
City Code, Chapter 7D: Storm Water Management Regulations

CHAPTER 7D
STORM WATER MANAGEMENT REGULATIONS

TABLE OF CONTENTS

CHAPTER 7D	STORM WATER MANAGEMENT REGULATIONS.....	7D-1 TO 7D-12
ARTICLE I	TITLE AND PURPOSE.....	7D-1
Section 7D-100	Title.....	7D-1
Section 7D-101	Purpose.	7D-1
ARTICLE II	FINDINGS.....	7D-1
Section 7D-200	7D-1
ARTICLE III	DEFINITIONS	7D-1
Section 7D-300	Definitions.	7D-1
ARTICLE IV	SCOPE AND EFFECT.....	7D-3 TO 7D-4
Section 7D-401	Applicability	7D-3
Section 7D-402	Exemptions	7D-3
Section 7D-403	Waiver.....	7D-4
ARTICLE V	STORM WATER MANAGEMENT PLAN APPROVAL PROCEDURES.....	7D-4
Section 7D-500	Intergovernmental Cooperation	7D-4
Section 7D-501	Application.	7D-4
Section 7D-502	Storm Water Management Plan.....	7D-4
ARTICLE VI	PLAN REVIEW PROCEDURE.....	7D-6 TO 7D-7
Section 7D-601	Process.	7D-6
Section 7D-602	Duration..	7D-6
Section 7D-603	Conditions.....	7D-6
Section 7D-604	Performance Bond	7D-6
Section 7D-605	Fees	7D-7
ARTICLE VII	APPROVAL STANDARDS.....	7D-7 TO 7D-11
Section 7D-701	Approval..	7D-7
Section 7D-702	Site Dewatering	7D-7
Section 7D-703	Waste and Material Disposal.....	7D-7
Section 7D-704	Tracking.....	7D-7
Section 7D-705	Drain Inlet Protection	7D-7
Section 7D-706	Site Erosion Control	7D-7
Section 7D-707	Storm Water Management Criteria for Permanent Facilities	7D-8

City Code, Chapter 7D: Storm Water Management Regulations

Section 7D-708	Design Standards	7D-9
Section 7D-709	Wetlands..	7D-9
Section 7D-710	Steep Slopes.....	7D-10
Section 7D-711	Catch Basins	7D-10
Section 7D-712	Drain Leaders	7D-10
Section 7D-713	Inspection and Maintenance..	7D-10
Section 7D-714	Models/Methodologies/Computations.....	7D-10
Section 7D-715	Watershed Management Plans/Groundwater Management Plans.....	7D-10
Section 7D-716	Easements.	7D-11
ARTICLE VIII	LAWN FERTILIZER REGULATIONS.....	7D-11
Section 7D-801	Use on Impervious Surfaces.	7D-11
Section 7D-802	Unimproved Land Areas.....	7D-11
Section 7D-803	Public Advisory on Fertilizer Content.....	7D-11
Section 7D-804	Buffer Zone.....	7D-11
ARTICLE IX	GENERAL PROVISIONS.....	7D-11 TO 7D-12
Section 7D-901	Penalty	7D-11
Section 7D-902	Other Controls	7D-11
Section 7D-903	Severability	7D-12

CHAPTER 7D
STORM WATER MANAGEMENT REGULATIONS

ARTICLE I
TITLE AND PURPOSE

SECTION 7D-100. TITLE. This Chapter shall be known and may be cited as the “Storm Water Management Regulations of the City of Columbus, Minnesota.”

[§ 7D-100 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-101. PURPOSE. The purpose of this Chapter is to promote, preserve and enhance the natural resources within the City of Columbus and protect them from adverse effects occasioned by poorly sited development or incompatible activities by regulating land disturbing or development activities that would have an adverse and potentially irreversible impact on water quality and unique and fragile environmentally sensitive land; by minimizing conflicts and encouraging compatibility between land disturbing and development activities and water quality and environmentally sensitive lands; and by requiring detailed review standards and procedures for land disturbing or development activities proposed for such areas, thereby achieving a balance between urban growth and development and protection of water quality and natural areas.

[§ 7D-101 amended by Ord. No. 07-02, effective March 1, 2007.]

ARTICLE II
FINDINGS

SECTION 7D-200. The City Council hereby finds that uncontrolled and inadequately planned use of wetlands, woodlands, natural habitat areas, areas subject to soil erosion and areas containing restrictive soils adversely affect the public health, safety and general welfare by impacting water quality and contributing to other environmental problems, creating nuisances, impairing other beneficial uses of environmental resources and hindering the ability of the City of Columbus to provide adequate water, sewage, flood control, and other community services. In addition, extraordinary public expenditures may be required for the protection of persons and property in such areas and in areas which may be affected by unplanned land usage.

[§ 7D-200 amended by Ord. No. 07-02, effective March 1, 2007.]

ARTICLE III
DEFINITIONS

SECTION 7D-300. DEFINITIONS. For the purposes of this Chapter, the following terms, phrases, words, and their derivatives shall have the meaning stated below. Whenever any terms, phrases, words, and their derivatives used herein are not defined herein, but are defined elsewhere in this City Code or in the state laws or regulations, any such definition therein shall be deemed to apply to such words and

City Code, Chapter 7D: Storm Water Management Regulations

phrases used herein, except when the context clearly requires otherwise. When not inconsistent with the context, words used in the present tense include the future tense, words in the plural number include the singular number, and words in the singular number include the plural number. The word “shall” is always mandatory and not merely directive.

- A. **“Applicant”** means: Any person who wishes to obtain a building permit, zoning permit, excavation permit, filling permit, mining permit, sign permit, wetlands activities permit, plat approval, minor subdivision approval, or permit for construction of utilities systems.
- B. **“Best Management Practices (BMPs)”** means: measures taken to minimize the negative effects on water resources and systems as referenced in the Minnesota Construction Site Erosion and Sediment Control Planning Handbook (BWSR, 1988), Protecting Water Quality in Urban Areas (MPCA, 1989) and the Minnesota Stormwater Manual (MPCA, 2006) or similar guidance documents.
- C. **“Control measure”** means: A practice or combination of practices to control erosion and attendant pollution.
- D. **“Detention facility”** means: A permanent natural or man-made structure, including wetlands, for the temporary storage of runoff which contains a permanent pool of water.
- E. **“Emergency Overflow (EOF)”** means: a primary overflow to pass flows above the design capacity around the principal outlet safely downstream without causing flooding.
- F. **“Excavation”** means: the displacement or removal of soil, sediment, or other material.
- G. **“Flood fringe”** means: The portion of the floodplain outside of the floodway.
- H. **“Floodplain”** means: The areas adjoining a watercourse or water basin that have been or may be covered by a regional flood.
- I. **“Floodway”** means: The channel of the watercourse, the bed of water basins, and those portions of the adjoining floodplains that are reasonably required to carry and discharge floodwater and provide water storage during a regional flood.
- J. **“Hydric soils”** means: Soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.
- K. **“Hydrophytic vegetation”** means: Macrophytic plant life growing in water, soil or on a substrate that is a least periodically deficient in oxygen as a result of excessive water content.
- L. **“Impervious Surface”** means: a compacted surface or a surface covered with material (i.e., gravel, asphalt, concrete, Class 5, etc.) that increases the depth of runoff compared to natural soils and land cover. Including but not limited to roads, driveways, parking areas, sidewalks and trails, patios, tennis courts, basketball courts, swimming pools, building roofs, covered decks, and other structures.
- M. **“Land disturbing or development activities”** means: any disturbance to the ground surface that, through the action of wind or water, may result in soil erosion or the movement of sediment into waters, wetlands or storm sewers or onto adjacent property. Land-disturbing activity includes but is not limited to the demolition of a structure or surface, soil stripping, clearing, grubbing, grading, excavating, filling and the storage of soil or earth materials. The term does not include normal farming practices as part of an ongoing farming operation.
- N. **“Low Entry Elevation”** means: the elevation of the lowest opening in a structure.
- O. **“Low Floor Elevation”** means: the elevation of the lowest floor of a habitable or uninhabitable structure, which is often the elevation of the basement floor or walk-out level.
- P. **“NPDES Permit”** means: general permit authorization to discharge storm water associated with construction activity under the National Pollutant Discharge Elimination System (NPDES), issued by the Minnesota Pollution Control Agency.
- Q. **“Person”** means: Any individual, firm, corporation, franchise, association or government entity.
- R. **“Pollutant”** means: Anything that causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids;

City Code, Chapter 7D: Storm Water Management Regulations

non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind. (This definition is for the purpose of Rule H only and is incorporated from the U.S. EPA model ordinance.)

S. **“Public waters”** means: Waters of the State as defined in Minn. Stat., § 103G.005, Subdivision 15, as amended.

T. **“Public Waters Wetlands”** means: all wetlands identified as public waters wetlands under Minnesota Statutes section 103G.005, subdivision 15a.

U. **“Regional flood”** means: A flood that is representative of large floods known to have occurred generally in the state and reasonably characteristic of what can be expected to occur on an average frequently in the magnitude of a 100-year recurrence interval.

V. **“Retention facility”** means: A permanent natural or man-made structure that provides for the storage of storm water runoff by means of a permanent pool of water.

W. **“Sediment”** means: Solid matter carried by water, sewage, or other liquids.

X. **“Structure”** means: Anything manufactured, constructed or erected which is normally attached to or positioned on land, including portable structure, earthen structures, roads, parking lots, and paved storage areas.

Y. **“Wetlands”** means: Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this definition, wetlands must have the following three attributes:

1. Have a predominance of hydric soils;
2. Are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions; and

City Code, Chapter 7D: Storm Water Management Regulations

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

[§ 7D-300 amended by Ord. No. 07-02, effective March 1, 2007, amended by Ord. No. 09-03, effective March 5, 2009.]

ARTICLE IV
SCOPE AND EFFECT

SECTION 7D-401. APPLICABILITY. Every applicant for a building permit, zoning permit, excavation permit, filling permit, mining permit, sign permit, wetlands activities permit, plat approval, minor subdivision approval, permit for construction of utilities systems, or permit for any land disturbing activities must submit a storm water management plan to the Zoning Administrator. No building permit, zoning permit, excavation permit, filling permit, mining permit, sign permit, wetlands activities permit, plat approval, minor subdivision approval, permit for construction of utilities systems, or permit for any land disturbing activities shall be issued until approval of the storm water management plan or a waiver of the approval requirement has been obtained in strict conformance with the provisions of this Chapter. The provisions of Article VIII of this Chapter apply to all land in all zones, public or private, located within the City of Columbus.

