

**CITY OF GRAND RAPIDS
ORDINANCE 22-04-01**

**AN ORDINANCE AMENDING CHAPTER 30, ARTICLE 149 STORMWATER
PROTECTION**

WHEREAS, upon review, it was determined that Article 149, section (d) Waste Controls and illicit discharge need the addition of a paragraph addressing animal waste; and

WHEREAS, it was determined that section (f), paragraph (2) e, 2 needed clarification; and

WHEREAS, it was determined there was a need for addition of section (f), paragraph (2) h. addressing infiltration systems.

NOW THEREFORE, be it ordained by the Council of the City of Grand Rapids, in the State of Minnesota, that the Grand Rapids Municipal Code be amended as stated in included text.

SECTION 1: **AMENDMENT** “30-149 Stormwater Protection” of the Grand Rapids Municipal Code is hereby *amended* as follows:

AMENDMENT

30-149 Stormwater Protection

(a) *Statutory authorization.* This section is adopted pursuant to the authorization and policies contained in Minn. Stat. chs. 103B, 105, 462, and 497, Minnesota Rules, parts 6120.2500—6120.3900, and Minnesota Rules chapters 8410 and 8420.

(b) *Scope.*

(1) The purpose of this article is to satisfy SWPPP obligations for a regulatory mechanism to control stormwater pollution and illegal discharges under the statewide general permit for small MS4s. This section sets forth minimum requirements for stormwater management to diminish threats to public health, safety, public and private property and natural resources of the community by establishing standards that will:

- a. Protect life and property from dangers associated with flooding;
- b. Protect public and private property from damage resulting from runoff or erosion;
- c. Ensure site design minimizes the generation of stormwater and maximizes pervious areas for stormwater treatment;
- d. Promote regional stormwater management by watershed;
- e. Protect, maintain and/or restore water quality from nutrients, pathogens, toxics and debris;

- f. Promote infiltration and groundwater recharge;
 - g. Promote water quality treatment for new development, redevelopment, and linear construction projects.
- (2) No person shall develop any land for residential, commercial, industrial, or institutional uses without having provided the stormwater management measures set forth herein to control or manage runoff from such development. All water entering the storm drain system generated on any developed and undeveloped lands, unless explicitly exempted by the city, shall be protected from illegal disposal/discharge and illegal connections.
- (3) A separate permit may be needed if the standards in this section are not incorporated into the review of other city permits.
- (4) Except where a waiver is granted, any person, firm, sole proprietorship, partnership, corporation, state agency, or political subdivision proposing a land disturbing activity, requiring a land alteration or building permit within the city shall submit to the city for review and comment on the stormwater pollution prevention plan (SWPPP) and site plan. No land shall be disturbed until the plan is reviewed by the city and conforms to the standards set forth herein and applicable permits have been issued.
- (5) The provisions of the waste controls and illicit discharge and inspections and enforcement subsections of this section apply to all areas within the city at all times.
- (6) The definitions of terms in this section correspond to the definitions in the most current MPCA NPDES construction permit.
- (c) *Erosion and sediment control.* Erosion and sediment control, at a minimum, shall meet the requirements and provisions defined in the most current Minnesota Pollution Control Agency (MPCA) National Pollution Discharge Elimination System (NPDES) General Stormwater Permit for Construction Activities, also referred to as the NPDES construction permit.
- (d) *Waste controls and illicit discharge.*
 - (1) *Illegal disposal.*
 - a. No person shall throw, deposit, place, leave, maintain, or keep or permit to be thrown, placed, left, maintained or kept, any refuse, rubbish, garbage, or any other discarded or abandoned objects, articles, or accumulations, in or upon any street, alley, sidewalk, storm drain, inlet, catch basin conduit or drainage structure, business place, or upon any public or private plot of land in the city, so that the same might be or become a pollutant, except in containers, recycling bags, or other lawfully established waste disposal facility.
 - b. No person shall intentionally dispose of grass, leaves, dirt, or other landscape debris into a water resource buffer, street, road, alley, catch basin, culvert, curb, gutter, inlet, ditch, natural watercourse, wetland, flood control channel, canal, storm drain or any fabricated natural conveyance.
 - (2) *Illicit discharges and connections.*

