SECTION 1109.00 LAND AND WATER PRESERVATION.

1109.01 PURPOSE.

The purpose of this Section is to ensure that sensitive physical features such as bluff land, ravines, wetlands and natural waterways are protected.

1109.02. SOIL EROSION AND SEDIMENTATION CONTROL.

1109.02 SUBD. 1. . GENERAL STANDARDS.

1. All development shall conform to the natural limitations presented by the topography and soil in order to create the best potential for preventing soil erosion.

2. Slopes over thirty (30) percent in grade shall not be used as a building site.

3. Development on slopes with a grade between twenty (20) percent and thirty (30) percent shall be carefully reviewed to insure adequate measures have been taken to prevent erosion, sedimentation and structural damage.

4. Erosion and siltation control measures, as determined by the City Engineer, shall be coordinated with the different stages of development. Appropriate control measures shall be installed prior to development when necessary to control erosion.

5. Land shall be developed in increments of workable size such that adequate erosion and siltation controls can be provided as construction progresses. The smallest practical area of land shall be exposed at any one period of time and no exposure shall exceed sixty-five (65) days unless extended by the City Council.

6. Where the topsoil is removed, sufficient arable soil shall be set aside for re-spreading over the disturbed area or new topsoil shall be brought in. The topsoil shall be restored to a depth of four (4) inches and shall be of a quality at least equal to the sod quality prior to development.

7. Public and private properties and waterbodies adjacent to the development site shall be protected from the effects of erosion, sedimentation, flooding or other damage. Any violations of this provision must be corrected by the owner to the satisfaction of the City within five (5) days of receiving notification of such. If the violation is not remedied within the time period specified, the City may correct the problem and assess the costs incurred to the property owner.

8. All land disturbing activities, whether requiring a permit under these Ordinances or otherwise, shall be undertaken in conformance with best

management practices and in compliance with the standards and criteria in these Ordinances.

9. Land disturbing activities shall be planned and conducted to minimize the extent of disturbed area, runoff velocities and erosion potential, and to reduce and delay runoff volumes. Erosion and runoff controls, consistent with Best Management Practices (BMPs), shall be properly installed before commencing land disturbing activities, shall be sufficient to retain sediment on-site, and shall not be removed without approval. Erosion and runoff controls shall be regularly inspected and maintained. Vegetation shall be installed over the disturbed areas promptly if the land disturbing activity ceases or is suspended, and upon completion. Pipe outlets must be provided with temporary or permanent energy dissipation if connected to a surface water.

10. When possible, existing natural watercourses and vegetated soil surfaces shall be used to convey, store, filter and retain runoff before discharge into public waters or a stormwater conveyance system.

11. When possible, runoff from roof gutter systems shall discharge onto lawns or other pervious surfaces to promote infiltration.

12. When development density, topographic features, and soil and vegetation conditions are not sufficient to adequately handle runoff using natural features and vegetation, various types of constructed facilities such as diversions, settling basins, skimming devices, dikes, watercourses and ponds may be used. Preference shall be given to designs using surface drainage, vegetation and infiltration rather than buried pipes and man-made materials and facilities.

13. Whenever the City determines that any land disturbing activity has become a hazard to any person, or endangers the property of another, adversely affects water quality or any waterbody, increases flooding, or otherwise violates these Ordinances, the owner of the land upon which the land disturbing activity is located, or other person or agent in control of such land, upon receipt of written notice from the City, shall within the time period specified therein repair or eliminate such condition. The owner of the land upon which a land disturbing activity is located shall be responsible for the cleanup and any damages from sediment that has eroded from such land. The City may require the owner to obtain a permit from the City under these Ordinances before undertaking any repairs or restoration.

14. Erosion and sediment control measures shall meet the standard for the General Permit Authorization to Discharge Storm Water Associated With Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program Permit MN R100001 (NPDES General Construction Permit) issued by the Minnesota Pollution

Control Agency, August 1 2003, as amended; except where more specific requirements are provided in this Ordinance below.

15. If the activity is taking place on a site where the soils are currently disturbed (e.g. a tilled agricultural site that is being developed), areas that will not be disturbed as part of the development and areas that will not be disturbed according to the time frames and slopes specified in the NPDES General Construction permit Part IV.B.2, shall be seeded with temporary or permanent cover before commencing the proposed land disturbing activity.

16. Where five (5) or more acres of disturbed soil drain to a common location, a temporary (or permanent) sediment basin must be provided prior to the runoff leaving the site or entering surface waters. The basins must be designed and constructed according to the standards in the NPDES General Construction Permit Part III.B.

17. The permittee or applicant must ensure final stabilization of the site in accordance with the NPDES General Construction Permit requirements. The site will be considered as having achieved final stabilization following submission of Certificate of Completion by the permittee or applicant, and inspection and approval by the City.

18. 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.

1109.02 SUBD. 2. EXPOSED SLOPES.

The following control measures shall be taken to control erosion during construction.

1. No exposed slopes shall be steeper in grade than five (5) feet horizontal to one (1) foot vertical, except during construction of utilities.

2. At the foot of each exposed slope, a channel and berm shall be constructed to control runoff. The channeled water should be diverted to a sedimentation basin (debris basin, silt or silt trap) before being allowed to enter the natural drainage system.

3. Along the top of each exposed slope, a berm shall be constructed to prevent runoff from flowing over the edge of the slope. Where runoff collecting behind said berm cannot be diverted elsewhere and must be directed down the slope, appropriate measures shall be taken to prevent erosion. Such measures shall consist of either an asphalt-paved flow apron and drop chute laid down the slope or a flexible slope drain. At the base of the slope drain or flow apron, a gravel energy dissipater shall be installed to prevent erosion at the discharge end.

4. Exposed slopes shall be protected to whatever means will effectively prevent erosion considering the degree of slope, soils material and expected length of exposure. Slope protection shall consist of mulch, sheets of plastic, burlap or jute netting, sod blankets, fast growing grasses or temporary seeding of annual grasses. Mulch consists of hay, straw, wood chips, cornstalks, bark or other protective material. Mulch shall be anchored to slopes with stakes, and netting, or shall be worked into the soil to provide additional slope stability.

5. Control measures, other than those specifically stated above, may be used in place of the above measures if it can be demonstrated they will as effectively protect exposed slopes.

1109.03 PRESERVATION OF NATURAL DRAINAGEWAYS.

1109.03 SUBD. 1. WATERWAYS.

1. The natural drainage system shall be used as far as is feasible for storage and flow of runoff water. Untreated stormwater drainage may be discharged to retention basins or other treatment facilities. Only treated stormwater may be discharged to wetlands, marshlands or swamps. Diversion of treated stormwater to wetlands, marshlands or swamps shall be considered for existing or planned surface drainage. Marshlands and swamps used for treated stormwater shall provide for natural or artificial water level control. Temporary storage areas or retention basins scattered throughout developed areas shall be encouraged in order to reduce peak flow, erosion damage and construction cost.

2. The widths of a constructed waterway shall be sufficiently large to channel runoff from a ten (10) year storm. Adequacy shall be determined by the expected runoff when full development of the drainage area is reached.

3. No fences or structures shall be constructed across the waterway that will reduce or restrict the flow of water.

4. The banks of the waterway shall be protected with permanent vegetation.

5. The banks of the waterway should not exceed five (5) feet horizontal to one (1) foot vertical in gradient.

6. The gradient of the waterway bed should not exceed a grade that will result in a velocity that will cause erosion of the banks of the waterway.

7. When possible, existing natural watercourses and vegetated soil surfaces shall be used to convey, store, filter and retain runoff before discharge into public waters or a stormwater conveyance system. If the waterway must be constructed, the bed of the waterway should be protected with turf, sod or other approved stabilizing materials. If turf or sod will not function properly, rip rap may be used. Rip rap shall consist of quarried

limestone, field-stone (if random rip rap is used). The rip rap shall be no smaller than two (2) inches square or no larger than two (2) feet square.

8. If the flow velocity in the waterway is such that erosion of the turf sidewall will occur and said velocity cannot be decreased via velocity control structures, then other materials may replace turf on the side walls. Either gravel or rip rap would be allowed to prevent erosion at these points.

9. Development of housing and other structures shall be restricted as stated in Ordinance 1105.

1109.03 SUBD. 2. . SEDIMENT CONTROL OF WATERWAYS.

1. To prevent sedimentation of waterways, pervious and impervious sediment traps and other sediment control structures shall be incorporated throughout the contributing watershed.

2. Temporary, pervious sediment traps may consist of a construction of bales of hay with a low spillway embankment section of sand and gravel that permits a slow movement of water while filtering sediment. Such structures would serve as temporary sediment control features during the construction state of development.

3. Permanent, impervious sediment control structures consist of sediment basins (debris basins, de-silting basins or silt traps) and shall be utilized to remove sediment from runoff prior to its disposal in any permanent body of water.

1109.04 WETLAND PRESERVATION.

1109.04 SUBD. 1. . GENERAL PROVISIONS AND POLICY.

To the extent possible, all wetlands shall be retained in their natural state to serve as natural water ecosystems and also as wildlife habitat. The rules and regulations applicable to wetlands and set forth by the Minnesota Wetland Conservation Act and Minnesota Clean Water Act are hereby incorporated.