Compliance with these regulations is not a substitute for compliance with other laws and regulations concerning substantially the same subject matter. If construction or development activities propose to disturb five or more acres of land, then the developer must obtain a General Storm Water Permit for Construction Activity from the Minnesota Pollution Control Agency. The Minnesota Pollution Control Agency regulates such activities pursuant to the U.S. Clean Water Act, 33 U.S.C. 1251, *et seq.*, 40 C.F.R. 122-124 *et seq.*, and pursuant to Minn. Stat. Chapter 115 and 116, and Minn. Rules Chapter 7001.

[§ 7D-401 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-402. EXEMPTIONS. The provisions of this Chapter do not apply to:

- A. Any part of a subdivision if a plat for the subdivision has been approved by the City of Columbus on or before the effective date of the Ordinance which incorporates this Chapter into the City Code;
- B. A permit is not required for single-family residential construction on an individual lot of record, if the proposed impervious surface of the lot is less than 10,000 square feet, excluding the driveway. If the lot is within a development previously approved by the City of Columbus, the construction must conform to the previous approval.
- C. Any land disturbing activity for which plans have been approved by the watershed management organization within six months prior to the effective date of the Ordinance which incorporates this Chapter into the City Code;
- D. Stormwater management requirements do not apply to sidewalks and trails 10 feet wide or less that are bordered down-gradient by vegetated open space or vegetated filter strip with a minimum width of 5 feet.
- E. Stormwater management requirements do not apply to bridge spans and mill, reclamation & overlay projects.
- F. A lot for which a building permit has been approved on or before the effective date of the Ordinance which incorporates this Chapter into the City Code;
- G. Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles;
- H. Emergency work to protect life, limb, or property; or
- I. Land disturbing activities for agricultural purposes on agricultural lands of 10.0 acres or more;
- J. Excavations of 100 cubic yards or less (see Chapter 9 of this City Code) for immediate construction of new single-family dwellings; or

City Code, Chapter 7D: Storm Water Management Regulations

K. Top soil filling of 100 cubic yards or less (see Chapter 9 of this City Code) if such top soil is immediately seeded or covered with live sod.

[§ 7D-402 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-403. WAIVER. The City Council, upon recommendation of the Planning Commission, may waive any requirement of this Chapter upon finding that compliance with the requirement will involve extreme financial expenses and that the waiver of such requirement will not adversely affect the standards and requirements set forth in Article V. As a condition of the waiver, the City Council may require easement dedications or topographical construction (or an agreement to dedicate easements or to complete construction) as may be necessary to adequately meet said standards and requirements.

[§ 7D-403 amended by Ord. No. 07-02, effective March 1, 2007.]

ARTICLE V**STORM WATER MANAGEMENT PLAN APPROVAL PROCEDURES**

SECTION 7D-500. INTERGOVERNMENTAL COOPERATION. If a storm water, surface water, or drainage alteration plan has already been approved by another reviewing governmental agency, then such plan shall be utilized by the City of Columbus in lieu of a duplicate application. Such plan shall be checked by the Zoning Administrator to determine its usefulness for the purposes of this Chapter. If such other plan is adequate, no other application or review process shall be required by the City. If no other plan has been prepared, then the applicant shall submit a plan which complies with this Chapter.

[§ 7D-500 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-501. APPLICATION. Before an application is accepted by the Zoning Administrator, the provisions of Section 7D-500, above, shall be examined. A written application for storm water management plan approval, along with the proposed storm water management plan, shall be filed with the Zoning Administrator and shall include a statement indicating the grounds upon which the approval is requested, that the proposed use is permitted by right or as an exception in the underlying zoning district, and adequate evidence showing that the proposed use will conform to the standards set forth in this Chapter. Prior to applying for approval of a stormwater management plan, an applicant may have the storm water management plans reviewed by the appropriate departments of the City.

Two sets of clearly legible blue or black-lined copies of drawings and required information shall be submitted to the Zoning Administrator and shall be accompanied by a receipt from the City Treasurer evidencing the payment of all required fees for processing and approval as set forth in Section 7D-605, and a bond when required by Section 7D-604 in the amount to be calculated in accordance with that Section. Drawings shall be prepared to a scale appropriate to the site of the project and suitable for the review to be performed. The scale shall be 1 inch equals 100 feet.

[§ 7D-501 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-502. STORM WATER MANAGEMENT PLAN. At a minimum, the storm water management plan shall contain the following information.

A. Existing site map. A map of existing site conditions showing the site and immediately adjacent areas, including:

1. The name and address of the applicant, the section, city and range, north point, date and scale of drawing and number of sheets;

City Code, Chapter 7D: Storm Water Management Regulations

2. Location of the tract by an insert map at a scale sufficient to clearly identify the location of the property and giving such information as the names and numbers of adjoining roads, railroads, utilities, subdivisions, cities and districts or other landmarks;
 3. Existing topography with a contour interval appropriate to the topography of the land but in no case having a contour interval greater than 2 feet;
 4. A delineation of all streams, rivers, public waters and wetlands located on and immediately adjacent to the site, including depth of water, a description of all vegetation which may be found in the water, a statement of general water quality, and any classification given to the water body or wetland by the Minnesota Department of Natural Resources, the Minnesota Pollution Control Agency, and/or the United States Army Corps of Engineers;
 5. Location and dimensions of existing storm water drainage systems and natural drainage patterns on and immediately adjacent to the site delineating in which direction and at what rate storm water is conveyed from the site, identifying the receiving stream, river, public water, or wetland, and setting forth those areas of the unaltered site where storm water collects;
 6. A description of the soils of the site, including a map indicating soil types of areas to be disturbed as well as a soil report containing information on the suitability of the soils for the type of development proposed and for the type of sewage disposal proposed, and describing any remedial steps to be taken by the developer to render the soils suitable;
 7. Vegetative cover and clearly delineating any vegetation proposed for removal; and
 8. 100-year floodplains, flood fringes and floodways.
- B. Site construction plan. A site construction plan including:
1. Locations and dimensions of all proposed land disturbing activities and any phasing of those activities;
 2. Locations and dimensions of all temporary soil or dirt stockpiles;
 3. Locations and dimensions of all construction site erosion control measures necessary to meet the requirements of this Chapter;
 4. Schedule of anticipated starting and completion date of each land-disturbing activity including the installation of construction site erosion control measures needed to meet the requirements of this Chapter; and
 5. Provisions for maintenance of the construction site erosion control measures during construction.
- C. Plan of final site conditions. A plan of final site conditions on the same scale as the existing site map showing the site changes including:
1. Finished grading shown at contours at the same interval as provided above or as required, to clearly indicate the relationship of proposed changes to existing topography and remaining features;
 2. A landscape plan, drawn to an appropriate scale, including dimensions and distances and the location, type, size and description of all proposed landscape materials which will be added to the site as part of the development;

City Code, Chapter 7D: Storm Water Management Regulations

3. A drainage plan of the developed site delineating in which direction and at what rate storm water will be conveyed from the site and setting forth the areas of the site where storm water will be allowed to collect;
4. The proposed size, alignment and intended use of any structures to be erected on the site;
5. A clear delineation and tabulation of all areas which shall be paved or surfaced, including a description of the surfacing material to be used; and
6. Any other information pertinent to the particular project which, in the opinion of the applicant, is necessary for the review of the project.

[§ 7D-502 amended by Ord. No. 07-02, effective March 1, 2007.]

ARTICLE VI

PLAN REVIEW PROCEDURE

SECTION 7D-601. PROCESS. Storm water management plans meeting the requirements of Article V above shall be submitted by the Zoning Administrator to the Planning Commission for review in accordance with the standards of Article VII below. The Commission shall recommend approval, recommend approval with conditions, or recommend denial of the storm water management plan. Following Planning Commission action, the storm water management plan shall be submitted to the City Council at its next available meeting. City Council action on the storm water management plan must be accomplished within 120 days following the date the application for approval is filed with the Zoning Administrator.

[§ 7D-601 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-602. DURATION. Approval of a plan submitted under the provisions of this Chapter shall expire one year after the date of approval unless construction has commenced in accordance with the plan. However, if prior to the expiration of the approval, the applicant makes a written request to the Zoning Administrator for an extension of time to commence construction setting forth the reasons for the requested extension, the planning department may grant one extension of not greater than one single year. Receipt of any request for an extension shall be acknowledged by the Zoning Administrator within 15 days. The Zoning Administrator shall make a decision on the extension within 30 days of receipt. Any plan may be revised in the same manner as originally approved.

SECTION 7D-603. CONDITIONS. A storm water management plan may be approved subject to compliance with conditions reasonable and necessary to insure that the requirements contained in this Chapter are met. Such conditions may, among other matters, limit the size, kind or character of the proposed development, require the construction of structures, drainage facilities, storage basins and other facilities, require replacement of vegetation, establish required monitoring procedures, stage the work over time, require alteration of the site design to insure buffering, and require the conveyance to the City of Columbus or other public entity of certain lands or interests therein.

[§ 7D-603 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-604. PERFORMANCE BOND. Prior to approval of any stormwater management plan, the applicant shall submit an agreement to construct such required physical improvements, to dedicate property or easements, or to comply with such conditions as may have been agreed to. Such

City Code, Chapter 7D: Storm Water Management Regulations

agreement shall be accompanied by a bond to cover the amount of the established cost of complying with the agreement. The agreement and bond shall guarantee completion and compliance with conditions within a specific time, which time may be extended in accordance with Section 7D-602.

The adequacy, conditions and acceptability of any agreement and bond shall be determined by the City Council or any official of the City of Columbus as may be designated by resolution of the Columbus City Council.

[§ 7D-604 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-605. FEES. All applications for storm water management plan approval shall be accompanied by a processing and approval fee of \$150.00.

ARTICLE VII APPROVAL STANDARDS

SECTION 7D-701. APPROVAL. No storm water management plan which fails to meet the standards contained in this section shall be approved by the City Council.

