#### CHAPTER 152: STORMWATER MANAGEMENT

38
38
38
41
ONE ACRE
44
51
51
51
52
53
53
53
53

### § 152.01 SHORT TITLE

This chapter shall be known as the "Cambridge Stormwater Management" chapter and may be cited as such and will be referred to herein as "this chapter."

### § 152.02 PURPOSE AND SCOPE

(A) The purpose of this chapter is to control or reduce stormwater pollution, including nutrients, along with soil erosion and sedimentation within the city and to protect sensitive receiving waters. It establishes standards and specifications for conservation practices and planning activities, that minimize stormwater pollution, soil erosion and sedimentation. It is the stated purpose of these efforts to minimize degradation of the downstream lakes and the Rum River, including a stated goal of no net increase in phosphorus loading to these lakes.

(B) Except where a variance is granted, any person, firm, sole proprietorship, partnership, corporation, state agency, or political subdivision proposing a construction activity that will disturb land within the city shall abide by the stormwater pollution control measures and requirements set forth in this chapter. No land shall be disturbed until Stormwater Pollution Control measures are implemented and conform to the standards set forth herein.

### § 152.03 DEFINITIONS

For the purposes of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

Applicant. Any person or group that applies for a building permit, subdivision approval, or a permit

to allow land disturbing activities. *Applicant* also means that person's agents, employees, and others acting under this person's or group's direction. The term *Applicant* also refers to the permit holder or holders and the permit holder's agents, employees, and others acting under this person's or group's direction.

**Best Management Practices (BMPS).** Erosion and sediment control and water quality management practices that are the most effective and practicable means of controlling, preventing, and minimizing the degradation of surface water, including construction-phasing, minimizing the length of time soil areas are exposed, prohibitions on certain activities, and other management practices published by state or designated area-wide planning agencies. (Examples of BMP's can be found in the MPCA's Minnesota Stormwater Manual).

**Buffer.** A protective vegetated zone located adjacent to a natural resource, such as a water of the state, that is subject to direct or indirect human alteration. A buffer strip is an integral part of protecting an aquatic ecosystem through trapping sheet erosion, filtering pollutants, reducing channel erosion and providing adjacent habitat. The buffer begins at the "ordinary high water mark" for wetlands and the top of the bank of the channel for rivers and streams. This start point corresponds to the Minnesota Department of Natural Resources' definition of a "shoreline" in Minn. Rules, part 6115.0030. Therefore, a stream with a width of 30 feet between banks and 100 foot buffer strips has a total protected width of 230 feet.

**Common Plan of Development or Sale.** A contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan.

**Construction Stormwater Permit.** The most recent version of the MPCA's NPDES/SDS General Construction Stormwater Permit.

*Erosion Control.* Refers to methods employed to prevent erosion. Examples include soil stabilization practices, horizontal slope grading, temporary or permanent cover, and construction phasing.

**Exposed Soil Areas.** All areas of the construction site where the vegetation (trees, shrubs, brush, grasses, etc.) or impervious surface has been removed, thus rendering the soil more prone to erosion. This includes topsoil stockpile areas, borrow areas and disposal areas within the construction site. It does not include temporary stockpiles or surcharge areas of clean sand, gravel, concrete or bituminous, which have less stringent protection. Once soil is exposed, it is considered "exposed soil," until it meets the definition of "final stabilization."

**Final Stabilization.** Means that all soil disturbing activities at the site have been completed, and that a uniform (evenly distributed, e.g., without large bare areas) perennial vegetative cover with a density of 75% of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures have been employed. Simply sowing grass seed is not considered final stabilization. Where agricultural land is involved, such as when pipelines are built on crop or range land, final stabilization constitutes returning the land to its preconstruction agricultural use. (Examples of vegetative cover practices can be found in the current

version of the Minnesota Department of Transportation's publication, "Supplemental Specifications to the (year of the latest update) Standard Specifications for Construction").

