

**CITY OF ROCKFORD  
KENT COUNTY, MICHIGAN**

Councilmember \_\_\_\_\_, supported by Councilmember \_\_\_\_\_,  
moved the adoption of the following ordinance:

**ORDINANCE NO. 18-\_\_\_\_**

**AN ORDINANCE TO REPEAL SECTION 5.4, "SOIL EROSION AND SEDIMENTATION CONTROL," AND SECTION 5.5, "ILLICIT DISCHARGE AND CONNECTION," OF CHAPTER 5, "HEALTH REGULATIONS," OF, AND TO ADD CHAPTER 11, "STORMWATER CONTROL," TO, THE CODE OF ORDINANCES OF THE CITY OF ROCKFORD.**

**THE CITY OF ROCKFORD ORDAINS:**

**Section 1. Repeal of Sections 5.4 and 5.5 of Chapter 5.** Section 5.4, "Soil Erosion and Sedimentation Control," and Section 5.5, "Illicit Discharge and Connection," of Chapter 5, "Health Regulations," of the Code of Ordinances of the City of Rockford are repealed in their entirety.

**Section 2. Addition of Chapter 11.** A new Chapter 11, "Stormwater Control," is added to the Code of Ordinances of the City of Rockford to read as follows:

**CHAPTER 11  
STORMWATER CONTROL**

**ARTICLE I. GENERAL**

**SECTION 11.01 FINDINGS**

The City finds that:

- (1) water bodies, roadways, structures, and other property within, and downstream of the City are at times subjected to Flooding;
- (2) Flooding is a danger to the lives and property of the public and is also a danger to the natural resources of the City and the region;
- (3) land development alters the hydrologic response of Watersheds, resulting in increased Stormwater Runoff rates and volumes, increased Flooding, increased Stream channel erosion, and increased sediment transport and deposition;
- (4) Stormwater Runoff produced by land development contributes to increased quantities of water-borne Pollutants;

- (5) increases of Stormwater Runoff, Soil Erosion, and non-point source pollution have occurred as a result of land development, and cause deterioration of the water resources of the City and downstream municipalities;
- (6) Stormwater Runoff, Soil Erosion, and non-point source pollution, due to land development within the City, have resulted in a deterioration of the water resources of the City and downstream municipalities;
- (7) increased Stormwater Runoff rates and volumes, and the sediments and Pollutants associated with Stormwater Runoff from future Development projects within the City will, absent reasonable regulation and control, adversely affect the City's water bodies and water resources, and those of downstream municipalities;
- (8) Stormwater Runoff, Soil Erosion, and non-point source pollution can be controlled and minimized by the regulation of Stormwater Runoff from Development;
- (9) Post construction Stormwater Runoff Program requirements for new Development and redevelopment within the City are set forth in the 2013 MDEQ permit application for discharge of stormwater to surface waters of the State from MS4 under the NPDES program;
- (10) adopting the standards, criteria and procedures contained in this chapter and implementing the same will address many of the deleterious effects of Stormwater Runoff;
- (11) adopting these standards is necessary for the preservation of the public health, safety and welfare;
- (12) adopting these standards is necessary to comply with the NPDES MS4 general permit;
- (13) Illicit Discharges contain Pollutants that will significantly degrade the City's waterbodies and water resources;
- (14) Illicit Discharges enter the City's MS4 through either direct connections (e.g. sanitary sewer laterals mistakenly or deliberately connected to the storm sewers) or indirect connections (e.g. infiltration, or spills conveyed by surface flow into the storm sewer system); and
- (15) establishing and implementing measures for controlling Illicit Discharges and connections will address many of their deleterious effects.

## **SECTION 11.02      PURPOSE**

It is the purpose of this chapter to establish minimum stormwater management requirements and controls to accomplish, among others, the following objectives:

- (1) to reduce artificially induced Flood damage;
- (2) to minimize increased Stormwater Runoff rates and volumes from identified new land development;
- (3) to minimize the deterioration of existing watercourses, culverts and bridges, and other structures;
- (4) to encourage water recharge into the ground where geologically favorable conditions exist;
- (5) to prevent an increase in non-point source pollution;
- (6) to maintain the integrity of Stream channels for their biological functions, as well as for drainage and other purposes;
- (7) to minimize the impact of Development upon Stream bank and streambed stability;
- (8) to reduce erosion from Development or construction projects;
- (9) to preserve and protect water supply facilities and water resources by means of controlling increased Flood discharges, Stream erosion, and runoff pollution;
- (10) to reduce Stormwater Runoff rates and volumes, Soil Erosion, and non-point source pollution, wherever practicable, from lands that were developed without stormwater management controls meeting the purposes and standards of this chapter;
- (11) to reduce the adverse impact of changing land use on water bodies and, to that end, this chapter establishes minimum standards to protect water bodies from degradation resulting from changing land use where there are insufficient stormwater management controls;
- (12) to regulate the contribution of Pollutants to the MS4 from stormwater discharges;
- (13) to prohibit Illicit Discharges and connections to the MS4; and
- (14) to establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this chapter.