[§ 7D-701 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-702. SITE DEWATERING. Water pumped from the site shall be treated by temporary sedimentation basins, grit chambers, sand filters, upflow chambers, hydro-cyclones, swirl concentrators or other appropriate controls as appropriate. Water may not be discharged in a manner that causes erosion or flooding of the site or receiving channels or a wetland.

SECTION 7D-703. WASTE AND MATERIAL DISPOSAL. All waste and unused building materials (including garbage, debris, cleaning wastes, wastewater, toxic materials or hazardous materials) shall be properly disposed of off-site and not allowed to be carried by runoff into a receiving channel or storm sewer system.

SECTION 7D-704. TRACKING. Each site shall have graveled roads, access drives and parking areas of sufficient width and length to prevent sediment from being tracked onto public or private roadways. Any sediment reaching a public or private road shall be removed by street cleaning (not flushing) before the end of each workday.

SECTION 7D-705. DRAIN INLET PROTECTION. All storm drain inlets shall be protected during construction until control measures are in place with a straw bale, silt fence or equivalent barrier meeting accepted design criteria, standards and specifications contained in the Minnesota Pollution Control Agency publication "Protecting Water Quality in Urban Areas."

SECTION 7D-706. SITE EROSION CONTROL AND SEDIMENT CONTROL.

- A. POLICY.** It is the policy of the City of Columbus to prevent erosion of soil into surface water systems by requiring erosion and sediment control for land-disturbing activities.
- B. REGULATION.**
 - 1. A permit under this rule is required for:
 - a. Surface soil disturbance or removal of vegetative cover on one acre or more of land;
 - b. Surface soil disturbance or removal of vegetative cover on 10,000 square feet or more of land, if any part of the disturbed area is within 300 feet of and drains to a lake, stream, wetland or public drainage system; or
 - 2. A person disturbing surface soils or removing vegetative cover on more than 5,000 square feet of land, or stockpiling on-site more than fifty (50) cubic yards of earth or other erodible material, but not requiring a permit under the criteria of this section 7D-706, must submit a notice in advance of disturbance and conform the activity to standard best practices established by and available from the City.
 - 3. Section 7D-706 does not apply to normal farming practices that are part of an ongoing farming

City Code, Chapter 7D: Storm Water Management Regulations

operation.

4. Section 7D-706 does not apply to milling, reclaiming or overlay of paved surfaces that does not expose underlying soils.
- C. DESIGN CRITERIA FOR EROSION CONTROL PLANS.** The applicant must prepare and receive City approval of an Erosion and Sediment Control that meets the following criteria:
1. For projects disturbing more than ten acres, compliance with the standards of SECTION 7D-708 B(1) and (2) must be demonstrated.
 2. Natural project site topography and soil conditions must be specifically addressed to reduce erosion and sedimentation during construction and after project completion.
 3. Site erosion and sediment control practices must be consistent with the Minnesota Pollution Control Agency Minnesota Stormwater Manual, as amended, and City-specific written design guidance and be sufficient to retain sediment on-site.
 4. The project must be phased to minimize disturbed areas and removal of existing vegetation, until it is necessary for project progress.
 5. The City may require additional erosion and sediment control measures on areas with a slope to a sensitive, impaired or special water body, stream, public drainage system or wetland to assure retention of sediment on-site.
 6. The plan must include conditions adequate to protect facilities to be used for post-construction stormwater infiltration.
- D. REQUIRED EXHIBITS.** The following exhibits must accompany the permit application.
1. An existing and proposed topographic map which clearly indicates all hydrologic features and areas where grading will expose soils to erosive conditions. The Plan must also indicate the direction of all project site runoff.
 2. Tabulation of the construction implementation schedule.
 3. Name, address and phone number of party responsible for maintenance of all erosion and sediment control measures.
 4. Quantification of the total disturbed area.
 5. Clear identification of all temporary erosion and sediment control measures that will remain in place until permanent vegetation is established. Examples of temporary measures include, but are not limited to, seeding, mulching, sodding, silt fence, erosion control blanket, and stormwater inlet protection devices.
 6. Clear identification of all permanent erosion control measures such as outfall spillways and riprap shoreline protection, and their locations.
 7. Clear Identification of staging areas, as applicable.
 8. Documentation that the project applicant has applied for the NPDES Permit from the Minnesota Pollution Control Agency (MPCA), when applicable.
 9. A stormwater pollution prevention plan for projects that require an NPDES Permit.
 10. Identification and location of any floodplain and/or wetland area. A more precise delineation may be required depending on the proximity of the proposed disturbance to a wetland and/or floodplain.
 11. Other project site-specific submittal requirements as may be required by the City.
- E. CONSTRUCTION ACTIVITY REQUIREMENTS.** Site disturbance must conform to the City-approved erosion and sediment control plan, to any other conditions of the permit, and to the standards of the NPDES construction general permit, as amended, regarding construction-site erosion and sediment control.
- F. INSPECTIONS.**
1. The permittee shall be responsible for inspection, maintenance and effectiveness of all erosion and sediment control measures until final soil stabilization is achieved or the permit is assigned,

City Code, Chapter 7D: Storm Water Management Regulations

~~whichever comes first.~~

2. The City may inspect the project site and require the permittee to provide additional erosion control measures as it determines conditions warrant.

G. FINAL STABILIZATION.

1. Erosion and sediment control measures must be maintained until final vegetation and ground cover is established to a density of 70%.
2. Temporary erosion and sediment control BMPs will be removed after disturbed areas have been permanently stabilized.

SECTION 7D-707. STORM WATER MANAGEMENT POLICY AND REGULATION.

A. **POLICY.** It is the policy of the City of Columbus to manage stormwater and snowmelt runoff on a local basis; to promote natural infiltration of runoff throughout the City to preserve flood storage and enhance water quality; and to address the unique nature of flooding issues within the Flood Management Zone, through the following principles:

1. Maximize water quality and flood control on individual project sites through Better Site Design practices and stormwater management.
2. Minimize land use impacts and improve operational and maintenance efficiency by siting stormwater BMPs, when needed, regionally unless local resources would be adversely affected.
3. Treat stormwater runoff before discharge to surface waterbodies and wetlands, while considering the historic use of City water features.
4. Ensure that future peak rates of runoff are less than or equal to existing rates.
5. Preserve remaining floodplain storage volume to minimize flood potential throughout the City.

B. **REGULATION.** A permit incorporating an approved stormwater management plan is required under this rule for development, consistent with the following:

1. A permit is required for subdivision of an area exceeding one acre. This includes subdivision for single-family residential, multi-unit residential, commercial, industrial, or institutional development.
2. A permit is required for development, other than Public Linear Projects, that creates or reconstructs 10,000 square feet or more of impervious surface. This threshold is cumulative of all impervious surface created or reconstructed through multiple phases or connected actions of a single complete project, as defined by the City, on a single parcel or contiguous parcels of land under common ownership, development or use.

SECTION 7D-708. DESIGN STANDARDS.**A. MODELING REQUIREMENTS FOR STORMWATER MANAGEMENT PLANS.**

1. A hydrograph method or computer program based on NRCS Technical Release #20 (TR- 20) and subsequent guidance must be used to analyze stormwater runoff for the design or analysis of discharge and water levels within and off the project site. The runoff from pervious and impervious areas within the model shall be modeled separately.
2. In determining Curve Numbers for the post-development condition, the Hydrologic Soil Group (HSG) of areas within construction limits shall be shifted down one classification for HSG C (Curve Number 80) and HSG B (Curve Number 74) and ½ classification for HSG A (Curve Number 49) to account for the impacts of grading on soil structure unless the project specifications incorporate soil amendments in accordance with available Soil Amendment

City Code, Chapter 7D: Storm Water Management Regulations

~~Guidelines, such as the MPCA Minnesota Stormwater Manual, or Rice Creek Watershed District guidance. This requirement only applies to that part of a site that has not been disturbed or compacted prior to the proposed project.~~

3. The analysis of flood levels, storage volumes, and discharge rates for waterbodies and stormwater management basins must include the NOAA Atlas 14 values, as amended, using a nested rainfall distribution (e.g. MSE 3), for the 2 year, 10 year and 100 year return period, 24-hour rainfall events and the 10-day snowmelt event (Curve Number 100), in order to identify the critical duration flood event. The City Engineer may require analysis of additional precipitation durations to determine the critical duration flood event. Analysis of the 10-day snowmelt event is not required for stormwater management detention basins with a defined outlet elevation at or below the 100 year return period, 24-hour rainfall event elevation.

B. STORMWATER MANAGEMENT PLAN FRAMEWORK.

1. When an existing regional BMP is proposed to manage stormwater runoff, the proposed total impervious surface area must be equal to or less than the impervious surface allocated within the original approved stormwater plan for that site. If an impervious surface area was not specified within the original approved stormwater plan for the site, the applicant shall show that the BMP was designed and constructed to manage the stormwater runoff from the project site, the applicant has permission to utilize any remaining capacity in the BMP, the BMP is subject to maintenance obligations enforceable by the City, and it is being maintained to its original design.
2. Stormwater management plans, with the exception of those for single family residential developments, must specify the proposed impervious surface area draining to each BMP for each land parcel
3. A combination of Stormwater BMPs may be used to meet the requirements of section(s) C, D, and E.
4. The proposed project must not adversely affect off-site water levels or resources supported by local recharge, or increase the potential for off-site flooding, during or after construction
5. A landlocked basin may be provided an outlet only if it:
 - a. Conforms with Section 7D-709 and all other wetland requirements, as applicable.
 - b. Provides sufficient dead storage volume to retain the runoff resulting from back-to- back 100-year, 24-hour rainfall events.
 - c. Does not create adverse downstream flooding or water quality conditions as a result of the change in the rate, volume or timing of runoff or a change in drainage patterns.

