



City Council Memorandum

To: Mayor Fasbender & City Council Members

From: John Caven, Assistant City Engineer

Date: Dec 12, 2022

Item: 2nd Reading / Public Hearing: Amend City Code Chapters 152 – Storm Water Management and City Code 158 – Property Maintenance

Council Action Requested:

The council is requested to hold a public hearing and consider the 2nd reading to amend Hastings City Code Chapter 152 relating to Storm Water Management and City Code Chapter 158 relating to Property Maintenance. The City Council considered the 1st reading and ordered the public hearing at the December 5, 2022 City Council Meeting.

Background Information:

The Federal Clean Water Act requires small cities (called municipal separate storm sewer systems or MS4) to submit a permit to discharge storm water into receiving water bodies. The storm water permit typically covers a five-year period and is intended to reduce pollutants from not only our storm sewer discharge points, but also from overland runoff that drains directly to rivers, lakes, and ponds.

To comply with the MS4 Permit, the City of Hastings submitted their first storm water pollution prevention plan (SWPPP) annual report to the Minnesota Pollution Control Agency (MPCA) on June 30, 2008, and submits an annual report by June 30th of each subsequent year. On November 16, 2020 the MPCA drafted and approved a revised permit. Consequently, MS4's were required to update their SWPPP by the end of 2022 to reflect the permit changes. Many changes such as employee training, topics meeting public outreach goals, and general documentation of storm water related practices and procedures have already been completed. The remaining item to achieve permit compliance requires City Council approval through the Public Hearing process to revise the City Ordinances as it relates to property maintenance and design standards for development/construction projects. A summary of the proposed changes to the ordinance include:

Chapter 152 – Storm Water Management

1. Re-organizes entire 152.08 Approval Standards section to make it flow better and be more user friendly.
2. Provides clarity on permitting authority of the City of Hastings as it pertains to the rules and standards of the Vermillion River Watershed Joint Powers Organization (VRWJPO) and MPCA.
3. Provides clarity in identifying storm water design and erosion control requirements (including applicability):
 - a. For projects disturbing over one acre versus under one acre,
 - b. For linear projects (such as road reconstruction projects or trail projects).
4. Formally requires the MPCA volume control/water quality calculation to be submitted in addition to the current VRWJPO requirement, and the more stringent of the two to be selected.
5. Provides clarity as to guidance of possible alternative approaches to volume control/water quality when certain limitations exist on a constructed site.
6. Requires conservation easements or outlots to be recorded to protect identified buffers adjacent to wetlands and watercourses.

Chapter 158 – Property Maintenance

1. Requires property owners to store their de-icing salt under a roof and on a hard surface to minimize its unnecessary leeching into the environment (Note: Training and other permit efforts are simultaneously being made to minimize unnecessary usage of salt in the winter time.)

VRWJPO has reviewed the revised ordinance and confirms it satisfies the general intent of their rules. The City of Hastings must be as strict or stricter than the VRWJPO rules to maintain permitting authority. Furthermore, the recommended ordinance changes would bring the City of Hastings into compliance with the MS4 Permit mandated by the MPCA.

Financial Impact:

No financial impact for the City.

Attachments:

Ordinance Amendment

ORDINANCE NO. _____

**AN ORDINANCE FOR THE CITY OF HASTINGS, MINNESOTA, AMENDING
HASTINGS CITY CODE CHAPTER 152, STORMWATER MANAGEMENT AND
CHAPTER 158, PROPERTY MAINTENANCE REQUIREMENTS**

The City Council of the City of Hastings, Dakota County, Minnesota, does hereby ordain as follows:

SECTION 1 AMENDMENT. The Code of the City of Hastings, Counties of Dakota and Washington, State of Minnesota, Chapter 152, Stormwater Management shall be amended as follows (items in underlined are additions, items ~~stricken~~ are deletions):

152.04 Definitions:

BMP. Best Management Practices (BMPs) are the most effective and practical means of erosion and sediment control, and water quality management practices aimed to control, prevent, and minimize degradation of surface water.

BUFFER. An area of natural, minimally maintained, vegetated ground cover abutting or surrounding a watercourse, public waters wetland, or wetland.

FULLY RECONSTRUCTED. Impervious surfaces that have been removed down to the underlying soils. Activities such as structure renovation, reclamation projects, mill and overlay projects, and other pavement rehabilitation projects do not expose the underlying soils beneath the structure, pavement, or activity are not considered fully reconstructed.

IMPERVIOUS SURFACE. Constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, driveways, parking lots and concrete, asphalt, or gravel roads or parking lots.

INFILTRATION. A stormwater retention method for the purpose of reducing the volume of stormwater runoff by transmitting water into the ground through the earth's surface.

LINEAR PROJECT. Construction of new or fully reconstructed roads, trails, sidewalks, or rail lines that are not part of a larger common plan of development or sale.

MPCA. Minnesota Pollution Control Agency.

NPDES. National Pollutant Discharge Elimination System.

VRWJPO. Vermillion River Watershed Joint Powers Organization

WCA. Wetland Conservation Act

WETLANDS. Any wetland as described in Minn. Stat. § 103G.005, subd. 19.

~~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 no deeper than 6 feet. For purposes of this definition, wetlands must have the following 3 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~~
- ~~3. Under normal circumstances support a prevalence of the vegetation.~~

152.05 Scope and Effect.

A. *Applicability.* Every applicant for a building permit, subdivision approval, or a permit to allow land disturbing activities must submit a stormwater management plan to the Public Works Department. No building permit, subdivision approval, or permit to allow land disturbing activities shall be issued until approval of the stormwater management plan or a waiver of the approval requirements has been obtained in strict conformance with the provisions of this chapter. The provisions of ~~§152.09~~ this Chapter apply to all land, public or private, located within the City of Hastings.