**SECTION 11.03      APPLICABILITY, EXEMPTIONS AND GENERAL PROVISIONS**

- (1) This chapter shall apply to all new Development and all redevelopment projects, including private, commercial and public projects that disturb one (1) acre or more, and projects less than one (1) acre that are part of a larger common Plan of Development or sale that would disturb one (1) acre or more.
- (2) This chapter shall not apply to the following:
  - (a) the installation or removal of individual mobile homes within a mobile home park (this exemption shall not be construed to apply to the construction, expansion, or modification of a mobile home park);
  - (b) construction of, or an addition, extension or modification to, an individual single-family or a two-family detached dwelling;
  - (c) farm operations and buildings, except dwellings, directly related to farm operations (this exemption shall not apply to greenhouses and other similar structures); and
  - (d) plats with preliminary plat approval and other Developments with final land use approval prior to the effective date of this chapter, where such approvals remain in effect.

**SECTION 11.04      DEFINITIONS**

For the purpose of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section unless the context in which they are used specifically indicates otherwise:

- (1) “Base Flood” shall mean a Flood having a one percent (1%) chance of being equaled or exceeded in any given year.
- (2) “Base Flood Elevation” shall mean the high water elevation of the Base Flood, commonly referred to as the “100-year Flood elevation”.
- (3) “Best Management Practices” or “BMP” shall mean a practice or combination of practices and design criteria that accomplish the purposes of this chapter (including, but not limited to reducing Stormwater Runoff rates, reducing Stormwater Runoff volume, and reducing the amount of Pollutants in stormwater) as determined by the City, and, where appropriate, the standards of the Kent County Drain Commissioner.
- (4) “Building Opening” shall mean any opening of a solid wall such as a window or door, through which floodwaters could penetrate.
- (5) “City” shall mean the City of Rockford, or a properly delegated official thereof.

- (6) “Clean Water Act” shall mean the Federal Water Pollution Control Act, as amended, and the applicable regulations promulgated thereunder.
- (7) “Construction Site Stormwater Runoff” shall mean stormwater runoff from a Development site following an earth change and before final site stabilization.
- (8) “Detention” shall mean a system which is designed to capture stormwater and release it over a given period of time through an outlet structure at a controlled rate.
- (9) “Developer” shall mean any Person or entity proposing or implementing the Development of land.
- (10) “Development” shall mean the installation or construction of buildings, structures or other Impervious Surfaces on a site that disturbs one (1) acre of land or more, including projects less than one (1) acre that are part of a larger common Plan or sale that would disturb one (1) acre or more. A Development may include a land division, plat, site condominium, planned unit development, mobile home park, private road or other special land use requiring land use or other review and approval by the City.
- (11) “Development Site” shall mean any land that is being, or has been, developed, or that a Developer proposes for Development.
- (12) “Discharger” shall mean any Person or entity who directly or indirectly discharges stormwater from any property.
- (13) “Drain” shall mean any drain as defined in the Drain Code of 1956, as amended.
- (14) “Drainage” shall mean the collection or conveyance of stormwater, groundwater and/or surface water.
- (15) “Drainageway” shall mean the area within which surface water or groundwater is conveyed from one part of a lot or parcel to another part of the lot or parcel or to adjacent land or to a watercourse.
- (16) “Earth Change” shall mean any human activity which removes ground cover, changes the slope or contours of the land, or exposes the soil surface to the actions of wind and rain. Earth Change includes, but is not limited to, any excavating, surface Grading, filling, landscaping, or removal of vegetative roots.
- (17) “EPA” shall mean the United States Environmental Protection Agency.
- (18) “Erosion” shall mean the process by which the ground surface is worn away by action of wind, water, gravity or a combination thereof.

- (19) “Flood(s)” or “Flooding” shall mean a general and temporary condition of partial or complete inundation of normally dry land areas resulting from the overflow of water bodies or the unusual and rapid accumulation of surface water runoff from any source.
- (20) “Flood Protection Elevation” or “FPE” shall mean the Base Flood Elevation plus one (1) foot at any given location.
- (21) “Floodway” shall mean the channel of a Stream and the portions of the Floodplain adjoining the channel that are reasonably required to carry and discharge a 100-year flood.
- (22) “Grading” shall mean any stripping, excavating, filling and stockpiling of soil or any combination thereof, and the land in its excavated or filled condition.
- (23) “Groundwater” shall mean water below the land surface in the zone of saturation as defined by the MDEQ in Part 213 of the Michigan Natural Resources and Environmental Protection Act, as amended.
- (24) “Hazardous Material(s)” shall mean any material including any substance, waste or combination thereof, which because of its quantity, concentration or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
- (25) “High Groundwater” shall mean a groundwater that elevation does not meet minimum distance from the bottom of a proposed practice as defined in the Stormwater Standards Manual.
- (26) “Illicit Connection” shall mean any method or means for conveying an Illicit Discharge into water bodies or the City’s stormwater system.
- (27) “Illicit Discharge” shall mean any discharge to water bodies or stormwater systems that does not consist entirely of stormwater, discharges pursuant to the terms of an NPDES Permit or exempted discharges as defined in this chapter.
- (28) “Impervious Surface” shall mean any surface that does not allow stormwater to percolate into the ground.
- (29) “Local Floodplain” shall mean any land area subject to periodic Flooding as determined by the City.
- (30) “Lowest Floor” shall mean the lowest floor or the lowest enclosed area (including a basement), but not including an unfinished or flood-resistant enclosure which is usable solely for parking of vehicles or building access.