C. WATER QUALITY TREATMENT.

1. Development creating or reconstructing impervious surface shall apply Better Site Design (BSD) techniques as outlined in the MPCA Minnesota Stormwater Manual as amended (www.stormwater.pca.state.mn.us).
2. Sediment shall be managed on-site to the maximum extent practicable before runoff resulting from new or reconstructed impervious surface enters a waterbody or flows off-site.
3. **WATER QUALITY TREATMENT STANDARD.**
 - a. The required water quality treatment volume standard for all projects, except Public Linear Projects, is determined as follows:

City Code, Chapter 7D: Storm Water Management Regulations

$$\begin{array}{l} \text{Required} \\ \text{Water} \\ \text{Quality} \\ \text{Treatment} \\ \text{Volume (ft}^3\text{)} \end{array} = \begin{array}{l} \text{Area of New or} \\ \text{Reconstructed} \\ \text{Impervious} \\ \text{Surface (ft}^2\text{)} \end{array} \times \begin{array}{l} 1.1 \\ \text{(in)} \end{array} \div \begin{array}{l} \text{TP} \\ \text{Removal} \\ \text{Factor} \\ \text{from Table} \\ \text{C1} \end{array} \div \begin{array}{l} 12 \\ \text{(in/ft)} \end{array}$$

- b. The required water quality treatment volume standard for Public Linear Projects is determined as follows:

$$\begin{array}{l} \text{Required Water} \\ \text{Quality Treatment} \\ \text{Volume (ft}^3\text{)} \end{array} = \begin{array}{l} \text{\{Greater of\}} \\ \\ \text{Area of New Impervious} \\ \text{Surface (ft}^2\text{)} \end{array} \times \begin{array}{l} 1.0 \\ \text{(in)} \end{array} \div \begin{array}{l} 12 \\ \text{(in/ft)} \end{array}$$

\{OR\}

$$\begin{array}{l} \text{Sum Area of New and} \\ \text{Reconstructed Impervious} \\ \text{Surface (ft}^2\text{)} \end{array} \times \begin{array}{l} 0.5 \\ \text{(in)} \end{array} \div \begin{array}{l} 12 \\ \text{(in/ft)} \end{array}$$

City Code, Chapter 7D: Storm Water Management Regulations

- c. For alternative Stormwater BMPs not found in Table C1 or to deviate from TP Removal Factors found in Table C1, the applicant may submit a TP Removal Factor, expressed as annual percentage removal efficiency, based on supporting technical data, for City approval.
- d. Stormwater runoff treated by the BMP during a rain event will not be credited towards the treatment requirement.

TABLE C1. TP REMOVAL FACTORS FOR PROPERLY DESIGNED BMPS.

BMP	BMP Design Variation	TP Removal Factor *
Infiltration **	Infiltration Feature	1.00
Water Reuse **	Irrigation	1.00
Biofiltration	Underdrain	0.65
Filtration	Sand or Rock Filter	0.50
Stormwater Wetlands	Shallow Wetland	0.40
	Pond/Wetland	0.55
Stormwater Ponds ***	Wet Pond	0.50
	Multiple Pond	0.60

Source: Adapted from Table 7.4 from the Minnesota Stormwater Manual, MPCA.

* Refer to MPCA Stormwater Manual for additional information on BMP performance.

Removal factors shown are average annual TP percentage removal efficiencies intended solely for use in comparing the performance equivalence of various BMPs.

** These BMPs reduce runoff volume.

*** Stormwater ponds must also provide 2.5" of dead storage as required by Section 9(d)(2).

4. BMP LOCATIONAL SITING.

- a. BMPs shall be located either on-site to treat runoff at the point of generation, or regionally within the primary drainage area.
- b. If infiltration is feasible on site (see Table C2), on-site or regional BMPs must provide volume control to meet the standard of SECTION 7D-708 C. If infiltration is not feasible, any BMP may be used.
- c. Off-site and/or regional BMPs must be sited in the following priority order:
 - i. In a downstream location that intercepts the runoff volume leaving the project site prior to the Resource of Concern.
 - ii. Anywhere within the same primary drainage area that results in no greater mass of Total Phosphorus reaching the resource of concern than on-site BMPs.

City Code, Chapter 7D: Storm Water Management Regulations

TABLE C2. SPECIFIC CONDITIONS THAT MAY RESTRICT INFILTRATION.

Type	Specific Project Site Conditions	Required Submittals
Potential Contamination	Potential Stormwater Hotspots (PSH)	PSH Locations and Flow Paths
	Contaminated Soils	Documentation of Contamination Soil Borings
Physical Limitations	Low Permeability Soils (HSG C & D)	Soil Borings
	Bedrock within three vertical feet of bottom of infiltration area	Soil Borings
	Seasonal High Water Table within three vertical feet of bottom of infiltration area	Soil Borings High Water Table
	Karst Areas	Geological Mapping or Report
Land Use Limitations	Utility Locations	Site Map
	Nearby Wells (Private and/or Municipal) *	Well Locations

* Refer to Minnesota Stormwater Manual or the Minnesota Department of Health for setback requirements.

5. Stormwater runoff from all new and reconstructed impervious surface must be captured and treated for total phosphorus if feasible. Notwithstanding, runoff from undisturbed impervious surface not otherwise being treated prior to the Resource of Concern may be treated in lieu of treating new or reconstructed impervious surface, provided the runoff from that surface drains to the same surface water resource as the new/reconstructed surface not being treated. Except for Public Linear projects, the area not treated for phosphorus may not exceed 15 percent of all the new or reconstructed impervious surface. For all untreated surface, TSS must be removed to the maximum extent practicable. Total water quality treatment volume for the project must be provided in aggregate pursuant to SECTION 7D-708 C SECTION 7D-708 D except that for a Public Linear Project, water quality treatment volume for reconstructed impervious surface, if required by SECTION 7D-707 B(2) must be provided only to the extent feasible.
6. For single-family residential development, the runoff from impervious surface other than parking or driving surface that, in the City's judgment, cannot reasonably be routed to a stormwater BMP is considered effectively treated for water quality if:
 - a. The length of the flow path across the impervious surface is less than the length of the flow path across the pervious surface to which it discharges; and
 - b. The pervious surface is vegetated and has an average slope of five percent or less.

City Code, Chapter 7D: Storm Water Management Regulations

D. PEAK STORMWATER RUNOFF CONTROL.

1. Peak stormwater runoff rates for the proposed project at the project site boundary, in aggregate, must not exceed existing peak runoff rates for the 2-year, 10-year and 100-year, 24-hour rainfall events, or a different critical event duration at the discretion of the City Engineer. Notwithstanding, peak runoff may be controlled to this standard in a regional facility consistent with paragraph 7(b). Aggregate compliance for all site boundary discharge will be determined with respect to runoff not managed in a regional facility.
2. Any increase in a critical duration flood event rate at a specific point of discharge from the project site must be limited and cause no adverse downstream impact. Table C3 shows the maximum curve numbers that may be utilized for existing condition modeling of those project site areas not covered by impervious surface.
3. Within the Flood Management Zone only (refer to FEMA Special Flood Hazard Areas and/or other local flood information), peak runoff rates for the 2, 10 and 100 year 24-hour rainfall events shall be reduced to $\leq 80\%$ of the existing condition. This requirement does not apply if the project is a Public Linear Project.

TABLE C3. CURVE NUMBERS FOR EXISTING CONDITION PERVIOUS AREAS.

Hydrologic Soil Group	Runoff Curve Number *
A	39
B	61
C	74
D	80

* Curve numbers from NRCS Technical Release #55 (TR-55).

TABLE C4. HYDROPERIOD STANDARDS.

Wetland Susceptibility Class	Permitted Storm Bounce for 2-Year and 10-Year Event *	Inundation Period for 2-Year Event *	Inundation Period for 10-Year Event *
Highly susceptible	Existing	Existing	Existing
Moderately susceptible	Existing plus 0.5 ft	Existing plus 1 day	Existing plus 7 days
Slightly susceptible	Existing plus 1.0 ft	Existing plus 2 days	Existing plus 14 days
Least susceptible	No limit	Existing plus 7 days	Existing plus 21 days

Source: Adapted from: Stormwater and Wetlands Planning and Evaluation Guidelines for Addressing Potential Impacts of Urban Stormwater and Snowmelt Runoff on Wetlands.

* Duration of 24-hours for the return periods utilizing NOAA Atlas 14.

E. BOUNCE AND INUNDATION PERIOD.

1. The project must meet the hydroperiod standards found in Table C4 with respect to all down-gradient wetlands.
2. Wetland Susceptibility Class is determined based on wetland type, as follows:

City Code, Chapter 7D: Storm Water Management Regulations

- a. Highly susceptible wetland types include: sedge meadows, bogs, coniferous bogs, open bogs, calcareous fens, low prairies, coniferous swamps, lowland hardwood forests, and seasonally flooded waterbasins.
 - b. Moderately susceptible wetland types include: shrub-carrs, alder thickets, fresh (wet) meadows, and shallow & deep marshes.
 - c. Slightly susceptible wetland types include: floodplain forests and fresh wet meadows or shallow marshes dominated by cattail giant reed, reed canary grass or purple loosestrife.
 - d. Least susceptible wetland includes severely degraded wetlands. Examples of this condition include cultivated hydric soils, dredge/fill disposal sites and some gravel pits.
- F. DESIGN CRITERIA.
1. Infiltration BMPs must be designed to provide:
 - a. Adequate pretreatment measures to remove sediment before runoff enters the primary infiltration area;
 - b. Drawdown within 48-hours from the end of a storm event. Soil infiltration rates shall be based on the appropriate HSG classification and associated infiltration rates (see Table C5). The least permeable layer of the soil boring column must be utilized in BMP calculations (see Design Criteria (4)). Alternate infiltration rates based on a recommendation and certified measurement testing from a licensed geotechnical engineer or licensed soil scientist will be considered. Infiltration area will be limited to horizontal areas subject to prolonged wetting;
 - c. A minimum of three feet of separation from the Seasonal High Water Table; and
 - d. Consideration of the Minnesota Department of Health guidance document Evaluating Proposed Stormwater Infiltration Projects in Vulnerable Wellhead Protection Areas. Documentation shall be submitted to support implementation of this guidance document and will be accepted at the discretion of the City Engineer.
 2. Water Reuse BMPs must conform to the following:
 - a. Design for no increase in stormwater runoff from the irrigated area or projectsite.
 - b. Required design submittal packages for water reuse BMPs must include:
 - i. An analysis using Metropolitan Council Stormwater Reuse Guide ‘Water Balance Tool Irrigation Constant Demand’ spreadsheet for irrigation practices or ‘Water Balance Tool Non-Irrigation Constant Demand’ spreadsheet for non-irrigation practices. The tools are available download at: [http://www.metrocouncil.org/wastewater-water/planning/water-supply-planning/studies-projects-workgroups-\(1\)/completed-studies-projects/stormwater-reuse-guide.aspx](http://www.metrocouncil.org/wastewater-water/planning/water-supply-planning/studies-projects-workgroups-(1)/completed-studies-projects/stormwater-reuse-guide.aspx);
 - ii. Documentation demonstrating adequacy of soils, storage system, and delivery system; and
 - iii. Operations plan.
 - c. Approved capacity of an irrigation practice will be based on:
 - i. An irrigation rate of 0.5 inches per week over the irrigated pervious area(s) or the rate identified through the completion of the Metropolitan Council Stormwater Reuse Guide ‘Water Balance Tool Irrigation Constant Demand’

City Code, Chapter 7D: Storm Water Management Regulations

Spreadsheet (whichever is less); or as approved by the City; and
 ii.No greater than a 26 week (April 15th to October 15th) growing season.