It is the policy of the City to:

(a) Achieve no net loss of wetlands in the City, in conformance with the Minnesota Wetland Conservation Act (WCA) and associated rules (Minnesota Rules 8420).

(b) Encourage wetland avoidance for all new developments and land disturbing activities.

(c) Require mitigation of unavoidable wetland disturbance by replacing the lost wetland functions and values in the same major watershed with a wetland of equal or greater value.

(d) Require transportation projects to pursue wetland mitigation projects to the extent practical along the transportation corridor. (This does not preclude the use of the BWSR Replacement Program.)

(e) Identify and preserve wetlands for water retention, recharge, soil conservation, wildlife habitat, aesthetics, and natural enhancement of water quality.

(f) Manage changes in volume and quality of local stormwater systems to minimize negative impacts to existing wetland functions, value, or biological diversity.

(g) Replace affected wetlands where avoidance is not feasible and prudent.

1109.04 SUBD. 2. DISCHARGES INTO WETLANDS.

1. No part of any sewage disposal system requiring on-land or inground disposal of waste shall be located closer than one hundred fifty (150) feet from the normal high water mark unless it is proven by the applicant that no effluent will immediately or gradually reach the wetland because of existing physical characteristics of the site or the system.

2. Organic and other waste which would normally be disposed of at a solid waste disposal site or which would normally be discharged into a sewage disposal system or sewer shall not be directly or indirectly discharged to the wetland.

3. Stormwater runoff from construction sites may be directed to the wetland only when substantially free of silt, debris and chemical pollutants and only at rates that will not disturb vegetation or increase turbidity.

1109.04 SUBD. 3. . BUILDING CONSTRAINTS.

1. The lowest floor elevation of buildings if used for living quarters or work area shall be at least three (3) feet above the seasonal high water level of any/all wetland(s) in the vicinity.

2. Development that will result in unusual road maintenance costs or utility line breakages due to soil limitations, including high frost action, shall not be permitted.

3. The minimum setback for all buildings shall be seventy-five (75) feet from the seasonal high water level of any/all wetland(s) in the vicinity.

1109.04 SUBD. 4. REGULATION.

1. No person or political subdivision shall drain, fill, excavate or otherwise alter a wetland or public waters wetland without first obtaining the

approval of a wetland replacement plan from the local government unit with jurisdiction over the activity.

2. For any parcel created or redeveloped after the effective date of this Ordinance, a buffer shall be maintained around the perimeter of all wetlands and public waters wetlands. The buffer provisions of this Ordinance shall not apply to any parcel of record as of the date of this Ordinance until such parcel is subdivided or developed.

3. The buffer portions of this Ordinance (Paragraph 1109.04 (2)) do not apply to any wetland or public waters wetland with a surface area equal to or less than the area of wetland impact allowed without replacement as de minimus under the Wetland Conservation Act (WCA), and to those portions of wetlands that will be filled under approved wetland replacement plans per the Wetland Conservation Act (WCA).

1109.04 SUBD. 5. CRITERIA.

1. Any drainage, filling, excavation or other alteration of a public waters wetland or wetland shall be conducted in compliance with Minnesota Statutes, section 103G.245, the WCA, and regulations adopted thereunder.

2. A public waters wetland or wetland may be used for storm water storage and treatment only if the use will not adversely affect the function and public value of the wetland as determined by the City.

3. Wetland replacement/mitigation siting must follow the priority order below:

   (a) Mitigation on-site

   (b) Mitigation within the same subwatershed

   (c) Mitigation within the Scott Water Management Organization boundary

   (d) Mitigation within Scott County

   (e) Mitigation within the same major watershed.

4. A wetlands functional assessment for vegetative diversity will be completed with each wetland, and public waters wetlands, delineated for a project and buffers established according to the following table. The functional assessment and wetland rankings will be determined using the Minnesota Routine Assessment Method version 3.0 (MnRAM 3.0, as amended). Rankings are summarized as follows.

Buffer Requirement	Exceptional	High	Medium	Low	Stormwater Ponds
Average Buffer Width	65 feet	50 feet	35 feet	25 feet	0
Minimum Buffer Width	25 feet	25 feet	25 feet	25 feet	0*

**Must have a building setback of 75 feet from delineated edge of wetland and elevated as necessary to meet provisions of paragraph 1104.03 (6) of these Ordinances.*

"Exceptional" Wetland – are wetlands assigned the exceptional rating using MnRAM 3.0 for evaluating wetland functions. These wetlands are most susceptible to human impacts, are most unique, have the highest community resources significance such as rare species habitats, and similar characteristics.

"High" Wetland – are wetlands assigned the high rating using MnRAM 3.0 for evaluating wetland functions. These wetlands are relatively undisturbed but exhibit evidence of more disturbance or degradation than Exceptional wetlands. High wetlands have conditions and functions that are susceptible to human impacts, are connected to other wetlands or watercourses, and may contain locally significant or rare wetland types.

"Moderate" Wetlands – are wetlands assigned a moderate rating using MnRAM 3.0 for evaluating wetland functions. These wetlands typically provide a diversity of habitats, and are connected to other wetland or upland habitats to provide wildlife habitat.

"Low" Wetlands – are wetlands assigned a low rating using the MnRAM 3.0 for evaluating wetland functions. These wetlands tend to be less susceptible to further impacts than the other wetland management classifications. They also have low diversity and connectivity to other wetlands and watercourses.

Stormwater Ponds – are designated strictly for treating and retaining stormwater.

5. All structures shall have a minimum set-back of 75 feet from the delineated edge of wetlands and public waters wetlands.

6. The first 25 feet of buffer as measured from the wetland or public waters wetland cannot be disturbed during project construction (i.e., cleared or graded, except for temporary disturbances for public roads and utility construction) and must be protected from disturbance with temporary fencing prior to construction. Vegetation can be replaced and site soils preparation work completed within this first 25 feet if necessary to establish acceptable vegetation in accordance with Paragraph 1109.04 (5) (8) of this Ordinance.

7. Buffers shall apply whether or not the wetland or public waters wetland is on the same parcel as a proposed development. An applicant is required to delineate the boundary for any wetland or public waters wetland on the

project land. An applicant shall not be required to delineate wetlands on adjacent property, but must review available information to estimate the wetland boundary.

8. Buffer vegetation shall be established and maintained as follows:

(a) Where acceptable natural vegetation exists in buffer areas, the retention of such vegetation in an undisturbed state is required unless an applicant receives approval to replace such vegetation. A buffer has acceptable natural 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 described in Paragraphs 1109.04 (5) (8)(a)(1) and (8)(a)(2) of this Ordinance above that has been uncultivated or unbroken for at least 5 years.

(b) Notwithstanding the performance standards set forth in Paragraph 1109.04 (5) (8) (a) of this Ordinance, and the City may determine existing buffer vegetation unacceptable if:

(1) It is composed of undesirable plant species including but not limited to common buckthorn, purple loosestrife, leafy spurge or noxious weeds; or

(2) It has topography that tends to channelize the flow of runoff; or

(3) For some other reason it is unlikely to retain nutrients and sediment.

(c) Where buffers are not vegetated or have been cultivated or otherwise disturbed within 5 years of the permit application, such areas shall be replanted and maintained. The buffer plantings must be identified on the permit application. The buffer landscaping shall comply with the following standards:

(aa) Buffers shall be planted with a seed mix approved by MnDOT, BWSR, NRCS or SWCD, with the exception of a one-time planting with an annual nurse or cover crop such as oats or rye.

(bb) The seed mix shall be broadcast according to MnDOT, BWSR, NRCS or SWCD specifications of the selected mix. The annual nurse cover crop shall be applied at a minimum rate of 30 pounds per acre. The MnDOT, BWSR, or NRCS seed mix selected for permanent cover shall be appropriate for the soil site conditions and free of invasive species.

(cc) Native shrubs may be substituted for native forbs. All substitutions must be approved by the City. Such shrubs may be bare root seedlings and shall be planted at a minimum rate of 60 plants per acre. Shrubs shall be distributed so as to provide a natural appearance and shall not be planted in rows.

(dd) Any groundcover or shrub plantings installed within the buffer are independent of any landscaping required elsewhere by the City.

(ee) Grasses and forbs shall be seeded or planted using a method of application that shall be approved by the City prior to planting or seeding.

(ff) No fertilizer shall be used in establishing new buffers, except on highly disturbed sites when necessary to establish acceptable buffer vegetation and then limited to amounts indicated by an accredited soil testing laboratory.

(gg) All seeded areas shall be mulched immediately with clean straw at a rate of 1.5 tons per acre. Mulch shall be anchored with a disk or tackifier.

(hh) Buffers (both natural and created) shall be protected by erosion and sediment control measures during construction in accordance with Section 1109.02 of this Ordinance. The erosion and sediment control measures shall remain in place until the area crop is established.

(d) Buffer vegetation shall be established and maintained in accordance with the requirements found in Paragraph 1109.04 (5) (8) of this Ordinance. During the first 2 full growing seasons, the owner must replant any buffer vegetation that does not survive. The owner shall be responsible for reseeding/or replanting if the buffer changes at any time through human intervention or activities. At a minimum the buffer must be maintained as a “no mow’ area.

