

Surface Water Management Plan: Appendix M1

Erosion and Sediment Control Plans Guidelines

1. Purpose

The purpose of Appendix M1 is to provide the guidelines and regulatory mechanism for erosion and sediment controls within the city of St. Louis Park(city). Everyone is encouraged to consult the most current versions of the Minnesota Stormwater Manual and the Minnesota Pollution Control Agency's (MPCA's) National Pollutant Discharge Elimination System (NPDES) Construction Stormwater (CSW) General Permit for additional guidance.

2. Authority

This appendix complements the city Code of Ordinances Chapter 12—Environment and Public Health, adopted pursuant to the Minnesota Statutes (Chapter 103B, 115, 116, and 473) and Minnesota Administrative Rules (Chapters 7050, 7090, and 8410).

3. Applicability

Appendix M1 establishes the requirements for all projects disturbing at least 5,000 square feet or excavating, filling, or stockpiling at least 50 cubic yards of material within the city.

Projects meeting minimum thresholds must be compliant with the guidelines outlined in this document; the NPDES, CSW, and Municipal Separate Storm Sewer System (MS4) permits (as amended); the Minnehaha Creek Watershed District (MCWD); the Bassett Creek Watershed Management Commission (BCWMC); and any other regulatory agency with jurisdiction in the city. All plans will be required to adhere to the most stringent requirements applicable.

4. Exemptions

Projects are exempt from the requirements of an erosion control plan and permit when they meet the following criteria:

- a) The disturbed or filled area is 5,000 square feet or less.
- b) The volume of soil or earth material stored or moved is 50 cubic yards or less.
- c) No drainage way is blocked or has its stormwater-carrying capacities or characteristics modified.
- d) The activity does not take place within 100 feet (by horizontal measurement) of the top of the bank of a watercourse, the ordinary high-water mark of a water body, the ordinary high-water mark of a wetland associated with a watercourse or water body, or the established 100-year floodplain.

The following activities are exempt from the permit requirements:

- a) Emergency activities to prevent or alleviate immediate dangers to life or property.
- b) General farming, gardening, and nursery activities.
- c) One- and two-family residential construction activity limited to:
 - i. Additions to the existing structure.
 - ii. Landscaping and landscaping structures.
 - iii. Construction of a garage.

5. Erosion and Sediment Control Requirements

Site plan design must adequately prevent erosion, control waste, and transport sediment and other pollutants from the permitted site in a way that satisfies the city engineer. At a minimum, the site plan must include the following items before the packet can be considered complete and the city's review can begin:

- a) Plans and specifications that conform to the provisions of the city and all other applicable regulatory entities.
- b) A schedule for overall project construction, phasing, erosion and sediment control plan implementation, maintenance, and final stabilization.
- c) Site location, including surrounding roads, steep slopes, other significant geographic features, buildings, and other significant structures.
- d) Existing and final grades or contours and the direction of flow for all pre- and post-construction runoff from the site; areas of grubbing, clearing, tree removal, grading, excavation, fill, and other disturbance; areas of soil or earth material storage; quantities of soil or earth material to be removed, placed, stored, or otherwise moved on site; and delineated limits of disturbance.
- e) Site property lines.
- f) Identification, location, and graphic representation of all existing and planned underground utilities within the project area (where safe, practical, and feasible).
- g) Identification and representation of all receiving water bodies or stormwater conveyance systems to which the site discharges; the status of impaired or special management waters, each receiving water body or conveyance system, and any existing or proposed wetland buffers on site.
- h) Locations of all trees and vegetation intended for removal or to be retained; protective fencing to exclude all fill and equipment from the drip line or critical root zone, whichever is greater, for all vegetation to be retained.
- i) A representation of all on-site buildings, structures, and stormwater management facilities (existing or proposed), including but not limited to infiltration basins, biofiltration basins, stormwater ponds, porous pavers, underground storage, and swales.