An additional water quality treatment capacity beyond 0.5 inches per week may be recognized under a stormwater management plan or a phased development permit based on an average of three consecutive years of monitoring records of volume irrigated and pursuant to a monitoring plan approved by the City.

- d. Approved capacity of a non-irrigation practice shall be based on the rate identified through the completion of the Metropolitan Council Stormwater Reuse Guide 'Water Balance Tool Non-Irrigation Constant Demand' spreadsheet, or as approved by the City.
3. Biofiltration/filtration BMPs must be designed to provide:
 - a. Adequate pretreatment measures to remove sediment before runoff enters the primary biofiltration area;
 - b. Drawdown within 48-hours from the end of a stormevent;
 - c. A minimum of 12-inches of organic material or sand above the rock trench or drain tile system; and
 - d. Drain tile system must be designed above the Seasonal High Water Table.

TABLE C5. SOIL TYPE AND INFILTRATION RATES.

Hydrologic Soil Group	Soil Textures	Corresponding Unified Soil Classification		Infiltration Rate (in/hr)
A	Gravel Sandy Gravel Silty Gravels	GW	Well-graded gravels, sandy gravels	1.63
		GP	Gap-graded or uniform gravels, sandy gravels	
		GM	Silty gravels, silty sandy gravels	
		SW	Well-graded gravelly sands	
	Sand Loamy Sand Sandy Loam	SP	Gap-graded or uniform sands, gravelly sands	0.8
B	Loam Silt Loam	SM	Silty sands, silty gravelly sands	0.45
		MH	Micaceous silts, diatomaceous silts, volcanic ash	0.3
C	Sandy Clay Loam	ML	Silts, very fine sands, silty or clayey fine sands	0.2
D	Clay Loam Silty Clay Loam Sandy Clay Silty Clay Clay	GC	Clayey gravels, clayey sandy gravels	0.06
		SC	Clayey sands, clayey gravelly sands	
		CL	Low plasticity clays, sandy or silty clays	
		OL	Organic silts and clays of low plasticity	
		CH	Highly plastic clays and sandy clays	

City Code, Chapter 7D: Storm Water Management Regulations

		OH	Organic silts and clays of high plasticity	
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Source: Adapted from the “Design infiltration rates” table from the Minnesota Stormwater Manual, MPCA, (January 2014).

4. Stormwater ponds must be designed to provide:
 - a. Water quality features consistent with NURP criteria and accepted design standards for average and maximum depth;
 - b. A permanent wet pool with dead storage at least equal to the runoff volume from a 2.5-inch rainfall over the area tributary to the pond;
 - c. An outlet structure capable of preventing migration of floating debris and oils for at least the one-year storm;
 - d. An identified emergency overflow spillway sufficiently stabilized to convey flows greater than the 100-year critical storm event; and
 - e. An outlet structure to control the 2-year, 10-year & 100-year frequency events.
5. Soil borings (utilizing ASTM D5921 and D2488, as amended) shall be considered for design purposes, and provided to the City, for each proposed BMP. The soil borings must be taken to a depth of at least 5 feet below the bottom of the proposed feature.
6. An outfall structure discharging directly to a wetland, public water or public water wetland must incorporate a stilling-basin, surge-basin, energy dissipater, placement of ungrouted natural rock riprap or other feature to minimize disturbance and erosion of natural shoreline and bed resulting from stormwater discharges. Where feasible, outfall structures are to be located outside of the natural feature.

TABLE C6. LOW FLOOR AND LOW ENTRY FREEBOARD REQUIREMENTS.

Freeboard	100-Year Flood Elevations		Detention Basins, Wetlands & Stormwater Ponds		Infiltration and Biofiltration Basins			Rain Gardens*
	100-yr	EOF	100-yr	EOF	Bottom	100-yr	EOF	EOF
Low Floor	2.0 ft	1.0 ft	0.0 ft	NA	0.0 ft	NA	NA	NA
Low Entry	NA	NA	2.0 ft	1.0 ft	NA	2.0 ft	1.0 ft	0.5 ft

7. All new residential, commercial, industrial and other habitable or non-habitable structures, and all stormwater BMPs, must be constructed so that the lowest floor and lowest entry elevations comply with Table C6.

The low entry freeboard criterion of Table C6 may be deemed met when the structure does not have the required vertical separation, but is protected from surface flooding to the required elevation by a berm or other natural or constructed topographic feature capable of providing flood protection.

Within a landlocked basin, minimum low floor elevations must be at least one foot above the surveyed basin run out elevation. Where a structure is proposed below the run out elevation of a land-locked basin, the low floor elevation will be a minimum of two feet above the highest water level of either the 10-day snowmelt event or back-to-back 100-year, 24-hour rainfalls. Aerial photos, vegetation, soils, and topography may be used to derive a "normal" water elevation for the purpose of computing the basin’s 100-year elevation.

City Code, Chapter 7D: Storm Water Management Regulations

- ~~8.~~ All stormwater management structures and facilities must be designed for maintenance access and be properly operated and maintained in perpetuity to assure that they continue to function as designed. The maintenance responsibility must be memorialized in a document executed by the property owner in a form acceptable to the City and filed for record on the deed. Alternatively, a public permittee may meet its perpetual maintenance obligation by executing a programmatic or project-specific maintenance agreement with the City. Regional ponds owned by public entities that are only used to meet the runoff rate requirements of the City rule do not need a maintenance agreement with the City.
9. The permittee must use construction best practices so that the facility as constructed will conform to design specifications and the soil and surrounding conditions are not altered in a way adverse to facility performance.
10. Before work under the permit is deemed complete, the permittee must submit as-built plans demonstrating that at the time of final stabilization, stormwater facilities conform to design specifications. If at any time the City finds that the stormwater facility is not performing as designed, on City request the permittee must undertake reasonable investigation to determine the cause of inadequate performance.

G. EASEMENTS.

1. Before permit issuance, the permittee must, submit a copy of any plat or easement required by the local land use authority establishing drainage or flowage over stormwater management facilities, stormwater conveyances, ponds, wetlands, on-site floodplain up to the 100-year flood elevation, or any other hydrologic feature.
2. Before permit issuance, the permittee must convey to the City an easement to the public drainage system specifying a City right of maintenance access over the right of way of the public drainage system as identified within the public drainage system record. If the right of way of the public drainage system is not described within the record, then the easement shall be conveyed with the following widths:
 - a. For tiled/piped systems, 40 feet wide perpendicular to the direction of flow, centered on the tile line or pipe;
 - b. For open channel systems, a width that includes the channel and the area on each side of the channel within 20 feet of top of bank. For adequate and safe access, where top of bank is irregular or obstruction exists, the City may specify added width.
3. Public Linear Projects are exempt from the public drainage system easement requirement of Section F(2).
4. Refer to local, state, and federal wetland rules for additional easement requirements near wetlands.

H. REQUIRED EXHIBITS. The following exhibits must accompany the permit application. The vertical datum must clearly be labeled on each plan set.

City Code, Chapter 7D: Storm Water Management Regulations

1. An erosion & sediment control plan and, for projects that require an NPDES permit, a Storm Water Pollution Prevention Plan.
2. Property lines and delineation of lands under ownership of the applicant.
3. Delineation of the subwatershed contributing runoff from off-site, proposed and existing subwatersheds onsite, emergency overflows, and drainageways.
4. Geotechnical analysis including soil borings at all proposed stormwater management facility locations utilizing ASTM D5921 and D2488, as amended.
5. Proposed and existing stormwater facilities' location, alignment and elevation
6. Delineation of existing on-site wetland, marshes and floodplain area.
7. Identification of existing and proposed normal, ordinary high and 100-year water elevations on-site.
8. Identification of existing and proposed contour elevations within the project site
9. Construction plans and specifications of all proposed stormwater management facilities, including design details for outlet control structures.
10. Stormwater runoff volume and rate analyses for the 2- 10- and 100-year critical events, existing and proposed conditions utilizing NOAA Atlas 14.
11. All hydrologic, water quality and hydraulic computations completed to design the proposed stormwater management facilities.
12. Narrative including a project description, discussion of BMP selection, and revegetation plan for the project site
13. Other project site-specific submittal requirements as may be required by the City.

I. EXCEPTIONS.

1. A permit is not required for single-family residential construction on an individual lot of record, if the proposed impervious surface of the lot is less than 10,000 square feet, excluding the driveway. If the lot is within a development previously approved by the City, the construction must conform to the previous approval
2. Rule C requirements do not apply to sidewalks and trails 10 feet wide or less that are bordered down-gradient by vegetated open space or vegetated filter strip with a minimum width of 5 feet.
3. Rule C requirements do not apply to Bridge Spans and Mill, Reclamation & Overlay projects.
4. Rule C.6 and C.7 requirements do not apply to single family residential subdivisions creating seven or fewer lots that:
 - a. Establish no new public roadway; and
 - b. Include no private roadway/driveway serving three or more lots.
5. Criteria of Section 7D-707 C may be waived if the project site discharges directly to a water body with large storage capacity (such as a public water), the volume discharged from the project site does not contribute to a downstream flood peak, and there are no downstream locations susceptible to flooding.
6. Section 7D-707 B and C are waived for a portion of a project that paves a gravel roadway if the right-of-way ditch is maintained and does not discharge a concentrated flow directly to a wetland or another sensitive waterbody.

J. EXTENDED PERMIT TERM AND REGIONAL FACILITIES FOR NON-RESIDENTIAL PHASED DEVELOPMENT.

1. The following definitions apply to this section:
 - a. "Area Development Permit" (ADP) means a City stormwater management permit for non-residential development that includes construction of a stormwater management facility explicitly intended to serve compliance requirements for a parcel other than that on which the facility is located.