*Impaired Waters.* A body of water is considered "impaired" if it fails to meet one or more water quality standards, as defined by the Minnesota Pollution Control Agency.

*Impervious Surface.* A constructed hard surface that either prevents or retards the entry of water into the soil, and causes water to run off the surface in greater quantities and at an increased rate of flow than existed prior to development or redevelopment. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.

*Land Disturbance Activity.* Any land change that may result in soil erosion from water or wind and the movement of sediments into or upon waters or lands within this government's jurisdiction, including construction, clearing and grubbing, grading, excavating, transporting and filling of land. Within the context of this chapter, land disturbance activity does not mean:

(1) Minor land disturbance activities such as home gardens and an individual's home landscaping, repairs, and maintenance work.

(2) Additions or modifications to existing single family structures that result in creating under 5,000 square feet of exposed soil or impervious surface.

(3) Construction, installation, and maintenance of fences, signs, posts, poles, and electric, telephone, cable television, utility lines or individual service connections to these utilities, that results in creating under 5,000 square feet of exposed soil or impervious surface.

(4) Tilling, planting, or harvesting of agricultural, horticultural, or silvicultural (forestry) crops.

(5) Emergency work to protect life, limb, or property and emergency repairs, unless the land disturbing activity would have otherwise required an approved erosion and sediment control plan, except for the emergency. If such a plan would have been required, then the disturbed land area shall be shaped and stabilized in accordance with the city's requirements as soon as possible.

**National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS).** The programs for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act (33 U.S.C. § 1251 et seq.) and M.S. § 115.03, as it may be amended from time to time, and any subsequent amendments thereto.

**Stabilize, Stabilized, Stabilization.** The exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, mats or other material that prevents erosion from occurring. Grass, agricultural crop or other seeding alone is not stabilization. Mulch materials must achieve approximately 90 percent ground coverage (typically 2 ton/acre).

Stormwater. Water meeting the definition of Minn. Rules, part 7077.0105, subpart 41b (Stormwater

means precipitation runoff, stormwater runoff, snow melt runoff, and any other surface runoff and drainage.") or The Code of Federal Regulations (CFR) under 40 CFR 122.26 [b][13], (Stormwater means stormwater runoff, snow melt runoff and surface and drainage). Stormwater does not include construction site dewatering.

**Stormwater Pollution Control Measures.** A set of measures for disturbed land involving temporary and/or permanent structures that, when implemented, will decrease soil erosion on a parcel of land and off-site nonpoint pollution.

**Stormwater Pollution Control Plan.** A document containing the requirements of § 152.05, and involving temporary or permanent structures that, when implemented, will decrease soil erosion on a parcel of land and off-site nonpoint pollution. It involves both temporary and permanent controls.

Waters of The State. As defined in M.S. § 115.01, Subd. 22, as it may be amended from time to time.

**Wetland.** As defined in Minn. Rules, part 7050.0130, subpart F, ("wetlands" are those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions). **Wetlands** generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. **Wetlands** must have the following attributes:

(1) A predominance of hydric soils;

(2) Inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and

(3) Under normal circumstances support a prevalence of such vegetation.

# § 152.04 STORMWATER POLLUTION CONTROL FOR LESS THAN ONE ACRE

Every applicant for a building permit, subdivision approval, or a permit to allow land disturbing activities of less than one acre, but not part of a Common Plan of Development or Sale, must abide by the stormwater pollution control measures and regulations listed below. No land disturbing activities shall commence until stormwater pollution control measures are properly installed. At a minimum these pollution abatement control practices must conform to, and if applicable be designed in accordance with, those in the current version of the Minnesota Pollution Control Agency's Minnesota Stormwater Manual.

(A) Stormwater pollution control measures. The following minimum control measures are required where bare soil is exposed. Where additional control measures are needed, they will be specified at the discretion of the city.

