

City of Excelsior

Ordinance No. 441

An Ordinance to Amend Article 2, Section 2-2, Definitions;
Article 36, General Stormwater Management,
Article 60, Shoreland Management District,
and Article 61, General Floodplain District

THE CITY OF EXCELSIOR DOES HEREBY ORDAIN:

SECTION ONE: Amendment. That Article 2, Section 2-2, of the Zoning Ordinance, City of Excelsior, Minnesota, is hereby amended to read as follows:

ARTICLE 2. RULES AND DEFINITIONS

2-2: DEFINITIONS:

DECORATIVE WALKWAYS: A pathway consisting of impervious and pervious material allowing a free flow of water to pass through the walking surface and consisting of materials to include, but not limited to, stone, crushed rock, gravel, wood, and concrete.

IMPERVIOUS SURFACE COVERAGE: Any surface impervious or resistant to the free flow of water or surface moisture. Impervious coverage shall include, but not be limited to, non-structural hard cover and structural hard cover.

GREEN SPACE: An area not occupied by structures or impervious surface coverage. It includes open or landscaped areas which are covered by vegetation or decorative landscape materials with permeable landscape barrier material, or water bodies (lakes, ponds, and streams) which have a natural bottom. Not to be included in this definition are swimming pools, green roof areas, and pervious pavement.

SHORELAND RELATED:

- I. Green Rooftops. Veneers of living vegetation installed atop of buildings which act to manage stormwater by mimicking a variety of hydrologic processes normally associated with open space.
- J. Impervious Surface Coverage. Any surface impervious or resistant to the free flow of water or surface moisture. Impervious cover shall include, but not be limited to, non-structural hard cover and structural hard cover.
- K. Intensive Vegetation Clearing. The complete removal of trees or shrubs in a contiguous patch, strip, row or block.
- L. Lake Minnetonka Conservation District (LMCD): The Lake Minnetonka Conservation District, as established by the State of Minnesota for the purposes of water planning and project implementation.

- M. **Non-Structural Hard Cover.** The impervious surface coverage of an area that is at grade level such as paved driveways and play areas, tennis courts, sidewalks, patios, and swimming pools.
- N. **Ordinary High Water Level.** The boundary of public waters and wetlands, and shall be an elevation delineating the highest water level which has been maintained for a sufficient period of time to have evidence upon the landscape, commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel. For reservoirs and flowage, the ordinary high water level is the operating elevation of the normal summer pool. At the time of adoption of this Ordinance, the ordinary high water level of Lake Minnetonka was 929.4 feet.
- O. **Pervious Pavement.** A paving system that allows water to infiltrate through the pavement including, but not limited to, porous concrete, porous asphalt, porous pavers, open jointed paving blocks and open cell paving blocks.
- P. **Public Waters.** Any waters as defined in Minnesota Statutes, Section 105.37, Subdivisions 14 and 15.
- Q. **Sensitive Resource Management.** The preservation and management of areas unsuitable for development in their natural state due to constraints such as shallow soils over ground water or bedrock, highly erosive or expansive soils, steep slopes, susceptibility to flooding, or occurrence of flora or fauna in need of special protection.
- R. **Sewer System.** Pipelines or conduits, pumping stations, and force main, and all other constructions, devices, appliances, or appurtenances used for conducting sewage or industrial waste or other wastes to a point of ultimate disposal.
- S. **Shore Impact Zone.** Land located between the ordinary high water level of a public water and a line parallel to it at a setback of fifty (50) percent of the structure setback.
- T. **Shoreland.** Land located within the following distances from public waters: one thousand (1,000) feet from the ordinary high water level of a lake, pond, or flowage; and three hundred (300) feet from a river or stream, or the landward extent of a floodplain designated by Ordinance on a river or stream, whichever is greater. The limits of shorelands may be reduced whenever the waters involved are bounded by topographic divides which extend landward from the waters for lesser distances and when approved by the Commissioner.
- U. **Steep Slope.** Land where agricultural activity or development is either not recommended or described as poorly suited due to slope steepness and the site's soil characteristics, as mapped and described in available County soil surveys or other technical reports, unless appropriate design and construction

techniques and farming practices are used in accordance with the provisions of the Ordinance. Where specific information is not available, steep slopes are lands having slopes over twelve (12) percent, as measured over horizontal distances of fifty (50) feet or more, that are not bluffs.