9. When a buffer is required the applicant shall, as a condition to issuance of a permit:

(a) Submit to the City for its approval a conservation easement for protection of approved buffers, or include the buffer in a dedicated outlot as part of platting and subdivision approval. The easement shall describe the boundaries of the wetland or public waters wetland and buffer, identify the monuments and monument locations, and prohibit any the alterations set forth in Paragraph 1109.04 (5) (10) of this Ordinance below and the removal of the buffer monuments within the buffer, wetland, or public waters wetland. Outlot descriptions shall provide for an equivalent level of protection of the buffer and prohibit any alterations set forth in Paragraph 1109.04 (5) (10) of this Ordinance below.

(b) File the approved easement for record and submit evidence thereof to the City, or complete preliminary and final plats including dedicated outlot(s); and

(c) Install the monumentation required by Paragraph 1109.04 (5) (13) of this Ordinance below.

10. Subject to Paragraph 1109.04 (5) (11) of this Ordinance below, alterations including building, storage, paving, mowing, 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. Noxious vegetation, such as European buckthorn, purple loosestrife and reed canary grass, may be removed. 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.

11. The following activities shall be permitted with any buffer, and shall not constitute prohibited alterations under Paragraph 1109.04 (5) (10) of this Ordinance above:

(a) Use and maintenance of an unimproved access strip through the buffer, not more than 20 feet in width, for recreational access to the watercourse or wetland and the exercise of riparian rights;

(b) 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 municipality or county, so long as any adverse impacts of public road, utility and drainage systems on the function of the buffer have been avoided or minimized to the extent practical;

(c) Construction, maintenance, repair, reconstruction or replacement of existing and future public roads within a buffer, so long as any adverse impacts of the road on the function of the buffer have been avoided or minimized to the extent practical.

(d) Clearing, grading and seeding is allowed if part of an approved Wetland Replacement Plan.

12. Buffers shall be monumented to clearly designate the boundaries of all buffers within new residential developments. A monument shall be required at each parcel line where it crosses a buffer strip and shall have a maximum spacing of 200 feet along the edge of the buffer. Additional monuments shall be placed as necessary to accurately define the edge of the buffer. A monument shall consist of a post and a buffer sign. The signs shall be obtained from the City and includes warnings about fines for disturbing and/or developing buffers. The signs shall be a minimum of

5 inches wide by 7 inches vertical, have a brown field with white lettering, and shall be securely mounted on a post to a minimum height of 4 feet above grade.

13. Other activities which would change the character of a wetland shall not diminish the quantity, quality or biological diversity of the wetland.

14. A land disturbing activity within a wetland may require a permit under Section 1109 of this Ordinance.

15. An activity within a wetland that alters or fills a floodplain may require a permit under Section 1109 of this Ordinance.

1109.05. TREE AND WOODLAND PRESERVATION.

1. Structures and other amenities shall be located in such a manner that the optimum number of trees shall be preserved.

2. Prior to the granting of a building permit, it shall be the duty of the person seeking the permit to identify existing trees on the lot on their site plan. Trees may be removed within a twenty-five (25) foot radius of the building pad perimeters and from the planned driveway. Any additional trees removed shall be replaced on a 1:1 ratio (one tree shall be replaced by one tree). When subdividing land, developers may remove up to twenty-five (25) percent of the trees for rights-of-way and streets and an additional twenty-five (25) percent of the existing trees for grading. Any additional trees removed shall be replaced on a 1:1 ratio.

3. Forestation, reforestation or landscaping shall utilize a variety of tree species and shall not utilize any species under disease epidemic. Species planted shall comply with landscaping requirements outlined in this Ordinance section.

4. Development including grading and contouring shall take place in such a manner that the root zone aeration stability of existing trees shall not be affected and shall provide existing trees with a watering area equal to not less than one-half (1/2) the crown area.

5. The provisions of this Section shall not apply to the following:

a. The removal of trees from commercial nurseries or horticulture properties such as tree farms, orchards or commercial forests. This exception shall not be interpreted to include lumber harvesting incidental to imminent development of land.

b. The removal of trees on public rights-of-way conducted by or on behalf of a federal, state, county, municipal or other governmental agency in pursuance of its lawful activities or functions in the construction or improvement of public rights-of-way.

c. The removal of trees deemed by the City to be diseased, dying or dead.

d. The removal of any tree that has become or threatens to become a danger to human life or property.

e. The removal of any tree by a public utility when such a tree has the reasonable potential of endangering the facilities operated by the utility.

1109.06 BLUFF PRESERVATION.

1109.06 SUBD. 1. CRITERIA

Minimum Bluff Standards: Any land disturbing activity, development or the redevelopment of land in a Bluff Overlay District shown on "Map 1: Bluff Overlay District of the City of Belle Plaine" (attached to this Ordinance) shall require a topographic survey to determine if a bluff is present. At its discretion, the City may waive the topographic survey requirement where a review of the available contour information clearly indicates a bluff is not present.

1. Where bluffs deemed unsuitable for land disturbance activity are present, the following rules shall apply:

   (1) All grading, clear cutting, removal of vegetation and/or other land disturbing activities are prohibited in the Bluff Impact Zone and/or Bluff Face,

   (2) Access to any buildings (except stairways and landings) shall not be placed within the bluff impact zone,

   (3) Setback from top or toe of bluff to any structure in any district shall be no less than thirty (30) feet, except if written permission has been granted by the City and the encroachment is in conformance with the City's Easement and Bluff Encroachment Requirements found in Chapter 12 of the City Code, Section 1205.07 Subd 4. EASEMENT AND BLUFF ENCROACHMENT REQUIREMENTS.

   (4) All storm water ponds, swales, infiltration basins, or other soil saturation-type features shall be set back a minimum of 50 feet from the top of bluff.

2. For those bluffs deemed suitable for land disturbance activity, the following rules shall apply:

   (1) Grading, clear cutting, removal of vegetation and/or other land disturbing activities may be allowed within the Bluff Impact Zone provided the activity is in compliance with the City Storm Water Management Plan's minimum performance standards. The Plan shall, at a minimum, require the following:

(a) The identification of any Bluff Preservation Areas where disturbance would be prohibited by City ordinance.

(b) The minimum Erosion and Sediment Control BMP's include site stabilization and slope restoration measures needed to ensure the proposed activity shall not result in:

Adverse impact to adjacent and/or downstream properties or water bodies,
Unstable slope conditions, and
Degradation of water quality due to erosion, sedimentation, flooding and other damage as stated in this Ordinance.

(c) Prohibit all activities that would result in disturbances or destabilization of the Bluff Face.

(d) Preservation of existing hydrology and drainage patterns. Land disturbing activities shall not result in any new water discharge points along the bluff.

(2) The following activities shall be permitted within the Bluff Face, and shall not constitute prohibited activities under 1109.06 Subd. 2 (1)(c):

(a) Maintenance, repair or replacement of public roads, and utility and drainage systems that exist on creation of the Bluff Overlay District.

(b) Disturbances that are part of an City-approved plan to repair, grade or re-slope existing bluff faces that are eroding or unstable as necessary to establish stable slopes and vegetation.

(c) Vertical cuts into the bluff face up to 10 vertical feet, measured from the existing top of bluff, provided that no storm water is directed over the bluff face and storm water runoff, including roof drainage, is collected and conveyed to a stable discharge point.

(d) Plantings that enhance the natural vegetation or the selective clearing of noxious, exotic or invasive vegetation, or the pruning of trees or vegetation that are dead, diseased or pose similar hazards.

1109.06 SUBD. 2. STANDARDS FOR CITY-SPONSORED PROJECTS

The City must demonstrate that any City-proposed activity in the bluff does not: 1) impact adjacent properties, 2) result in unstable slope conditions and, 3) result in the

degredation of water bodies from erosion, sedimentation, flooding and other damage as stated in Section 1109.02 (1) (6, 7, 8, 9, 12, and 13).

1109.06 SUBD. 3. EXCEPTIONS

1. Where the City has determined mining is appropriate, mining activities shall be exempt from Paragraph 1109.06 (1) provided that:

    (1) an extractive use site development and restoration plan is developed, approved by the City, and followed over the course of the project;

    (2) the mining operation is conducted in such a manner as to minimize interference with the surface water drainage outside of the boundaries of the mining operation;

    (3) that erosion and sediment control is provided in a manner consistent with Section 1109.02 (1) of this Ordinance; and

    (4) the landowner complies with all other applicable state and local regulations governing mining.

2. Disturbances, grading or re-grading of abandoned mine slopes necesesary to establish stable slopes and vegetation are exempt from Paragraph 1109.06 (1).

3. For the purposes of constructing Public Improvement Projects, as defined under these Ordinances, land disturbances in the Bluff Impact Zone and Bluff Face may be permitted providing the project proposer demonstrates to the City an appropriate need for these activities to occur and that avoidance and minimization sequencing was followed.

1109.07. GROUNDWATER PRESERVATION.

The City has a Wellhead Protection Plan. A Wellhead Protection Area (WHPA) was delineated through this plan and is shown on “Map 2: Wellhead Protection Area of the City of Belle Plaine” (attached to this Ordinance).