- (31) “MDEQ” shall mean the Michigan Department of Environmental Quality.
- (32) “MS4” or “Municipal Separate Storm Sewer System” shall mean a system of drainage (including roads, Storm Drains, pipes, and ditches, etc.) that is not a combined sewer or part of a sewage treatment plant. During wet weather, Pollutants are transported through MS4s to local water bodies.
- (33) “NPDES” shall mean the National Pollution Discharge Elimination System. The NPDES Program protects the surface waters of the State by assuring that discharges of Wastewater comply with state and federal regulations. Anyone discharging or proposing to discharge Wastewater to the surface waters of the state are required to make application for and obtain a valid NPDES Permit prior to Wastewater discharge.
- (34) “Overland Flow-way” shall mean the surface area that conveys a concentrated flow of Stormwater Runoff.
- (35) “Person” shall mean an individual, firm, partnership, association, public or private corporation, limited liability company, public agency, instrumentality, or any other legal entity.
- (36) “Plan” shall mean written narratives, specifications, drawings, sketches, written standards, operating procedures or any combination thereof.
- (37) “Pollutant” shall mean a substance discharged which includes, but is not limited to, any dredged spoil, solid waste, vehicle fluids, yard wastes, animal wastes, agricultural waste products, sediment, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological wastes, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, commercial and agricultural waste, or any other contaminant or other substance defined as a pollutant under the Federal Clean Water Act.
- (38) “Project Site” shall mean an area of earth change or disturbance.
- (39) “Property Owner” shall mean any Person having legal or equitable title to property or any Person having or exercising care, custody, or control over any property.
- (40) “Retention” shall mean a system which is designed to capture stormwater and contain it until it infiltrates the soil or evaporates.
- (41) “Soil Erosion” shall mean the stripping of soil and weather rock from land creating sediment for transportation by water, wind, or ice, and enabling formation of new sedimentary deposits.

- (42) “State” shall mean the State of Michigan.
- (43) “State of Michigan Water Quality Standards” shall mean all applicable State rules, regulations, and laws pertaining to water quality, including the provisions of Section 3106 of Part 31 of the Michigan Natural Resources and Environmental Protection Act, as amended.
- (44) “State Regulated Floodplain” shall mean any area of land adjoining a Stream that will be inundated by a Base Flood that has a drainage area of two (2) square miles or more when measured at the downstream limits of the proposed Development site.
- (45) “Storm Drain” shall mean a system of open or enclosed conduits and appurtenant structures intended to convey or manage Stormwater Runoff, ground water and drainage.
- (46) “Stormwater Management Facility(ies)” shall mean the method, structure, area, system, plantings, trees, or other equipment or measures which are designed to receive, control, store, convey, infiltrate, or treat stormwater.
- (47) “Stormwater Permit” shall mean a permit issued pursuant to this chapter.
- (48) “Stormwater Runoff” shall mean water that originates during precipitation events or with snowmelt. Stormwater that does not soak into the ground or evaporate becomes Stormwater Runoff, which either flows directly into surface waters or is channeled into storm drainage systems.
- (49) “Stormwater Standards Manual” shall mean the establishment of a uniform set of minimum stormwater design standards necessary to provide for public safety, the protection of property, and to comply with the NPDES permit.
- (50) “Stream” shall mean a river, stream or creek which may or may not be serving as a drain, or any other Water Body that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water.
- (51) “Substantial Improvement” shall mean a repair, reconstruction, or improvement of an existing structure, such that the cost equals or exceeds fifty percent (50%) of the true cash value of the structure either:
- a. before the improvement is started,
  - b. before the damage occurred if the structure has been damaged and is being restored, or
  - c. is started when the first alteration of any structural part of the building commences.

- (52) “Uncontaminated Pumped Groundwater” shall mean pumped groundwater from dewatering wells at sites where no known soil or groundwater contamination exists.
- (53) “Wastewater” shall mean any water or other liquid, other than uncontaminated stormwater discharged from a building, structure or facility.
- (54) “Water Body” shall mean a river, lake, stream, creek, other watercourse or Wetlands.
- (55) “Watershed” shall mean a land area draining into a Water Body.
- (56) “Wetland(s)” shall mean land characterized by the presence of water at a frequency and duration sufficient to support Wetland vegetation or aquatic life.

**ARTICLE II. STORMWATER PERMITS**

**SECTION 11.21 STORMWATER PERMIT REQUIRED.**

- (1) No Person shall engage in any Development activity without first receiving a Stormwater Permit from the City pursuant to this article II.
- (2) The granting of a Stormwater Permit only authorizes the discharge of stormwater from the Development for which the Permit is required, subject to the terms of the Permit. It shall not be deemed to approve other Development, other land use activities, or replace other required Permits.

**SECTION 11.22 STORMWATER PERMIT REVIEW PROCEDURES.**

The City shall grant a Stormwater Permit, which may impose terms and conditions in accordance with section 11.29 hereof, only upon compliance with each of the following requirements:

- (1) The Developer has submitted a drainage Plan complying with section 11.23 hereof.
- (2) The Developer has paid or deposited the Stormwater Permit review fee pursuant to Section 11.23 hereof.
- (3) The Developer has paid or posted any applicable performance guarantee pursuant to Section 11.26 hereof.