(1) The Applicant must properly install sediment control measures before the construction

activity begins. Such structures may be adjusted during dry weather to accommodate short term activities, such as those allowing the passage of very large vehicles. As soon as this activity is finished or before the next runoff event, the erosion and sediment control structures must be returned to the configuration specified by the BMPs for sediment control.

(2) The Applicant must divert channeled runoff around disturbed areas and protect the channel.

(3) If a stormwater control measure involves directing some or all of the site's runoff to adjacent property, the owner shall obtain from adjacent property owners any necessary easements or other property interests concerning the flowing of such water.

(4) The Applicant must schedule the site's activities to lessen their impact on erosion and sediment creation, so as to minimize the amount of exposed soil.

(5) A stormwater BMP shall be required to hold all sheet flow runoff generated at an individual site, until it can either infiltrate or seep through the BMP.

(6) Soil stockpiles must be stabilized no later than 14 calendar days after construction activity has temporarily or permanently ceased, and cannot be placed in surface water, including stormwater conveyances such as curb and gutter systems, or conduits and ditches.

(7) Temporary rock construction entrances or other effective BMPs are required wherever vehicles enter and exit a site.

(8) Streets must be cleaned and swept whenever tracking of sediments occurs and before sites are left idle for weekends and holidays. A regular sweeping schedule may be required by the city.

(9) Water (impacted by the construction activity) removed from the site by pumping must be treated by temporary sedimentation basins, geotextile or chemical filters, grit chambers, sand filters, up-flow chambers, hydrocyclones, swirl concentrators or other appropriate stormwater control measures. Such water shall not be discharged in a manner that causes erosion or flooding of the site; receiving channels, adjacent property or a wetland.

(10) All storm drain inlets must be protected during construction until control measures are in place.

(11) Existing water bodies and wetlands shall have temporary erosion control devices installed around their respective perimeters to protect them from sediment deposits created by a construction activity.

(12) All debris and trash from construction site must be housed in appropriate container. If wind or other events create problems with materials staying in container, a cover may be required.

42

(13) Wet construction materials treated on site must be handled in a contained washout area.

(B) *Temporary sediment basins.* The City may require a temporary sediment basin be installed where appropriate, in areas with steep slopes or highly erodible soils.

**(C)** *Permanent stormwater controls.* If an Applicant chooses to implement an unrequired stormwater facility, the owner should follow MPCA's Minnesota Stormwater Manual guidelines.

**(D)** *Building Elevations.* Where buildings are proposed adjacent to wetlands, lakes, detention or retention basins, or other water bodies, the lowest floor elevation of the adjacent structures shall be set to the greater of the following:

(1) Four feet above the higher of the groundwater level or the normal water level of the adjacent water body.

(2) Two feet above the Base Flood Elevation (BFE) established in a Flood Insurance Study or where no BFE exists, two feet above the high water level resulting from the 100-year, 24-hour duration, AMC-2 (design storm);

(3) One foot above the emergency overflow elevation if the overflow elevation is above the 100-year, 24-hour duration, AMC-2 (design storm) elevation, and the overflow elevation plus one foot is less than the elevations in (1) and (2) unless otherwise approved by the City Engineer.

(4) The elevation based on applicable shoreland and/or floodplain zoning.

(5) The building or structure shall be a horizontal distance of at least 15 feet from the nearest location of the BFE.

(6) All low building openings shall be 1.5 feet above the emergency overflow elevation.

**(E)** Additional controls for Rum River. If a construction activity is within 1 mile of the Rum River, or discharges directly to the Rum River, the following controls apply in addition to those listed in divisions (A) through (D).

(1) All exposed soil areas with a slope of 3:1 or steeper that have a continuous positive slope to the Rum River must have a temporary erosion protection or permanent cover within seven days after the area is no longer actively being worked, either temporarily or permanently.

(2) An undisturbed buffer zone of not less than 100 linear feet from the Rum River (not including tributaries) shall be maintained at all times. Exceptions from this requirement for the areas, such as water crossings or limited water access, may be allowed if the owner fully documents the circumstances and reasons the buffer encroachment is necessary.

