburse the city accordingly. If the land owner does not reimburse the City of Columbus for all costs incurred for such corrective action, the City shall place the amount due on the tax rolls and collect the money as a special charge against the property pursuant to ch. 66.0627, Wis. Stats. and all applicable city ordinances.
- (4) **Master Grading Plans for Developments.** If a Master Grading Plan exists for any development within the City of Columbus, whether it be for a residential, commercial, or industrial development, no one, including a builder or landscaper shall deviate from the intended drainage within the master plan on record. Drainage patterns must be maintained as intended and flow is not to be impeded. If proposed drainage is disrupted, impeded, or filled in, the city will require that the builder, landscaper, or developer remove the impedance and fix the situation so that the intended drainage is re-established. If costs are incurred by the city for any maintenance or removal of obstructions performed, the responsible party will reimburse the city accordingly. If the responsible party does not reimburse the City of Columbus for all costs incurred for such corrective action, the City shall place the amount due on the tax rolls and collect the money as a special charge against the property pursuant to ch. 66.0627, Wis. Stats. and all applicable city ordinances.

(f) **BMP Location.**

- (1) To comply with the performance standards required under Sec. 48-7 of this chapter, BMPs may be located on-site or off-site as part of a regional stormwater device, practice, or system, but shall be installed in accordance with §NR 151.003, Wis. Adm. Code.
- (2) The administering authority may approve off-site management measures if all of the following conditions are met:
 - a. The administering authority determines that the post-construction

runoff is covered by a stormwater management system plan that is approved by the City of Columbus and that contains management requirements consistent with the purpose and intent of this chapter.

- b. The off-site facility meets all the following conditions:
 - 1. The facility is in place.
 - 2. The facility is designed and adequately sized to provide a level of stormwater control equal to or greater than that which would be afforded by on-site practices meeting the performance standards of this ordinance.
 - 3. The facility has a legally obligated entity responsible for its long-term operation and maintenance.
- (3) Where a regional treatment option exists such that the administering authority exempts the applicant from all or part of the on-site stormwater management requirements, the applicant shall be required to pay a fee as required by the permit application and any permits applicable to the proposed development shall be obtained to document how the property meets requirements of this chapter.
- (g) **Additional Requirements.** The administering authority may establish stormwater management requirements more stringent than those set forth in this ordinance if the administering authority determines that the requirements are needed to control stormwater quantity or control flooding, comply with federally approved total maximum daily load requirements, or control pollutants associated with existing development or redevelopment.

Sec. 48-8. – Permitting Requirements, Procedures and Fees.

- (a) **Permit Required.** No responsible party may undertake a land disturbing construction activity that requires storm water management without receiving a post-construction runoff permit from the administering authority prior to commencing the proposed activity.
- (b) **Permit Application and Fees.** Unless specifically excluded by this chapter, any responsible party desiring a permit shall submit to the administering authority a permit application on a form provided by the administering authority for that purpose.
 - (1) Unless otherwise excluded by this chapter, a permit application must be accompanied by a stormwater management plan, site plan and specifications and a maintenance agreement and a non-refundable permit fee.
 - (2) The stormwater management plan shall be prepared to meet the requirements of Sec. 48-7 and Sec. 48-9, the maintenance agreement shall be prepared to meet the requirements of Sec. 48-10, the financial guarantee shall meet the requirements of Sec. 48-11, and fees shall be those established by the Common Council as set forth in Sec. 48-12.
- (c) **Permit Application Review and Approval.** The administering authority shall review any permit application that is submitted with a stormwater management plan, site plan and specifications and maintenance agreement, and the required fee. The following approval procedure shall be used:
 - (1) Within fifteen business days of the receipt of a complete permit application,

including all items as required by sub. (b), the administering authority shall inform the applicant whether the application, stormwater management plan and maintenance agreement are approved or disapproved based on the requirements of this ordinance.