1109.07 SUBD. 1. POLICY

Groundwater is the primary source of potable water for the residents of the City. It is the policy of the City to:

(a) Support identification and reduction of groundwater contamination from both point and nonpoint sources.

(b) Require that all ISTS on a property be removed once sanitary sewer service is available to the property.

(c) Continue to support programs that promote efficient administration of groundwater pollution programs.

(d) To target high priority water bodies for water quality projects: including working with those waters listed as “impaired” by the MPCA for listing under Section 303(d) of the Clean Water Act. These include waters listed for excess nutrients and fecal coliform bacteria where failing ISTS systems and contaminated groundwater contribute to the impairment.

(e) Not allow constructed infiltration practices within the Wellhead Protection Area shown on Map 2, within 400 feet of a community water system or within 100 feet of a private well.

1109.07 SUBD. 2. REGULATION

The City requires all ISTS on a property be removed once sanitary sewer service is available to the property. If sanitary sewer service is not available to the property, the City shall require all known non-compliant ISTS in the 10-year capture area of Wellhead Protection Area (WHPA) to be upgraded to conform with Minnesota Rule 7080 within 3 years of establishment of this Ordinance.

1109.07 SUBD. 3. EXCEPTIONS

An exception may be granted by the City where non-compliant systems will be provided with municipal sewer service within 5 years. However, in no case should noncompliant systems remain in violation for more than 5 years from the date of establishment of this Ordinance or 5 years of establishment of a WHPA.

1109.08. STORM WATER MANAGEMENT.

1109.08 SUBD. 1. FINDINGS.

The City of Belle Plaine 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 affects 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 Belle Plaine 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 that may be affected by unplanned land usage.

1109.08 SUBD. 2. PURPOSE.

The purpose of this Ordinance is to promote, preserve and enhance the natural resources within the City of Belle Plaine. The City will protect water quality and unique and fragile environmentally sensitive land from adverse effects occasioned by poorly sited development or incompatible activities by regulating land disturbances or development activities. The Ordinance’s purpose is also to control or eliminate storm water pollution along with soil erosion and sedimentation in the City. The City intends to minimize conflicts and encourage compatibility between land disturbances and development activities, and water quality and environmentally sensitive lands. The City will do this 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. This Ordinance establishes standards and specifications for conservation practices and planning activities, which minimize storm water pollution, soil erosion and sedimentation.

1109.08 SUBD. 3. SCOPE AND EFFECT.

1. APPLICABILITY.

All applicants shall comply with current NPDES/SDS permitting requirements. No permit shall be issued until approval of the storm water pollution prevention plan (SWPPP) or a waiver of the approval requirement has been obtained in conformance with the provisions of this Section. At a minimum, these pollution abatement practices must conform to those in the current version of the Minnesota Pollution Control Agency's publication "Protecting Water Quality in Urban Areas".

2. EXEMPTIONS.

The provisions of this Section do not apply to:

A. Any land disturbing activity for which plans have been approved by the City within six (6) months prior to the effective date of this Section.
B. A lot for which a building permit has been approved on or before the effective date of this Section, provided that improvements are completed in compliance with previous approvals.
C. Installation of fence, sign, telephone and electric poles and other kinds of posts or poles;
D. Emergency work to protect life, limb or property;
E. Projects involving less than 500 cubic yards of material.

3. GENERAL POLICY.

For rivers and streams, storm water discharge rates from storm water treatment basins shall not increase over the predevelopment two (2) year, ten (10) year and one hundred (100) year peak storm discharge rates. Also, accelerated channel erosion must not occur as a result of the proposed activity. For discharges to wetlands, volume control is generally more important than discharge rate control. All on-site storm water conveyance channels shall be designed and constructed to withstand the expected velocity of flow from a 10-year frequency storm without erosion. As land is annexed into the City, the land being annexed carries with it the existing condition. Parcels developed after the date of this Ordinance within unincorporated areas will be regulated using pre-settlement conditions and this would then become the existing condition for the City once the area is annexed. If agricultural land is annexed, agriculture is the existing condition. If roads or streets are present they are part of the existing condition.

4. GRADING PLAN.

The storm water pollution prevention plan's measures, the limit of disturbed surface and the location of buffer areas shall be marked on the approved grading plan, and identified with flags, stakes, signs etc. on the development site before work begins.

1109.08 SUBD. 4. STORM WATER POLLUTION PREVENTION PLAN APPROVAL PROCEDURES.

1. APPLICATION.

A written application for storm water pollution prevention plan approval, along with the proposed storm water pollution prevention 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 Section. Prior to applying for approval of a storm water pollution prevention plan, an applicant may have the storm water pollution prevention plan 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 evidencing the payment of all required fees for processing and approval as set forth in Section 1109.08 Subd. 6, (6), and a bond when required by Section 1109.08 Subd. 6, (5) in the amount to be calculated in accordance with that subsection.

Drawings shall be prepared to scale appropriate to the site of the project and suitable for the review to be performed. At a minimum the scale shall be one (1) inch equals one hundred (100) feet.

2. STORM WATER POLLUTION PREVENTION PLAN.

At a minimum, the storm water pollution prevention plan (SWPPP) 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; a legal description of the property directly associated with the request; north point; date; scale of drawing; and number of sheets;
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, towns and districts or other landmarks;
3. Existing topography with a contour interval appropriate to the topography of the land;
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 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. Vegetative cover and clearly delineating any vegetation proposed for removal; and,
7. One hundred (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 Section;
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 Section; 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 drainage plan of the developed site delineating in which direction and at what rate storm water will be conveyed from the site and settling forth the areas of the site where storm water will be allowed to collect;
3. The proposed size, alignment and intended use of any structures to be erected on the site;
4. Any other information pertinent to the particular project, which in the opinion of the applicant, is necessary for the review of the project.

1109.08 SUBD. 5. CRITERIA.

Stormwater pollution prevention plans shall comply with the following criteria:

1. A hydrograph method based on sound hydrologic theory will be used to analyze runoff for the design or analysis of flows and water levels. Hydrologic models and design methodologies used for the determination of runoff and analysis of storm water management structures shall be approved by the City Engineer. Plan specification and computations for storm water management facilities submitted for review shall be sealed and signed by a registered professional engineer. All computations shall appear on the plans submitted for review, unless otherwise approved by the City Engineer.

2. Runoff rates for the proposed activities, development or redevelopment within the City shall:

   (a) Not exceed existing runoff rates for the 2-year, 10-year and 100-year critical duration storm events;

   (b) Not accelerate on or off-site water course erosion, downstream nuisance, flooding or damage as demonstrated by the applicant according to paragraph 1109.08 (5) (4) of this Ordinance below; and

(c) Runoff rates may be restricted to less than the existing rates when necessary for the public health, safety and general welfare of the City.

3. As land is annexed into the City, the land being annexed carries with it the existing condition. Parcels developed after the date of this Ordinance within unincorporated areas will be regulated using pre-settlement conditions and this would then become the existing condition for the City once the area is annexed. If agricultural land is annexed, agriculture is the existing condition. If roads or streets are present they are part of the existing condition.

4. An assessment of the potential for adverse impacts downstream of site improvements, whether on- or off-site, is required except when the proposed activity, development or redevelopment is less than 20 acres and less than 8 percent of the site is covered by impervious surface, or when the rate control provisions of Paragraph 1109.08 (5) (2) of this Ordinance, as applicable, are met; and the proposed activity, development or redevelopment does not increase runoff volume for the 2-year critical duration event (not including snow melt). To demonstrate that the proposed activity does not accelerate on or off-site erosion, downstream nuisance, flooding or damage, the applicant must complete an evaluation downstream to the point where the proposed activity is 10 percent of the drainage area (e.g. a 10 acre development must evaluate downstream to the point where the drainage area is 100 acres). The evaluation at a minimum must consist of an assessment of:

(a) Potential impacts to areas surrounding landlocked lakes or ponds, or lakes or ponds with inadequate outlets where flood levels would be increased by added runoff volume.

(1) Evaluations must include:

(aa) An assessment of water levels in the water body resulting from the contributing watershed's full annual runoff yield during a 100-year wet year using the Simplified Hydrologic Yield Method (SHYM), or more rigorous methods for back to back 100-year critical events, for both existing conditions and fully developed watershed conditions; and

(bb) The identification of public and private structures (including low floor and entry elevations of residences, and individual sewage treatment systems (ISTS)), and infrastructure (sanitary sewer, stormwater pipes and facilities, and roads) surrounding the water body and located within 2 vertical feet of the future conditions water level elevation predicted using the SHYM, or the elevation for the back to back 100-year critical event. Information regarding the SHYM can be found in the City's Surface Water Management Plan or Scott Watershed Management Organization's Comprehensive Water Resource Management Plan Rules Attachment 1.