(F) Additional controls – Impaired Waters. If a construction activity discharges to a receiving

water with construction related impairments, the following water quality requirements apply in addition to those listed in divisions (A) through (E).

(1) All exposed soil areas with a slope of 3:1 or steeper that have a continuous positive slope to the impaired water must have a temporary erosion protection or permanent cover within seven days after the area is no longer actively being worked, either temporarily or permanently.

(2) An undisturbed buffer zone of not less than 100 linear feet from the impaired water (not including tributaries) shall be maintained at all times. Exceptions from this requirement for the areas, such as water crossings or limited water access, may be allowed if the owner fully documents the circumstances and reasons the buffer encroachment is necessary.

# (G) Inspection and maintenance of the Stormwater Pollution Control Measures.

(1) Inspections may be performed by city staff to observe that erosion, sediment and waste control measures are properly installed. Construction stop orders may be issued by the city until erosion and sediment control measures are corrected.

(2) It shall be the responsibility of the applicant to obtain any necessary easements or other property interests to allow access to the stormwater management facilities for inspection and maintenance purposes.

(3) All stormwater pollution control management facilities must be designed to minimize the need of maintenance, to provide easy vehicle and personnel access for maintenance purposes and to be structurally sound.

# § 152.05 STORMWATER POLLUTION CONTROL FOR SITES GREATER THAN OR EQUAL TO ONE ACRE OR COMMON PLAN OF DEVELOPMENT OR SALE

Every applicant for a building permit, subdivision approval, or a permit to allow land disturbing activities of one acre or more, or is part of a Common Plan of Development or Sale, must submit a Stormwater Pollution Control Plan to the City Engineer that contains the items listed below. No building permit, subdivision approval, or authorization to commence land disturbing activities shall be issued until the city approves this plan. At a minimum these pollution abatement control practices must conform to, and if applicable be designed in accordance with, those in the current version of the Minnesota Pollution Control Agency's Minnesota Stormwater Manual.

(A) *Requirements of the Stormwater Pollution Control Plan.* The plan shall contain:

- (1) The name and address of the owner and applicant, if different than the owner.
- (2) The location of the activity.

(3) Project description: the nature and purpose of the land disturbing activity and the amount of grading, utilities, and building construction involved.

(4) Phasing of construction: time frames and schedules for the project's various aspects.

(5) A map(s) of the existing site conditions: existing topography, property information, steep slopes (greater than 3:1), existing drainage systems/patterns, type of soils, waterways, wetlands, vegetative cover, 100-year flood plain boundaries, if present, locations of existing and future buffer strips and labeling the portions of the site that drain to downstream lakes, rivers and/or streams.

(6) A site construction plan that includes the location of the proposed land disturbing activities, stockpile locations, erosion and sediment control plan, construction schedule, and the plan for the maintenance and inspections of the stormwater pollution control measures. The Stormwater Pollution Control Plan's measures, the limit of disturbed surface and the location of buffer areas shall be marked on the approved grading plan, and identified with flags, stakes, signs etc. on the development site before work begins. At a minimum, such inspections shall be done weekly by either the permittee, or the permittee's designated representative, and within 24 hours after every storm or snow melt event large enough to result in runoff from the site (approximately 0.25 inches or more in 24 hours). At a minimum, these inspections shall be done during active construction.

(7) Identification of adjacent areas: neighboring streams, lakes, residential areas, roads and the like, that might be affected by the land disturbing activity.

(8) Designation of the site's areas that have the potential for serious erosion problems.

(9) Erosion, sediment and waste control measures: the methods that will be used to control erosion, sedimentation and waste on the site, both during and after the construction process. Erosion, sediment, and waste control measures shall be consistent with the requirements of the Construction Stormwater Permit.

(10) Permanent stabilization: how the site will be stabilized after construction is completed, including specifications, time frames or schedules and a narrative plan for the removal of temporary sediment and erosion control measures at the end of the project.