- V. Structural Hard Cover. The impervious surface coverage of an object that is constructed above grade level such as a building, retaining walls, or docks.
- W. Surface Water-Oriented Commercial Use. The use of land for commercial purposes, where access to and use of a surface water feature is an integral part of the normal conductance of business. Marinas, resorts, and restaurants with transient docking facilities are examples of such use.
- X. Water-Oriented Accessory Structure or Facility. A small, above ground building or other improvement, except stairways, fences, docks, and retaining walls, which because of the relationship of its use to a surface water feature, reasonably needs to be located closer to public waters than the normal structure setback. Examples of such structures and facilities include boathouses, gazebos, screen houses, fish houses, pump houses, and detached docks.
- Y. Wetland. A surface water feature classified as a wetland in the United States Fish and Wildlife Service Circular No. 39 (1971 edition).

SECTION TWO: Amendment. That Article 36 of the Zoning Ordinance, City of Excelsior, Minnesota, be repealed in its entirety and be amended to read as follows:

ARTICLE 36 — GENERAL STORM WATER MANAGEMENT

SECTION:

- 36-1: Statutory Authorization
- 36-2: Findings
- 36-3: Purpose
- 36-4: Scope and Effect
- 36-5: Storm Water Management General and Specific Standards
- 36-6: Storm Water Management Plan Approval Procedures
- 36-7: Plan Review Procedure
- 36-8: Approval Standards
- 36-9: Lawn Fertilizer Regulations

36-1: STATUTORY AUTHORIZATION: The stormwater management regulations contained in this Section are adopted pursuant to Minnesota Statutes Section 462.351.

36-2: FINDINGS: The City of Excelsior 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 Excelsior to provide adequate water, sewage, flood control, and other community services. In addition, extraordinary public expenditures may be required for the protection of persons and property in such areas and in areas which may be affected by unplanned land usage.

36-3: PURPOSE: The purpose of this Ordinance is to promote, preserve and enhance the natural resources within the City of Excelsior and protect them from adverse effects occasioned by poorly sited development or incompatible activities by regulating land disturbing or development activities that would have an adverse and potentially irreversible impact on water quality and unique and fragile environmentally sensitive land; by minimizing conflicts and encouraging compatibility between land disturbing and development activities and water quality and environmentally sensitive lands; and by requiring detailed review standards and procedures for land disturbing or development activities proposed for such areas, thereby achieving a balance between urban growth and development and protection of water quality and natural areas.

36-4: SCOPE AND EFFECT:

- A. **Applicability:** Every applicant for a building permit, subdivision approval, or a permit to allow land disturbing activities must submit a storm water management plan to the City. No building permit, subdivision approval, or permit to allow land disturbing activities shall be issued until approval of the storm water management plan or a variance of the approval requirement has been obtained in strict conformance with Section 36-4.C of this Ordinance.
- B. **Exemptions:** The provisions of this Ordinance do not apply to:
1. Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles;

Interior remodeling;
 3. Any activity requiring a building permit which does not disturb any land and does not increase the area of impervious surface of the subject parcel;
 4. Emergency work to protect life, limb, or property.
 5. A proposed addition or the construction of an accessory structure when the plans have been reviewed and the site has been inspected by the Zoning Administrator and/or the City Engineer and it has been determined that the land is flat and/or drainage will not have an impact on neighboring property(s) or any body of water.
- C. **Variance:** The City Council, upon recommendation of the Planning Commission, may grant a variance to any requirement of this Ordinance upon making a finding that compliance with the requirement will involve an unnecessary hardship and the variance of such requirement will not adversely affect the standards and

requirements set forth in Section 36-5. The City Council of Excelsior may require as a condition of the variance, such dedication or construction, or agreement to dedicate or construct as may be necessary to adequately meet said standards and requirements.

36-5: STORMWATER MANAGEMENT - GENERAL AND SPECIFIC STANDARDS

A. Stormwater Management: The following general and specific standards shall apply:

1. General Standards:

- a. When possible, existing natural drainageways, wetlands, and vegetated soil surfaces must be used to convey, store, filter, and retain stormwater runoff before discharge to public waters.
- b. Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff velocities, erosion potential, and reduce and delay runoff volumes. Disturbed areas must be stabilized and protected as soon as possible and facilities or methods used to retain sediment on the site.
- c. When development density, topographic features, and soil and vegetation conditions are not sufficient to adequately handle stormwater runoff using natural features and vegetation, various types of constructed facilities such as diversions, settling basins, skimming devices, dikes, waterways, and ponds may be used. Preference must be given to designs using surface drainage, vegetation, and infiltration rather than buried pipes and man-made materials and facilities.