- a. No person shall cause any illicit discharge to enter the municipal stormwater system unless such discharge: (1) consists of non-stormwater that is authorized by an NPDES point source permit obtained from the MPCA; or (2) is associated with firefighting activities.
 - b. No person shall use any illicit connection to intentionally convey non-stormwater to the city stormwater system.
- (3) *Good housekeeping provisions.* Any owner or occupant of property within the city shall comply with the following good housekeeping requirements:
- a. No person shall leave, deposit, discharge, dump, or otherwise expose any chemical or septic waste in an area where discharge to streets, storm drain system, or waters of the state as defined by the MPCA, may occur. This section shall apply to both actual and potential discharges.
 - b. Runoff of water from residential property shall be minimized to the maximum extent practicable. Runoff of water from the washing down of paved areas in commercial or industrial property is prohibited unless necessary for health or safety purposes and not in violation of any other provisions in city codes.
 - c. Storage of materials, machinery, and equipment.
 - 1. Objects, such as motor vehicle parts, containing grease, oil or other hazardous substances, and unsealed receptacles containing hazardous materials, shall not be stored in areas susceptible to runoff or discharge to a stormwater system.
 - 2. Any machinery or equipment that is to be repaired or maintained in areas susceptible to runoff shall be placed in a confined area to contain or collect leaks, spills, or discharges without discharge to the stormwater system.
 - 3. Any storage of materials that are exposed to the environment such as; salt, salt/sand or sand, that are susceptible to runoff or discharge into a stormwater system, public or private, shall be covered in a manner that will eliminate the leeching of chemicals and/or sediment and must apply for stormwater permit for inspection and monitoring.
 - d. Debris and residue shall be removed, as noted below:
 - 1. All motor vehicle parking lots and private streets shall be swept, at a minimum of once a year in the spring to remove debris. Such debris shall be collected and properly disposed;
 - 2. Fuel and chemical residue or other types of potentially harmful material, such as animal waste, garbage or batteries, which is located in an area susceptible to runoff, shall be removed as soon as possible and disposed of properly. Household hazardous waste shall not be placed in a trash container.

(4) Animal Waste.

- a. No owner or custodian of any animal shall cause or allow such animal to soil, defile or defecate on any public property or upon any street, sidewalk, public way, play area or common grounds owned jointly by the members of a homeowners' or condominium association, or upon private property other than that of the owner, unless such owner immediately removes and disposes of all feces deposited by such animal in a sanitary manner.
- b. It is unlawful for any person owning, keeping or harboring an animal to cause or permit said animal to be on any public or private property, not owned or possessed by such person without having in his/her immediate possession a device for the removal of feces and depository for the transmission of excrement to a proper receptacle located on the property owned or possessed by such person.
- c. It is unlawful for any person in control of, causing or permitting any animal to be on any public or private property, if private property included add: not owned or possessed by such person to fail to remove feces left by such animal and dispose of it properly as described in section (d).
- d. Proper disposal of animal waste shall be limited to burial where lawfully permitted, flushing in the toilet, bagging for disposal in the owner or keeper's waste receptacle, and bagging for disposal in a waste receptacle designated for animal waste in a public park or park area.
- e. Disposal of animal waste in storm drains is prohibited.
- f. Disposal of animal waste in public compost is prohibited.
- g. The provisions of this section shall not apply to the ownership or use of any property identified service animals, animals when used for police activities, or tracking animals when used by or with the permission of the appropriate authorities.
- h. Any peace officer or community service officer is responsible for issuing the citations.

(5) *Industrial or construction activity discharges.* Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit will be required in a form acceptable to the city prior to the allowing of discharges to the storm sewer system. All facilities that have stormwater discharges associated with industrial activity, including construction activity must adhere to the following guidelines:

- a. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the storm sewer system or watercourses through the use of structural and non-structural BMPs.
- b. Any person responsible for a property or premises, which is, the

source of an illicit discharge, shall be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the storm sewer system. These BMPs shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

- (6) *Notification of spills.* Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into the storm sewer system, or water of the state said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the city no later than the next business day.
- (7) *Access to buildings for inspection, monitoring and/or dye testing.*
 - a. The city shall be permitted to enter and inspect all buildings under this article as often as may be necessary to determine compliance with this article.
 - b. Facility operators shall allow the city ready access to all parts of the premises for the purposes of inspection, sampling, dye testing, examination and copying of records that relate to the discharge of stormwater.
 - c. The city shall have the right to set up at any building such devices as are necessary to conduct monitoring, sampling and/or dye testing of the facility's stormwater discharge.
 - d. The city has the right to require the discharger to install monitoring equipment as necessary.
 - e. Unreasonable delays in allowing the city access to a facility is a violation of this article.
 - f. If the city has been refused access to any part of the premises from which stormwater is discharged, and is able to demonstrate probable cause to believe that there may be a violation of this section, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this article or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the city may seek issuance of a search warrant from any court of competent jurisdiction.
- (8) *Suspension of storm sewer system access.*
 - a. Suspension due to illicit discharges in emergency situations. The city may, without prior notice, suspend storm sewer system discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present

imminent and substantial danger to the environment, or to the health or welfare of persons, or to the storm sewer system or waters of the state. If the violator fails to comply with a suspension order issued in an emergency, the city may take such steps as deemed necessary to prevent or minimize damage to the storm sewer system or waters of the state, or to minimize danger to persons.

- b. Suspension due to the detection of illicit discharge. Any person discharging to the storm sewer system in violation of this article may have their storm sewer system access terminated if such termination would abate or reduce an illicit discharge. A person commits an offense if the person reinstates storm sewer system access to premises terminated pursuant to this section, without the prior approval of the city.