B. *Exemptions.* The provisions of this chapter do not apply to:

1. Any part of a subdivision ~~if a plat for the subdivision has been approved by the City Council on or before the effective date of this chapter, which includes an approved storm water plan, for one year following preliminary approval and for two years following final approval by the City Council.~~
- ~~2. Any land disturbing activity for which plans have been approved by the watershed management organization within 6 months prior to the effective date of this chapter;~~
- ~~3. A lot for which a building permit has been approved on or before the effective date of this chapter;~~
4. Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles gardening, tree planting, deck construction, ~~and other types of construction disturbing 1/3 acre or less;~~ or
5. Emergency work to protect life, limb, or property.

152.08 Approval Standards

A. Construction activity of any size

1. Site Dewatering

- a. Water pumped from the site shall be treated by temporary sedimentation basins, grit chambers, sand filters, up flow 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 in receiving channels or a wetland.

2. Waste And Material Disposal

- a. All waste and unused building materials (including garbage, debris, concrete washout, cleaning wastes, wastewater, toxic materials or hazardous materials) shall be properly disposed of off-site and not allowed to be carried off by runoff into a receiving channel or storm sewer system.
3. Site Erosion & Sediment Control.
- a. Erosion and sediment control measures shall be consistent with Best Management Practices (BMPs), included in the City's Builders Handbook and Public Works Design Manual or otherwise approved by the City, and shall be sufficient to retain sediment on site.
 - b. All temporary erosion and sediment controls shall be installed on all down gradient perimeters before commencing the land disturbing activity, and left in place and maintained as needed until removal is approved by the City after the site had been stabilized. All permanent erosion control measures shall be installed and operational per the design and as approved by the City.
 - c. All activities on the site shall be phased and/or conducted in a logical sequence to minimize the area of bare soil exposed at any one time.
 - d. All disturbed ground to be left inactive for 14 or more days shall be stabilized by seeding and mulching, sodding, coverings, or other equivalent control measure by no later than 14 calendar days after the construction activity has ceased. Stabilization shall occur within 7 calendar days when within one aerial mile from an MPCA defined special or impaired water.
 - e. All stockpiles shall contain silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter.
 - f. All storm drain inlets shall be protected during construction until control measures are in place with best management practices included within the City's Builders Handbook and Public Works Design Manual or otherwise approved by the City.
 - g. Each site shall have a minimum of graveled roads, access drives, and parking areas of sufficient width and a length providing a minimum of 50 feet of maintained graveled surface both from the edge of the public or private roadway 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. Failure to keep the public or private roadway clean may result in the city ordering a stop work order until the roadways are properly cleaned.
 - h. All erosion and sediment control inspection priorities must be given to areas susceptible to erosion due to site topography, soil characteristics, quality of receiving water, state of construction, and weather conditions.
4. Rate Control
- a. Shall not adversely affect neighboring properties and downstream stormwater systems.
- B. Construction activity with land disturbing activities greater than or equal to one acre, including projects less than an acre that are part of a larger common plan of development or sale greater than equal to one acre.

1. The City of Hastings is the permitting authority on construction projects. Construction activity shall meet the permit requirements within
 - a. The most current requirements of the General Permit Authorization to Discharge Stormwater Associated with Construction Activity Under the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Program, otherwise known as the Construction Stormwater Permit, issued by the Minnesota Pollution Control Agency (MPCA).
 - b. The most current requirements of the Vermillion River Watershed Joint Powers Organization.
2. Site Erosion & Sediment Control.
 - a. Qualified individual representing Construction Stormwater Permit holder must submit to the City an erosion control inspection form one time per week and after every half inch or greater rain event. A rain gage must be present on site.
3. Design Standards
 - a. All on-site stormwater conveyance channels shall be designed and constructed to withstand the expected velocity flow from a 10-year frequency storm without erosion.
 - b. All on-site basins shall be designed and constructed to withstand the expected 100-year frequency storm without erosion to the pond, inlet or outlet discharge. The high water level (HWL) shall be noted on the plan and entirely contained within an easement.
 - c. Precipitation frequency estimates must utilize the most current published estimates by NOAA (ie. Atlas 14 Version 8).
 - d. Existing condition is considered the date received on the Stormwater Management Plan submittal. "Common plan of development" dates back to the year 2005.
 - e. Hydrologic models and design methodologies used for the determination of runoff analysis of storm water management infrastructure shall be signed by a registered Minnesota Professional Engineer and approved by the Engineering Department.
 - f. Infiltration techniques are the preferred approach and to be given highest priority to meeting volume and water quality requirements. Pre-treatment leading to infiltration basins is recommended. Where limitations apply, other green technologies shall be explored (ie. filtration, evapotranspiration, reuse/harvesting, etc) to the maximum extent possible.
 - g. Infiltration areas must draw down within 48 hours of a significant rainfall unless otherwise specified within the Minnesota Stormwater Manual. The recommended number of soil borings, per Minnesota Stormwater Manual, shall be provided in the location of the proposed infiltration BMP to support the design infiltration rate.
 - h. Infiltration areas identified on the plan must either be fenced or delineated prior to the project to protect the area from compaction during construction activity.
4. Long-Term Stormwater BMP Maintenance Agreement