Specific Standards:

- a. Stormwater management shall be performed according to the policies outlined in the most recent version of the city's Surface Water Management Plan.
- b. In addition to the city's policies, stormwater management shall be performed according to the policies of the Minnehaha Creek Watershed District.
- c. For land disturbing activities that require an NPDES general stormwater construction permit, activities shall be performed according to the NPDES permit requirements in addition to the policies of the city.

- d. Maximum impervious surface coverage and green space requirements of lots shall be as follows or as otherwise provided within this Ordinance:

	Impervious Surface Coverage Maximum	Green Space
(1) Low density residential (R1, R-1A, R2, R-2A):	35%	65%
(2) Multiple family residential (R3, R4):	40%	60%
(3) Commercial: (B2, B3, B4, B5)	90%	10%
(B6)	75%	25%
(B1)	100%	
(4) Parks:	50%	50%

- e. The definitions of impervious surface coverage, pervious pavement, non-structural and structural hard cover are found in Article 2 of this Ordinance.
- f. Structural and non-structural hard cover/impervious surface coverage in the low density residential districts (R-1, R-1A, R-2, and R-2A) shall not exceed a maximum of thirty-five (35) percent.
- g. For all lots in low density residential districts, decorative walkways, retaining walls for planting areas, and decorative water features shall be considered as green space, and shall account for, in total, not more than five (5) percent of the total lot area.
- h. Open decks and stairways, which allow a free flow of water to pass through the structure, and gravel or rock surfaces shall be counted as fifty (50) percent impervious, provided they are installed over a permeable surface, as approved by the City Engineer.
- i. Hardcover credit may be considered through a variance application review process in cases where stormwater runoff is effectively held on site by retention basins or other acceptable means such as flat rooftops and parking lots with built-in basins. Pervious paver systems shall be reviewed by the City Engineer in association with review and inspection of residential and business stormwater plans and installation.
- j. New constructed stormwater outfalls to public waters must provide for filtering or settling of suspended solids and skimming of surface debris before discharge.

36-6: STORM WATER MANAGEMENT PLAN APPROVAL PROCEDURES:

- A. Application: A written application for storm water management plan approval, along with the proposed storm water management plan, shall be filed with the City 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 Ordinance. Four (4) sets of clearly legible blue or black lined copies of drawings and required information shall be submitted to the Zoning Administrator. Drawings shall be prepared to a 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.

The applicant is responsible to apply for, and obtain any necessary permits or approvals required by other agencies, including, but not limited to, permits required by the Minnehaha Creek Watershed District, the Minnesota Pollution Control Agency, the Minnesota Department of Natural Resources, and the Army Corps of Engineers. For stormwater management plans submitted as a part of a preliminary plat application, the applicant must provide copies of the preliminary plat and stormwater management plan to the Minnehaha Creek Watershed District.

- B. Storm Water Management Plan: At a minimum, the Storm Water Management Plan shall contain the following information.
1. Existing Site Map. A map of existing site conditions showing the site and immediately adjacent areas, including:
 - a. The name and address of the applicant, the section, township and range, north point, date and scale of drawing and number of sheets;
 - b. 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;
 - c. Existing topography with a contour interval appropriate to the topography of the land but in no case having a contour interval greater than two (2) feet;
 - d. A delineation of all streams, rivers, public waters and wetlands located on and immediately adjacent to the site and any classification given to the water body or wetland by the Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, and/or the United States Army Corps of Engineers.

- e. Location and dimensions of existing storm water drainage systems and natural drainage patterns on and immediately adjacent to the site delineating in which direction 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;
- f. 100-year floodplains, flood fringes and floodways.
- g. Ordinary high water level of surface waters as established by the Minnesota Department of Natural Resources, normal water level and 100-year high water level of surface waters and detention facilities.