(e) *Site design.*

(1) *Applicability.*

- a. A city approved stormwater pollution prevention plan (SWPPP) and stormwater permit shall be required prior to any construction or grading activity that meets any of the criteria immediately below, unless otherwise exempted in this section.
 - 1. Construction or grading activity involving between 5,000 square feet and one acre of land disturbance area.
Construction or grading activity involving under 5,000 square feet of land disturbance shall only be required to submit a stormwater permit application (no SWPPP).
 - 2. When any land disturbance project proposes to disturb between 5,000 square feet and one acre of land area, a land alteration permit is required. Additionally, the applicant shall prepare a stormwater management plan which will be reviewed by the city engineer, or their designee to determine if permanent stormwater management is required.
 - 3. Any construction or grading activity, regardless of size, that the city determines is likely to cause an adverse impact to an environmentally sensitive area or other property.
- b. Construction or grading activity that is greater than or equal to one acre of land disturbance and is subject to NPDES construction stormwater general permit regulations is considered in compliance with this section with an approved NPDES coverage card. Applicant must submit a stormwater permit application to the city and provide proof of NPDES coverage and the approved SWPPP prior to construction. NPDES compliance shall be maintained through the duration of the project. Instances of noncompliance with NPDES regulations are subject to the city's enforcement procedures described in subsection (h).

(2) *Exemptions.*

- a. The following activities shall be exempt from all of the requirements

of this section:

1. Emergency work necessary to protect life, limb, or property.
2. Routine agricultural activity such as tilling, planting, harvesting, and associated activities. Other agricultural activities are not exempt including activities such as construction of structures.

(3) *Stormwater permit review process.*

- a. Application review. The applicant shall not commence any construction activity subject to this section until a permit (herein referred to as "stormwater permit") has been authorized by the city. As deemed necessary, a review of the stormwater permit application shall be done and the city will provide written notice within 15 business days of the receipt of a complete stormwater permit application from the applicant in accordance with Minn. Stat. § 15.99. The city will work with the necessary state, county, and local agencies to complete the review as appropriate. The city shall review the information in the stormwater permit application including proposed stormwater practices, hydrologic models, and design methodologies for compliance with this section. The city may require additional information, as necessary, prior to authorization of a permit.
- b. Stormwater permit authorization. The city may issue approval authorizing the project or activity. The approval shall be valid for one year. Approval will be in written or electronic format from the city to the applicant.
- c. Stormwater permit denial. If the city determines the application does not meet the requirements of this section the application will be denied. If the application is denied, the applicant will be notified of the denial in written or electronic format, including reasons for the denial. Once denied, a new application shall be resubmitted for approval before any activity may begin. All building permits shall be suspended until the applicant has an authorized stormwater permit.
- d. Stormwater pollution prevention plan (SWPPP) information requirements. The minimum information shown in the applicant's plan shall be consistent with the following:
 1. Plan shall meet the erosion and sediment control requirements in the most recent version of the NPDES construction stormwater general permit issued by the MPCA and shall include a fully completed application.
 2. The SWPPP shall be prepared by an individual who has received training by an accredited governmental agency, professional organization, or educational institution for and has working knowledge and experience in erosion prevention, sediment control, permanent stormwater management and the MN NPDES/SDS construction stormwater permit. This individual shall sign the SWPPP with

a certification statement that the individual meets the requirements of this clause.

- e. Modification of permitted plans. The applicant must amend an approved plan to include additional requirements such as additional or modified stormwater best management practices (BMPs) designed to correct problems whenever:
 - 1. There is a change in design, construction, operation, maintenance, weather or seasonal conditions that has a significant effect on the discharge of pollutants to surface water or underground water.
 - 2. Inspections or investigations by site operators, local, state or federal officials indicate the plans are not effective in eliminating or significantly minimizing the discharge of pollutants to surface water or underground water or that the discharges are causing water quality standard exceedances.
 - 3. The plan is not achieving the general objectives of minimizing pollutants in stormwater discharges associated with the activity on the permitted site.

- f. Stormwater permit completion. Before work under the stormwater permit is deemed complete:
 - 1. The permittee must submit as-builts, a long-term maintenance plan and information demonstrating that the stormwater facilities conform to design specifications as deemed necessary by the city engineer or designee.
 - 2. All soil disturbing activities at the site have been completed and all soils are stabilized by a uniform perennial vegetative cover with a density of 70 percent of its expected final growth density over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions.
 - 3. A final certificate of occupancy has been provided by the city, as applicable according to the building permit issued for the development.

(4) *Site design considerations.*

- a. Design process.
 - 1. New and redevelopment projects that disturbs more than 5,000 square feet of land area shall be designed to incorporate erosion control and stormwater management features and to meet the minimum requirements outlined in the most recent version of the NPDES construction stormwater general permit.
 - 2. Whenever possible, new development projects shall be designed using the better site design techniques of the current version of the Minnesota Stormwater Manual. Better site

design involves techniques applied early in the design process to preserve natural areas, reduce impervious cover, distribute runoff and use pervious areas to more effectively treat stormwater runoff. Site design should address open space protection, impervious cover minimization, and runoff distribution and minimization, and runoff utilization.