- a. A legal document shall be executed that determines the party responsible for the long-term maintenance of the proposed stormwater BMPs designed to meet the design standards of this Ordinance. Should the BMP be on private property, the agreement shall allow the City to enter the property to inspect, notify owner of maintenance duties, and if necessary conduct necessary maintenance to maintain normal functionality of the BMP. In the event maintenance is not performed, costs to perform maintenance shall be assessed to the property owner.
5. Stormwater Calculations
- a. Rate Control onsite within the area proposed to be disturbed
 1. Not to exceed existing runoff rates for the following storms events
 - a) 1-year 24 hour
 - b) 10-year 24 hour
 - c) 100-year 24 hour
 2. When discharging directly to the Vermillion River,
 - a) Peak runoff controls keep future peak flood flows for the Vermillion River 100-year 4 day event from increasing above existing conditions peak flow
 3. Shall not adversely affect neighboring properties and downstream stormwater systems.
 - b. Volume Control / Water Quality onsite within the area proposed to be disturbed
 1. The greater of the following:
 - a) Not to exceed existing runoff volume for the 2-year 24 hour event
 - b) One-inch times the sum of the new and the fully reconstructed impervious surface
 2. Limitations
 - a) Within an emergency response area (ERA) identified within the City of Hastings Wellhead Protection Plan, otherwise known as a one-year capture zone for municipal supply wells.
 - b) Where soil infiltration rates are more than 8.3 inches per hour and cannot be amended to slow the rate.
 - c) Where high level of contaminants in soil or groundwater may be mobilized. To make this determination, an MPCA site screening assessment, or approved equal, must be completed. The assessment is available in the Minnesota Stormwater Manual.
 - d) Where vehicle fueling and maintenance operations occur.
 - e) Where industrial areas with exposed materials are capable of leaching into the soil.
 - f) Where industrial facilities are not authorized to infiltrate industrial stormwater under an NPDES/SDS Industrial Stormwater Permit issued by the MPCA.

- g) Where less than three feet separates the bottom of the infiltration system to the elevation of the top of bedrock or seasonally saturated soils (ie. water table).
- h) Type D Soils (clay)
- i) Within 400 feet of a municipal well and within 100 feet of a private well unless specifically allowed by an approved Wellhead Protection Plan (WHPP).
- j) Within 1,000 feet up-gradient, or 100 feet down-gradient of active karst features.
- k) Within linear projects where the lack of available right-of-way prevents the installation of volume control practices.

c. Alternatives

1. Non-linear projects where the water quality volume cannot meet the standards by treatment within the boundaries of a lot in the final approved plat, per the limitations set forth in Section 152.08. If that cannot be accomplished the owner will be required to identify and construct (or an equivalent cash payment) on locations where off-site treatment can be completed within 24 months of the start of any construction of site alteration. The order of preference must be followed:
 - a) Locations that yield benefits to the same receiving water that receives runoff from the original construction activity.
 - b) Locations within the same tributary area as the original construction activity.
 - c) Locations in the next adjacent tributary up-stream.
 - d) Locations anywhere within the City of Hastings jurisdiction
2. Linear projects where the water quality volume cannot meet the standards by treatment, per the limitations set forth in Section 152.08, volume control / water quality shall be the greater of the following:
 - a) One-inch times the new impervious surface
 - b) One-half inch times the sum of the new and the fully reconstructed impervious surface.

If alternative conditions cannot be met for linear projects, then owners of construction activity must maximize the treatment of the water quality volume prior to discharge from the MS4.

C. Buffers

1. Wetlands. Classification per the most current City of Hastings Water Management Plan (ie. Figure 3-9, 2018-2027) or wetland functional assessment for vegetative diversity using the Minnesota Routine Assessment Method (MNRAM 3.0) or other state accepted functional assessment method approved by the City.
 - a. Exceptional Quality Wetland (Preserve)
 1. Average Buffer Width: 50 feet

2. Minimum Buffer Width: 30 feet
 - b. High Quality Wetland (Manage 1)
 1. Average Buffer Width: 40 feet
 2. Minimum Buffer Width: 30 feet
 - c. Medium Quality Wetland (Manage 2)
 1. Average Buffer Width: 30 feet
 2. Minimum Buffer Width: 25 feet
 - d. Low Quality Wetland (Manage 3)
 1. Average Buffer Width: 25 feet
 2. Minimum Buffer Width: 16.5 feet
2. Watercourses. Classifications per the most current Standards for the Vermillion River Watershed Joint Powers Organization (ie. Map 1, September 2019) as measured from the edge of the meander belt of the watercourse.
- a. Conservation Corridor (ie. Vermillion River below Hastings Falls):
 1. Average Buffer Width: 150 feet
 2. Minimum Buffer Width: 100 feet
 - b. Aquatic Corridor – Principal Connector (ie. Vermillion River above Hastings Falls):
 1. Average Buffer Width: 100 feet
 2. Minimum Buffer Width: 65 feet
 - c. Aquatic Corridor – Tributary Connector (ie. Hastings Sand Coulee SNA)
 1. Average Buffer Width: 50 feet
 2. Minimum Buffer Width: 35 feet, plus 2 feet for every 1% of slope
 - d. Water Quality Corridor
 1. Average Buffer Width: 30 feet
 2. Minimum Buffer Width: 20 feet where there is a flow path for concentrated surface runoff measured from the center line of the flow path.
3. Exceptions
- a. Wetland or public waters wetland listed under the Wetland Conservation Act (WCA), and to those portions of wetlands that will be filled under approved wetland replacement plans per the WCA.
 - b. In areas the Hastings Stormwater Management Plan requires a greater buffer width.
 - c. Lots created that are enrolled in Green Acres, Rural Preserves, Agricultural Preserves, or similar rural preservation programs controlling or limiting the potential for future lot subdivision or development, as part of the subdivision process.
4. Conservation Easements
- a. A conservation easement or dedicated outlot shall be created when a part of platting and subdivision approval, except where the buffer is located within a public transportation right-of-way.
5. Allowable activities within any buffer
- a. Use and maintenance of an unimproved access strip through the buffer, not more than 10 feet in width (ie. For recreational access).
 - b. Structures that exist when the buffer is created.