- j) Locations of all proposed runoff control, erosion prevention, sediment control, waste control, and temporary and permanent soil stabilization best management practices (BMPs), including but not limited to inlet protection, perimeter control, temporary and permanent soil stabilization, concrete wash areas, slope breaks, energy dissipation, rock construction, entrance, and silt curtains.
- k) Compliance with the current Standard Specifications for Construction, Minnesota Department of Transportation, as amended, for all silt fences.
- l) A representation of areas where compaction is to be prevented or mitigated: these areas shall be protected from construction vehicle traffic where practical and feasible; these areas include but are not limited to filtration and infiltration stormwater facilities and proposed areas to be permanently landscaped as green space.
- m) Locations of all on-site existing and proposed stormwater management facilities, including but not limited to infiltration basins, biofiltration basins, stormwater ponds, porous pavers, underground storage, and swales.
- n) Locations of any wetland buffers on site (existing or to be established).
- o) An inspection plan that meets the following criteria:
 - i. Inspections must be performed by a trained person who will inspect the entire construction site at least once every seven days and within 24 hours after a rainfall event greater than ½ inch in a 24-hour period.
 - ii. Inspection and maintenance records must be maintained on-site with the erosion control plan and made available within 24 hours of the city's request.
 - iii. Each inspection record shall include the following:
 - a. Date and time of inspection.
 - b. Name of person conducting inspections.
 - c. Findings of inspection, including recommendations for corrective actions and corrective actions taken, including dates, times, and parties completing the maintenance activities.
 - d. Date and amount of rainfall for events with rainfall of 0.5 inches or more within 24 hours.
 - e. Record of the location and type of any discharge observed during the inspection, including a photograph.
 - f. Any proposed amendments to the stormwater pollution prevention plan (SWPPP).

- p) The credentials and contact information of a trained erosion control supervisor who will be responsible for implementing the erosion and sediment control plan or SWPPP.
- q) A plan to stabilize any exposed soils within seven days of inactivity.
- r) A requirement for soil stabilization within 72 hours on slopes along surface waters; a requirement of stabilization within 24 hours for exposed soils within 200 feet of DNR public waters during fish spawning.
- s) A requirement of a category 3 erosion control blanket for slopes greater than 3:1
- t) Adequate sediment and pollutant controls for all downgradient slopes that will not allow sediment or other pollutants to overtop or undermine the BMPs.
- u) A stipulation that all dewatering activities are to be regulated by the city, the Minnesota Department of Natural Resources, and the Metropolitan Council Environmental Services (see the city's dewatering webpage for permitting information):
<https://www.stlouispark.org/government/departments-divisions/engineering/engineering-permits/dewatering-permit>.
- v) A requirement to submit an individual site plan to the city engineer for all dewatering activities that must include, at a minimum, a sampling protocol for selected pollutants, identification and protection plans for downstream receiving waters, and an adequate treatment process to reduce pollutants and to protect downstream receiving waters.
- w) A stipulation that stockpiles of soil or other materials subject to erosion by wind or water shall be covered or vegetated, and effective sediment controls shall be installed at the base of stockpiles on the downgradient perimeter in accordance with the amount of time the material will be on site and the manner of its proposed use BMP maintenance timelines and practices per NPDES, CSW, and MS4 permit guidelines that include:
 - i. Guidelines for maintenance of erosion prevention, sediment control, and waste control BMPs (within one business day).
 - ii. The removal of sediment from paved surfaces caused by erosion or tracked sediment from vehicles and equipment (within 24 hours).
 - iii. Implementation of soil stabilization BMPs (within no more than seven days).
 - iv. Stabilization of ditches and outfalls with adequate BMPs (within 24 hours).
- x) Management practices for solid and hazardous wastes, per NPDES CSW, and MS4 permit guidelines, including the following:
 - i. Storage, handling, and disposal of construction products, materials, and wastes: the permittee(s) shall comply with the following to minimize the exposure to stormwater of any products, materials, or wastes (products or wastes that either

are not a source of contamination to stormwater or are designed to be exposed to stormwater are not held to these requirements):

1. Building products that have the potential to leach pollutants must be under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by a similarly effective means designed to minimize contact with stormwater.
 2. Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials must be under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by similarly effective means designed to minimize contact with stormwater.
 3. Hazardous materials and toxic waste, including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, and curing compounds and acids must be properly stored in sealed containers to prevent spills, leaks, or other discharge; restricted-access storage areas must be provided to prevent vandalism; storage and disposal of hazardous waste or materials must comply with Minn. R. ch. 7045, including secondary containment as applicable.
 4. Solid waste must be stored, collected, and disposed of properly, in compliance with Minn. R. ch. 7035.e; portable toilets must be positioned so that they are secure and will not be tipped or knocked over; sanitary waste must be disposed of properly in accordance with Minn. R. ch. 7041.
- ii. Fueling and maintenance of equipment or vehicles, spill prevention and response: the permittee(s) will take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded, including the use of drip pans or absorbents, unless infeasible; the permittee(s) must conduct fueling in a contained area unless infeasible; the permittee(s) must ensure that adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials; the permittee(s) must report and clean up spills immediately, as required by Minn. Stat. § 115.061, using dry clean-up measures when possible.
 - iii. Vehicle and equipment washing: no vehicle washing, or engine degreasing allowed on site.
 - iv. Concrete and other washouts waste: the permittee(s) must provide effective containment for all liquid and solid wastes generated by washout operations related to the construction activity (concrete, stucco, paint, form release oils,

curing compounds and other construction materials); liquid and solid washout wastes must not contact the ground, and the containment must be designed so that it does not result in runoff from the washout operations or areas; liquid and solid wastes must be disposed of properly and in compliance with MPCA rules; a sign must be installed adjacent to each washout facility that requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.