(5) *Inspections and maintenance.*

- a. Applicant responsibilities. The applicant is responsible for inspections, maintenance, and record keeping during construction for all stormwater BMPs on the site.
- b. Right of entry. The issuance of a stormwater permit, land alteration permit or NPDES construction stormwater general permit constitutes a right-of-entry for the city or its agent to enter upon the construction site. The applicant shall allow the city and their authorized representatives, upon presentation of credentials, to:
 1. Enter upon the permitted site for the purpose of obtaining information, examination of records, conducting investigations or surveys;
 2. Bring such equipment upon the permitted development as is necessary to conduct such surveys and investigations;
 3. Examine and copy any books, papers, records, or memoranda pertaining to activities or records required to be kept under the terms and conditions of the applicable permit(s);
 4. Inspect the stormwater pollution control measures;
 5. Sample and monitor any items or activities pertaining to stormwater pollution control measures.
- c. City inspections. The city reserves the right to conduct inspections on a regular basis to ensure that both temporary and permanent stormwater management and erosion and sediment control measures are properly installed and maintained prior to construction, during construction, and at the completion of the project.

(6) *Maintenance schedule.*

- a. Generally. All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs by the end of the next business day after discovery, or as soon as field conditions allow access unless another time frame is specified below.
- b. Perimeter control devices. All perimeter control devices and inlet protection devices must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches one-half the height of the device. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access.
- c. Sedimentation basins. Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of the sediment collected in the basin reaches one-half the storage volume. Drainage and removal must be completed within 72 hours of

discovery.

- d. Surface waters. The permittee must remove all deltas and sediment deposited in surface waters, including drainageways, catch basins, and other drainage systems. Areas where sediment removal results in exposed soil must be re-stabilized. The removal and stabilization must take place within seven days of discovery unless precluded by legal, regulatory, or physical access constraints. The permittee is responsible for contacting all local, regional, state, and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters.
- e. Sediment tracking. All sediment that escapes the site or that is tracked onto paved surfaces must be removed within 12 hours of discovery.

(f) *Post construction stormwater management.*

(1) The purpose of this section is to prevent or reduce water pollution within the city after construction has been completed. This section establishes standards for new development, redevelopment, and linear construction projects in order to minimize the stormwater pollution, soil erosion, and sedimentation.

(2) The applicant shall consider reducing the need for stormwater management performance standards by incorporating the use of natural topography and land cover. It shall also:

- a. Minimize impact to significant natural features;
- b. Review the site for wetlands, wooded areas of significance, and rare and endangered species habitat. These areas should not be developed;
- c. Minimize impervious surface coverage to the maximum extent practicable;
- d. In designated shoreland areas the development shall meet the impervious surface requirements of the shoreland ordinance regardless of conveyance systems;
- e. Volume control. Designer shall be required to provide soil boring analysis to determine the infiltration rate prior to approval of plans. The design shall meet the following requirements depending on the type of project in accordance with the MS4 NPDES permit:

1. New development. For new, nonlinear developments that create more than one acre of new impervious surface on sites without restrictions, stormwater runoff volumes will be controlled and the post-construction runoff volume shall be retained on site for 1.1 inches of runoff from all impervious surfaces on the site;

2. Redevelopment. ~~Redevelopment projects (including linear projects), on sites without restrictions that create new impervious surfaces shall capture and retain on site 1.1 inches of runoff from the new impervious surface and show a net pollutant reduction for any reconstructed impervious surfaces~~ Redevelopment projects (including linear projects),

on sites without restrictions that create new impervious surfaces shall capture and retain on site 1.1 inches of runoff from the new impervious surface or 0.5 inches times the sum of the new and fully reconstructed impervious surface, whichever is larger.

- f. Rate control. For post-construction rate control modeling a minimum curve number of 84 shall be used on all disturbed/graded soil areas, due to soil compaction impacts, unless soil protection/compaction remediation specifications have been incorporated into the proposal (plan set, stormwater management plan, etc.) and are approved by the city engineer. Atlas 14 shall be used in all rate-control estimates.
 1. New construction. Projects shall have no increase in runoff from the predevelopment peak runoff rates for the two-, ten-, and 100-year 24-hour storm events.
 2. Redevelopment. Projects shall have no increase in runoff from the pre-project peak runoff rates for the two-, ten-, and 100-year 24-hour storm events.
- g. Water quantity/flood control.
 1. The low building elevation shall be set to the higher of the following:
 - i. Where an effective base flood elevation (BFE) has been established and is included in the city's FIRM, the low floor elevation adjacent to the surface water body shall be established in accordance with the city's floodplain ordinance. The ordinance establishes the regulatory flood protection elevation (low floor elevation) at not less than one foot above the BFE plus any increase due to encroachment of the floodway.
 - ii. The low floor elevation shall be two feet or more above the 100-year/24-hour event as determined by a technical evaluation by a qualified engineer or hydrologist.
 2. An emergency overflow shall be incorporated into the site design at or above the BFE or modeled high water level to convey a 100-year discharge away from buildings to the next downstream water body. Existing, natural or manmade emergency overflows shall be analyzed as part of the design process. The lowest opening shall be set at least 1.5 feet above the emergency overflow elevation of the adjacent water body, unless the analysis shows that adequate storage volume exists within the basin to provide a reasonable level of protection from potential flooding. Where a natural overflow does not exist, the designer shall consider the possibility of long duration events, such as multiple-year wet