Site Construction Plan. A site construction plan including:

- a. Locations and dimensions of all proposed land disturbing activities and any phasing of those activities;
 - b. Locations and dimensions of all temporary soil or dirt stockpiles;
 - c. Locations and dimensions of all construction site erosion control measures necessary to meet the requirements of this Ordinance;
 - d. 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 Ordinance; and
 - e. Provisions for maintenance of the construction site erosion control measures during construction, including a Storm Water Pollution Prevention Plan (SWPPP) for activities that require an NPDES General Construction Stormwater Permit issued by the Minnesota Pollution Control Agency.
3. 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:
- a. 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;
 - b. A drainage plan of the developed site delineating in which direction and at what rate storm water will be conveyed from the site and setting forth the areas of the site where storm water will be allowed to collect;

- c. The proposed size, alignment, low floor elevation, low building opening elevation, and intended use of any structures to be erected on the site;
 - d. A clear delineation and tabulation of all areas which shall be paved or surfaced, including a description of the surfacing material to be used; and
 - e. Ordinary high water level of surface waters as established by the Minnesota Department of Natural Resources, normal water level and 100-year high water level of surface waters and detention facilities.
4. Any other information pertinent to the particular project which in the opinion of the Zoning Administrator is necessary for the review of the project.

36-7: PLAN REVIEW PROCEDURE:

- A. Process: Storm water management plans meeting the requirements of Section 36-5 shall be submitted to the Zoning Administrator for review in accordance with the standards of Section 36-7. The Zoning Administrator shall approve, approve with conditions, or deny the storm water management plan. The decision by the Zoning Administrator may be appealed in accordance with Article 7 of this Ordinance.
- B. Duration: Approval of a plan submitted under the provisions of this Ordinance shall expire one year after the date of approval unless construction has commenced in accordance with the plan. However, if prior to the expiration of the approval, the applicant makes a written request to the Zoning Administrator for an extension of time to commence construction setting forth the reasons for the requested extension, the Zoning Administrator may grant one extension of not greater than one single year. Receipt of any request for an extension shall be acknowledged by the Zoning Administrator within fifteen (15) days. The Zoning Administrator 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.
- C. Conditions: A storm water management plan may be approved subject to compliance with conditions reasonable and necessary to insure that the requirements contained in this Ordinance are met. Such conditions may, among other matters, limit the size, kind or character of the proposed development, require the construction of structures, drainage facilities, storage basins and other facilities, require replacement of vegetation, establish required monitoring procedures, stage the work over time, require alteration of the site design to insure buffering and require the conveyance to the City of Excelsior or other public entity of certain lands or interests therein.

- D. **Financial Guarantee:** Prior to approval of any storm water management plan, the applicant shall submit an agreement to construct such required physical improvements, to dedicate property or easements, or to comply with such conditions as may have been agreed to. Such agreement shall be accompanied by a financial guarantee to cover the amount of the established cost of complying with the agreement. The agreement and guarantee shall insure completion and compliance with conditions within a specific time, which may be extended in accordance with Section 36-6.B of this Ordinance.
- E. **Fees and Escrow:** All applications for storm water management plan approval shall be accompanied by a processing fee of fifty dollars (\$50.00) and cash escrow in accordance with the following schedule:

<u>Lot Size</u>	<u>Amount of Cash Escrow</u>
10,000 S.F. or Less	\$ 200.00
10,001 S.F. to 1 Acre	\$ 400.00
Over 1 Acre	\$ 700.00

The City Council may change, amend or revise the processing fee and escrow amounts from time to time by resolution of the Council.

36-8: APPROVAL STANDARDS:

- A. No storm water management plan which fails to meet the standards contained in this section shall be approved by the Zoning Administrator.
- B. **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.
- C. **Water and Material Disposal:** All waste and unused building materials (including garbage, debris, cleaning wastes, wastewater, toxic materials or hazardous materials) shall be properly disposed of off-site and not allowed to be carried by runoff into a receiving channel or storm sewer system.
- D. **Tracking:** Each site shall have graveled roads, access drives and parking areas of sufficient width and length to prevent sediment from being tracked onto public or private roadways. Any sediment reaching a public or private road shall be removed by street cleaning (not flushing) before the end of each workday.
- E. **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 MPCA publication "Protecting Water Quality in Urban Areas."

F. Site Erosion Control: Erosion control shall be provided consistent with the policies and permit requirements of the Minnehaha Creek Watershed district and the Minnesota Pollution Control Agency (MPCA), including the NPDES permit requirements of the MPCA.