- (4) The Developer agrees to provide all easements necessary to implement the approved drainage plan and to otherwise comply with this Chapter including, but not limited to, section 11.72 hereof. All easements shall be acceptable to the City in form and substance and shall be recorded with the Kent County Register of Deeds. At the discretion of the City the final easement may be required to be recorded prior to Stormwater Permit issuance.
- (5) The Developer provides the required maintenance agreement for routine, emergency, and long-term maintenance of all structural and vegetative BMPs installed and implemented to meet the performance standards, and to comply with the approved drainage plan and this chapter including, but not limited to, section 11.73 hereof. The maintenance agreement shall be acceptable to the City in form and substance, may not be amended without the approval of the City, shall be binding on all future Property Owners, and shall be recorded with the Kent County Register of Deeds.

### **SECTION 11.23 DRAINAGE PLAN.**

The Developer shall provide adequate Stormwater Management Facilities for the Development site. Adequate facilities reduce the exposure of people to drainage-related adverse impacts and to health and safety hazards. They reduce the exposure of real and personal property to damage through stormwater inundation. The stormwater management system and BMPs shall be designed in accordance with the latest version of the Stormwater Standards Manual.

The Developer shall provide a drainage plan to the City for review and approval. The drainage plan shall identify and contain all of the information required in the Stormwater Standards Manual, including an implementation Plan relative to the Development site.

The implementation Plan for construction and inspection of all stormwater management facilities necessary to the overall drainage Plan shall include a schedule of the estimated dates of completing construction of the Stormwater Management Facilities shown on the Plan and an identification of the proposed inspection procedures to ensure that the Stormwater Management Facilities are constructed in accordance with the approved drain Plan.

### **SECTION 11.24 STORMWATER PERMIT REVIEW FEES.**

- (1) All expenses and costs incurred by the City directly associated with processing, reviewing and approving or denying a Stormwater Permit application shall be paid to the City from the funds in a separate escrow account established by the Developer, as provided in subsection (2) below. The City shall draw funds from the escrow account to reimburse the City for out-of-pocket expenses incurred by the City related to the application. Such reimbursable expenses include, but are not limited to, the following:

- (a) services of the City attorney directly related to the application;
  - (b) services of the City engineer directly related to the application;
  - (c) services of other independent contractors or consultants working for the City which are directly related to the application; and
  - (d) all costs of public hearings, required mailings and legal notice requirements necessitated by the application.
- (2) At the time a Developer applies for a Stormwater Permit, the City may require the Developer to deposit with the City, as an escrow deposit, an initial amount as determined by resolution of the City Council for such matters and shall provide additional amounts as requested by the City in such increments as are specified in said resolution. Any excess funds remaining in the escrow account after the application has been fully processed, reviewed, and the final City approval or rejection has occurred will be refunded to the Developer with no interest to be paid on such funds. At no time prior to the City's final decision on an application shall the balance in the escrow account fall below the amount as designated by the City. If the funds in the account are reduced to less than the required amount, the Developer shall deposit into the account an additional amount as determined by City Council resolution, before the application review process will be continued.

#### **SECTION 11.25 CONSTRUCTION SITE RUNOFF CONTROLS**

Prior to making any earth change on a Development site regulated by this chapter, the Developer shall first obtain a soil erosion Permit issued in accordance with Part 91 of the Michigan Natural Resources and Environmental Protection Act, as amended, or as otherwise required by law. The Developer shall install Stormwater Management Facilities and shall phase the Development activities so as to prevent construction site Stormwater Runoff and off-site sedimentation. During all construction activities on the Development site, the City may inspect the Development site to ensure compliance with the approved construction site runoff controls.

#### **SECTION 11.26 PERFORMANCE GUARANTEE**

- (1) The City shall not approve a Stormwater Permit until the Developer submits to the City, a letter of credit or other performance guarantee in a form and amount satisfactory to the City, to ensure the timely and satisfactory construction of all approved Stormwater Management Facilities and to complete site Grading in accordance with the approved drainage Plan. Upon a) certification by a registered professional engineer that the Stormwater Management Facilities have been completed in accordance with the approved drainage Plan including, but not limited to, the implementation Plan and b) receipt of construction drawings meeting the minimum requirements of City or the Kent County Drain

Commissioner, the City may release the letter of credit, or other performance guarantee.

- (2) Except as provided in subsection (3) below, the amount of the performance guarantee shall be \$10,000, unless the City reasonably determines that a greater amount is appropriate, in which case the basis for such determination shall be provided to the Developer in writing. In determining whether an amount greater than \$10,000 is appropriate, the City shall consider the size and type of the Development, the size and type of the on-site Stormwater Management Facilities, and the nature of the off-site Stormwater Management Facilities the Development will utilize.
- (3) The City Manager or his/her designee may reduce or waive the amount of the performance guarantee for a Development that will not increase the percentage of Impervious Surface of the Development Site by more than ten percent (10%) and in accordance with those factors set forth in subsection (2) above.
- (4) This chapter shall not be construed or interpreted as relieving a Developer of its obligation to pay all costs associated with on-site private Stormwater Management Facilities as well as those costs arising from the need to make other drainage improvements in order to reduce a Development's impact on a Drain consistent with adopted design standards.

#### **SECTION 11.27 CERTIFICATE OF OCCUPANCY**

No final certificate of occupancy shall be issued to a Development until Stormwater Management Facilities have been completed in accordance with the approved drainage Plan; provided, however, the City may issue a certificate of occupancy if an acceptable letter of credit or other performance guarantee has been submitted to the City, for the timely and satisfactory construction of all Stormwater Management Facilities and site Grading in accordance with the approved drainage Plan.