- (2) If the stormwater permit application, stormwater management plan, site plan and specifications and maintenance agreement are approved the administering authority shall issue the permit.
 - (3) If the stormwater permit application, stormwater management plan or maintenance agreement is disapproved, the administering authority shall detail in writing the reasons for disapproval.
 - (4) The administering authority may request additional information from the applicant. If additional information is submitted, the administering authority shall have ten business days from the date the additional information is received to inform the applicant that the stormwater management plan and maintenance agreement are either approved or disapproved.
 - (5) Failure by the administering authority to inform the permit applicant of a decision within fifteen business days of a required submittal of (1) or (4) shall be deemed to mean approval of the submittal and the applicant may proceed as if a permit had been issued.
- (d) **Permit Requirements.** All permits issued under this ordinance shall be subject to the following conditions, and holders of permits issued under this ordinance shall be deemed to have accepted these conditions. The administering authority may suspend or revoke a permit for violation of a permit condition, following written notification of the responsible party. An action by the administering authority to suspend or revoke this permit may be appealed in accordance with Sec. 48-14.
- (1) Compliance with this permit does not relieve the responsible party of the responsibility to comply with other applicable federal, state, and local laws and regulations.
 - (2) The responsible party shall design and install all structural and non-structural stormwater management measures in accordance with the approved stormwater management plan and the permit.
 - (3) The owner of a Stormwater BMP is required to submit an annual certification letter, after the BMP is constructed. This letter is required to assure the administering authority that the BMP has been designed and is performing consistent with the intended design. Upon completion of all required stormwater BMPs the responsible party will submit notice to the administering authority that includes a letter informing the City of Columbus that all measures were installed as permitted and an as-built plan of all features, including but not limited to topography and surveyed elevations of any structures or appurtenances, along with the installed design and any revision the Stormwater Management Plan for the development caused by as built conditions.
 - (4) The responsible party shall notify the administering authority at least three business days before commencing any work in conjunction with the stormwater management plan, and within fifteen business days upon completion of the

stormwater management practices. If required as a special condition under sub. (e), the responsible party shall make additional notification according to a schedule set forth by the administering authority so that practice installations can be inspected during construction.

- (5) Practice installations required as part of this ordinance shall be certified “as built” or “record” drawings by a licensed professional engineer. Completed stormwater management practices must pass a final inspection by the administering authority or its designee to determine if they are in accordance with the approved stormwater management plan and this chapter. The administering authority shall notify the responsible party in writing of any changes required in such practices to bring them into compliance with the conditions of this permit.
 - (6) The responsible party shall notify the administering authority of any significant modifications it intends to make to an approved stormwater management plan. The administering authority may require that the proposed modifications be submitted to it for approval prior to incorporation into the stormwater management plan and execution by the responsible party.
 - (7) The responsible party shall maintain all stormwater management practices in accordance with the stormwater management plan until the practices either become the responsibility of the City of Columbus or are transferred to subsequent private owners as specified in the approved maintenance agreement.
 - (8) The responsible party authorizes the administering authority to perform any work or operations necessary to bring stormwater management measures into conformance with the approved stormwater management plan, and consents to a special assessment or charge against the property as authorized under subch. VII of ch. 66, Wis. Stats., or to charging such costs against the financial guarantee posted under Sec. 48-11.
 - (9) If so directed by the administering authority, the responsible party shall repair at the responsible party's own expense all damage to adjoining municipal facilities and drainage ways caused by runoff, where such damage is caused by activities that are not in compliance with the approved stormwater management plan.
 - (10) The responsible party shall permit property access to the administering authority or its designee for the purpose of inspecting the property for compliance with the approved stormwater management plan and this permit.
 - (11) Where site development or redevelopment involves changes in direction, increases in peak rate and/or total volume of runoff from a site, the administering authority may require the responsible party to make appropriate legal arrangements with affected land owners concerning the prevention of endangerment to property or public safety.
 - (12) The responsible party is subject to the enforcement actions and penalties detailed in Sec. 48-13, if the responsible party fails to comply with the terms of this permit.
- (e) **Permit Conditions.** Permits issued under this subsection may include conditions established by administering authority in addition to the requirements needed to meet

the performance standards in Sec. 48-7 or a financial guarantee as provided for in Sec. 48-11.