(11) Hydrologic models and design methodologies used for determining runoff characteristics and analyzing stormwater management structures must be approved by the city engineer. Plans, specifications, and computations for stormwater management facilities submitted for review must be sealed and signed by a registered professional engineer. All computations must appear in the plans submitted for review, unless otherwise approved by the City Engineer.

(12) The plan should address stormwater discharging to special as well as impaired waters and what special actions/BMPs that will be employed.

(13) The plan shall identify methods and discharge routes for dewatering activities

(14) The plan shall include provisions for site inspections and maintaining records of rainfall

events by the site contractor.

(15) The plan shall provide for BMP maintenance.

(16) The plan shall identify how solid and hazardous wastes on the project site will be managed.

(17) The plan shall provide for final stabilization upon the completion of construction activity, including the use of perennial vegetative cover on all exposed soils or other equivalent means.

**(B)** Stormwater pollution control measures. The following minimum control measures are required where bare soil is exposed. Where additional control measures are needed, they will be specified at the discretion of the city.

(1) The applicant must properly install sediment control measures before the construction activity begins. Such structures may be adjusted during dry weather to accommodate short term activities, such as those allowing the passage of very large vehicles. As soon as this activity is finished or before the next runoff event, the erosion and sediment control structures must be returned to the configuration specified by the BMPs for sediment control.

(2) The applicant must divert channeled runoff around disturbed areas and protect the channel.

(3) If a stormwater management plan involves directing some or all of the site's runoff to adjacent property, the applicant shall obtain from adjacent property owners any necessary easements or other property interests concerning the flowing of such water.

(4) The applicant must schedule the site's activities to lessen their impact on erosion and sediment creation, so as to minimize the amount of exposed soil.

(5) Adequately installed and maintained perimeter BMPs shall be required to hold all sheet flow runoff generated at an individual site, until it can either infiltrate or seep through silt fence's pores.

(6) Soil stockpiles must be stabilized no later than 14 calendar days after construction activity has temporarily or permanently ceased, and cannot be placed in surface water, including stormwater conveyances such as curb and gutter systems, or conduits and ditches.

(7) Temporary rock (or other suitable material) construction entrances are required wherever vehicles enter and exit a site.

(8) Streets must be cleaned and swept whenever tracking of sediments occurs and before sites are left idle for weekends and holidays. A regular sweeping schedule may be required by the city.

46

(9) Water (impacted by the construction activity) removed from the site by pumping must be treated by temporary sedimentation basins, geotextile or chemical filters, grit chambers, sand filters, up-flow chambers, hydrocyclones, swirl concentrators or other appropriate controls. Such water shall not be discharged in a manner that causes erosion or flooding of the site; receiving channels, adjacent property or a wetland.

(10) All storm drain inlets must be protected during construction until control measures are in place with either silt fence or an equivalent.

(11) Existing water bodies and wetlands shall have temporary erosion control devices installed around their respective perimeters to protect them from sediment deposits created by a construction activity.

(12) All debris and trash from construction site must be housed in appropriate container. If wind or other events create problems with materials staying in container, a cover may be required.

(13) Wet construction materials treated on site must be handled in a contained washout area.

**(C)** *Temporary sediment basins.* For common drainage locations that serve an area of ten or more acres disturbed at one time, and that drain to a discernable pond, a sediment basin must be provided prior to the runoff leaving the construction site or entering waters of the state. In addition to this requirement, the applicant is encouraged, and may be required by the city, to install temporary sediment basins where appropriate in areas with steep slopes or highly erodible soils even if less than ten acres drains to one area.

(D) Permanent stormwater controls.