- y) Design calculations for the use of temporary sediment basins for sites of five or more acres: temporary sediment basins must be designed to meet the requirements of the NPDES CSW permit, as amended.
- z) Implementation methods for construction phasing, maintaining vegetative buffer strips, horizontal slope grading, and minimizing disturbance.
- aa) A requirement that projects adjacent to surface waters must preserve a 50-foot natural buffer or, if a buffer is infeasible on the site, provide redundant (double) perimeter sediment controls when surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water; requirement to install perimeter sediment controls at least five feet apart, unless limited by lack of available space; natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets and sediment basins; if preserving the buffer is infeasible, the reasons why must be documented in the SWPPP; sheet piling is a redundant perimeter control if installed in a manner that retains all stormwater.
- bb) An additional site plan design, which may be required to meet total maximum daily load requirements.
- cc) Review of erosion and sediment control plan cannot begin until all these aforementioned criteria have been met.
- dd) A soils engineering and geology report, for which the city engineer may request the following information:
 - v. Data obtained from the requested site investigation.
 - vi. Description of the types, composition, permeability, stability, erodibility, and distribution of existing soils on site.
 - vii. Description of site geology.
 - viii. The proposed land-disturbing activity at the site or erosion control plan, including revisions of plans and specifications.

- ee) A stipulation that all fabric fences used for erosion and sedimentation control, and all other temporary controls, will not be removed until the city has determined that the site has been permanently restabilized, and will be removed within 30 days thereafter.

6. Construction Activity Requirements

During the construction process, the owner and contractor must maintain site-wide compliance as defined within their SWPPP, NPDES, CSW, and MS4 permits and local watershed standards.

- a) All plans will be required to adhere to the most stringent applicable requirements of the aforementioned organizations.
- b) All erosion and sedimentation controls proposed for compliance with this rule shall be in place before any land-disturbing activity commences.

7. Final Stabilization Plan

The plan to establish permanent perennial vegetative cover to prevent erosion of the soil must include the following:

- a) Final soil stabilization or landscaping plan.
- b) Specific vegetation species and locations within the project.
- c) Performance standards and schedule for desired vegetative cover.
- d) Permanent stabilization of all areas subject to land disturbance, retention of native topsoil on-site wherever practical and feasible, and the specification that at least six inches of topsoil or organic matter must be spread and incorporated into the underlying soil during final site treatment wherever topsoil has been removed.
- e) Soil amendments and usage of fertilizers.
- f) Long-term vegetation maintenance practices

8. Permit Termination Conditions

The NPDES CSW permit must be terminated once the project is complete, and the site has been stabilized with vegetation or other permanent means to control erosion. At a minimum, the following conditions must be met before terminating the NPDES CSW permit:

- a) All construction activity must be complete, and permanent cover must be installed over all areas; vegetative cover must consist of a uniform perennial vegetation with a density of 70 percent of its expected final growth; where the function of a specific area dictates no vegetation (e.g., impervious surfaces), vegetation is not required.
- b) All permanent stormwater treatment systems must be cleaned to remove accumulated sediment and must operate as designed.
- c) All sediment must be removed from conveyance systems, including curbs, gutters, ditches, and swales.

- d) All temporary synthetic erosion prevention and sediment control devices must be removed.
- e) For residential construction only, permit coverage is terminated on individual lots if the structures are finished, temporary erosion prevention and downgradient perimeter controls are complete, the residence sells to the homeowner, and the permittee distributes the MPCA's "Homeowner Fact Sheet" to the homeowner.

9. Project Closeout

The following outlines the city's project certification and permit closeout procedures to ensure the project has been completed in conformance with the plans and specifications developed for projects:

- a) Permittee shall provide the city engineer with an as-built grading plan, as defined in the city's erosion and sediment control plan requirements and design guidelines (section 02050 standard specifications).
- b) The city will withhold all securities until the certified, as-built grading plan has been approved by the city engineer.

10. Material Testing and Quantity Verification Requirements

Permittees and contractors are required to work closely with city to ensure that the installation, application, location, and quantity of the selected erosion and sediment control BMPs are in conformance with the approved plans and specifications for the project. The city reserves the right to refuse any work that is not in conformance with the approved plans and specifications for the project or is deemed to be inadequate because of existing conditions.