#### **SECTION 11.28 NO CHANGE IN APPROVED FACILITIES**

Stormwater Management Facilities, after construction and approval, shall be maintained in good operational condition, in accordance with the approved drainage Plan, and shall not be subsequently altered, revised or replaced except in accordance with the approved drainage Plan, or in accordance with approved amendments or revisions to that Plan.

#### **SECTION 11.29 TERMS AND CONDITIONS OF PERMITS**

In granting a Stormwater Permit, the City may impose such terms and conditions as are reasonably necessary to effectuate the purposes of this chapter. A Developer shall comply with such terms and conditions.

**ARTICLE III. STORMWATER SYSTEM, FLOODPLAIN AND OTHER STANDARDS, SOIL EROSION CONTROL**

**SECTION 11.31 MANAGEMENT OF AND RESPONSIBILITY FOR STORMWATER SYSTEM**

The City is not responsible for providing drainage facilities on private property for the management of stormwater on said property. It shall be the responsibility of the Property Owner to provide for, and maintain, private Stormwater Management Facilities serving the property and to prevent or correct the accumulation of debris that interferes with the drainage function of a Water Body or the functioning of such drainage.

**SECTION 11.32 STORMWATER SYSTEM**

All Stormwater Management Facilities shall be constructed and maintained in accordance with all applicable federal, State and local ordinances, and rules and regulations.

**SECTION 11.33 STORMWATER DISCHARGE RATES AND VOLUMES**

The minimum design standards set forth in this article III shall apply to all new Development and redevelopment projects, including preventing or minimizing water quality impacts. Specific exemptions are listed in the Stormwater Standards Manual.

**SECTION 11.34 FLOODPLAIN STANDARDS**

- (1) All new buildings and Substantial Improvements to existing buildings shall be protected from Flood damage up to the Flood Protection Elevation and shall be in accordance with all applicable federal, State and local ordinances, and rules and regulations. Floodway alteration in a Local Floodplain shall be permitted only upon review and approval by the City, in accordance with an approved drainage Plan.
- (2) A drain Plan providing for the filling or alteration of a Floodway within a local Floodplain shall include provisions for maintaining stability of the banks of Streams or other water bodies. Establishing buffer zones is one means of providing protection of the slopes and banks of water bodies.
- (3) Within any required buffer zone, no earth change shall take place except in accordance with the approved drain Plan. Such a Plan may also include provisions for the replacement of local Flood plain storage volume, where such storage volume is lost or diminished as a result of the approved Development.
- (4) Any earth change within a State Regulated Floodplain shall only be undertaken in accordance with any required State or federal Permit.

- (5) The degree of Flood protection required by this chapter is hereby found to be the minimum necessary and reasonable for regulatory purposes. Larger Floods may occur and higher Flood water heights may occur than will be mitigated or controlled by compliance with the requirements of this chapter. This chapter shall not be interpreted to imply or guarantee that areas outside the Floodway or the State Regulated Floodplain or uses permitted within such areas, shall remain free from Floods or Flood damage. Compliance with the terms of this chapter will not guarantee freedom from damage, injury or loss of life. This chapter shall not be interpreted or applied to create liability for the City or any officer, agent or employee of the City for any Flood or Flood damage.

### **SECTION 11.35 SOIL EROSION AND SEDIMENTATION CONTROL**

- (1) All Persons who cause, in whole or in part, any earth change to occur shall provide Soil Erosion and sedimentation control so as to adequately prevent soils from being eroded and discharged or deposited onto adjacent properties or into a stormwater drainage system, a public street or right-of-way, Wetland, Stream, Water Body, or Floodplain. All Development shall be in accordance with all applicable federal, State and local ordinances, rules and regulations.
- (2) During any earth change which exposes soil to an increased risk of erosion or sediment track-out, the Property Owner and other Persons causing or participating in the earth change shall do the following:
  - (a) comply with the stormwater management standards of this chapter;
  - (b) obtain and comply with the terms of a Soil Erosion and sedimentation control Permit if required by law;
  - (c) prevent damage to any public utilities or services within the limits of Grading and within any routes of travel or areas of work of construction equipment;
  - (d) prevent damage to or impairment of any Water Body on or near the location of the earth change or affected thereby;
  - (e) prevent damage to adjacent or nearby land;
  - (f) apply for all required approvals and Permits prior to the commencement of work;
  - (g) proceed with the proposed work only in accordance with the approved Plans and in compliance with this chapter and the Stormwater Standards Manual;
  - (h) maintain all required Soil Erosion and sedimentation control measures, including but not limited to, measures required for compliance with the terms of this chapter;

- (i) promptly remove all soil, sediment, debris, or other materials applied, dumped, tracked, or otherwise deposited on any lands, public streets, sidewalks, or other public ways or facilities, as directed by the regulatory agency issuing the Soil Erosion and sediment control Permit and removal of all such soil, sediment, debris or other materials within twenty-four (24) hours shall be considered prima facie compliance with this requirement, unless such materials present an immediate hazard to public health and safety;
- (j) refrain from Grading lands at locations near or adjoining lands, public streets, sidewalks, alleys, or other public or private property without providing adequate support or other measures so as to protect such other lands, streets, sidewalks or other property from settling, cracking or sustaining other damage; and
- (k) shall have the Soil Erosion and sediment control measures inspected weekly and within twenty-four (24) hours of a rain event of sufficient quantity to cause runoff; such inspection for sites one (1) acre or greater shall be conducted by a MDEQ certified construction site stormwater operator who shall maintain written inspection logs which shall be made available to the City upon request.