- c. Placement, maintenance, repair, or replacement of public roads and utility and drainage systems that exist when the buffer was created or are required to comply with any subdivision approval or building permit obtained from the City of Hastings or Dakota County, so long as any adverse impacts of public road, utility, or drainage systems on the function of the buffer have been avoided or minimized to the extent practical.
 - d. Clearing, grading, and seeding are allowed, if part of an approved Wetland Replacement Plan or approved Stream Restoration Plan.
 - e. A multipurpose trail through an area protected by conservation easement or in a dedicated outlot, is allowed provided it is designed and constructed to minimize erosion and new impervious surfaces, and maintains an absolute minimum distance of at least fifteen feet as measured from the edge of the trail nearest the water resource to the wetland or public waters wetland edge, the bank of the watercourse, or the meander belt, and averages at least one-half the total required buffer width. Where needed to cross the watercourse, the minimum impact alignments shall be used. The area between the trail and the water resource must be maintained in perennial vegetation in an undisturbed state accepting regular required maintenance of the buffer. Boardwalks and pedestrian bridges associated with a multipurpose trail must be approved by the City of Hastings.
 - f. The construction of underground utilities such as water, stormwater, and sanitary sewers and pipelines provided the minimum impact alignment is used, the area is satisfactorily stabilized and setbacks are met.
6. Allowable activities within those portions of the average buffer width that exceed the minimum buffer width
- a. Stormwater management facilities provided the land areas are stabilized and alterations prohibited are upheld.
 - b. The area of shallow vegetated infiltration and biofiltration facilities, and water quality ponds not to exceed 50 percent of the pond area, adjacent to wetlands and watercourses may be included in buffer averaging provided the facilities do not encroach into the minimum buffer width, and the land areas are stabilized and alterations prohibited are upheld.
7. Alterations
- a. Alterations, including building, storage, paving, routine mowing, burning, plowing, introduction of noxious vegetation, cutting, dredging, filling, mining, dumping, grazing livestock, agricultural production, yard waste disposal, or fertilizer application are prohibited within any buffer. Periodic mowing or burning, or the use of fertilizers and pesticides for the purpose of managing and maintaining native vegetation is allowed with approval from the City of Hastings. Noxious weeds may be removed and mechanical or spot herbicide treatments may be used to control noxious weeds, but aerial or broadcast spraying is not acceptable. Prohibited alterations would not include plantings that enhance the natural vegetation or selective clearing or pruning of trees or vegetation that are dead, diseased or pose similar hazards.
8. Vegetation

- a. Acceptable Natural Vegetation. Where acceptable natural vegetation exists in buffer areas, the retention of such vegetation in an undisturbed state is required unless approval to replace such vegetation is received. A buffer has acceptable vegetation if it:
 1. Has a continuous, dense layer of non-invasive perennial grasses and forbs that has been uncultivated or unbroken for at least five consecutive years; or
 2. Has an overstory of non-invasive trees and/or shrubs that has been uncultivated or unbroken for at least five consecutive years; or
 3. Contains a mixture of the above plant communities that has been uncultivated or unbroken for at least five consecutive years.
- b. Unacceptable Buffer Vegetation. Where buffer vegetation is found to be unacceptable or needs to be replanted the following standards shall be met:
 1. Buffers shall be planted with a native seed mix approved by the State of Minnesota, NRCS or the Dakota County SWCD, with the exception of a one-time planting with an annual nurse or cover crop. Plantings of native forbs and grasses may be substituted for seedling. All substitutions must be approved by the City of Hastings. Groupings/clusters of native trees and shrubs, of species and at densities appropriate to site conditions, can also be planted throughout the buffer area.
 2. The seed mix and planting shall be broadcast/installed according to the State of Minnesota, NRCS or Dakota County SWCD specifications. The selected seed mixes and plantings for permanent cover shall be appropriate for the soil site conditions and free of invasive species.
 3. Buffer vegetation (both natural and created) shall be protected by erosion and sediment control measures during construction.
 4. During the first five full growing seasons, the buffer vegetation shall be replanted if the vegetative cover is less than 90 percent, unless condition is accepted by the City of Hastings.

D. Wetlands

1. General Provisions

1. Any drainage, filling, excavation, or other alteration of a public waters wetland or wetland shall be conducted in compliance with Minnesota Statutes, §103G.245, Wetland Conservation Act (WCA), Minnesota Rules 8420, and regulation adopted hereunder. No wetland or public waters wetland shall be drained, filled, or excavated without first submitting a wetland application and obtaining the approval from the City of Hastings.
2. In order to preserve WCA exemption or no loss determination, projects involving excavation in Types 1, 2, 6, and 7 wetlands must demonstrate a beneficial purpose, such as habitat or water quality improvements, and minimize loss of wetland function as determined by the City.
3. A high quality (or equivalent value) public waters wetland or wetland (as determined by the Minnesota Routine Assessment Method (MNRAM 3.0))

or other state accepted functional assessment method for vegetative diversity, may not be used for stormwater management and treatment unless the use will not adversely affect the function and public value of the wetland and other alternatives do not exist.