(2) If there are public or private structures or infrastructure located within 2 vertical feet of the future conditions SHYM, or back-to-back 100-year critical event elevation, the applicant must demonstrate that no adverse impacts to health, safety and welfare, or property damage, would occur; or provide corrective actions. Corrective actions shall include the following as necessary to mitigate in proportion to the proposed project impact:

(aa) Controlling post-development runoff volumes at existing conditions;

(bb) Controlling runoff rates to less than existing conditions within the City as described in Paragraph 1109.08 (5) (2) of this Ordinance;

(cc) Protecting or re-locating impacted structures or infrastructure, or securing easements for additional flooded areas; or

(dd) Other actions necessary to mitigate the impact.

(b) Potential impacts to downstream infrastructure, public and private structures, and erosion along the drainage path and downstream public waters.

(1) Evaluations must include:

(aa) The identification of existing public and private drainage easements;

(bb) The locations, condition, and dimensions of the existing drainage infrastructure;

(cc) The location and elevation of structures with low floors, or entries within 2 vertical feet of the 100-year critical storm flood level;

(dd) The location and description of known existing flooding problems;

(ee) A hydrologic and hydraulic assessment of flooding impacts of the proposed project on downstream public and private structures.

(ff) An assessment of existing and potential watercourse erosion, bank stability, bank protection, and watercourse slope;

(gg) An assessment of the hydrologic and hydraulic capacity of the downstream public and private infrastructure;

(hh) An assessment of property damages; and health, safety and welfare impacts relative to increased flooding of public and private infrastructure. Minnesota Department of Transportation guidelines shall be used to assess safety of flood levels at downstream driveways and road crossings.

(2) If property damage, erosion, public health, safety and welfare impacts are identified the applicant must provide corrective action. Corrective actions shall include the following as necessary to mitigate in proportion to the proposed project impact:

(aa) Actions described in Paragraph 1109.08 (5) (4) (a) (2) of this Ordinance;

(bb) Obtaining easements;

(cc) The installation of stream bank stability and protection measures;

(dd) The upgrading, protecting or re-locating impacted infrastructure; or

(ee) Other actions necessary to mitigate the impact.

(c) Potential impacts to wetlands with exceptional vegetative diversity functional value (see Paragraph 1109.04 of this Ordinance for determination of Exceptional value wetlands).

(1) Evaluation must include:

(aa) Delineation and functional assessment of wetlands according to Paragraph 1109.04 of this Ordinance;

(bb) A hydrologic and hydraulic analysis of the before and after project water level bounce and period of inundation for wetlands with exceptional vegetative diversity for the 1-year, 2-year and 10-year critical duration events.

(2) The applicant must provide corrective actions that mitigate in proportion to the proposed project impact as specified in Paragraph 1109.08 (5) (4) (c) (3) of this Ordinance; if the water level bounce and period of inundation created by the storms evaluated in Paragraph 1109.08 (5) (4) (c) (1) (bb) of this Ordinance exceeds the limit specified in the following table.

(3) Corrective actions shall consist of runoff rate and volume controls necessary to keep the water level bounce and period of inundation within the limits specified in the following table.

5. The minimum design capacity of all drainage systems shall accommodate the runoff from a 10-year storm event. All drainage systems and facilities shall be designed to withstand the runoff from the critical one hundred 100-year event or accumulative antecedent conditions without damage to the system or facility, downstream areas and/or significant risk to public health, safety and welfare unless waived for limited use, low maintenance road crossings.

Hydroperiod standard	**Highly susceptible wetlands***	**Moderately susceptible wetlands***	**Slightly susceptible wetlands***	**Least-susceptible wetlands***
Storm Bounce 1 & 2-year events	Existing	Existing plus 0.5 feet	Existing plus 1.0 feet	No limit
Period of Inundation for 1 & 2-year events	Existing	Existing plus 1 day	Existing plus 2 days	Existing plus 7 days
Period of inundation for 10-year event	Existing	Existing plus 7 days	Existing plus 14 days	Existing plus 21 days

** See Ordinance 1101 Definitions.*
Source: Storm Water and Wetlands: Planning and Evaluation Guidelines for Addressing Potential Impacts of Urban Stormwater and Snow Melt Runoff on Wetlands. June 1997. State of Minnesota Stormwater Advisory Group.

6. Regional detention basins shall be utilized to manage peak flow rates and runoff volumes, and meet water quality objectives when feasible. On-site detention basins, volume control facilities, and permanent sedimentation and water quality ponds will be utilized for land disturbing activities, the development or redevelopment of land that creates greater than 1 acre of impervious surface when regional basins are not in place or feasible, or would not otherwise met requirements for the protection of downstream areas according to Paragraph 1109.08 (5) (4) of this Ordinance that are located between the project and the regional basin.

7. The City may approve alternative BMPs instead of permanent sedimentation and water quality ponds if it finds that the water quality performance of the proposed alternative BMPs is equivalent to that of a permanent sedimentation and water quality pond designed according to the criteria set forth for permanent sedimentation and water quality ponds in Paragraph 1109.08 (5) (11) of this Ordinance below. The generally accepted performance of permanent sedimentation and water quality ponds designed to these criteria is 80% Total Suspended Solids removal on an annual average basis. The assumed performance for the BMPs shall be based on information from independent laboratory work, studies, or reference materials including the Minnesota Urban Small Sites BMP Manual (Metropolitan Council 2001), as such manual may be amended, revised or supplemented. The City may require monitoring of alternative practices and contingency plans similar to the requirements for the

General Permit Authorization to Discharge Storm Water Associated With Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program Permit MN R100001 (NPDES General Construction Permit) issued by the Minnesota Pollution Control Agency, August 1 2003, as amended.

8. Analysis of flood levels, storage volumes and flow rates for waterbodies and detention basins shall be based on the range of rainfall and snow melt durations producing the critical flood levels and discharges.

9. Landlocked water basins may be provided with outlets if an outcome based analysis and resource oriented management review regarding downstream impacts is completed that demonstrates that:

   (a) A hydrologic regime is maintained that complies with Paragraphs 1109.04 and 1109.09 of this Ordinance;

   (b) Dead storage is provided to retain the fully developed future conditions SHYM predicted water volumes, or the back to back 100-year critical event water volume, above the highest anticipated groundwater elevation to the extent possible while preventing damage to property adjacent to the basin;

   (c) The outlet does not create adverse downstream flooding or water quality conditions, or materially affect stability of downstream watercourses according the criteria in Paragraph 1109.08 (5) (4) of this Ordinance;

   (d) Proposed development tributary to the land-locked basin has incorporated runoff volume control practices to the extent practical;

   (e) There is a demonstrated need for an outlet to protect existing structures and infrastructure; and

   (f) The outlet design is part of an approved comprehensive local water management plan.

10. Detention basins shall be designed to provide:

   (a) An outlet structure to control the 2-year, 10-year and 100-year critical storm events to runoff rates specified in Paragraphs 1109.08 (5) (2) and (3) of this Ordinance;

   (b) An identified overflow spillway and downstream route sufficiently stabilized to convey a 100-year critical storm event;

   (c) A normal water elevation above the OHW of adjacent waterbodies or normal water level (NWL) where an OHW is not established; and

   (d) Access for future maintenance.

11. Storm Water Management Criteria for Permanent Facilities.

A. An applicant shall install or construct, on or for the proposed land disturbing or development activity, all storm water management facilities necessary to manage increased runoff so that the two (2) -year, ten (10) -year, and one hundred (100) -year storm peak discharge rates existing before the proposed development shall not be increased, and accelerated channel erosion will not occur as a result of the proposed land disturbing or development activity. An applicant may also make an in-kind or monetary contribution to the development and maintenance of regional storm water management facilities designed to serve multiple land disturbing and development activities undertaken by one (1) or more persons, including the applicant.

All storm water treatment basins, with the exception of commercial or institutional private storm water treatment basins, become City property after project completion. The City will clean private storm water treatment basins and charge/assess the owner. The City has access rights to maintain storm water treatment basins.

B. The applicant shall give consideration to reducing the need for storm water management facilities by incorporating the use of natural topography and land cover such as wetlands, ponds, natural swales, and depressions as they exist before development to the degree that they can accommodate the additional flow of water without compromising the integrity or quality of the wetland or pond.

C. Permanent sedimentation and water quality ponds shall be designed to provide:

(a) Water quality features consistent with NURP criteria and best management practices;

(b) A permanent wet pool with dead storage of at least the runoff from a 2.5-inch storm event and meeting NPDES General Construction Permit Part III.C. The pond must have a permanent volume of 1800 cubic feet of storage per acre that drains to the pond. The pond should also have a water quality volume of 0.5 inch of runoff from the new impervious surface;

(c) Pond outlets shall be designed to prevent short circuiting of the flow from pond inputs to the outlet;

(d) A normal water elevation above the OHW of adjacent waterbodies, or normal water level (NWL) where an OHW is not established;

(e) An outlet skimmer to prevent migration of floatables and oils for at least the 1-year storm event;

(f) Access for future maintenance;

(g) A permanent pond surface area equal to two (2) percent of the impervious area draining to the pond or one (1) percent of the entire area draining to the pond, whichever amount is greater;

(h) An average permanent pool depth of four (4) to ten (10) feet; and,

(i) A minimum protective shelf extending ten (10) feet into the permanent pool with a slope of ten-to-one (10:1), beyond which slopes should not exceed a four-to-one (4:1) ratio.