City Code, Chapter 7D: Storm Water Management Regulations

- b. ~~“Phased Development Permit” (PDP) means a City stormwater management permit for non-residential development that includes construction of a stormwater management facility explicitly intended to serve compliance requirements not just for development under the permit, but also for subsequent development on that parcel or a contiguous parcel under common ownership.~~
2. If an off-site stormwater management facility approved under a prior ADP cannot be used for compliance due to a rule change occurring since the date of ADP approval, the City nevertheless by permit will approve its use, subject to the following:
- a. The applicant must demonstrate that the facility was built in compliance with the ADP, that the ADP identified the development site as one that may use the facility, and that the requirements of subsection B(1) above, are met.
 - b. If the current rule requires a level of peak flow or volume control, or of water quality treatment, beyond that provided by the off-site facility, the applicant must provide for the additional treatment. This does not disallow use of an existing facility on the ground that it does not meet a sequencing requirement with respect to the BMP location or type.
- The protection against rule change provided by this subsection 13(b) does not apply if the City makes written findings, on the basis of new knowledge or information, that use of the facility would have a material adverse impact on a water quality, flood management or other specific public interest, or if the approval date of the development permit is more than 10 years after the date of ADP approval.
3. The City may issue a PDP with a permit term of up to 10 years.
- a. During the permit term, development using the stormwater management facilities approved under the PDP will not be subject to a rule change occurring after the date of PDP approval, provided the PDP states the design criteria to which subsequent development will conform and the proposed development meets those criteria.
4. This section does not apply to an ADP or a PDP approved before December 1, 2004.

[§ 7D-708 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-709. WETLAND ALTERATIONS.

1. **NEEDS TO BE FORMATTED TO CITY STANDARD POLICY.** It is the policy of the City of Columbus to:
- (a) Maintain no net loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands.
 - (b) Increase the quantity, quality, and biological diversity of Minnesota's wetlands by restoring or enhancing diminished or drained wetlands.
 - (c) Avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality, and

City Code, Chapter 7D: Storm Water Management Regulations

biological diversity of wetlands.

- (d) Replace wetland values where avoidance of activity is not feasible or prudent.
- (e) Accomplish goals of the adopted Comprehensive Wetland Protection and Management Plans (CWPMs) provided by watershed districts and/or county.

2. REGULATION. No person may fill, drain, excavate or otherwise alter the hydrology of a wetland without first obtaining a permit from the City.

- (a) The provisions of the Minnesota Wetland Conservation Act (WCA), Minnesota Statutes §§103G.221 through 103G.2372, and its implementing rules, Minnesota Rules 8420, apply under this Rule and govern District implementation of WCA as well as District regulation of non-WCA wetland impacts, except where the Rule provides otherwise.
- (b) This rule does not regulate alteration of incidental wetlands as defined in Minnesota Rules chapter 8420, as amended. An applicant must demonstrate that the subject wetlands are incidental.
- (c) An activity for which a No-Loss decision has been issued under Minnesota Rules chapter 8420 is subject to the applicable requirements of chapter 8420 but not otherwise subject to this Rule.
- (d) Clearing of vegetation, plowing or pasturing in a wetland as part of an existing and ongoing farming operation is not subject to this rule unless the activity results in draining or filling the wetland.

3. LOCAL GOVERNMENT UNIT. The City intends to serve as the "Local Government Unit" (LGU) for administration of the Minnesota Wetland Conservation Act (WCA) within the Sunrise River Watershed Management Organization. WCA shall be administered by Rice Creek Watershed District and Coon Creek Watershed District within their jurisdictional boundary. Pursuant to its regulatory authority under both WCA and watershed law, when the City is serving as the LGU it will require wetland alteration permits for wetland-altering activities both as required by WCA and otherwise as required by this Rule.

4. CRITERIA.

- (a) When the City is serving as the LGU, it will regulate wetland alterations that are not subject to WCA rules and do not qualify for an exemption at Minnesota Rules 8420.0420 or do not meet the "no-loss" criteria of Minnesota Rules 8420.0415 according to the rules and procedures of WCA, except as specifically provided in this Rule. Alteration under

City Code, Chapter 7D: Storm Water Management Regulations

this paragraph requires replacement at a minimum ratio of 1:1 to ensure no loss of wetland quantity, quality or biological diversity. Replacement activities will be credited consistent with the actions eligible for credit in Minnesota Rules 8420.0526.

- (b) A wetland alteration not subject to WCA that does not change the function of a wetland and results in no net loss of wetland quantity, quality or biological diversity is exempt from the replacement requirement in Section 4(a) of this Rule.
- (c) The wetland replacement exemptions in Minnesota Rules 8420.0420 are applicable under this Rule, except as modified within CWPMP areas under Section 6.
- (d) Alterations in wetlands for the purposes of wildlife enhancement must be certified by the local Soil and Water Conservation District as compliant with the criteria described in Wildlife Habitat Improvements in Wetlands: Guidance for Soil and Water Conservation Districts and Local Government Units.

5. ADDITIONAL DISTRICT REQUIREMENTS. In addition to the wetland replacement plan components and procedures in WCA, the following more specific requirements will apply to the City's review of WCA and, except as indicated, non-WCA wetland alterations:

- (a) Applicants must adequately explain and justify each individual contiguous wetland alteration area in terms of impact avoidance and minimization alternatives considered.
- (b) Where the wetland alteration is proposed in the context of land subdivision, on-site replacement wetland and buffer areas, as well as buffers established under section 6(e), must:
 - (1) Be located within a platted outlet.
 - (2) Be protected from future encroachment by a barrier (i.e. stormwater pond, infiltration basin, existing wetland, tree line, fence, trail or other durable physical feature).
 - (3) Have boundaries posted with signage approved by the City identifying the wetland/buffer protected status. On installation, the applicant must submit a GIS shapefile, or CADD file documenting sign locations.
- (c) The upland edge of new wetland creation must have an irregular and uneven slope. The slope must be no steeper than 8:1 over the initial 25 feet upslope from the projected wetland elevation contour along at least 50 percent of the upland/wetland boundary and no steeper than 5:1 along the remaining 50 percent of the boundary.
- (d) The City will not allow excess replacement credits to be used for replacement on a different project unless the credits were designated for wetland banking purposes in the original application in accordance with WCA rules and have been deposited into the WCA wetland banking system.
- ~~(e) Within the boundary of a District developed and BWSR approved CWPMP (see Figure F1), Rule F and WCA are further modified to include Section 6. Public Linear Projects located in a CWPMP jurisdictional area and not part of an industrial, commercial, institutional or residential development are not subject to Section 6 of this Rule.~~

City Code, Chapter 7D: Storm Water Management Regulations

- 6. ~~COMPREHENSIVE WETLAND PROTECTION AND MANAGEMENT PLANS.~~** All City Comprehensive Wetland Protection and Management Plans (CWPMPs) are incorporated into this Rule. The specific terms of Rule F will govern, but if a term of Rule F is susceptible to more than one interpretation, the City will apply the interpretation that best carries out the intent and purposes of the respective CWPMP.

(a) PRE-APPLICATION REVIEW.

- (1)** In cases where wetland fill, excavation or draining, wholly or partly, is contemplated, the applicant is encouraged to submit a preliminary concept plan for review with District staff and the Technical Evaluation Panel (TEP) before submitting a formal application. The following will be examined during pre- application review:
 - (i)** Sequencing (in accordance with WCA and Federal Clean Water Act requirements, reducing the size, scope or density of each individual proposed action, and changing the type of project action to avoid and minimize wetland impacts).
 - (ii)** Wetland assessment.
 - (iii)** Applying Better Site Design principles as defined in Rule A.
 - (iv)** Integrating buffers and other barriers to protect wetland resources from future impacts.
 - (v)** Exploring development code flexibility, including conditional use permits, planned unit development, variances and coderevisions;
 - (vi)** Reviewing wetland stormwater susceptibility (see Rule C.8) and coordinating Wetland Management Corridor (WMC) establishment with existing adjacent WMCs.
- (2)** At the pre-application meeting, the applicant shall provide documentation sufficient to assess project alternatives at a concept level and such other information as the City specifically requests.
- (3)** On receipt of a complete application, the City will review and act on the application in accordance with its procedural rules and WCA procedures.
- (4)** The TEP shall be consulted on decisions related to replacement plans, exemptions, no-loss, wetland boundaries and determination of the WMC.

~~(b) WETLAND MANAGEMENT CORRIDORS.~~

- ~~(1)~~** ~~At the time of permitting, the preliminary Wetland Management Corridor (WMC) boundary (see Figure F1) will be adjusted in accordance with subsections F(6)(b)(2) and (3), below. Notwithstanding, within the Columbus CWPMP, commercial/Industrial zoned areas within Zone 1 will remain outside of the WMC (see Figure F2).~~
- ~~(2)~~** ~~The applicant must delineate the site level WMC when wetland impacts are proposed:~~
 - ~~(i)~~** ~~Within the Preliminary WMC; or~~
 - ~~(ii)~~** ~~Within 150 feet of the Preliminary WMC and greater than the applicable~~
 - ~~(iii)~~** ~~*de minimis* exemption amount, per Minnesota Rules 8420.0420;~~

City Code, Chapter 7D: Storm Water Management Regulations

~~If the proposed project does not meet criterion (b)(2)(i) or (b)(2)(ii), above, an applicant may accept the Preliminary WMC boundary on the project site, as made more precise on a parcel basis by the use of landscape scale delineation methods applied or approved by the District and need not comply with Section 6(b)(3) and 6(b)(4).~~