**SECTION 11.36 BUILDING OPENINGS**

- (1) No Building Opening shall be constructed below the following elevations:
  - (a) one (1) foot above the Base Flood Elevation;
  - (b) one (1) foot above the 100-year water surface hydraulic grade line of the stormwater system; and
  - (c) the Building Opening established at the time of plat or Development approval and on file with the City.
- (2) No Lowest Floor shall be constructed below the following elevations:
  - (a) one (1) foot above the highest known ground water elevation; or
  - (b) the lowest allowable floor established at the time of plat or development approval and on file with the City.
- (3) A waiver from elevations stated in subsection (1) above may be granted by the City following receipt of a certification from a registered professional engineer demonstrating that the proposed elevation does not pose a risk of Flooding.
- (4) Upon completion of construction of a structure's foundation and or slab on grade, a registered land surveyor shall certify any minimum Building Opening or Lowest Floor elevation specified by this chapter. This certificate shall attest that the

Building Opening or Lowest Floor elevation complies with the standards of this chapter. The permittee for the building Permit shall submit the certificate to the City building inspections official prior to the commencement of framing and/or structural steel placement. If the surveyor should find that the minimum Building Opening or Lowest Floor elevation is below the elevation specified in subsection (1), that opening must be raised using a method that meets with the approval of the City. After reconstruction, a registered land surveyor or engineer shall recertify that the minimum Building Opening or Lowest Floor elevation complies with the standards of this chapter prior to the commencement of framing and or structural steel placement.

### **SECTION 11.37      STORMWATER LATERALS AND SUMP PUMP DISCHARGE**

- (1) Sump pump discharges shall be directed to Stormwater Management Facilities in a manner that does not impact neighboring lands. Sump pump discharges shall not be directed onto streets.
- (2) A stormwater lateral shall be provided for each new lot at the time of storm sewer construction unless in the sole discretion of the City it is determined that stormwater from roof drains and sump pumps can be adequately discharged on the lot without ponding in lawn areas, flowing onto adjacent lots or street right of ways, or causing Erosion.
- (3) Stormwater laterals shall be owned and maintained by the Property Owner.
- (4) No work shall performed within the public right-of-way without written authorization from the City.
- (5) Whenever building foundation drains are installed, water from foundation drains shall be discharged through a sump pump and check valve system to reduce the risk of backflow. Sump pump discharges to stormwater laterals shall be configured with an air gap and freeze protection to allow overflow in the event of backflow from the storm sewer. Gravity outlets from footing drains to storm sewers shall not be allowed. The Property Owner assumes all risks associated with connecting building footing drains to the storm sewer system. The requirements outlined in this subsection (5) are the minimum required for the City to allow a Property Owner to connect a foundation drain to the storm sewer system. Additional measures to reduce the risk of storm sewer backups may be taken by the Property Owner. All backflow prevention devices shall be installed on private property and maintained by the Property Owner. The Property Owner shall ensure the proper design, operation, and maintenance of sump pumps and check valve systems and shall protect the property from any damage which may result from failures of a sump pump and check valve system.
- (6) Water discharged to the storm sewer system via a lateral is not exempted from meeting water quality and channel protection discharge requirements.

- (7) No person shall discharge water from footing drains, sump pumps, or other sources of stormwater to a sanitary sewer.

## **ARTICLE IV. PROHIBITIONS AND EXEMPTIONS**

### **SECTION 11.41 PROHIBITED DISCHARGES**

- (1) No Person shall discharge to a Water Body, directly or indirectly, any substance other than stormwater or an exempted discharge. Any Person discharging stormwater shall effectively prevent Pollutants from being discharged with the stormwater, except in accordance with BMPs.
- (2) The City is authorized to require Dischargers to implement pollution prevention measures, utilizing BMPs as necessary, to prevent or reduce the discharge of Pollutants into the City's stormwater drainage system.
- (3) No Person shall discharge or cause to be discharged into the City Storm Drain system or watercourses any materials, including, but not limited to, Pollutants, or water containing any Pollutants that cause or contribute to a violation of applicable water quality standards other than stormwater. The commencement, conduct, or continuance of any Illicit Discharge to the Storm Drain system is prohibited except for discharges authorized by the City as being necessary to protect public health and safety.
- (4) The construction, use, maintenance, or continued existence of Illicit Connections to the MS4 is prohibited. This prohibition expressly includes, without limitation, Illicit Connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection. Without limitation, a Person is considered to be in violation of this chapter if the Person connects a line conveying Wastewater to the MS4, or allows such a connection to continue.
- (5) The prohibitions of this section shall not apply to any nonstormwater discharge permitted under a NPDES Permit, waiver, or waste discharge order issued to the Discharger and administered under the authority of the EPA, provided, that the discharge is in full compliance with all requirements of the Permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the MS4.