cycles and high runoff volume events (e.g., snowmelt events that last for many weeks) when evaluating high water elevations and outlets from landlocked basins.

- h. Infiltration systems pose a risk of contaminating ground water; therefore they are prohibited when the system would be constructed in the following areas:
1. Areas that receive discharges from vehicle fueling or maintenance
 2. Areas with shallow bedrock and shallow water table
 3. Areas that receive discharges from industrial facilities where infiltration is prohibited
 4. Areas where high levels of contaminants may be mobilized by infiltrating stormwater
 5. Area with hydrologic soil group D (clay) soils
 6. Areas within 1,000 feet up-gradient or 100 feet down-gradient of active karst features
 7. Areas within a Drinking Water Supply Management Area (DWSMA)
 8. Areas where soil infiltration rates are more than 8.3 inches per hour
 9. Sites within vulnerable groundwater areas
- i. Treatment design sequencing for sites with restrictions (as found in the MIDS design sequence flowchart).

Applicant shall fully attempt to comply with the appropriate performance goals described above. Options considered and presented shall examine the merits of relocating project elements to address, varying soil conditions and other constraints across the site. If full compliance is not possible due to any of the factors listed below, the applicant must document the reason. If site constraints or restrictions limit the full treatment goal, the following treatment design sequence shall be followed:

Applicant shall document the treatment sequence starting with alternative #1. If alternative #1 cannot be met, then alternative #2 shall be analyzed. Applicants must document the specific reasons why alternative #1 cannot be met based on the factors listed below. If alternative #2 cannot be met then alternative #3 shall be met. Applicants must document the specific reasons why alternative #2 cannot be met based on the factors listed below. When all of the conditions are fulfilled within an alternative, this sequence is completed;

Volume reduction techniques considered shall include infiltration,

reuse and rainwater harvesting, and canopy interception and evapotranspiration and/or additional techniques included in the MIDS calculator and the Minnesota Stormwater Manual;

Higher priority shall be given to BMPs that include volume reduction. Secondary preference is to employ filtration techniques, followed by rate control BMPs. Factors to be considered for each alternative will include:

1. Karst geology;
2. Shallow bedrock;
3. High groundwater;
4. Hotspots or contaminated soils;
5. Drinking water source management areas or within 200 feet of drinking water well;
6. Zoning, setbacks or other land use requirements;
7. Excessive cost;
8. Poor soils (infiltration rates that are too low or too high, problematic urban soils).

Alternative #1:

Applicant attempts to comply with the following conditions:

1. Achieve at least 0.55-inch volume reduction from all impervious surfaces if the site is new development or from the new and/or fully reconstructed impervious surfaces for a redevelopment site;
2. Remove 75 percent of the annual TP load from all impervious surfaces if the site is new development or from the new and/or fully reconstructed impervious surfaces for a redevelopment site;
3. Options considered and presented shall examine the merits of relocating project elements to address, varying soil conditions and other constraints across the site.

Alternative #2:

Applicant attempts to comply with the following conditions:

1. Achieve volume reduction to the maximum extent practicable;
2. Remove 60 percent of the annual TP load from all impervious surfaces if the site is new development or from the new and/or fully reconstructed impervious surfaces for a redevelopment site;
3. Options considered and presented shall examine the merits of relocating project elements to address, varying soil conditions and other constraints across the site.

Alternative #3:

Off-site treatment—Mitigation equivalent to the performance of 1.1 inches of volume reduction for new development or redevelopment as

described above in this section, (including banking or cash) can be performed off-site to protect the receiving water body. Off-site treatment shall be achieved in areas selected in the following order of preference:

1. Locations that yield benefits to the same receiving water that receives runoff from the original construction activity;
2. Locations within the same department of natural resource (DNR) catchment area as the original construction activity;
3. Locations within the next adjacent DNR catchment area upstream;
4. Locations anywhere within the community's jurisdiction.

Impervious surface area calculations shall include all disturbed/graded soil areas, due to soil compaction impacts, unless soil protection/compaction remediation specifications have been incorporated into the proposal (plan set, stormwater management plan, etc.) and are approved by the city engineer.