D. Any new residential, commercial, industrial and other habitable structures shall be constructed with the following low floor elevation: Elevation of the lowest opening of a structure shall be a minimum of 2 feet above the Emergency Overflow, or 1 foot above the HWL of the nearby pond or waterbody, whichever is higher. When possible, storm water pond designs shall include an emergency overflow to provide an outlet 2 feet below the lowest floor elevation of any adjacent structure for added safety. Overland flow routes shall be incorporated into the design for ponds and maintained during development. The City shall require a minimum of 3 feet of freeboard above the 100 year back to back 24 hour rainfall event elevation for landlocked areas or ponds where emergency overflows cannot be provided. The lowest exposed floor or opening elevation of structures that are adjacent to ponds shall be indicated on the site grading plan to ensure adequate freeboard.

12. Development and redevelopment that creates impervious surfaces and increases runoff volumes above existing conditions for the 2-year critical storm event (not including snow melt events) must incorporate runoff volume control practices into the design. The design must explicitly address the use of best management practices to limit the loss of pervious area, and limit runoff volume increases from impervious areas to the extent feasible considering site-specific conditions.

(a) At a minimum volume control practices shall provide a reduction in site runoff discharge volume of at least ½ inch of runoff from all new impervious surfaces.

(b) Volume controls shall be greater than ½-inch from new impervious surfaces if necessary to mitigate downstream impacts in accordance with Paragraph 1109.08 (5) (4) of this Ordinance.

(c) When using infiltration for volume control, infiltration volumes and facility sizes shall be calculated using the appropriate hydrological soil group classification and saturated infiltration rate from the table below, and shall be capable of infiltrating the required volume within 72 hours. Documented site-specific infiltration or hydraulic conductivity measurements completed by a licensed soil scientist or engineer may be used in place of the values in the following table.

Hydrologic Soils Type	Infiltration Rate	Soil Texture
A	0.30 inches/hour	Sand, loamy sand, or sand loam
B	0.15 inches/hour	Silt loam or loam
C	0.07 inches/hour	Sandy clay loam

Source: Urban Hydrology for Small Watersheds (SCS, 1986), as amended, revised or supplemented.

(1) Infiltration areas will be limited to the horizontal areas subject to prolonged wetting.

(2) Areas of permanent pools tend to lose infiltration capacity over time and will not be accepted as an infiltration practice.

(3) Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction that will enter the infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging and to protect groundwater quality. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips. To minimize potential groundwater impacts it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollution source areas such as parking lots.

(4) Infiltration systems must be designed to bypass higher flows.

(5) Infiltration areas must be fenced or otherwise protected from disturbance before the land disturbing activity starts.

(d) Constructed infiltration practices, such as infiltration ponds and trenches, as the best management practice for volume control shall be avoided by using other appropriate volume control practices, credits, or areas of project sites, and shall not be used:

(1) For runoff from fueling and vehicle maintenance areas,

(2) On areas with less than 3 feet vertical separation from the bottom of the infiltration system to the elevation of seasonal high groundwater or top of bedrock,

(3) For areas with runoff from industrial, commercial and institutional parking lots and roads where there is less than 5 feet separation from the bottom of the infiltration system to the elevation of the seasonal high groundwater,

(4) On areas with Type D soils.

(e) Constructed infiltration practices are not allowed in the Wellhead Protection Area shown on Map 2 “Wellhead Protection Areas of the City of Belle Plaine” (attached to this Ordinance), as amended; and within 400 feet of a community water system or within 100 feet of a private well.

(f) The following credits will be allowed toward the ½-inch volume control requirement, and may be used as corrective actions for downstream impacts if required under Paragraph 1109.08 (5) (4) of this Ordinance. To receive credit applicants must request the credits, and provide calculations and documentation showing that the following criteria are met;

(1) Natural Area Conservation Credit. A volume control credit will be given when natural areas are conserved at development or redevelopment sites, thereby retaining or improving their pre-development hydrologic and water quality characteristics. To the extent practicable, these natural areas should be delineated to maximize contiguous land and avoid fragmentation. Credit will be given for a runoff volume based on what the conserved area could have been developed as under the current Comprehensive Land Use Plan for the City without conservation. To receive the credit:

(aa) The area must not be part of a density transfer where impervious area is transferred to another part of the site, but must represent a net reduction in impervious area that can be constructed as part of the project;

(bb) The area must be maintained in a natural vegetative state in an outlot and protected with a conservation easement (see Paragraph 1109.04 of this Ordinance for prohibited and allowed uses in Conservation Easements);

(cc) Mowed grass will not be considered a natural vegetative state;

(dd) The area cannot be disturbed during the project construction (i.e., cleared or graded, except for temporary disturbances for utility construction); and

(ee) The area must be protected by limits of disturbance clearly shown on all construction drawings.

(2) Disconnection of Rooftop Runoff Credit. A credit will be given when rooftop runoff is “disconnected” and directed to a pervious area where it can either infiltrate or transpire. If a rooftop is disconnected, the disconnected impervious area can be deducted from the total impervious area thereby reducing the volume control requirement. To receive the credit:

(aa) Projects involving the subdivision of land must include the maintenance and preservation of the disconnection as part of a recorded restrictive covenant;

(bb) The disconnection must be designed to adequately address the issue of basement seepage;

(cc) The contributing length of rooftop to a discharge location shall be 75 feet or less;

(dd) The rooftop contributing area to anyone discharge location cannot exceed 1,000 square feet;

(ee) Disconnections will only be credited for residential lots sizes greater than 6,000 square feet;

(ff) The entire vegetative “disconnection” shall be on a slope less than or equal to 5.0%, and must not channelize flow;

(gg) Where provided, downspouts must be at least 10 feet away from the nearest impervious surface to discourage “re-connections”;

(hh) Where a subsurface drain is used the drain cannot be directly connected to the storm drainage network;

(ii) No soil evaluation is required for disconnections that drain to hydrologic soil groups A and B;

(jj) Disconnections draining to hydrologic soil groups C and D shall have a soil evaluation to demonstrate that additional flows will not create nuisance conditions;

(kk) For those rooftops draining to a stream buffer, the applicant may only use either the rooftop disconnection credit or the buffer credit, not both; and

(ll) Rooftop disconnects are only allowed for vehicle fueling and maintenance areas if the rooftop runoff does not co-mingle with runoff from the paved vehicular surfaces.

(3) Disconnection of non-rooftop runoff credit. A credit will be given for practices that disconnect impervious surfaces by directing runoff as sheet flow from impervious areas to pervious areas where it is either infiltrated or transpired. These “disconnected” areas can be subtracted from the site impervious area when calculating the volume control requirement. To receive the credit:

(a) The site must be graded to promote the flow of runoff to pervious areas;

(b) Maximum impervious flow path length shall be 75 feet;

(c) The length of disconnected pervious area must be equal to or greater than the contributing length;

(d) The vegetated pervious area must be on a slope less than or equal to 5.0% and must not channelize flow;

(e) No soil evaluation is required for disconnections that drain to hydrologic soil groups A and B;

(f) Disconnections draining to hydrologic soil groups C and D shall have a soil evaluation to demonstrate that directing additional flows will not create nuisance conditions;

(g) For impervious surfaces draining to a stream buffer, the applicant may only use either the non-rooftop disconnection credit or the buffer credit, not both; and

(h) Projects involving the subdivision of land must include the maintenance and preservation of the disconnection(s) as part of a recorded restrictive covenant.

(4) Buffer Credit. This credit is given when a buffer is effectively used to disconnect and control runoff volumes by directing runoff from impervious areas to sheet flow across pervious areas within the buffer where it is either infiltrated or transpired. These "disconnected" areas may be subtracted from the site impervious area when calculating the volume control requirement. To receive the credit:

(aa) The site must be graded to promote the flow of runoff to pervious areas in the buffer;

(bb) Minimum buffer widths must be consistent with buffer requirements of Paragraph 1109.04 (5) (4) of this Ordinance;

(cc) The depth to the seasonally high water table or top of bedrock must be 3 feet or more;

(dd) Maximum impervious flow path length shall be 75 feet for impervious surface;

(ee) The length of disconnected pervious area must be equal to or greater than the contributing length;

(ff) The vegetated pervious area must be on a slope less than or equal to 5.0%, and must not channelize flow;

(gg) Runoff shall enter the buffer as sheet flow. A level spreading device shall be utilized where local site conditions prevent sheet flow from being maintained;

(hh) The credit is not applicable if rooftop (Paragraph 1109.08 (5) (12) (f) (2) of this Ordinance), or non-rooftop (Paragraph 1109.08 (5) (12) (f) (3) of this Ordinance) are already allowed for the same disconnection;

(ii) Buffers must be protected by conservation easement or dedicated outlots, and maintained in a natural condition in accordance with Section 1109.04 of this Ordinance; and

(jj) Projects involving a subdivision of land must include the maintenance and preservation of the disconnection(s) as part of a recorded restrictive covenant.

13. Watershed Management and Groundwater Management Plans.

Storm water pollution prevention plans shall be consistent with adopted watershed management plans and groundwater management plans prepared in accordance with State law and as approved by the Minnesota Board of Water and Soil Resources and the Minnesota Pollution Control Agency.