### **SECTION 11.42 EXEMPTED DISCHARGES**

- (1) The following non-stormwater discharges shall be exempted from the requirement of this article, provided that they do not result in a violation of State water quality standards:
  - (a) water supply line flushing;
  - (b) landscape irrigation;
  - (c) eiverted Stream flows;

- (d) rising ground water;
  - (e) uncontaminated ground water infiltration to Storm Drains;
  - (f) uncontaminated Pumped Groundwater;
  - (g) discharges from potable water sources;
  - (h) foundation drains;
  - (i) air conditioning condensate;
  - (j) individual residential car washing;
  - (k) dechlorinated swimming pool water;
  - (l) street washwater;
  - (m) discharges or flows from emergency firefighting activities; and
  - (n) discharges for which a specific federal or State Permit has been issued.
- (2) None of the above exemptions eliminate the need to provide appropriate pollution control or pollution prevention measures required under this chapter or under any other federal or State law, rule or regulation.

#### **SECTION 11.43 INTERFERENCE WITH NATURAL OR ARTIFICIAL DRAINS**

- (1) It shall be unlawful for any Person to stop, fill, dam, confine, pave, alter the course of, or otherwise interfere with any natural or constructed drain, ditch, swale, culvert, Water Body, Floodplain, or Flood prone area without first submitting a drain Plan to the City and receiving approval of that Plan. Any deviation from the approved Plan is a violation of this chapter. This section shall not prohibit, however, necessary emergency action so as to prevent or mitigate drainage that would be injurious to the environment or the public health, safety or welfare.
- (2) No filling, blocking, fencing or above-surface vegetation planting shall take place within a Floodway.
- (3) No shrubs or trees shall be planted below the top of the bank of a Water Body.
- (4) For an Overland Flow-way:
- (a) silt screen fences shall not be permitted below the top of the bank of a Water Body;
  - (b) chain link fences shall be permitted if the City determines that the fence will not obstruct or divert the flow of water; and
  - (c) if a fence is removed by the City for drain access or drain maintenance, the fence shall be replaced by the owner of the fence at the owner's expense.
- (5) Shrubs, trees or other above-ground vegetation shall not be planted over the top of an underground storm sewer or over the top of the easement within which the storm sewer has been installed.

**SECTION 11.44 STORAGE OF MATERIALS IN DRAINAGEWAY**

It shall be unlawful for any Person to store, stockpile or dispose of any hazardous, toxic or non-toxic material including but not limited to chemicals, explosives, buoyant materials, yard wastes, log and brush piles, unsecured landscaping materials, play or work sheds, animal wastes, fertilizers, flammable liquids and Pollutants within an Overland Flow-way, drainage system or a Floodplain unless adequate protection and or containment has been provided to prevent such materials from entering, diverting or blocking the City's drainage system, except as specifically permitted by State and federal Law.

**ARTICLE V. INSPECTION, MONITORING, REPORTING, AND RECORDKEEPING.**

**SECTION 11.51 INSPECTION AND SAMPLING**

To assure compliance with the standards outlined in article VIII, the City may inspect and/or obtain stormwater samples from Stormwater Management Facilities of any Discharger to determine compliance with the requirements of this chapter. Upon request, the Discharger shall allow the City's properly identified representative to enter upon the premises of the Discharger at all hours necessary for the purposes of such inspection or sampling. The City shall make a reasonable effort to provide the Discharger with advance notice of such inspection and/or sampling. Unreasonable delays in allowing access to a Discharger's facility is a violation of this chapter. As a condition of the issuance of any Permit in accordance with this chapter, a permittee is deemed to consent to the City's exercise of its right to place on the Discharger's property the equipment or devices used for such sampling or inspection.

**SECTION 11.52 STORMWATER MONITORING FACILITIES**

A Discharger of stormwater runoff shall install and operate equipment or devices for the monitoring of stormwater runoff, at its own expense, so as to provide for inspection, sampling, and flow measurement of each discharge to a Water Body or a Stormwater Management Facility, when directed in writing to do so by the City. The City may require a Discharger to provide and operate such equipment and devices if it is necessary or appropriate for the inspection, sampling and flow measurement of discharges in order to determine whether adverse effects from or as a result of such discharges may occur. All such equipment and devices for the inspection, sampling and flow measurement of discharges shall be installed and maintained in accordance with applicable laws, ordinances and regulations.

**SECTION 11.53 ACCIDENTAL DISCHARGES**

- (1) Any Discharger who accidentally discharges into a Water Body any substance other than stormwater or an exempted discharge shall immediately inform the City concerning the discharge. If such information is given orally, a written report

concerning the discharge shall be filed with the City within five (5) days. The written report shall specify:

- (a) the composition of the discharge and the cause thereof;
  - (b) the exact date, time, and estimated volume of the discharge;
  - (c) all measures taken to date to clean up the accidental discharge, and all measures proposed to be taken to reduce and prevent any recurrence; and
  - (d) the name and telephone number of the Person making the report, and the name of a Person who may be contacted for additional information on the matter.
- (2) A properly reported accidental discharge shall be an affirmative defense to a civil infraction proceeding brought under this chapter against a Discharger for such discharge. It shall not, however, be a defense to a legal action brought to obtain an injunction, to obtain recovery of costs or to obtain other relief as a result of or arising out of the discharge. A discharge shall be considered properly reported only if the Discharger complies with all the requirements of subsection (1) above.

#### **SECTION 11.54 RECORD KEEPING REQUIREMENT**

Any Person subject to this chapter shall retain and preserve for no less than three (3) years any and all books, drawings, Plans, prints, documents, memoranda, reports, correspondence and records, including records on magnetic or electronic media and any and all summaries of such records, relating to monitoring, sampling and chemical analysis of any discharge or stormwater runoff from any property.