- ~~(3) The applicant shall complete a wetland functional analysis using MnRAM 3.4 (or most recent version) when defining the site level WMC boundary.~~
- ~~(i) The WMC boundary will be expanded to encompass any delineated wetland lying in part within the preliminary WMC and any wetland physically contiguous with (not separated by upland from) the landscape scale WMC.~~
- ~~(ii) The District, in its judgment, may retract the WMC boundary on the basis of site-level information demonstrating that the retraction is consistent with the associated CWPMP and does not measurably diminish the existing or potential water resource functions of the WMC. In making such a decision, the District may consider relevant criteria including wetland delineation, buffer and floodplain location, WMC connectivity, protection of surface waters and groundwater recharge, and whether loss would be reduced by inclusion of compensating area supporting WMC function.~~
- ~~(iii) If the site level functional analysis shows the presence of Non-degraded or High Quality wetland within 50 feet of the site level WMC, the WMC will be expanded to the lateral extent of the Non-degraded or High Quality wetland boundary plus the applicable buffer as defined in section 6(e).~~
- ~~(iv) If the WMC lies within or contiguous to the parcel boundaries of the project, the lateral extent of the final WMC may be increased by the applicant to include all wetland or other action eligible for credit contiguous with the site level WMC. The extended WMC boundary must connect property to the WMC boundary on adjacent properties and reflect local surface hydrology.~~
- ~~(4) A map of the final WMC boundary must be prepared and submitted to the District for approval. The map will reflect any change to the boundary as a result of the permitted activity. A GIS shapefile or CADD file of the final WMC boundary shall be submitted to the District.~~
- ~~(5) A variance from a requirement of Section 6(b) otherwise meeting the criteria of District Rule L may be granted if the TEP concurs that the wetland protection afforded will not be less than that resulting from application of standard WCA criteria.~~
- (c) WETLAND REPLACEMENT.**
- (1)** The wetland replacement exemptions in Minnesota Rules 8420.0420 are not applicable within CWPMP areas, except as follows:
- (i)** The agricultural, wetland restoration, utilities, *de minimis* and wildlife habitat exemptions found at Minnesota Rules 8420.0420, subparts 2, 5, 6, 8 and 9, respectively, are applicable, subject to the scope of the exemption standards found at Minnesota Rules 8420.0420, subpart 1.

City Code, Chapter 7D: Storm Water Management Regulations

TABLE F1. WETLAND REPLACEMENT RATIOS FOR CWPMP AREAS.

Wetland Degradation Type	Anoka County		Washington County	
	Outside-WMC	Inside-WMC	Outside-WMC	Inside-WMC
Moderately or Severely Degraded Wetland	1:1	2:1	2:1	3:1
Marginally or Non-Degraded Wetland	1.5:1	2.5:1	2.5:1	3.5:1
High Quality Wetland and/or hardwood, coniferous swamp, floodplain forest or bog-wetland communities of any quality	2:1	3:1	3.5:1	4:1

TABLE REFERENCED THROUGHOUT, NEED TO DECIDE HOW TO HANDLE

TABLE F2. ACTIONS ELIGIBLE FOR CREDIT FOR CWPMP AREAS.

Actions Eligible for Credit	Inside of the Final WMC	Outside of the Final WMC
Wetland Restoration		
Hydrologic and vegetative restoration of moderately and severely degraded wetland	up to 75% Determined by LGU and TEP	up to 50% Determined by LGU and TEP
Hydrologic and vegetative restoration of effectively drained, former wetland	100%	75%
Wetland Creation		
Upland to wetland conversion	50%	50%
Wetland Protection & Preservation		
Protection via conservation easement of wetland previously restored consistent with MN Rule 8420.0526 subpart 6	up to 75% Determined by LGU and TEP	up to 75% Determined by LGU and TEP
Columbus CWPMP Only: Preservation of wetland or wetland/upland mosaic (requires a 3rd party easement holder and other matching action eligible for credit)	25% Determined by LGU and TEP	12.5% Determined by LGU and TEP
Restoration or protection of wetland of exceptional natural resource value consistent with MN Rule 8420.0526, subpart 8	Up to 100% Determined by LGU and TEP	Up to 100% Determined by LGU and TEP
Buffers		
Non-native, non-invasive dominated buffer around other action eligible for credit, consistent with Section 6(e)	10%	10%
Native, non-invasive dominated buffer around other action eligible for credit, consistent with Section 6(e)	25%	25%
Upland habitat area contiguous with final WMC wetland (2 acre minimum), as limited by Rule F.6(e)(5)	100%	NA
Vegetative Restoration		
Positive shift in MnRAM assessment score for "Vegetative Integrity" from "Low" to "Medium" or "High"	Up to 50% Determined by LGU and TEP	NA

City Code, Chapter 7D: Storm Water Management Regulations

- (6)** The location and type of wetland replacement will conform as closely as possible to the following standards:
- (i)** No wetland plant community of high or exceptional wildlife habitat function and high or exceptional vegetative integrity, as identified in the required wetland assessment, may be disturbed.
 - (ii)** No replacement credit will be given for excavation in an upland natural community with Natural Heritage Program rank B or higher, or with identified Endangered, Threatened or Special Concern species.
- (7)** In the Columbus CWPMP only, preservation credit can be used for up to 50% of the wetland replacement required. The remaining 50% must be supplied by a non-preservation replacement action as shown within Table F2. Additionally:
- (i)** All other eligible actions for credit within this rule must be considered before preservation is approved as an action eligible for credit.
 - (ii)** The Technical Evaluation Panel must find that there is a high probability that, without preservation, the wetland area to be preserved would be degraded or impacted and that the wetland meets the criteria of Minnesota Rules 8420.0526 subpart 9.A through 9.D.
 - (iii)** Non-degraded, High Quality, and Moderately Degraded wetland is eligible for Preservation Credit within Zone 1 (see Figure F2).
 - (iv)** Non-degraded and High Quality wetland is eligible for Preservation Credit within Zone 2 (see Figure F2).
 - (v)** Wetland ranked “Low” for “vegetative integrity” is not eligible for replacement credit through Preservation.
 - (vi)** Banked preservation credit may be used only within the Columbus CWPMP area (see Figure F1).
- (8)** Replacement credit for Wetland Protection and Preservation (see Table F2) requires that a perpetual Conservation Easement be conveyed to and accepted by the City. The easement must encompass the entire replacement area, and must provide for preservation of the wetland’s functions by the fee owner and applicant. The applicant must provide a title insurance policy acceptable to the City, naming the City as the insured. The fee owner and the applicant also must grant an access easement in favor of the City, the local government unit and any other state, local or federal regulatory authority that has authorized use of credits from the mitigation site for wetland replacement. The fee owner must record or register these easements on the title for the affected property.

City Code, Chapter 7D: Storm Water Management Regulations

- (9) Replacement credit for Vegetative Restoration (see Table F2) may be granted only for wetland communities scoring “Low” for Vegetative Integrity. The TEP must find that there is a reasonable probability for restoration success.
- (10) Unless a different standard is stated in the approved replacement or banking plan, the performance standard for upland and wetland restored or created to generate credit is establishment, by the end of the WCA monitoring period, of a medium or high quality plant community ranking with 80% vegetative coverage consisting of a native, non-invasive species composition.
- (11) Notwithstanding any provision in this rule to the contrary, for wetland impacts resulting from public drainage system repairs undertaken by the Rice Creek Watershed District that are exempt from Clean Water Act Section 404 permit requirements but are not exempt from replacement under Section 6(c)(1) of this Rule, replacement may occur subject to the following priority of replacement site sequencing:
- (i) Within bank service areas 6 or 7 or with the concurrence of governing board of the local county or watershed district, within any county or watershed district whose county water plan, watershed management plan, or other water resource implementation plan contains wetland restoration as a means of implementation.
 - (ii) Throughout the state in areas determined to possess less than 80% of pre-settlement wetland acres.
- (12) A variance from a requirement of Section 6(c) otherwise meeting the criteria of District Rule L may be granted if the TEP concurs that the wetland protection afforded will not be less than that resulting from application of standard WCA criteria.
- (d) **WETLAND BANKING.**
- (1) Replacement requirements under Section 6(c) of this Rule may be satisfied in whole or part by replacement credits generated off-site within any CWPMP area, but not by credits generated outside of a CWPMP area except as provided in Section 6(d)(5).
 - (2) The deposit of replacement credits created within a CWPMP area for banking purposes and credit transactions for replacement will occur in accordance with Minnesota Rules 8420.0700 through 8420.0745. Credits generated within a CWPMP area may be used for replacement within or outside of a CWPMP area.
 - (i) The District will calculate the amount of credit in accordance with the standard terms of WCA. This measure of credit will appear in the BWSR wetland banking account.

City Code, Chapter 7D: Storm Water Management Regulations

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- (3)** Buffer adjacent to wetland restored, created or preserved for replacement credit, not within the final WMC, must meet the minimum width standards as described in MN Rule 8420.0522, subpart 6.
- (4)** Buffer adjacent to High Quality Wetland, or to replacement wetland adjacent to High Quality Wetland, must be at least 50 feet wide at all points. For private projects dedicating public right of way, the minimum width may be reduced based on compelling need and a City finding that the wetland protection afforded is reasonable given the circumstances. In making this finding, the City will give substantial weight to the TEP recommendation.
- (5)** The area of buffer for which replacement credit is granted must not exceed the area of the replacement wetland except and specific to when the buffer is to meet the 50- foot requirement of Sections 6(e)(2) and 6(e)(4) and is further limited to the buffer area required to encapsulate another action eligible for credit.
- (6)** Buffer receiving replacement credit as upland habitat area contiguous with the final WMC must be at least two acres in size.
- (7)** No above- or below-ground structure or impervious surface may be placed within a buffer area permanently or temporarily, except as follows:
- (i)** A structure may extend or be suspended above the buffer if the impact of any supports within the buffer or habitat area is negligible, the design allows sufficient light to maintain the species shaded by the structure, and the structure does not otherwise interfere with the function afforded by the buffer.
 - (ii)** A public utility, or a structure associated with a public utility, may be located within a buffer on a demonstration that there is no reasonable alternative that avoids or reduces the proposed buffer intrusion. The utility or structure shall minimize the area of permanent vegetative disturbance.
 - (iii)** Buffer may enclose a linear surface for non-motorized travel no more than 10 feet in width. The linear surface must be at least 25 feet from the wetland edge. The area of the linear surface will not be eligible for replacement credit. For projects proposing non- motorized travel no more than 10 feet in width, the linear surface may be reduced to less than 25 feet from the wetland edge based on compelling need and a TEP recommendation to the City in support that the wetland protection afforded is reasonable given the circumstances.