(1) The following volume control standards shall be met as described below for all construction activities:

- (a) Treat the water quality volume on any project where the sum of the new impervious surface and the fully reconstructed impervious surface equals one or more acres.
  - (i) For non-linear projects, water quality volume (calculated as an instantaneous volume) must be calculated as one (1) inch times the sum of the new and the fully reconstructed impervious surface.
  - (ii) For linear projects, water quality volume (calculated as an instantaneous volume) must be calculated as the larger of one (1) inch times the new impervious surface or one-half (0.5) inch times the sum of the new and the fully reconstructed impervious surface. Where the entire water quality volume cannot be treated within the existing right-of-way, a reasonable attempt to obtain additional right-of-way, easement, or other permission to treat the stormwater during the project planning process must be made.

Volume reduction practices must be considered first, as described in Section D.1.b. Volume reduction practices are not required if the practices cannot be provided cost effectively. If additional right-of-way, easements, or other permission cannot be obtained, the owner/operator of construction activity must maximize the treatment of the water quality volume prior to discharge from Cambridge's MS4.

- (b) Volume reduction practices (e.g., infiltration or other) to retain the water quality volume on-site must be considered first when designing the permanent stormwater treatment system. Wet sedimentation basins and filtration systems are not considered volume reduction practices. If infiltration is prohibited, other volume reduction practices, a wet sedimentation basin, or filtration systems may be considered.
- (c) Infiltration systems are prohibited in the following areas:
  - (i) that that receive runoff from vehicle fueling and maintenance areas;
  - (ii) where infiltrating stormwater may mobilize high levels of contaminants in soil or groundwater;
  - (iii) where soil infiltration rates are field measured at more than 8.3 inches per hour unless the soils are amended to slow the infiltration rate below 8.3 inches per hour;
  - (iv) with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock;
  - (v) of predominately Hydrologic Soil Group type D soils (clay);
  - (vi) in an Emergency Response Area (ERA) within a DWSMA classified as having high or very high vulnerability as defined by the Minnesota Department of Health; or
  - (vii) in an ERA within a DWSMA classified as moderate vulnerability or outside of an ERA within a DWSMA classified as having high or very high vulnerability unless a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater has been approved by the City of Cambridge.
  - (viii) within 1,000 feet upgradient or 100 feet downgradient of known active karst features; and
  - (ix) that receive runoff from the following industrial facilities not authorized to infiltrate stormwater under the NPDES stormwater permit for industrial activities: automobile salvage yards; scrap recycling and waste recycling facilities; hazardous waste treatment, storage, or disposal facilities; or air transportation facilities that conduct deicing activities.
- (d) Off-site Treatment
  - (i) For non-linear projects, where the water quality volume cannot cost effectively be treated on the site of the original construction activity, the remaining water quality volume must be addressed through off-site

treatment and meet the following requirements (must be 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 DNR catchment area as the original construction activity.
- 3. Locations in the next adjacent DNR catchment area up-stream.
- 4. Locations anywhere within the Cambridge's jurisdiction.
- (ii) Off-site treatment projects must involve the creation of new structural stormwater BMPs or the retrofit of existing structural stormwater BMPs, or the use of a properly designed regional structural stormwater BMP. Routine maintenance of structural stormwater BMPs owned or operated by the City of Cambridge cannot be used to meet this requirement.
- (iii) Off-site treatment projects must be completed no later than 24 months after the start of the original construction activity.
- (iv) The applicant may provide payment to the City of Cambridge in lieu of offsite treatment.
  - If the City of Cambridge receives payment from the owner of a construction activity for off-site treatment, the City must apply any such payment received to a public stormwater project, and all projects must comply with the requirements in item (b).

(2) All permanent stormwater controls shall abide by the Construction Stormwater Permit and the MPCA's Minnesota Stormwater Manual

(3) Outlets shall be designed according to the Construction Stormwater Permit and the MPCA's Minnesota Stormwater Manual.

(4) Release rates shall not increase over the predevelopment (existing conditions) storm discharge rates for the 24-hour duration two-year, ten-year and 100-year rainfall events. Calculations that were made for the design of such items as sediment basins, rate control structures, wet detention basin volumes, diversions, waterways, infiltration zones and other selected BMPs shall be included with the submittal.