G. Storm Water Management Criteria for Permanent Facilities:

1. 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 peak discharge rates leaving the site are not increased for the two-year, ten-year, and 100-year critical duration rainfall events. Accelerated channel erosion shall not occur as a result of the proposed land disturbing or development activity. At the discretion of the City, an applicant may also make an in-kind or monetary contribution to the development and maintenance of community storm water management facilities designed to serve multiple land disturbing and development activities undertaken by one (1) or more persons, including the applicant.

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.

3. Drainage systems shall be designed to convey runoff from contributing drainage areas under fully developed conditions. Capacities of drainage systems shall be designed to meet the following standards:
 - a. Local storm sewer shall convey runoff from the five-year, critical duration, rainfall event.
 - b. Trunk storm sewer shall convey runoff from the ten-year, critical duration, rainfall event.
 - c. Ponds and open channels shall convey runoff from the 100-year, critical duration, rainfall event.
4. Special attention shall be given to existing residential developments which do not currently comply with the thirty-five (35) percent impervious cover limitation of Excelsior's shoreland management ordinance. When installing sidewalk and driveways, adding decks and building additions or constructing garages and storage buildings, the following methods are suggested as solutions to the problem of managing stormwater runoff from impervious surfaces:

- a. Building additions and decks shall be constructed to direct runoff to more pervious grassed filter strips, such as lawns and gardens.
 - b. Runoff from garages or storage buildings can be separated from impervious surfaces by different roof designs and/or use of gutters and down spouts directing water to pervious areas.
 - c. Sidewalks and driveways shall be sloped to drain towards pervious surfaces, such as lawns or gardens.
 5. The following storm water management practices shall be investigated in developing a storm water management plan in the following descending order of preference:
 - a. Natural infiltration of precipitation on-site;
 - b. Flow attenuation by use of open vegetated swales and natural depressions;
 - c. Storm water retention facilities; and
 - d. Storm water detention facilities.
 6. A combination of successive practices may be used to achieve the applicable minimum control requirements specified in subsection A above. Justification shall be provided by the applicant for the method selected.
- H. Water Quality Treatment Standards: Storm water treatment facilities shall be provided to remove fifty percent (50%) of phosphorus and 85 percent (85%) of total suspended solids, or a detention pond designed to NURP standards.
1. NURP standards for pond design include the following:
 - a. Permanent pool volume below the principle spillway (normal outlet) shall be greater than or equal to the runoff from a 2.5-inch rainfall event over the contributing drainage area based on full development of the watershed.
 - b. A permanent pond surface area equal to two percent of the impervious area draining to the pond or one percent of the entire area draining to the pond, whichever amount is greater;
 - c. An average permanent pool depth of four (4) to ten (10) feet; and
 - d. A permanent pool length-to-width ratio of 3:1 or greater

- e. A minimum protective shelf extending ten feet into the permanent pool with a slope of ten to one (10:1), beyond which slopes should not exceed 3:1;
2. Permanent treatment facilities shall provide the following:
- a. Protective buffer strip of vegetation surrounding the permanent pool at a minimum width of one (1) rod;
 - b. Skimmer device to keep oil, grease, and other floatable material from moving downstream as a result of normal operations;
 - c. If constructed as a part of a private development, treatment facilities shall be covered by drainage and utility easements that are dedicated to the City.
 - d. All storm water detention facilities must have a forebay to remove coarse-grained particles prior to discharge into a watercourse or storage basin.
- I. Volume Control Standards: Abstraction via infiltration, evapotranspiration, capture and / or reuse of one inch of rainfall from the site on a regional or site-specific basis is required for development or redevelopment for projects that increase storm water runoff volume, provided that past and existing land use practices, groundwater elevations, and soil characteristics are suitable for infiltration.
- J. Flood Control: Development and land disturbing activities must meet the following criteria:
- 1. The basement floor elevation of any new building shall be placed at least 2 feet above the elevation of any known historic high groundwater elevations for the area and at least 2 feet above the 100-year high surface water elevation in the area.
- The low building opening elevation of any new building shall be at least 3 feet above the projected 100-year high water elevation for the area. If this standard is considered a hardship, the standard may be lowered to placing the low building opening elevation at least 2 feet above the projected 100-year high water elevation if the following can be demonstrated:
- a. That within the 2-foot freeboard area above the 100-year high water elevation, storm water storage is at least 50% of the storm water storage capacity below the 100-year high water elevation; and