City Code, Chapter 7D: Storm Water Management Regulations

- (iv) A stormwater features that is vegetated consistent with Section 6(e)(1), including NURP ponds, may be located within buffer and count toward buffer width on site-specific approval.
- (8) Buffer area is to be indicated by permanent, freestanding markers at the buffer edge, with a design and text approved by City staff in writing. A marker shall be placed at each lot line, with additional markers placed at an interval of no more than 200 feet and as necessary to define variation in a meandering boundary. If a City permit is sought for a subdivision, the monumentation requirement will apply to each lot of record to be created. On public land or right-of-way, the monumentation requirement may be satisfied by the use of markers flush to the ground, breakaway markers of durable material, or a vegetation maintenance plan approved by City staff in writing.
- (9) As a condition of permit issuance under this Rule, a property owner must file on the deed a declaration in a form approved by the City establishing a vegetated buffer area adjacent to the delineated wetland edge within the final WMC and other wetland buffers approved as part of a permit under this Rule. The declaration must state that on further subdivision of the property, each subdivided lot of record shall meet the monumentation requirement of Section 6(e)(8). On public land or right-of- way, in place of a recorded declaration, the public owner may execute a written maintenance agreement with the City. The agreement will state that if the land containing the buffer area is conveyed to a private party, the seller must file on the deed a declaration for maintenance in a form approved by thCity.
- (10) Buffer may be disturbed to alter land contours or improve buffer function if the following criteria are met:
- (i) An erosion control plan is submitted under which alterations are designed and conducted to expose the smallest amount of disturbed ground for the shortest time possible, fill or excavated material is not placed to create an unstable slope, mulches or similar materials are used for temporary soil coverage, and permanent vegetation is established as soon as possible after disturbance is completed.
 - (ii) Wooded buffer and native riparian canopy trees are left intact;
 - (iii) When disturbance is completed, sheet flow characteristics within the buffer are improved; average slope is not steeper than preexisting average slope or 5:1 (horizontal: vertical), whichever is less steep; preexisting slopes steeper than 5:1 containing dense native vegetation will not require regrading; the top 18 inches of the soil profile is not compacted, has a permeability at least equal to the permeability of the preexisting soil in an uncompacted state and has organic matter content of between five and 15 percent; and habitat diversity and riparian shading are maintained or improved. Any stormwater feature within the buffer will not have exterior slopes greater than 5:1.

City Code, Chapter 7D: Storm Water Management Regulations

- (b) WETLAND DELINEATION REPORT.** An applicant must submit a copy of a wetland delineation report conforming to a methodology authorized for WCA use and otherwise consistent with Minnesota Board of Water & Soil Resources guidance. The following requirements and clarifications apply to submittals of wetland delineation reports to the City and supplement the approved methodology and guidance:
- (1)** Wetland delineations should be conducted and reviewed during the period of May 1 - October 15. The City may accept delineations performed outside this time frame on a case-by-case basis. The City will determine if there is sufficient information in the report and visible in the field at the time to assess the three wetland parameters (hydrophytic vegetation, hydric soils, hydrology) in relation to the placement of the wetland delineation line. If proper assessment of the delineation is not possible, the City may consider the application incomplete until appropriate field verification is possible.
 - (2)** An applicant conducting short- or long-term wetland hydrology monitoring for the purpose of wetland delineation/determination must coordinate with the City prior to initiating the study.
 - (3)** For a project site with row-cropped agricultural areas, the wetland delineation report must include a review of Farm Service Agency aerial slides (if available) for wetland signatures per Guidance for Offsite Hydrology/Wetland Determinations (July 1, 2016), as amended, and Section 404 Clean Water Act or subsequent State-approved guidance. This review is to be considered along with field data and other pertinent information, and is not necessarily the only or primary basis for a wetland determination in an agricultural row-cropped area.
 - (4)** The wetland delineation report must follow current BWSR/ACOE Guidance for Submittal of Delineation Reports, and include:
 - (i)** Documentation consistent with the 1987 Corps of Engineers Wetlands Delineation Manual and Northcentral and Northeast Regional Supplement.
 - (ii)** National Wetland Inventory (NWI) map, Soil Survey Map, and Department of Natural Resources (DNR) Protected Waters Map of the area being delineated.
 - (iii)** Results of a field investigation of all areas indicated as potential wetland by mapping sources including: NWI wetlands, hydric soil units, poorly drained or depressional areas on the Soil Survey Map, and DNR Protected Waters or Wetlands.
 - (iv)** Classifications of each delineated wetland using the following systems:
 - Classification of Wetlands and Deep Water Habitats of the United States (Cowardin et al. 1979)
 - Fish and Wildlife Service Circular 39 (Shaw and Fredine 1971)
 - Wetland Plants and Plant Communities of Minnesota and Wisconsin (Eggers & Reed, 3rd Edition, 2011)

City Code, Chapter 7D: Storm Water Management Regulations

- (v) A survey map (standard land survey methods or DGPS) of delineated wetland boundaries.
- (5) As a condition of City approval of any wetland delineation, applicants shall submit X/Y coordinates (NAD 83 state plane south coordinate system) and a GIS shapefile of the delineated wetland boundaries. All data shall be collected with a Trimble Geoexplorer or equivalent instrument with sub-meter accuracy.
- (c) **WETLAND REPLACEMENT PLAN APPLICATION.** An applicant submitting a plan involving a wetland alteration requiring replacement must submit five copies of a replacement plan application and supporting materials conforming to WCA replacement plan application submittal requirements and including the following additional documents:
 - (1) Plan sheet(s) clearly identifying, delineating, and denoting the location and size of each wetland impact area and all replacement actions for credit.
 - (2) Plan sheet(s) with profile views and construction specifications of each replacement wetland including proposed/estimated normal water level, proposed/estimated boundary of replacement wetland, topsoiling specifications (if any), grading specifications, and wetland/buffer seedings specifications.
- (d) **FUNCTIONS AND VALUES ASSESSMENT.** An applicant must submit a before-and-after wetland functions and values assessment using a WCA-accepted methodology for a project in a CWPMP area or otherwise involving at least one acre of wetland impact requiring replacement.
- (e) Erosion and sediment control plan in accordance with City Ordinances.
- (f) On City request, the applicant will conduct an assessment of protected plant or animal species within the project site, where such assessment is not available from existing sources.
- (g) Other project site-specific submittal requirements as may be required by the City.

SECTION 7D-711. CATCH BASINS. All newly installed and rehabilitated catch basins shall be provided with a sump area for the collection of coarse-grained material. Such basins shall be cleaned when they are half filled with material.

SECTION 7D-712. DRAIN LEADERS. All newly constructed and reconstructed buildings will route drain leaders to pervious areas wherein the runoff can be allowed to infiltrate. The flow rate of water exiting the leaders shall be controlled so no erosion occurs in the pervious areas.

SECTION 7D-713. INSPECTION AND MAINTENANCE. All storm water management facilities shall be designed to minimize the need of maintenance to provide access for maintenance purposes and to be structurally sound. All storm water management facilities shall have a plan of operation and maintenance that assures continued effective removal of pollutants carried in storm water runoff. The City Engineer, or designated representative, shall inspect all storm water management facilities during construction, during the first year of operation, and at least once every five years thereafter. The

City Code, Chapter 7D: Storm Water Management Regulations

inspection records will be kept on file at the public works department for a period of six years. It shall be the responsibility of the applicant to obtain any necessary easements or other property interests to allow access to the storm water management facilities for inspection and maintenance purposes.

[§ 7D-713 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-715. WATERSHED MANAGEMENT PLANS/GROUNDWATER MANAGEMENT PLANS.

Storm water management plans shall be consistent with adopted watershed management plans and groundwater management plans prepared in accordance with Minn. Stat. § 103B.231 and § 103B.255, as amended, respectively, and as approved by the Minnesota Board of Water and Soil Resources in accordance with state law.

[Chapter 7D, Section 7D-715 amended by Ord. No. 09-03, effective March 5, 2009.]

City Code, Chapter 7D: Storm Water Management Regulations

SECTION 7D-716. EASEMENTS. If a storm water management plan involves direction of some or all runoff off of the site, it shall be the responsibility of the applicant to obtain from adjacent property owners any necessary easements or other property interests concerning flowage of water.

ARTICLE VIII
LAWN FERTILIZER REGULATIONS

SECTION 7D-801. USE ON IMPERVIOUS SURFACES. No person shall apply fertilizer to or deposit grass clippings, leaves, or other vegetative materials on impervious surfaces, or within storm water drainage systems, natural drainage ways, or within wetland buffer areas.

SECTION 7D-802. UNIMPROVED LAND AREAS. Except for driveways, sidewalks, patios, areas occupied by structures or areas which have been improved by landscaping, all areas shall be covered by plants or vegetative growth.

SECTION 7D-803. PUBLIC ADVISORY ON FERTILIZER CONTENT. Except for the first growing season for newly established turf areas, no person should apply liquid fertilizer which contains more than one-half percent by weight of phosphorus, or granular fertilizer which contains more than three percent by weight of phosphorus, unless the single application is less than or equal to one-tenth pound of phosphorus per one thousand square feet. Annual application amount should not exceed one half pound of phosphorus per one thousand square feet of lawn area. Property owners are further advised to have soils tested before applying fertilizers.

SECTION 7D-804. BUFFER ZONE. Fertilizer applications should not be made within one rod (16.5 feet) of any wetland or water resource.

ARTICLE IX
GENERAL PROVISIONS

SECTION 7D-901. PENALTY. Any person, firm or corporation violating any provision of this Chapter shall be guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine or by imprisonment in accordance with the provisions of Chapter 1, Section 1-109 of this City Code for each offense, and a separate offense shall be deemed committed on each day during or on which a violation occurs or continues.

[§ 7D-901 amended by Ord. No. 07-02, effective March 1, 2007.]

SECTION 7D-902. OTHER CONTROLS. In the event of any conflict between the provisions of this Chapter and the provisions of an erosion control or shoreland protection chapter adopted by the City Council, the more restrictive standard prevails.

[§ 7D-902 amended by Ord. No. 07-02, effective March 1, 2007.]

City Code, Chapter 7D: Storm Water Management Regulations

SECTION 7D-903. SEVERABILITY. The provisions of this Chapter are severable. If any provision of this Chapter, or the application thereof, to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Chapter which can be given effect without the invalid provision or application.



History of ordinances affecting the text of Chapter 7D:

Added to Town Code by Ord. No. 94-5, effective January 12, 1996.

Amended by Ord. No. 07-02, effective March 1, 2007.

Amended by Ord. No. 09-03, effective March 5, 2009.