- (f) **Permit Duration.** Permits issued under this section shall be valid from the date of issuance through the date the administering authority notifies the responsible party that all stormwater management practices have passed the final inspection required under sub. (d)(4).

Sec. 48-9. – Stormwater Management Plan.

- (a) **Stormwater Management Plan Requirements.** The stormwater management plan required under Sec. 48-7(b) shall contain at a minimum the following information:
- (1) Name, address, and telephone number for the following or their designees: land owner; developer; project engineer for practice design and certification; person(s) responsible for installation of stormwater management practices; and person(s) responsible for maintenance of stormwater management practices prior to the transfer, if any, of maintenance responsibility to another party.
 - (2) A proper legal description of the property proposed to be developed, referenced to the U.S. Public Land Survey system or to block and lot numbers within a recorded land subdivision plat.
 - (3) Pre-development site conditions, including:
 - a. One or more site maps at a scale of not less than 1-inch equals 40 feet. The site maps shall show the following: site location and legal property description; predominant soil types and hydrologic soil groups; existing cover type and condition; topographic contours of the site at a scale not to exceed one foot; topography and drainage network including enough of the contiguous properties to show runoff patterns onto, through and from the site; watercourses that may affect or be affected by runoff from the site; flow path and direction for all stormwater conveyance sections; watershed boundaries and subcatchment areas used in hydrology determinations to show compliance with performance standards; lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site; limits of the 100 year floodplain; location of wells and wellhead protection areas covering the project area and delineated pursuant to §NR 811.16, Wis. Adm. Code.
 - b. Hydraulic, Hydrology and pollutant loading computations as needed to show compliance with performance standards. All major assumptions used in developing input parameters shall be clearly stated. The geographic areas used in making the calculations shall be clearly cross-referenced to the required map(s).
 - (4) Post-development site conditions, including:
 - a. Explanation of the provisions to preserve and use natural topography and land cover features to minimize changes in peak flow runoff rates and volumes to surface waters and wetlands.
 - b. Explanation of any restrictions on stormwater management measures in the development area imposed by wellhead protection plans and

ordinances.

- c. One or more site maps at a scale of not less than 1 inch equals 40 feet showing the following: post-construction pervious areas including vegetative cover type and condition; impervious surfaces including all buildings, structures, and pavement; post-construction topographic contours of the site at a scale not to exceed one foot; post-construction drainage network with subcatchment areas including enough of the contiguous properties to show runoff patterns onto, through and from the site; locations and dimensions of drainage easements; locations of maintenance easements specified in the maintenance agreement; flow path and direction for all stormwater conveyance sections; location and type of all stormwater management conveyance and treatment practices, including the on-site and off- site tributary drainage area; location and type of conveyance system that will carry runoff from the drainage and treatment practices to the nearest adequate outlet such as a curbed street, storm drain, or natural drainage way; watershed boundaries used in hydrology and pollutant loading calculations and any changes to lakes, streams, wetlands, channels, ditches, and other watercourses on and immediately adjacent to the site.
 - d. Hydraulic, Hydrology and pollutant loading computations as needed to show compliance with performance standards. The computations shall be made for each discharge point in the development, and the geographic areas used in making the calculations shall be clearly cross-referenced to the required map(s).
 - e. Results of investigations of soil and groundwater required for the placement and design of stormwater management measures. Detailed drawings including cross-sections and profiles of all permanent stormwater conveyance and treatment practices.
- (5) A description and installation schedule for the stormwater management practices needed to meet the performance standards in Sec. 48-7.
 - (6) A maintenance plan developed for the life of each stormwater management practice including the required maintenance activities and maintenance activity schedule.
 - (7) Cost estimates for the construction, operation, and maintenance of each stormwater management practice.
 - (8) Other information requested in writing by the administering authority to determine compliance of the proposed stormwater management measures with the provisions of this ordinance.
 - (9) All site investigations, plans, designs, computations, and drawings shall be certified by a licensed professional engineer to be prepared in accordance with accepted engineering practice and requirements of this ordinance.
- (b) **Alternate Requirements.** The administering authority may prescribe alternative submittal requirements for applicants seeking an exemption to on-site stormwater management performance standards under Sec. 48-7(e).