Designers shall be required to provide estimates of BMP-site specific infiltration rates to the city engineer for approval prior to site plan review. For information on estimation of infiltration rates, see the Minnesota Stormwater Manual (<http://stormwater.pca.state.mn.us>).

The MIDS design sequence flowchart can be found in the Minnesota Stormwater Manual:
http://stormwater.pca.state.mn.us/index.php/Flexible_treatment_options.

All volume control practices and site design specifications shall conform to the current version of the Minnesota Stormwater Manual.

(3) *Storm sewer sizing.*

- a. All stormwater sizing must be sized at a minimum to maintain predevelopment peak runoff rates for the ten-year, 24-hour storm event.
- b. Low areas must have an acceptable overland drainage route with the proper transfer capacity when the storm event is exceeded.
- c. All stormwater detention or retention facilities shall be designed to safely pass the 100-year, 24-hour event.

(4) *Better site design.* Whenever possible, projects shall be designed using better site design techniques early in the design process to preserve natural areas, reduce impervious cover, distribute runoff and use pervious area more

effectively to treat stormwater runoff. The applicant shall attempt to limit the impervious surface of the developed site or subdivision by incorporating the following design considerations, consistent with zoning, subdivision, and PUD requirements:

- a. Open space protection and restoration.
 1. Maximizing open space while incorporating smaller lot sizes to conserve natural areas and reduce the amount of stormwater runoff generated at the site.
 2. Conservation of natural vegetation wherever practical.
 3. Reforestation.
 4. Reestablishment of prairies and wetlands.
 5. Increase buffers around streams, steep slopes, and wetlands to protect from flood damage and provide additional water quality treatment.
- b. Reduction of impervious cover.
 1. Reduce new impervious area through redevelopment of existing sites and use existing roadways, trails, etc.
 2. Minimize street widths, parking space size, driveway length, sidewalk width.
 3. Reduce impervious structure footprint.
 4. Use shared parking facilities consistent with zoning requirements.
 5. Install semi-permeable/permeable or porous paving.
- c. Distribution and minimization of runoff.
 1. Utilize vegetated areas for stormwater treatment.
 2. Look for vegetated areas that can filter sheet flow, removing sediment and other pollutants, and increasing the time of concentration.
 3. Disconnect impervious areas by allowing runoff from small impervious areas to be directed to pervious areas where it can be infiltrated or filtered.
 4. All runoff from downspouts, driveways and other impervious areas shall be directed to pervious surfaces, where feasible, or unless the applicant can demonstrate that the practice is likely to result in groundwater contamination.
 5. Eliminate curb and gutter where practicable, and use vegetated swales or equivalent.
 6. Encourage infiltration and soil storage of runoff through grass channels, soil compost amendment, vegetated swales, rain gardens, etc.
 7. Plant vegetation that does not require irrigation beyond natural rainfall and runoff from site.

(5) *Regional ponding.* If the city determines the site is not suitable for on-site treatment, off-site stormwater management and associated fees may be

established, provided that provisions are made to manage stormwater by an off-site facility, and provided that all of the following conditions for the off-site facility are met:

- a. The facility is in place or the city has knowledge of future regional ponding on site;
- b. The facility is designed and adequately sized to provide a level of stormwater control that at least meets the ordinance standards;
- c. The city is satisfied that the facility has a legally obligated entity responsible for its long-term operation and maintenance.

(6) *Accepted alternatives to stormwater pond treatments.* Alternative treatments may be installed and shall be reviewed and approved by the city. Alternative treatments are included but are not limited to those stated in the Minnesota Stormwater Manual.

(7) *Maintenance of private stormwater facilities.* All private stormwater facilities shall be maintained by the owner in proper condition consistent with the performance standards for which they were originally designed.

- a. All settled materials from sumps, grit chambers, and other devices, including settled solids, shall be removed and properly disposed of on an annual basis. One- to five-year waivers from this requirement may be granted by the city when the owner presents evidence that the facility has additional capacity to remove settled solids in accordance with the original design capacity.
- b. Ponds shall be inspected at least once every five years to determine if settled materials should be removed. Settled materials shall be removed and properly disposed of when the pond is no longer functioning at the original design capacity.
- c. A maintenance plan must be provided that defines who will conduct the maintenance, the type of maintenance and the maintenance intervals of a private stormwater facility before the facility is approved.
- d. All stormwater facilities must be designed to minimize the need for maintenance, to provide easy vehicle and personnel access for maintenance purposes, and be structurally sound. It shall be the responsibility of the applicant to obtain any necessary easements or other property interests to allow access to the facilities for inspection or maintenance.
- e. The city shall have the right to request and review inspection and maintenance records and shall have the right to perform an inspection of stormwater facilities at any time if the city has probable cause to believe that the facilities are not being properly maintained or inspected. A charge based on current wages will be assessed to the owner for any inspections or maintenance that needs to be performed.

(g) *Fees.* Fees associated with this section shall be set by a duly adopted resolution by city council.