2. No Net Loss and Wetland Alteration
 1. Wetland replacement/mitigation must follow the priority order below:
 1. Mitigation on-site
 2. Mitigation within the same minor sub watershed as established by the Minnesota Department of Natural Resources for the “1979 Watershed Mapping Project” pursuant to Minnesota Laws 1977, chapter. 455, section33, subdivision 7, paragraph (a).
 3. Mitigation within the JPO boundary
 4. Mitigation within Dakota County
 2. Transportation projects shall pursue wetland mitigation projects to the extent practical using the criteria above. However, this does not preclude the use of the BWSR Replacement Program.
- ~~A. *Site Dewatering.* Water pumped from the site shall be treated by temporary sedimentation basins, grit chambers, sand filters, up flow 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.~~
- ~~B. *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 off by runoff into a receiving channel or storm sewer system.~~
- ~~C. *Tracking.* Each site shall have graveled roads, access drives, and parking areas of sufficient width and a length providing a minimum of 50 feet of maintained graveled surface both from the edge of the public or private roadway 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. Failure to keep the public or private roadway clean may result in the city ordering construction halted until the time as the roadways are properly clean.~~
- ~~D. *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 included in the City’s Builders Handbook and Public Works Design Manual or otherwise approved by the City.~~
- ~~E. *Site Erosion Control.*~~
- ~~1. *Construction Erosion Control*~~
 - ~~a. *Erosion and sediment control measures shall be consistent with Best Management Practices (BMPs), included in the City’s Builders Handbook and Public Works Design Manual or otherwise approved by the City, and shall be sufficient to retain sediment on site. The City may at its discretion use turbidity measurements as an indicator of potential non-compliance with erosion and sediment control measures taken. Turbidity measurements will be in accordance with VRWJPO Standards.*~~

- b. ~~All temporary erosion and sediment controls shall be installed on all down gradient perimeters before commencing the land disturbing activity, and left in place and maintained as needed until removal is approved by the City after the site had been stabilized. All permanent erosion control measures shall be installed and operational per the design and as approved by the City.~~
 - e. ~~For projects disturbing equal to or more than 1 acre, including smaller sites that are part of a common plan of development:

 1. ~~Construction activity requirements shall meet the most current requirements of the General Permit Authorization to Discharge Stormwater Associated With Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program Permit (NPDES General Construction Permit) issued by the Minnesota Pollution Control Agency. Construction activity requirements include, but are not limited to, temporary sediment basins (Part III.C), stormwater pollution prevention plan, erosion prevention practices, sediment control practices, dewatering and basin draining, inspection and maintenance, pollution prevention management measures, and final stabilization (Part IV) as referenced in the NPDES General Construction Permit;~~
 2. ~~All on-site stormwater conveyance channels shall be designed and constructed to withstand the expected velocity of flow from a 10-year frequency storm without erosion.~~
 3. ~~If the activity is taking place on a site where soils are currently disturbed (e.g., a tilled agricultural site that is being developed), areas that will not be graded as part of the development and areas that will not be stabilized according to the timeframes specified in the NPDES General Construction permit Part IV, B.S., shall be seeded with a temporary or permanent cover before commencing the proposed land disturbing activity.~~~~
 - d. ~~All activities on the site shall be phased and/or conducted in a logical sequence to minimize the area of bare soil exposed at any one time.~~
 - e. ~~All disturbed ground left inactive for 14 or more days shall be stabilized by seeding and mulching, sodding, coverings, or other equivalent control measure. Straw, hay, or other vegetative mulch shall be disc anchored. Geotextile or other approved covering shall be anchored in accordance with the manufacturer's specifications.~~
 - f. ~~Contractor is responsible for submitting to the City an erosion control inspection form after every half inch or greater rain event and at a minimum of one time per week. A rain gage must be present on site.~~
 - g. ~~Erosion control and erosion control inspection priority must be given to areas susceptible to erosion due to site topography, soil characteristics, quality of receiving water, state of construction, and weather conditions.~~
- F. ~~Stormwater management criteria for new development or re-development projects with land disturbance of greater than or equal to one acre. Green infrastructure techniques and~~

practices (ie. infiltration, filtration, evapotranspiration, reuse/harvesting, conservation design, urban forestry, green roofs) are to be given highest priority to meet the water quality treatment requirements. Infiltration/filtration options are the preferred approach to satisfying the water quality treatment requirements of the NPDES General Construction Permit. Rate and volume calculations are to utilize NOAA Atlas 14 precipitation frequency estimates.

1. ~~Conditions~~

a. ~~Post Construction Water Quality.~~

1. ~~Post construction stormwater runoff quality measures shall meet the standard for the General Permit Authorization to Discharge Stormwater Associated With Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program Permit (NPDES General Construction Permit) issued by the Minnesota Pollution Control Agency.~~
2. ~~Stormwater discharges of Total Suspended Solids (TSS) and Total Phosphorus (TP) shall have no net increase from pre-project conditions for new development and a net reduction from pre-project conditions for re-development.~~
3. ~~Circumstances where the TSS and TP requirements cannot be reasonably achieved on site shall be addressed through mitigation.~~
 - a) ~~Mitigation projects shall be selected in the following order of preference:~~
 1. ~~Locations that yield benefits to the same receiving water that receives runoff from the original construction activity.~~
 2. ~~Locations within the same Department of Natural Resource (DNR) catchment area as the original construction activity.~~
 3. ~~Locations in the next adjacent DNR catchment area up-stream.~~
 4. ~~Locations anywhere within the City of Hastings.~~
 - b) ~~Mitigation projects must involve the creation of new structural stormwater BMPs, retrofit of existing structural stormwater BMPs, or the use of a properly designed regional structural stormwater BMP.~~
 - c) ~~Routine maintenance of structural BMPs cannot be used to meet mitigation.~~
 - d) ~~Mitigation projects shall be completed within 24 months after the start of the original construction activity.~~
 - e) ~~The long term maintenance for storm water BMPs shall be determined prior to construction activity.~~
 - f) ~~If monetary payment is received to satisfy mitigation processes then payment shall be applied to a public storm water project and comply with City Ordinance 152.08(F)(1)(a)(3)(1) (a-d)~~

b. ~~Peak Runoff Rate.~~

- ~~1. Hydrologic models and design methodologies used for the determination of runoff and analysis of stormwater management infrastructure shall be signed by a registered professional engineer and approved by the Engineering Department.~~
 - ~~2. Runoff rates for proposed land disturbing activities greater than or equal to one acre shall:

 - ~~a) Utilize an existing condition in the runoff calculation as defined as the land cover condition existing in the year 2005.~~
 - ~~b) Not exceed existing runoff rates for the 1-year 24-hour, 10-year 24-hour, 100-year 24-hour, and 100-year 4-day storm events.~~~~
- ~~c. Volume Runoff Criteria.~~
- ~~1. Hydrologic models and design methodologies used for the determination of runoff and analysis of stormwater management infrastructure shall be signed by a registered professional engineer and approved by the Engineering Department.~~
 - ~~2. Runoff volume for proposed land disturbing activities greater than or equal to one acre shall:

 - ~~a) Utilize an existing condition in the runoff calculation as defined as the land cover condition existing in a pre-project condition.~~
 - ~~b) Not exceed the existing pre-project runoff rates for the 2-year 24-hour storm event.~~~~
 - ~~3. Exceptions where a lesser volume control will be acceptable.

 - ~~a) Infiltration, as listed in 152.08(F)(2)(a), prohibit volume control.~~
 - ~~b) Non-infiltration green technologies are implemented to the maximum extent possible.~~
 - ~~c) Outlets from landlocked basins with a tributary drainage area of greater than or equal to 100 acres, provided:

 - ~~1. Outlets are consistent with other portions of the City Ordinances~~
 - ~~2. Outlets have been analyzed for any detrimental downstream impacts, riparian impacts, and habitat impacts. The analysis shall include:

 - ~~a) Use a hydrograph method based on sound hydrologic theory to analyze runoff for the design or analysis of flows and water levels;~~
 - ~~b) Ensure a hydrologic analysis is consistent with the Stormwater Runoff Control Criteria of the City Ordinances.~~
 - ~~c) Ensure the outlet does not create adverse downstream flooding or water quality conditions, or materially affect stability of downstream major waterways;~~~~~~~~

- d) ~~Maintain dead storage within the basin to the maximum extent possible while preventing damage to property adjacent to the basin;~~
 - e) ~~Ensure that the low floors of new structures adjacent to the basin are set consistent with the Floodplain Alterations Rule; and~~
 - f) ~~Ensure that proposed development tributary to the land-locked basin has incorporated runoff volume control practices to the extent practical.~~
- d) ~~Artificial drainage, flow obstruction, and diversions involving waterways, public waters, and wetlands with drainage areas of 640 acres or more, provided:~~
- 1. ~~Alterations and diversions are consistent with other portions of the City Ordinances~~
 - 2. ~~Alterations and diversions have been analyzed for any detrimental downstream impacts, riparian impacts, and habitat impacts. The analysis shall include:~~
 - a) ~~Provide reasonable necessity for such drainage alteration or diversion to improve or protect human health and safety, or to improve or protect aquatic resources;~~
 - b) ~~Ensure reasonable care has been taken to avoid unnecessary injury to upstream and downstream land;~~
 - c) ~~Ensure the utility or benefit accruing to the land on which the drainage will be altered reasonably outweighs the gravity of the harm resulting to the land receiving the burden; and~~
 - d) ~~Ensure the drainage alteration or diversion is being accomplished by reasonably improving and aiding the normal and natural system of drainage according to its reasonable carrying capacity, or in the absence of a practicable natural drain, a reasonable and feasible artificial drainage system is being adopted.~~
 - e) ~~Drainage alterations, diversions, and landlocked basin outlets shall be provided with stable channels and outfall.~~
- d. ~~Design Criteria~~
- 1. ~~Minimize connected impervious surfaces.~~

2. ~~Vegetation used in conjunction with infiltration systems must be tolerant of urban pollutants and the range of soil moisture conditions anticipated.~~
3. ~~Infiltration and filtration areas must be fenced or otherwise protected from disturbance before the land disturbing project begins.~~
2. ~~Limitations of using infiltration techniques to achieve stormwater management. Filtration and other green technologies should be considered instead.~~
 - a. ~~Conditions~~
 1. ~~Where vehicle fueling and maintenance occur.~~
 2. ~~Where industrial areas with exposed materials are capable of leeching into the soil~~
 3. ~~Where industrial facilities are not authorized to infiltrate industrial stormwater under an NPDES/SDS Industrial Stormwater Permit issued by the Agency.~~
 4. ~~Where high level of contaminants in soil or groundwater will be mobilized.~~
 5. ~~Where less than three (3) feet separates the bottom of the infiltration system to the elevation of the top of bedrock or seasonally saturated soils (ie. water table).~~
 6. ~~Type D Soils (clay)~~
 7. ~~Where soil infiltration rates are more than 8.3 inches per hour.~~
 8. ~~Within an emergency response area, as defined by the Drinking Water Surface Management Area (DWSMA).~~
 9. ~~Within the one year travel zone of a municipal or other community supply well as defined in the Hastings Well Head Protection Plan (WHPP). The following design requirements need be adhered to if infiltration for volume control is to be considered as an option:~~
 - a) ~~Pretreatment of stormwater runoff is designed to protect infiltration system from clogging with sediment and to protect groundwater quality.~~
 - b) ~~Hydrological soil group classification and saturated infiltration rate shall comply with the current VRWJPO rules.~~
 - c) ~~Site specific infiltration or hydraulic conductivity measurements shall be performed by a licensed soil scientist or engineer.~~
 - d) ~~Infiltration rates shall reflect the least permeable horizon within the first five feet below the bottom of the infiltration system.~~
 - e) ~~Infiltration system shall be capable of infiltrating the required volume within 72 hours.~~
 10. ~~Within 100 feet of a private well unless specifically allowed by an approved WHPP.~~
 11. ~~Within 1,000 feet up gradient, or 100 feet down gradient of active karst features.~~