- b. That a 25% obstruction of the basin outlet for a 100-year critical duration rainfall event would not result in a high water elevation greater than one foot above the 100-year high water elevation; and
 - c. An adequate overflow route from the basin will assure that water levels, even for extreme rainfall events, will be greater than one foot below the low building opening elevation.
 3. An emergency spillway from ponding areas shall be installed a minimum of one foot below the lowest building opening and shall be designed to have a capacity to overflow water at an elevation below the lowest building opening at a rate not less than three times the 100-year peak discharge rate from the basin or the 100-year inflow rate to the basin, whichever is higher.
- K. Wetlands: Minnehaha Creek Watershed District is the Local Government Unit with jurisdictional control for enforcement of the Wetland Conservation Act. For most activities that could affect wetlands, the rules of the Minnehaha Creek Watershed District will apply. In addition to the rules of the District, the following standards shall apply:
 1. Runoff shall not be discharged directly into wetlands without presettlement of the runoff.

A protective buffer strip of natural vegetation shall surround all wetlands. Buffer dimensions shall be as required by the Minnehaha Creek Watershed District, or 16.5 feet wide, whichever is greater.
 3. Wetlands must not be drained or filled, wholly or partially, unless replaced by restoring or creating wetland areas of at least equal public and natural value. Replacement must be guided by the following principles in descending order of priority:
 - a. Avoiding the direct or indirect impact of the activity that may destroy or diminish the wetland;
 - b. Minimizing the impact by limiting the degree or magnitude of the wetland activity and its implementation;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the affected wetland environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the activity; and
 - e. Compensating for the impact by replacing or providing substitute wetland resources or environments.

- L. Bluffs: No land disturbing or development activities shall be allowed on bluffs as defined under Definitions in Article 2 of this Ordinance.
- M. Structures: In a newly constructed or rehabilitated storm sewer system, the last downstream structure before discharge to a receiving water body shall be provided with a sump area for the collection of coarse-grained material. Such sumps shall be cleaned when they are half-filled with material.
- N. Drain Leaders: All newly constructed and reconstructed buildings will route drain leaders to pervious areas wherein the runoff can be allowed to infiltrate. The flow rate of water exiting the leaders shall be controlled so no erosion occurs in the pervious areas.
- O. Inspection and Maintenance: All storm water management facilities shall be designed to minimize the need of maintenance, to provide access for maintenance purposes and to be structurally sound. All storm water management facilities shall have a plan of operation and maintenance that assures continued effective removal of pollutants carried in storm water runoff. The Director of Public Works, or designated representative, shall inspect all storm water management facilities during construction, during the first year of operation, and at least once every five (5) years thereafter. The inspection records will be kept on file at the Public Works Department for a period of six (6) years. It shall be the responsibility of the applicant to obtain any necessary easements or other property interests to allow access to the storm water management facilities for inspection and maintenance purposes.
- P. Models/Methodologies/Computations: 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. Plans, specifications 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.
- Q. Watershed Management Plans/Groundwater Management Plans: Storm water management plans shall be consistent with adopted watershed management plans and groundwater management plans prepared in accordance with Minnesota Statutes section 103B.231 and 103B.255 respectively, and as approved by the Minnesota Board of Water and Soil Resources in accordance with state law.
- R. Easements: If a storm water management plan involves direction of some or all runoff off of the site, it shall be the responsibility of the applicant to obtain from adjacent property owners any necessary easements or other property interests concerning flowage of water.

36-9: LAWN FERTILIZER REGULATIONS:

- A. Use of Impervious Surfaces: No person shall apply fertilizer to or deposit grass clippings, leaves or other vegetative materials on impervious surfaces, or within storm water drainage systems, natural drainageways, or within wetland buffer areas.
- B. Unimproved Land Areas: Except for driveways, sidewalks, patios, areas occupied by structures or areas which have been improved by landscaping, all areas shall be covered by plants or vegetative growth.
- C. Fertilizer Content: No person shall apply any lawn fertilizer, liquid or granular, that contains any amount of phosphorous or other compounds containing phosphorous, such as phosphate, except small quantities when a soil text indicates added phosphorous is needed to support healthy turf growth, or during the first year when new area of turf is being established.
- D. Buffer Zone: Fertilizer applications shall not be made within one rod (16.5 feet) of any wetland or water resource.
- E. Sale and Display of Lawn Fertilizer. No person, firm, corporation, franchise, or commercial establishment shall sell or display for sale and lawn fertilizer, liquid or granular, within the City of Excelsior that contains any amount of phosphorous or other compound containing phosphorous, such as phosphate, unless:
 - a. Phosphorous-free fertilizer is also available for sale.
 - b. Phosphorous-free fertilizer and fertilizer with phosphorous are separately displayed which each display being clearly marked as to whether or not the fertilizer contains phosphorous.
 - c. Displays of phosphorous-free fertilizer are of equal or greater size and prominence.
 - d. A sign or brochure is on prominent display next to any fertilizer display containing the City of Excelsior's regulations concerning the use of fertilizer with phosphorous.

SECTION THREE: Amendment. That Article 60, Section 60-2 and 60-3 of the Zoning Ordinance, City of Excelsior, Minnesota, are hereby amended to read as follows:

60-2: ADMINISTRATION:

- A. Permits Required: In addition to building permits required by Section 9-11, a permit shall be required for those grading and filling activities not exempted by Section 60-4.D. Application for a permit shall be made to the Zoning Administrator on the forms provided. The application shall include the necessary information so that the Zoning Administrator can determine the site's suitability for the intended use.

The shoreland area to which the regulations of this Article apply is as shown on the Official Zoning Map. The area includes land located within one thousand (1,000) feet of the ordinary high water level of the above lakes, or a lesser distance if the topographic divide is less than one thousand (1,000) feet. In the area where Lake Minnetonka shoreland overlaps Galpin Lake shoreland, the regulations pertaining to Lake Minnetonka shall apply.

SECTION FOUR: Amendment. That Article 60, Section 60-4(F) of the Zoning Ordinance, City of Excelsior, Minnesota, is hereby amended to read as follows:

F. Stormwater Management: The following general and specific standards shall apply:

1. General Standards:

- a. When possible, existing natural drainageways, wetlands, and vegetated soil surfaces must be used to convey, store, filter, and retain stormwater runoff before discharge to public waters.
- b. Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff velocities, erosion potential, and reduce and delay runoff volumes. Disturbed areas must be stabilized and protected as soon as possible and facilities or methods used to retain sediment on the site.
- c. When development density, topographic features, and soil and vegetation conditions are not sufficient to adequately handle stormwater runoff using natural features and vegetation, various types of constructed facilities such as diversions, settling basins, skimming devices, dikes, waterways, and ponds may be used. Preference must be given to designs using surface drainage, vegetation, and infiltration rather than buried pipes and man-made materials and facilities.

Specific Standards:

a. Maximum impervious surface coverage of lots shall be as follows:

(1)	Low density residential (R1, R-1A, R2, R-2A):	35%
(2)	Multiple family residential (R3, R4):	40%
(3)	Commercial: (B2, B3, B4, B5)	90%
	(B6)	75%
	(B1)	100%
(4)	Parks	50%

Credit may be allowed in cases where stormwater runoff is effectively held on site by retention basins or other acceptable means such as flat rooftops and parking lots with built-in basins.

Open patterned decks and stairways shall not be counted as impervious cover, provided they are installed over a permeable surface. Those constructed over an impermeable surface or are impermeable themselves shall be counted as one hundred (100) percent impervious cover.

- b. New constructed stormwater outfalls to public waters must provide for filtering or settling of suspended solids and skimming of surface debris before discharge.

SECTION FIVE: Amendment. That Article 61, Section 61-2 of the Zoning Ordinance, City of Excelsior, Minnesota, is hereby amended to add the following:

61-2: GENERAL PROVISIONS:

- E. Activities within and adjacent to the Floodplain District shall be performed according to the rules of the Minnehaha Creek Watershed District.

SECTION SIX: Effective Date: This ordinance shall be in effect 30 days after publication.

Adopted by the City Council of the City of Excelsior, Minnesota this 20th day of July 2009.

ATTEST:

J. Nicholas Ruehl, Mayor

Cheri Johnson, City Clerk

Kristi Luger, City Manager

First Reading:	July 20, 2009
Second Reading and Adoption:	August 6, 2009
Publication of Ordinance:	August 13, 2009
Effective Date:	September 12, 2009