14. An assessment of the potential for adverse impacts downstream of site improvements, and corrective actions in proportion to the proposed project input is required. At a minimum an assessment must consist of:

A. Potential impacts to areas surrounding landlocked lakes or ponds, or lakes or ponds with inadequate outlets.

B. Potential impact to public or private structures or infrastructure located near potential flood prone areas with corrective actions that mitigate in proportion to the impact.

C. Potential impacts to downstream infrastructure, public and private structures, and erosion along the drainage path and downstream public waters, with corrective actions that mitigate in proportion to the impact.

D. Potential impacts to wetlands with exceptional vegetative diversity, with corrective actions that mitigate in proportion to the impact.

The site developer must assess downstream impacts from each new development. The assessed area is limited to a drainage area equal to 10 times the proposed development area. If existing or potential problems are found, they need to be mitigated in proportion to the proposed project's impacts. The City's Surface Water Management Plan outlines the downstream assessment procedure.

1109.08 SUBD. 6. PLAN REVIEW PROCEDURE.

1. PROCESS.

Storm water pollution prevention plans meeting the requirements of Section 1109.08 Subd. 4 shall be submitted by the Zoning Administrator to the City Engineer and the

Planning and Zoning Commission for review in accordance with the standards of Section 1109.08 Subd. 5. The Planning and Zoning Commission shall recommend approval, recommend approval with conditions, or recommend denial of the storm water pollution prevention plan to the City Council. Where additional control measures are needed, they will be specified at the discretion of the City Engineer. Following Planning and Zoning Commission action, the storm water pollution prevention plan shall be submitted to the City Council at its next available meeting. City Council action on the storm water pollution prevention plan must be accomplished within sixty (60) days following the date the application for approval is filed with the Zoning Administrator.

2. DURATION.

Approval of a plan submitted under the provisions of this Section shall expire one (1) 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 City Council may grant one extension of not greater than one (1) year. Receipt of any request for an extension shall be acknowledged by the Zoning Administrator within fifteen (15) days. The Zoning Administrator, after consulting with the City Engineer and the Public Works Department, shall make a decision on the extension within thirty (30) days of receipt. Any plan may be revised in the same manner as originally approved.

3. CONDITIONS.

A storm water pollution prevention plan may be approved subject to compliance with conditions reasonable and necessary to insure that the requirements contained in this Section 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 alternation of the site design to insure buffering; and require the conveyance to the City or other public entity of certain lands or interests therein.

4. INSPECTIONS.

At a minimum, inspections of the storm water pollution prevention plan shall be done weekly by the City Engineer or a designated City employee, and after every storm or snow melt event large enough to result in runoff from the site.

In all cases, the inspectors will attempt to work with the applicant and/or builder to maintain proper erosion and sediment control at all sites. In cases where cooperation is withheld, construction stop work orders may be issued by the City, until erosion and sediment control measures meet specifications.

The applicant shall allow the City and their authorized representatives, upon presentation of credentials to:

1. Enter upon the permitted site for the purpose of obtaining information, examination of records and conducting investigations or surveys.
2. Bring such equipment upon the permitted development as is necessary to conduct such surveys and investigations.
3. Examine and copy any books, papers, records or memoranda pertaining to activities or records required to be kept under the terms and conditions of this permitted site.
4. Inspect the storm water pollution control measures.
5. Sample and monitor any items or activities pertaining to storm water pollution control measures.

5. FINANCIAL SECURITIES.

The total security amount in the project's development agreement with the City shall also provide security for the performance of the work approved by the City in the storm water pollution prevention plan and any storm water pollution prevention plan related remedial work, if the development agreement's security totals three thousand dollars ($3,000) per acre for the maximum acreage of soil that will be simultaneously exposed during the project's construction. If this security is less than the three thousand dollars ($3,000) per acre value, then it shall be increased to at least that amount.

The City may request a greater financial security, if the City considers that the development site is especially prone to erosion, or the resource to be protected is especially valuable. A rate schedule of security amounts shall be set annually by the City as the amount the City deems necessary to cover potential liabilities to the resources.

1. The security or letter of credit must be in a form acceptable to the City and from a bank or surety licensed to do business in Minnesota.
2. The security shall be in favor of the City and conditioned upon the applicant's performance of the authorized activity in compliance with the permit and applicable laws, including these Ordinances, and the payment when due of any fees or other charges authorized or required by the permit, and these Ordinances.

3. The security shall be issued for a minimum term of 1 year. Security with a shorter term may be deposited with the City provided it is replaced at least 30 days before its expiration.
4. If at anytime during the course of the work, the secured amount falls below fifty (50) percent of the required deposit, the applicant shall make another deposit in the amount necessary to restore the deposit to the required amount within thirty (30) days. Otherwise the City may:
    a. Withhold the scheduling of inspections and/or the issuance of a Certificate of Occupancy.
    b. Revoke any permit issued by the City to the applicant for the site in question and any other of the applicant's sites within the City's jurisdiction.
    c. When more than one-half (1/2) of the applicant's maximum exposed soil area has achieved final stabilization, the City can reduce the total required amount of the financial security by one-half (1/2), if recommended by the City Engineer.
5. The City may act against the financial security if any of the conditions listed below exist. The City shall use funds from this security to finance any corrective or remedial work undertaken by the City or a contractor under contract to the City and to reimburse the City for all direct costs incurred in the process of remedial work including, but not limited to staff time and attorney's fees.
    a. The applicant ceases land disturbing activities and/or filling and abandons the site prior to completion to the grading plan.
    b. The applicant fails to conform to any City approved grading plan and/or the storm water pollution prevention plan as approved by the City.
    c. The techniques utilized under the storm water pollution prevention plan fail within one (1) year of installation.
    d. The applicant fails to reimburse the City for corrective action.
    e. The applicant defaults under the permit.
    f. The applicant fails to replace any security at least 30 days before its expiration.
6. If circumstances exist such that noncompliance with this Section poses an immediate danger to public health, safety and welfare, as determined by the City Engineer, the City may take emergency preventative action. The City shall also take every reasonable action possible to contact and direct the applicant to take any necessary action. Any cost to the City may be recovered from the applicant's financial security.
7. Any unspent amount of the financial security deposited with the City for faithful performance of the storm water pollution prevention plan and any remedial work must be released not more

than one (1) year after the completion of the installation of all such measures and establishment of final stabilization.

6. FEES.
All applications for storm water pollution prevention plan approval shall be accompanied by a processing and approval fee as specified by the City Council through ordinance.

The fee shall cover the cost of the review and analysis of the proposed activity, including services of engineering, legal, and other consultants. The City may require a deposit to cover the cost of review at the time of filing. The City will provide a statement of review charges. In all cases the review fee shall be payable before a permit may be issued.

1109.08 SUBD. 7. APPROVAL STANDARDS.

1. STANDARDS REQUIRED.

No storm water pollution prevention plan that fails to meet the standards contained in this Section shall be approved by the City Council.

2. 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.

3. WASTE AND MATERIAL DISPOSAL.

All waste and unused building materials, including but not limited to, garbage, cleaning wastes, debris, 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.

4. ENTRANCES AND CLEANING.

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.

5. 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 entitled "Protecting Water Quality in Urban Areas".

6. SITE EROSION CONTROL.

The following criteria (A through C) apply only to construction activities that result in runoff leaving the site.

A. Channeled runoff from adjacent areas passing through the site shall be diverted around disturbed areas, if practical. Diverted runoff shall be conveyed in a manner that will not erode the conveyance and receiving channels.

B. All activities on the site shall be conducted in a logical sequence to minimize the area of bare soil exposed at any one time.

C. Runoff from the entire disturbed area on the site shall be controlled by meeting either Subsection 1 and 2 or 1 and 3:

1 . All disturbed ground left inactive for fourteen (14) or more days shall be stabilized by seeding or sodding (only available prior to September 15) or by mulching or covering or other equivalent control measure.

2. For sites with more than ten (10) acres disturbed at one time, or if a channel originates in the disturbed area, one (1) or more temporary or permanent sedimentation basins shall be constructed. Each sedimentation basin shall have a surface area of at least one (1) percent of the area draining to the basin and at least three (3) feet of depth and constructed in accordance with accepted design specifications. Sediment shall be removed to maintain a depth of three (3) feet. The basin discharge rate shall also be sufficiently low as to not cause erosion along the discharge channel or the receiving water.

3. For sites with less than ten (10) acres disturbed at one time, silt fences, straw bales, or equivalent control measures shall be laced along all sideslope and downslope sides of the site. If a channel or area of concentrated runoff passes through the site, silt fences shall be placed along the channel edges to reduce sediment reaching the channel. The use of silt fences, straw bales, or equivalent control measures must include a maintenance and inspection schedule.

7. VEGETATED BUFFER PROTECTION.

At the minimum a vegetated buffer strip on each bank of a river or stream the width of either the one hundred (100)-year floodplain or one hundred (100) feet whichever is larger, shall be provided. If possible such a buffer strip shall consist of predevelopment native vegetation. Buffer width shall be increased at least two (2) feet for every one (1) percent of slope of the surrounding land. Natural wetlands adjacent to rivers and streams are not counted as buffers, and therefore their widths are not counted as part of the channel's buffer strip. Such wetlands rate their own vegetated buffer strip as stated in Paragraph 1109.04 (5) (4).