Sec. 48-10. – Maintenance Agreement.

- (a) **Maintenance Agreement Required.** The maintenance agreement required under Sec. 48-8(b) for stormwater management practices shall be an agreement between the City of Columbus and the responsible party to provide for maintenance of stormwater practices beyond the duration period of issued permit. The maintenance agreement shall be filed by the applicant, with fees paid for recording by the applicant, with the County Register of Deeds as a property deed restriction so that it is binding upon all subsequent owners of the land served by the stormwater management practices.
- (b) **Agreement Provisions.** The maintenance agreement shall contain the following information and provisions and be consistent with the maintenance plan required by Sec. 48-9(a)(6):
 - (1) Identification of the stormwater facilities and designation of the drainage area served by the facilities.
 - (2) A schedule for regular maintenance of each aspect of the stormwater management system consistent with the stormwater management plan required under Sec. 48-8(b).
 - (3) Identification of the responsible party(s), organization or city, county, town or village responsible for long term maintenance of the stormwater management practices identified in the stormwater management plan required under Sec. 48-8(b).
 - (4) Requirement that the responsible party(s), organization, or city, county, town or village shall maintain stormwater management practices in accordance with the schedule included in par. (2).
 - (5) Authorization for the City of Columbus to access the property to conduct inspections of stormwater management practices as necessary to ascertain that the practices are being maintained and operated in accordance with the agreement.
 - (6) A requirement that the party designated under par. (3), to maintain public records of the results of the site inspections, to inform the responsible party responsible for maintenance of the inspection results, and to specifically indicate any corrective actions required to bring the stormwater management practice into proper working condition.
 - (7) Agreement that the party designated under par. (3), as responsible for long term maintenance of the stormwater management practices, shall be notified by the administering authority of maintenance problems which require correction. The specified corrective actions shall be undertaken within a reasonable time frame as set by the administering authority.
 - (8) Authorization of the City of Columbus to perform the corrected actions identified in the inspection report if the responsible party designated under par. (3) does not make the required corrections in the specified time period. City of Columbus shall have the right, after providing the owner with written notice of the issues and 30 days to comply to enter the property for the limited purpose of conducting the maintenance. If the responsible party does not reimburse the City of Columbus for all costs incurred for such corrective action, the city shall place

the amount due on the tax rolls and collect the money as a special charge against the property pursuant to ch. 66.0627, Wis. Stats. and all applicable city ordinances.

Sec. 48-11. – Financial Guarantee.

- (a) **Establishment of the Guarantee.** The administering authority may require the submittal of a financial guarantee, the form and type of which shall be acceptable to the City of Columbus. The financial guarantee shall be in an amount determined by the administering authority to be the estimated cost of construction and the estimated cost of maintenance of the stormwater management practices during the period which the designated party in the maintenance agreement has maintenance responsibility. The financial guarantee shall give the administering authority the authorization to use the funds to complete the stormwater management practices if the responsible party defaults or does not properly implement the approved stormwater management plan, upon written notice to the responsible party by the administering authority that the requirements of this ordinance have not been met.
- (b) **Conditions for Release.** Conditions for the release of the financial guarantee are as follows:
 - (1) The administering authority shall release the portion of the financial guarantee established under this section, less any costs incurred by the administering authority to complete installation of practices, upon submission of “as built plans” or “record” drawings by a licensed professional engineer. The administering authority may make provisions for a partial pro-rata release of the financial guarantee based on the completion of various development stages.
 - (2) The administering authority shall release the portion of the financial guarantee established under this section to assure maintenance of stormwater practices, less any costs incurred by the administering authority, at such time that the responsibility for practice maintenance is passed on to another entity via an approved maintenance agreement.