(5) An emergency overflow shall be provided that meets the elevation criteria in divisions (6)(c) and (6)(f) below.

(6) Where buildings are proposed adjacent to wetlands, lakes, detention or retention basins, or other water bodies, the lowest floor elevation of the adjacent structures shall be set to the greater of the following:

(a) Four feet above the higher of the groundwater level or the normal water level of the adjacent water body.

(b) Two feet above the Base Flood Elevation (BFE) established in a Flood Insurance Study or where no BFE exists, two feet above the high water level resulting from the 100-year, 24-hour duration, AMC-2 (design storm);

(c) One foot above the emergency overflow elevation if the overflow elevation is above the 100-year, 24-hour duration, AMC-2 (design storm) elevation, and the overflow elevation plus one foot is less than the elevations in (a) and (b) unless otherwise approved by the City Engineer.

(d) The elevation based on applicable shoreland and/or floodplain zoning.

(e) The building or structure shall be a horizontal distance of at least 15 feet from the nearest location of the BFE.

(f) All low building openings shall be 1.5 feet above the emergency overflow elevation.

(7) Where feasible, wet retention or detention basins shall have a 10:1 vegetative bench at the normal water level.

(8) Permanent stormwater pollution controls shall be designed by a professional engineer licensed in the State of Minnesota.

(9) Stormwater management limitations and exceptions will be followed as stated in the Construction Stormwater Permit

**(E)** Additional controls – Impaired Waters. If a construction activity discharges to a receiving water with construction related impairments, the following water quality requirements apply for sites where the sum of the new impervious surface and the fully reconstructed impervious surface equals one or more acres, in addition to those listed in divisions (A) through (D), as applicable.

- (1) Projects shall not result in an increase in loading of total phosphorus (TP) and total suspended solids (TSS) to the receiving water. Defendable computations shall be submitted that demonstrate no increase in loading on an annual basis as compared to existing site conditions, using standard techniques and generally accepted assessment practices, including available lake and ecoregional studies and models. Assessment techniques and resulting computations must be approved by the City Engineer.
- (2) The applicant shall consider incorporating the use of natural topography and land cover to mimic, restores, or maintains natural hydrology. This may include natural swales and depressions as they exist before development, disconnected impervious surfaces or other measures as to not compromise the integrity or quality of the receiving water.
- (G) Inspection and maintenance of the Stormwater Pollution Control Measures.

(1) Inspections may be performed by city staff to observe that erosion, sediment and waste control measures are properly installed and maintained in accordance with the SWPCP. Construction stop orders may be issued by the city until erosion and sediment control measures are corrected in accordance with the SWPCP.

(2) The Applicant shall enter into an operation and maintenance agreement with the City, which is to include an operation and maintenance manual specific to the permanent stormwater control(s) on site.

(3) It shall be the responsibility of the applicant to obtain any necessary easements or other property interests to allow access to the stormwater management facilities for inspection and maintenance purposes.

(4) All stormwater pollution control management facilities must be designed to minimize the need of maintenance, to provide easy vehicle and personnel access for maintenance purposes and to be structurally sound.

(5) The Applicant shall allow the City to conduct inspections of permanent stormwater controls, perform necessary maintenance, and assess costs for those permanent stormwater controls when the City determines that the owner and/or operator of that permanent stormwater control has not conducted maintenance.

(6) If site configurations or permanent stormwater controls change, causing decreased effectiveness, new or improved permanent stormwater controls must be implemented to ensure the conditions for post-construction stormwater management are maintained as originally approved.

### § 152.06 REVIEW

The city shall review the stormwater pollution control plan, of § 152.05, and approve or disapprove in accordance with M.S. § 15.99, as it may be amended from time to time.