1. Detailed buffer design is usually site specific. Therefore the City Engineer may require a larger buffer than the minimum.
2. For newly constructed buffer sites, the design criteria should follow common principles and the example of nearby natural areas. The site should be examined for existing buffer zones and mimic the slope structure and vegetation as much as possible.
3. The applicant or designated representative shall maintain the buffer strip for the first year. After that time period, the City, or a party designated by the City, shall maintain the buffer strip.
4. Drain tiles will short-circuit the benefits of vegetated buffer strips. Therefore drain tiles on the development site shall be identified and rendered inoperable.
5. Buffer strips can be made into perpetual conservation easements.
6. Buffer strips shall be marked as such with permanent markers.
7. The City Engineer may allow buffer area averaging in cases where averaging will provide additional protection to either the resource or environmentally valuable adjacent upland habitat.

Water courses used solely for drainage, such as road ditches, are exempt from this Subdivision.

8. OTHER PERMITS REQUIRED.

All sand, gravel or other mining operations taking place on the development site shall have a Minnesota Pollution Control Agency National Pollutant Discharge Elimination System General Storm Water permit for industrial activities and all required Minnesota Department of Natural Resource permits.

9. EASEMENTS.

If a storm water management plan involves direction of some or all runoff off the site, the applicant shall obtain any easements or other property interests needed to establish the required drainage facilities from the adjacent property owner or owners. This is necessary in order for the city to provide the proper maintenance and long-term protection and operation of facilities created for the public benefit and constructed and permitted by the City. The stormwater management plan shall identify responsibility for future maintenance of the stormwater facilities.

(Ord. 11-11, Sections 1107.21. 1109.08, 1205.07, Adopted December 5, 2011.)

10. COVENANTS.

The City may require that the land be subjected to restrictive covenants or a conservation easement, in a form acceptable to the City, to prevent the future expansion of impervious surface and the loss of infiltration capacity.

1109.08 SUBD. 8. LAWN FERTILIZER REGULATIONS.

1. This Subdivision shall apply to all land, public and private, located in the City of Belle Plaine.

2. 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.

3. Except for driveways, sidewalks, patios, areas occupied by structures, or areas that have been improved by landscaping, all areas shall be covered by plants or vegetative growth.

4. Fertilizer applications shall not be made within one rod, sixteen and one-half (16.5) feet of any wetland or water resource.

5. Use of fertilizer and pesticides in the shoreland protection zone shall be done so as to minimize runoff into public waters by the use of earth material, vegetation, or both.

1109.08 SUBD. 9. WAIVERS.

(a) The City may waive the volume control requirement for environmentally sensitive developments. Developments will be considered environmentally sensitive when:

(1) The total impervious surface footprint is less than 8% of the development;

(2) A minimum of 25% of the site is protected in natural conservation areas that are protected with conservation easements (see Section 1109.04 for allowed and prohibited uses in conservation easements);

(3) Buffers and wetlands are protected in accordance with this Ordinance;

(4) Rooftop runoff is disconnected in accordance with this Ordinance;

(5) Runoff rate control is provided in accordance with this Ordinance;

(6) Stormwater runoff has been treated in accordance with this Ordinance;

(7) Downstream impacts have been assessed and corrective actions have been incorporated in accordance with this Ordinance;

(8) Buffers are recorded as conservation easements on outlots (see Section 1109.04 for allowed and prohibited uses in conservation easements); and

(9) The maintenance and preservation of the disconnection(s) and environmental features are made part of a recorded restrictive covenant.

(b) The City may waive the on-site runoff rate and water quality control design criteria in this Ordinance for those areas of the City where regional runoff rate and water quality facilities have been implemented in conformance with the City's Surface Water Management Plan (approved December 17, 2001).

(c) Design for the 100-year actual storm event required pre this Ordinance may be waived for limited use, low maintenance road crossings.

1109.08 SUBD. 10. MAINTENANCE.

All storm water management structures and facilities shall be maintained in perpetuity to assure that the structures and facilities function as originally designed. The applicable permit shall assign responsibility for maintenance of the structures and facilities within the City to either the property owner or City. The permittee shall be responsible for proper operation and maintenance of all erosion and sediment controls, and soil stabilization measures, in conformance with best management practices, and in conformance with the maintenance requirements in the NPDES General Construction Permit.

(Ord. 11-11, Sections 1107.21. 1109.08, 1205.07, Adopted December 5, 2011.)

1109.08 SUBD. 11. EXCEPTIONS.

No permit or storm water pollution prevention plan shall be required under this Ordinance for the following land disturbing activities where the city has demonstrated that the infrastructure has capacity:

- Minor land disturbing activities such as home gardens, repairs and maintenance work.
- Construction, installation and maintenance of individual sewage treatment systems where City sewer service is not available and other than those on steep slopes or riparian lots within a Shoreland District or in a bluff impact zone.
- Construction, installation and maintenance of public utility lines or individual service connections unless the activity disturbs more than one acre.
- Construction of any structure on an individual parcel in a subdivision with a storm water pollution prevention plan approved by the City, so long as any land disturbing activity complies with the approved plan.
- Development or redevelopment of, or construction of a structure on, an individual parcel with a land disturbing activity that does not cause off-site erosion, sedimentation, flooding or other damage, and creates less than 1 acre of cumulative impervious surface.
- Installation of any fence, sign, telephone or electric poles, or other kinds of posts or poles.
- Emergency activity necessary to protect life or prevent substantial harm to persons or property.
- Redevelopment projects are exempt from rate and volume control provisions in this Ordinance. Note: for the purposes of this Ordinance if an activity creates more than 1 acre of new or additional impervious surface the activity is considered new development and the exception does not apply to the increased (new) impervious surface.
- Development or redevelopment of land in incorporated areas shall be exempt from runoff volume control provisions of this Ordinance where the City has demonstrated the infrastructure has capacity for increased runoff volumes.
- Minor wetland impacts that have received a “certificate of exemption or no loss” determination by the City administering the Wetland Conservation Act, as amended.
- All maintenance, repair, resurfacing and reconditioning activities of existing road, bridge and highway systems, which do not involve land disturbing activities outside of the existing surfaced roadway.
- Land disturbing activities associated with the construction of conservation practices by the SWCD or the Natural Resources Conservation Services (NRCS) provided that

erosion prevention and sediment control practices are used in a manner consistent with this Ordinance.

1109.08 SUBD. 12. OTHER CONTROLS.

In the event of any conflict between the provisions of this Section and the provisions of Sections 1105.17, the more restrictive standard shall prevail.

1109.09. DRAINAGE ALTERATIONS

1109.09 SUBD. 1. POLICY

It is the policy of the City that surface water may be drained only in a manner that does not unreasonably burden upstream or downstream land.

1109.09 SUBD. 2. REGULATION

No person or political subdivision shall artificially drain surface water, nor obstruct or redirect the natural flow of runoff, so as to affect a drainage system established under Minnesota Statutes, Chapter 103E, or harm the public health, safety and general welfare of the City and County, without first obtaining a permit from the City.

1109.09 SUBD. 3. CRITERIA

The applicant for a drainage alteration shall:

(a) Describe the overall environmental impact of the proposed drainage alteration and demonstrate that:

(1) There is a reasonable necessity for such drainage alteration;

(2) Reasonable care has been taken to avoid unnecessary injury to upstream and downstream land;

(3) 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;

(4) That downstream impacts have been controlled or mitigated according to Paragraph 1109.08 (5) (4) of this Ordinance;

(5) The drainage alteration 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.

(b) Provide a hydraulic design which complies with Paragraphs 1109.08 and 1109.04 of this Ordinance, and if the alteration involves a landlocked basin, the alteration

must comply with Paragraph 1109.08 (5) (9) of this Ordinance for outlets from landlocked basins.

(c) Provide a stable channel and outfall.

(d) Obtain a permit under Paragraphs 1109.02 and 1109.08 of this Ordinance if the drainage alteration is part of a land disturbing activity or a development or redevelopment of land.

1109.09 SUBD. 4. EXHIBITS

The City shall require the submittal of exhibits with an application necessary for review and determination of compliance with this Ordinance.

1109.09 SUBD. 5. EXCEPTIONS

(a) No permit shall be required under this Ordinance for the alteration of drainage in connection with the use of land for agricultural activities.

(b) The City may waive the requirement of Paragraph 1109.09 (3) (a) (4) of this Ordinance above if the applicant submits easements or other documentation in form acceptable to the City evidencing the consent of the owner of any burdened land to the proposed alteration. Such easements or other documentation shall be filed for record and evidence thereof submitted to the City.

(c) All drainage alterations not required by this Ordinance to obtain a permit shall nevertheless be conducted in full compliance with these Ordinances.

(Ord. 06-08, Section 1109, Adopted July 17, 2006.)
(Ord. 11-11, Sections 1107.21. 1109.08, 1205.07, Adopted December 5, 2011.
(Ord. 12-04, Sections 1105, Adopted September 17, 2012.)