12. Within linear projects where the lack of available or obtainable right-of-way prevents the installation of volume control practices.
3. ~~Long term maintenance of structural stormwater BMPs~~
- a. ~~A legal document shall be executed that determines the party responsible for long term maintenance of the stormwater BMP. Should the BMP be on private property, the agreement shall allow the City to enter the property to inspect, notify owner of maintenance duties, and if necessary conduct necessary maintenance to maintain normal functionality of the BMP. Costs to perform maintenance shall be assessed to the property owner.~~

G. ~~Wetlands~~

1. ~~General Provisions~~

- a. ~~Any drainage, filling, excavation, or other alteration of a public waters wetland or wetland shall be conducted in compliance with Minnesota Statutes, §103G.245, Wetland Conservation Act (WCA), Minnesota Rules 8420, and regulations adopted hereunder.~~
- b. ~~In order to preserve WCA exemption or no loss determination, projects involving excavation in Types 1, 2, 6, and 7 wetlands must demonstrate a beneficial purpose, such as habitat or water quality improvements, and minimize loss of wetland function as determined by the City.~~
- c. ~~A high quality (or equivalent value) public waters wetland or wetland (as determined by methods acceptable to the VRWJPO for vegetative diversity) may not be used for stormwater management and treatment unless the use will not adversely affect the function and public value of the wetland and other alternatives do not exist. Runoff shall not be discharged directly into a high quality public water wetlands or wetland (as determined by methods acceptable to the VRWJPO for vegetative diversity) without pretreatment of the runoff.~~

2. ~~No Net Loss and Wetland Alteration~~

- a. ~~No permits will be granted until the WCA replacement plan is approved or exemption certificate is obtained. Wetland replacement/mitigation citing must follow the priority order:~~
1. ~~Mitigation on-site~~
 2. ~~Mitigation within the same minor sub watershed as established by the Minnesota Department of Natural Resources for the "1979 Watershed Mapping Project" pursuant to Minnesota Laws 1977, chapter. 455, section33, subdivision 7, paragraph (a).~~
 3. ~~Mitigation within the JPO boundary~~
 4. ~~Mitigation within Dakota County~~
- b. ~~Transportation projects shall pursue wetland mitigation projects to the extent practical using the criteria above. However, this does not preclude the use of the BWSR Replacement Program.~~

3. ~~Wetland Buffer Areas~~

- a. ~~Application. Buffer areas abutting all rivers, streams, and wetlands as identified in Figure 4 of the City's Water Management Plan.~~
- b. ~~Classification. A wetlands functional assessment for vegetative diversity will be completed with each wetland and public waters wetland,~~

delineated for a project and buffers established according to the management classification in the following table. Figure 4 and 8 in the Water Management Plan, as adopted in 2009, delineates three different quality standards for wetlands. All wetlands shown on Figure 8 not shown on Figure 4 are considered Low Quality. Buffers on wetlands begin at the delineated edge of the wetland; (the line where hydrology, vegetation, and soils indicate a change between upland and wetland).

1. ~~Exceptional Quality Wetland:~~
 - a) ~~Average Buffer Width: 50ft~~
 - b) ~~Minimum Buffer Width: 30ft~~
 2. ~~High Quality Wetland:~~
 - a) ~~Average Buffer Width: 40ft~~
 - b) ~~Minimum Buffer Width: 30ft~~
 3. ~~Medium Quality Wetland:~~
 - a) ~~Average Buffer Width: 30ft~~
 - b) ~~Minimum Buffer Width: 25ft~~
 4. ~~Low Quality Wetland:~~
 - a) ~~Average Buffer Width: 25ft~~
 - b) ~~Minimum Buffer Width: 16.5ft~~
- c. ~~Buffer area requirements. Where acceptable natural vegetation exists in buffer areas, the retention of such vegetation in an undisturbed state is required unless approval to replace such vegetation is received. A buffer has acceptable vegetation if it:~~
1. ~~Has a continuous, dense layer of perennial grasses that has been uncultivated or unbroken for at least 5 consecutive years; or,~~
 2. ~~Has an overstory of trees and/or shrubs that has been uncultivated or unbroken for at least 5 consecutive years; or,~~
 3. ~~Contains a mixture of the plant communities in Criteria (c)(1) and (c)(2) above that has been uncultivated or unbroken for at least 5 years.~~
- d. ~~Maintenance of Buffer Areas. Buffers shall be staked and protected in the field prior to construction unless the vegetation and the condition of the buffer are considered inadequate. Existing conditions vegetation will be considered unacceptable if:~~
1. ~~Topography or sparse vegetation tends to channelize the flow of surface water~~
 2. ~~Some other reason the vegetation is unlikely to retain nutrients and sediment~~
- e. ~~Requirements for Replanting. Where buffer vegetation and conditions are unacceptable, or where approval has been obtained to replant, buffers shall be replanted and maintained according to the following criteria:~~
1. ~~Buffers shall be planted with a native seed mix approved by MnDOT, BWSR, NRCS or the Dakota County SWCD, with the exception of a one time planting with an annual nurse or cover crop. Plantings of native forbs and grasses may be substituted for seeding. All substitutions must be approved by the City.~~