(h) *Inspections and enforcement.*

- (1) *City inspections and enforcement.* The city may conduct inspections on a regular basis to monitor erosion and sediment control practices. In all cases the inspectors will attempt to work with the builder or developer to maintain proper erosion and sediment control at all sites. A charge based on current wages will be assessed for any inspections that are necessary. In cases where cooperation is withheld, construction stop work orders may be issued by the city until erosion and sediment control measures meet the requirements of this section.
- (2) *Construction stop order.* The city may issue construction stop orders until stormwater management measures meet specifications. A second stormwater management inspection must then be scheduled and passed before the final inspection will be done.
- (3) *Perimeter breach.* If stormwater management measures malfunction and breach the perimeter of the site, enter streets, other public areas, or water bodies, the applicant shall immediately notify the city and initiate corrective measures within 48 hours. If in the discretion of the city, the applicant does not repair the damage caused by the stormwater runoff, the city can do the remedial work required and charge the cost to the applicant.
- (4) *Actions to ensure compliance.* The city can take the following action in the event of a failure by applicant to meet the terms of this section:
 - a. Withhold inspections or issuance of final certificates or approvals.
 - b. Revoke any applicable permit issued by the city to the applicant.
 - c. Conduct remedial or corrective action on the development site or adjacent site affected by the failure.
 - d. Charge applicant for all costs associated with correcting the failure or mitigating damage from the failure. If payment is not made within 30 days, payment will be made from the applicant's financial securities.
 - e. Bring other actions against the applicant to recover costs of remediation or meeting the terms of this section, which are not covered by financial securities.
 - f. Any person, firm or corporation failing to comply with or violating any of these regulations, shall be deemed guilty of a misdemeanor and be subject to a fine of \$1,000.00 or imprisonment of 90 days or both. Each day that a separate violation exists shall constitute a separate offense.
- (5) *Financial securities.* The applicant shall provide security for the performance of the work described and delineated on the approved stormwater pollution prevention plan and related remedial work in an amount listed on the departmental fee schedule for each parcel of disturbed property. This amount shall apply to the maximum acreage of soil that will be simultaneously exposed during the project's construction. The form of the securities shall be one or a combination of the following to be determined by the city:
 - a. Cash deposit.

- b. Securing deposit. Deposit, either with the city, a responsible escrow agent, or trust company, at the option of the city:
 - 1. An irrevocable letter of credit or negotiable bonds of the kind approved for securing deposits of public money or other instruments of credit from one or more financial institutions, subject to regulation by the state and federal government wherein said financial institution pledges funds are on deposit and guaranteed for payment. The security deposit shall have an expiration date of not less than one year after approval of the stormwater permit.

This security shall save the city free and harmless from all suits or claims for damages resulting from the negligent grading, removal, placement or storage of rock, sand, gravel, soil or other like material within the city.

- 2. Blanket financial security deposit (for licensed contractors for multiple residential permits within a construction season.) Licensed contractors working within the city can provide a cash deposit or letter of credit, dated one year from the first application, to cover a permit. Upon completion of a parcel permit the contractor can transfer the letter of credit to another parcel permit. The contractor must notify the city of each new construction area by remitting an application. This financial security deposit will be held by the city until parcel work sites are substantially complete.

(6) *Maintaining the financial security.* If at any time during the course of the work this amount falls below 50 percent of the required deposit or the dated letter of credit expires, the developer shall make another deposit in the amount necessary to restore the cash deposit or letter of credit to the required amount. If the developer does not bring the financial security back up to the required amount within seven days after notification by the city that the amount has fallen below 50 percent of the required amount the city may:

- a. Withhold inspections. Withhold the scheduling of inspections and/or the issuance of a certificate of occupancy.
- b. Revocation of permits. Revoke any permit issued by the city to the applicant for the site in question or any other of the applicant's sites within the city's jurisdiction.

(7) *Proportional reduction of the financial security.* When more than one-third of the applicant's maximum exposed soil area achieves final stabilization, the city can reduce the total required amount of the financial security by one-third. When more than two-thirds of the applicant's maximum exposed soil area achieves final stabilization, the city can reduce the total required amount of the financial security to two-thirds of the initial amount. This reduction in financial security will be determined by the city staff.