Sec. 48-12. – Fee Schedule.

The fees referred to in this chapter shall be established by the administering authority approved by motion of the City of Columbus Common Council and may from time to time be modified by resolution of the Common Council.

Sec. 48-13. – Enforcement.

- (a) If land disturbing construction activities that requires storm water management are occurring without a permit required by this chapter, the administering authority may enter the land pursuant to the provisions of §§66.0119(1), (2), and (3), Wis. Stats.
- (b) Any land disturbing construction activity or post-construction runoff initiated after the effective date of this chapter by any person, firm, association, or corporation subject to the provisions of this chapter shall be deemed a violation unless conducted in

- accordance with the requirements of this chapter.
- (c) The administering authority shall notify the responsible party by written notice of any non-complying land disturbing construction activity or post-construction runoff. The notice shall describe the nature of the violation, remedial actions needed, a schedule for remedial action, and additional enforcement action which may be taken.
 - (d) Upon receipt of written notification from the administering authority under sub. (b), the responsible party shall correct work that does not comply with the stormwater management plan or other provisions of this permit. The responsible party shall make corrections as necessary to meet the specifications and schedule set forth by the administering authority in the notice.
 - (e) If the violations to a permit issued pursuant to this ordinance are likely to result in damage to properties, public facilities, or waters of the state, the administering authority may enter the land and take emergency actions necessary to prevent such damage. All costs incurred by the administering authority shall be billed to the responsible party.
 - (f) The administering authority is authorized to post a stop work order on all land disturbing construction activity that is in violation of this chapter.
 - (g) The administering authority may revoke a permit issued under this chapter for non-compliance with the provisions of this chapter.
 - (h) Any permit revocation, stop work order, or cease and desist order shall remain in effect unless retracted by the administering authority or by a court with jurisdiction.
 - (i) The administering authority is authorized to refer any violation of this chapter, or a stop work order or cease and desist order issued pursuant to this chapter, to the municipal attorney, for the commencement of further legal proceedings in any court with jurisdiction.
 - (j) Any person, firm, association, or corporation who does not comply with the provisions of this chapter shall be subject to a forfeiture of not less than \$100 or more than \$500 per offense, together with the costs of prosecution. Each day that the violation exists shall constitute a separate offense.
 - (k) Compliance with the provisions of this chapter may also be enforced by injunction in any court with jurisdiction. It shall not be necessary to prosecute for forfeiture or a cease-and-desist order before resorting to injunctive proceedings.
 - (l) When the administering authority determines that the holder of a permit issued pursuant to this ordinance has failed to follow practices set forth in the stormwater management plan, or has failed to comply with schedules set forth in said stormwater management plan, the administering authority or designee may enter upon the land and perform the work or other operations necessary to bring the condition of said lands into conformance with requirements of the approved stormwater management plan. The administering authority shall keep a detailed accounting of the costs and expenses of performing this work. These costs and expenses shall be deducted from any financial security posted pursuant to S. 48-11 of this chapter. Where such a security has not been established, or where such a security is insufficient to cover these costs, the costs and expenses shall be entered on the tax roll as a special charge against the property and collected with any other taxes levied thereon for the year in which the work is completed.

Sec. 48-14. – Appeals.

- (a) **Board of Appeals.** The board of appeals created pursuant to Section 114-34 of the City Code pursuant to §62.2(7)(e), Wis. Stats.:
 - (1) Shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made by the administering authority in administering this chapter except for cease-and-desist orders obtained under Sec. 48-13(3).
 - (2) May authorize, upon appeal, variances from the provisions of this chapter which are not contrary to the public interest and where owing to special conditions a literal enforcement of the provisions of the chapter will result in unnecessary hardship; and
 - (3) Shall use the rules, procedures, duties, and powers authorized by statute in hearing and deciding appeals and authorizing variances.
- (b) **Who May Appeal.** Appeals to the board of appeals may be taken by any aggrieved person or by any office, department, board, or bureau of the City of Columbus affected by any decision of the administering authority.