### § 152.07 VARIANCE

An applicant may seek a variance from the requirements of either section § 152.04 or § 152.05, as applicable, by submitting a written request to the City Engineer. The City Engineer, or his or her designee, shall have the sole discretion to determine if a variance to the requirements of the pertinent section will be allowed. All decisions of the City Engineer involving requests for variances under section § 152.04 shall be final. Decisions of the City Engineer involving requests for variances under section § 152.05 may be appealed to the City Council.

#### § 152.08 MODIFICATION OF PLAN

An approved stormwater pollution control plan, in accordance with § 152.05, may be modified upon

submission of a written request for modification to the city, and after written approval by the city. The City Engineer may require additional reports and data to be submitted with the request.

# § 152.09 FAILURE OF THE STORMWATER POLLUTION CONTROL MEASURES

(A) Notification by the city. The city shall notify the applicant, property owner, contractor, or other property designee, when the city is going to act against violations. The initial contact will be to the party or parties listed on the Stormwater Pollution Control Plan as contacts, or for sites less than one acre, the appropriate property designee. Notwithstanding anything in City Code to the contrary, and except during an emergency action, 48 hours after notification by the city, the city at its discretion may begin corrective work. 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. If violations are not corrected, and the City must act to correct violations, the city will bill the party or parties listed on the Stormwater Pollution Control Plan as contacts, or the appropriate property designee. Enforcement will follow the guidelines set in Chapter 38 of the city code.

(B) *Emergency action.* If circumstances exist such that noncompliance with this chapter poses an immediate danger to the public health, safety and welfare, as determined by the city, the city may take emergency preventive 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 will be billed directly to the party or parties listed on the stormwater Pollution Control Plan as contacts, or for sites less than one acre, the property designee.

(C) *Failure to do corrective work.* When an applicant fails to conform to any provision of § 152.04 or § 152.05 within the time stipulated, the city may take the following actions:

(1) 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, or property designee, for the site in question or any other of the applicant's, or property designee's, sites within the city's jurisdiction.

(3) Direct the correction of the deficiency by city forces or by a separate contract.

(4) The City must be reimbursed for all costs incurred in correcting stormwater pollution control deficiencies. Payments must be made within 30 days after the city incurs costs.

(5) If payments are not made within 30 days after the city incurs costs, then the city may assess the remaining amount against the property.

(6) If applicant fails to complete construction activity before a Certificate of Occupancy is obtained, the city may require a cash escrow deposit in the amount to be determined by the city, as a security for completion and continued maintenance of stormwater control measures. Following completion of land disturbing activities with final vegetative stabilization

to the city's satisfaction, the city shall refund the amount of deposit. The city reserves the right to expend such funds to ensure effective stormwater control measures are established and maintained until final vegetative stabilization is completed.

### § 152.10 ENFORCEMENT

The city shall be responsible for enforcing this chapter. 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 or imprisonment or both. All land use and building permits will be suspended until the violation is corrected. Each day that a separate violation exists shall constitute a separate offense.

# § 152.11 RIGHT OF ENTRY AND INSPECTION

The City, and its authorized representatives, shall be allowed to, upon presentation of credentials to:

(A) Enter upon the permitted site for the purpose of obtaining information, examining records, conducting investigations or surveys or for the purpose of correcting deficiencies in stormwater pollution control.

(B) Bring such equipment upon the permitted site as is necessary.

(C) Examine and copy any books, papers, records, or memoranda pertaining to activities or records required to be kept under the terms and conditions of this permitted site.

(D) Inspect the stormwater pollution control measures.

(E) Sample and monitor any items or activities pertaining to stormwater pollution control measures.

# § 152.12 ABROGATION AND GREATER RESTRICTIONS

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail.

# § 152.13 OTHER STATUTES, RULES AND ORDINANCES

The applicant shall comply with all federal and state statutes and local ordinances including the current version of the Minnesota Pollution Control Agency's General Permit Authorization to Discharge Stormwater Associated with Construction Activity under the NPDES/SDS permit program and the requirements of a Watershed Management Organization, if applicable.