e. Reconstruction of public roads when the area of impervious surface is not changing.

f. Pavement maintenance activities, such as sealing, milling and overlaying, or pulverizing.

4. WAIVERS. a. Requests to waive the storm water management plan requirements shall be submitted to the city engineer for approval.

b. The person shall also submit a narrative description and drawings of the proposed development or improvement. The city engineer may request other information that is reasonably necessary to evaluate the waiver.

c. The city engineer shall coordinate a review by city agencies and may grant a waiver if the development is primarily a storm water reduction or green infrastructure project and will not:

   c-1. Increase the rate or volume of storm water runoff.
   c-2. Have an adverse impact on a wetland, watercourse or receiving body of water.
   c-3. Contribute to the degradation of water quality.
   c-4. Otherwise impair attainment of the objectives of this chapter.

4.5. PEAK RUNOFF RELEASE RATE CALCULATIONS.

a. Peak runoff release rates shall be calculated using NOAA Atlas 14 precipitation depths and NRCS MSE3 precipitation distribution.

b. Refer to s. NR 151.123(1), Wis. Adm. Code, for maximum predevelopment runoff curve numbers for developments that include but are not limited to areas like new subdivisions and undeveloped urban areas.

5. RUNOFF RELEASE RATE.

a. If the development or redevelopment occurring causes an increase of 0.5 acres or more of impervious area, the release rate and requirements shall be governed by Milwaukee metropolitan sewerage district chapter 13 - surface water and storm water rules.

b. If the development or redevelopment occurring is subject to the requirements of sub. 2 and does not cause an increase of 0.5 acres or more of impervious area, the peak runoff flow rates under post-development conditions shall be at least 10% less than the peak runoff rates under pre-development conditions during 2-year and 100-year, 24-hour storm events.

c. If demolition or construction during redevelopment will disturb an area between 3.5 and 5 acres, then the runoff release rate shall be reduced by 15%.

d. If demolition or construction during redevelopment will disturb an area exceeding 5 acres, then the runoff release rate shall be reduced by 20%.

6. RUNOFF DISCHARGE QUALITY CONTROL. a. Runoff quality shall meet or exceed the following criteria:

   a-1. For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this paragraph.

   a-2. For redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this paragraph.

   a-3. For in-fill development under 5 acres that occurs within 10 years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this paragraph.

   a-4. For in-fill development under 5 acres that occurs 10 or more years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this paragraph.

   a-5. Any other regulatory agency requirements specific to the discharge produced by the development.

b. Applicability. This subsection applies to whenever a storm water management plan is required in the separate storm sewer system or if storm water runoff from the development or redevelopment is subject to the requirements of sub. 2 and storm water runoff from that development or redevelopment discharges into waters of the state.
6.5. **GREEN INFRASTRUCTURE REQUIRED.** a. If a stormwater management plan is required under sub. 2 and is not waived under sub. 4, then the development or redevelopment shall include green infrastructure with a detention volume equal to at least one-half inch multiplied by the total area of new or redeveloped impervious surface. A green infrastructure plan required under this paragraph shall be submitted and approved as part of the stormwater management plan.

b. A green infrastructure plan required under par. a shall include:
   b-1. A description of the project and the dimensions of the new impervious surface.
   b-2. A description of the proposed green infrastructure and the dimensions of the green infrastructure.
   b-3. One or more drawings showing the new impervious surface and the green infrastructure.
   b-4. Calculations showing the detention volume needed and the detention volume provided by the proposed green infrastructure.
   b-5. If applicable, a description of any conditions that support a reduction in green infrastructure implementation to a maximum extent practicable according to s. 120-4, and a description of any suggested alternate green infrastructure arrangement. Any reduction in or alternate green infrastructure arrangement must be approved by the city engineer.
   b-6. An annual maintenance plan for the proposed green infrastructure.

b. A green infrastructure plan shall determine the detention volume provided by the proposed green infrastructure through project-specific modeling, a calculating tool identified by the department or a schedule of green infrastructure detention volume estimates according to type made available by the department.

7. **MAINTENANCE OF EFFORT.** For a redevelopment site where the redevelopment will be replacing an older development that was subject to s. 120-7, the responsible party shall meet the total suspended solids reduction and peak flow control standards applicable to the older development or meet the redevelopment standards of this chapter, whichever is more stringent.

8. **MAXIMUM EXTENT PRACTICABLE.** If a design cannot meet the total suspended solids reduction performance standard of sub. 6, 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 load will be reduced only to the maximum extent practicable.

9. **INTENT TO PROCEED.** The department of public works shall be notified 3 working days before any work is commenced on the site. The contact phone number shall be listed in the storm water management plan.

120-9. **Storm Water Management Plan.** The person shall be responsible for the preparation and implementation of the storm water management plan. Sufficient information shall be furnished to the city engineer for evaluating the environmental characteristics of the affected areas. Such information shall include the potential and predicted impacts on watercourses, the effectiveness and acceptability of the proposed measures for reducing adverse impacts and a maintenance program.

1. **GENERAL INFORMATION.** The storm water management plan shall be prepared by a registered professional engineer. It shall contain the person’s name, address and telephone number. The plan shall also contain but is not limited to narrative descriptions and explanations, maps, charts and graphs, tables, photographs, calculations and supporting reference information to books, publications, manuals and other documents used. The department of public works reserves the authority to determine the appropriateness of the methodology used.

2. **EXISTING SITE CONDITIONS.** The description of the existing site conditions shall include:
   a. The hydrologic parameters.
   b. The location of areas where storm water collects or percolates into the ground.
   c. Groundwater levels.
   d. Vegetation, including grasses, forbs, trees, shrubs, wildflowers and aquatic plants that are native to Wisconsin, as well as any oldfield successions of native and non-native plants.
   e. Topography.