~~Groupings/clusters of native trees and shrubs, of species and at densities appropriate to site conditions, shall also be planted throughout the buffer area.~~

- ~~2. The seed mix and planting shall be broadcast/installed according to MnDOT, BWSR, NRCS or Dakota County SWCD specifications. The selected seed mixes and plantings for permanent cover shall be appropriate for the soil site conditions and free of invasive species.~~
 - ~~3. Buffer vegetation (both natural and created) shall be protected by erosion and sediment control measures during construction.~~
 - ~~4. During the first five full growing seasons, except where the City has determined vegetation establishment is acceptable, the owner or applicant must replant buffer vegetation where the vegetative cover is less than 90%. The owner or applicant must assure reseeding/or replanting if the buffer changes at any time through human intervention or activities.~~
- ~~f. Conservation Easement. Where a buffer is required, the City shall require the protection of the buffer under a conservation easement, or include the buffer in a dedicated outlet as part of platting and subdivision approval, except where the buffer is located in a public transportation right-of-way. Buffer shall also have monumentation to clearly designate the boundaries of all new buffers within new residential subdivisions. A monument shall consist of a post and a buffer strip sign approved by the City.~~
- ~~g. Usage:~~
- ~~1. Alterations, including building, storage, paving, routine mowing, burning, plowing, introduction of noxious vegetation, cutting, dredging, filing, mining, dumping, grazing livestock, agricultural production, yard waste disposal, or fertilizer application are prohibited within any buffer. Periodic mowing or burning, or the use of fertilizers and pesticides for the purpose of managing and maintaining native vegetation, may be allowed with approval of the City. Noxious weeds may be removed and mechanical or spot herbicide treatments may be used to control noxious weeds, but aerial or broadcast spraying is not acceptable. Prohibited alterations would not include plantings that enhance the natural vegetation or selective clearing or pruning of trees or vegetation that are dead, diseased or pose similar hazards, or as otherwise clarified in Criteria 3d.~~
 - ~~2. The following activities shall be permitted within any buffer, and shall not constitute prohibited alterations:

 - ~~a) The following activities are allowed within both the minimum and average buffer width areas:

 - ~~1. Use and maintenance of an unimproved access strip through the buffer, not more than 10 feet in width, for recreational access to the major waterway or wetland and the exercise of riparian rights;~~
 - ~~2. Structures that exist when the buffer is created;~~~~~~

- ~~3. Placement, maintenance, repair, or replacement of public roads and utility and drainage systems that exist on creation of the buffer or are required to comply with any subdivision approval or building permit obtained from the City, so long as any adverse impacts of public road, utility, or drainage systems on the function of the buffer have been avoided or minimized to the extent practical;~~
 - ~~4. Clearing, grading, and seeding is allowed if part of an approved Wetland Replacement Plan, or approved Stream Restoration Plan.~~
 - ~~5. Construction of a multipurpose trail, including boardwalks and pedestrian bridges, provided it is constructed to minimize erosion and new impervious surface, and has an undisturbed area of vegetative buffer at least ten (10) feet in width between the trail and the wetland or public waters wetland edge, or the bank of the major waterway; or where needed to cross the major waterway, the minimum impact alignment is used.~~
 - ~~6. The construction of underground utilities such as water, stormwater, and sanitary sewers and pipelines provided the minimum impact alignment is used, the area is stabilized in accordance with Criteria 3d above, and setbacks established in the Floodplain Alterations Rule, are met.~~
- ~~b) The following activities are allowed within those portions of the average buffer width that exceed the minimum buffer width:~~
- ~~1. Stormwater management facilities, provided the land areas are stabilized in accordance with Criteria (e) (1-4) above, and alterations prohibited in Criteria (g)(1) above are upheld.~~
 - ~~2. The area of shallow vegetated infiltration and biofiltration facilities, and water quality ponds not to exceed 50 percent of the pond area, adjacent to wetlands and major waterways may be included in buffer averaging provided the facilities do not encroach into the minimum buffer width, and the land areas are stabilized in accordance with Criteria 3d above, and alterations prohibited in Criteria fl above are upheld.~~

SECTION 2. AMENDMENT. The Code of the City of Hastings, Counties of Dakota and Washington, State of Minnesota, Chapter 158.04, Section H, Property Maintenance Requirements - Repair and Maintenance of Existing Buildings shall be amended as follows (items underlined are additions, items ~~stricken~~ are deletions):

8. Salt Storage.

- a. De-icing materials must be stored
1. Indoors, or outside in a designated salt storage area under a roof or cover that eliminates exposure to precipitation.
 2. On an impervious surface
 3. In a location that reduces exposure to precipitation when transferring the de-icing material.

SECTION 3. SUMMARY PUBLICATION. Pursuant to Minnesota Statutes Section 412.191, in the case of a lengthy ordinance, a summary may be published. While a copy of the entire ordinance is available without cost at the office of the City Clerk, the following summary is approved by the City Council and shall be published in lieu of publishing the entire ordinance.

The text adopted by the Hastings City Council on December 19, 2022 modifies the City Code to satisfy the general intent of the MS4 General Permit requirements for chloride storage and stormwater management.

SECTION 4. EFFECTIVE DATE. This ordinance shall be in full force and effect from and after its passage and publication according to law.

Passed this 19th day of December, 2022.

Mary Fasbender, Mayor

Attest:

Kelly Murtaugh, City Clerk

Published in the *Hastings Journal* on December 22, 2022.