- (8) *Action against the financial security.* The city may access financial security for remediation actions if any of the conditions listed below exist. The city shall use the security to finance remedial work undertaken by the city, or a private contractor under contract to the city, and to reimburse the city for all direct cost incurred in the process of remedial work including, but not limited to, staff time and attorney's fees.
- a. Abandonment. The developer ceases land disturbing activities and/or filling and abandons the work site prior to completion of the grading plan.
 - b. Failure to implement SWPPP. The developer fails to conform to the grading plan and/or the SWPPP as approved by the city.
 - c. Failure to perform. The techniques utilized under the SWPPP fail within one year of installation.
 - d. Failure to reimburse city. The developer fails to reimburse the city for corrective action taken.
- (9) *Emergency action.* If circumstances exist such that noncompliance with this section poses an immediate danger to the public health, safety and welfare, as determined by the city, the city may take emergency preventative action. The city shall also take every reasonable action possible to contact and direct the applicant to take any necessary action. Any cost to the city may be recovered from the applicant's financial security.
- (10) *Returning the financial security.* The security deposited for faithful performance of the SWPPP and any related remedial work shall be released after the completion of the installation of all stormwater pollution control measures as shown on the grading and/or the SWPPP and approval/acceptance of city staff.
- (11) *Notification of failure of the SWPPP.* The city may notify the permit holder of the failure of the SWPPP's measures.
- a. Initial contact. The initial contact will be to the party or parties listed on the application and/or the SWPPP as contacts. Except during an emergency action, 48 hours after notification by the city of the failure of erosion control measures, or non-compliance of the permit, the city at its discretion, may begin corrective work. Such notification should be in writing, but if it is verbal, a written notification should follow as quickly as practical. If after making a good faith effort to notify the responsible party or parties, the city has been unable to establish contact, the city may proceed with corrective work. There are conditions when time is of the essence in controlling erosion. During such a condition the city may take immediate action, and then notify the applicant as soon as possible.
 - b. Erosion off-site. If erosion breaches the perimeter of the site, the applicant shall immediately develop a cleanup and restoration plan, obtain the right-of-entry from the adjoining property owner, and implement the cleanup and restoration plan within 48 hours of

obtaining the adjoining property owner's permission. In no case, unless written approval is received from the city, may more than seven calendar days go by without corrective action being taken. If in the discretion of the city, the permit holder does not repair the damage caused by the erosion, the city may do the remedial work required. When restoration to wetlands and other resources are required, the applicant should be required to work with the appropriate agency to ensure that the work is done properly.

- c. Erosion into streets, wetlands or water bodies. If eroded soils (including tracked soils from construction activities) enter or appear likely to enter streets, wetlands, or other water bodies, cleanup and repair shall be immediate. The applicant shall provide all traffic control and flagging required to protect the traveling public during the cleanup operations.
- d. Failure to do corrective work. When an applicant fails to conform to any provision of this policy within the time stipulated, the city may take the following actions.
 1. Issue a stop work order, withhold the scheduling of inspections, and/or the issuance of a certificate of occupancy.
 2. Revoke any permit issued by the city to the applicant for the site in question or any other of the applicant's sites within the city's jurisdiction.
 3. Correct the deficiency or hire a contractor to correct the deficiency. The issuance of a permit constitutes a right-of-entry for the city or its contractor to enter upon the construction site for the purpose of correcting deficiencies in erosion control.
 4. Require reimbursement to the city for all costs incurred in correcting stormwater pollution control deficiencies. If payment is not made within 30 days after costs are incurred by the city, payment will be made from the applicant's financial securities as described in subsection (8) above.
 5. If there is an insufficient financial amount in the applicant's financial securities as described in subsection (8) above then the city may assess the remaining amount against the property. As a condition of the permit, the owner shall waive notice of any assessment hearing to be conducted by the city, concur that the benefit to the property exceeds the amount of the proposed assessment, and waive all rights by virtue of Minn. Stat. § 429.081 to challenge the amount or validity of assessment.

(12) *Enforcement.*

- a. Penalties. Any person, firm, or corporation failing to comply with or violating any of these regulations, may be deemed guilty of a

misdemeanor and be subject to a \$1,000.00 fine or 90 days imprisonment or both. All land use and building permits must be suspended until the applicant has corrected the violation. Each day that a separate violation exists shall constitute a separate offense.

- (13) *Abrogation and greater restrictions.* It is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this section imposes greater restrictions, the provisions of this section shall prevail. All other ordinances inconsistent with this section are hereby repealed to the extent of the inconsistency only.

In the event that there is a governing entity that has a more restrictive requirement, the more stringent requirement is required.

(Ord. No. 07-10-11, §§ A—G, 10-9-2007; Ord. No. 08-02-01, §§ A—G, 2-11-08; Ord. No. 09-04-03, §§ A—G, 4-27-2009; Ord. No. 10-04-03, 4-12-2010; Ord. No. 17-05-04, Exh. A, 5-8-2017)

Cross reference— Stormwater utility, § 70-201 et seq.

PASSED AND ADOPTED BY THE CITY OF GRAND RAPIDS COUNCIL

_____.

	AYE	NAY	ABSENT	ABSTAIN
Dale Adams	_____	_____	_____	_____
Tasha Connelly	_____	_____	_____	_____
Michelle Toven	_____	_____	_____	_____
Rick Blake	_____	_____	_____	_____
Dale Christy	_____	_____	_____	_____

Presiding Officer

Attest

Dale Christy, Mayor, City of Grand Rapids

Kimberly Gibeau, City Clerk City of Grand Rapids