### **ARTICLE VI. ENFORCEMENT**

#### **SECTION 11.61 SANCTIONS FOR VIOLATION**

- (1) Any Person violating any provision of this chapter shall be responsible for a municipal civil infraction and subject to a fine of not less than \$5,000 for a first offense, and not less than \$ 10,000 for a subsequent offense, plus costs, damages, expenses, and other sanctions as authorized under Chapter 87 of the Revised Judicature Act of 1961, as amended, and other applicable laws, including, without limitation, equitable relief; provided, however, that the violation stated in subsection (2) below shall be a misdemeanor. Each day such violation occurs or continues shall be deemed a separate offense and shall make the violator liable for the imposition of a fine for each day. The rights and remedies provided for in this section are cumulative and in addition to any other remedies provided by law. An admission or determination of responsibility shall not exempt the offender from compliance with the requirements of this chapter.

For purposes of this section, “subsequent offense” means a violation of the provisions of this chapter committed by the same Person within 12 months of a previous violation of the same provision of this chapter for which said Person admitted responsibility or was adjudicated to be responsible.

The City Manager or his/her designee is authorized to issue municipal civil infraction citations for a violation of any provision of this chapter.

- (2) Any Person who neglects or fails to comply with a stop work order issued under section 11.30 shall, upon conviction, be guilty of a misdemeanor, punishable by a fine of not more than \$500 or imprisonment for not more than 93 days, or both such fine and imprisonment, and such Person shall also pay such costs of prosecution and other charges as may be imposed in the discretion of the court.
- (3) Any Person who aids or abets a Person in a violation of this chapter shall be subject to the sanctions provided in this section.

#### **SECTION 11.62 STOP WORK ORDER**

Where there is work in progress that causes or constitutes in whole or in part, a violation of any provision of this chapter, the City is authorized to issue a stop work order to prevent further or continuing violations or adverse effects. All Persons to whom a stop work order is directed, or who are involved in any way with the work or matter described in a stop work order shall fully and promptly comply therewith.

#### **SECTION 11.63 FAILURE TO COMPLY; COMPLETION**

In addition to any other remedies, should any owner fail to comply with the provisions of this chapter, the City may, after giving reasonable notice and an opportunity for compliance, have the necessary work done, and the owner shall be obligated to promptly reimburse the City for all costs of such work. Without limiting the foregoing, a failure to comply or otherwise bring property into compliance with this chapter is deemed a public nuisance and shall be subject to abatement.

#### **SECTION 11.64 EMERGENCY MEASURES**

When emergency measures are necessary to moderate a nuisance, to protect public safety, health and welfare, and/or to prevent loss of life, injury or damage to property, the City is authorized to carry out or arrange for all such emergency measures. Property Owners shall be responsible for the cost of such measures made necessary as a result of a violation of this chapter, and shall promptly reimburse the City for all such costs.

#### **SECTION 11.65 COST RECOVERY FOR DAMAGE TO STORM DRAIN SYSTEM**

A Discharger shall be liable for all costs incurred by the City as the result of causing a discharge that produces a deposit or obstruction, or causes damage to, or impairs a Storm Drain, or violates any of the provisions of this chapter. Costs include, but are not limited to,

those penalties levied by the EPA or MDEQ for violation of a NPDES Permit, attorney fees, and other costs and expenses.

#### **SECTION 11.66      COLLECTION OF COSTS; LIEN**

To the extent permitted by law, costs incurred by the City and the Kent County Drain Commissioner including, without limitation, costs incurred pursuant to sections 11.30, 11.31, 11.32 and 11.33 may be collected by the City or Kent County Drain Commissioner in any manner authorized by law including, but not limited to, all remedies authorized by Act 94 of the Public Acts of Michigan of 1933, as amended. When applicable, said costs shall be a lien on the premises which shall be enforceable in accordance with Act 94 from time to time or as otherwise authorized by law with any such costs which are delinquent for six (6) months or more may be certified annually to the City Treasurer who shall enter the lien on the next tax roll against the premises and the costs shall be collected and the lien shall be enforced in the same manner as provided for in the collection of taxes assessed upon the property tax roll and the enforcement of a lien for taxes.

#### **SECTION 11.67      APPEALS**

Any Person as to whom any provision of this chapter has been applied may appeal in writing, not later than thirty (30) days after the action or decision being appealed from, to the City Council. Such appeal shall identify the matter being appealed, and the basis for the appeal. The City Council shall consider the appeal at a public hearing and may affirm, reject or modify the action being appealed based on the standards set forth in this chapter. The City Council may impose reasonable conditions on an affirmative decision in an appeal. The City Council shall make its decision in writing and shall furnish a copy of the decision to the Person making the appeal. In considering any such appeal, the City Council may consider the recommendations of the City engineer and the comments of other Persons having knowledge of the matter.

#### **SECTION 11.68      SUSPENSION OF MS4 ACCESS**

- (1) The City may, without prior notice, suspend a Person's discharge access to the MS4 when such suspension is necessary to stop an actual or threatened discharge that presents or may present imminent and substantial danger to the environment, or to the health or welfare of Persons or the MS4. If the Person fails to comply with a suspension order issued herein, the City may take such steps as deemed necessary to prevent or minimize damage to the MS4 or the environment, or to minimize danger to Persons. A Person failing to comply with a suspension order pursuant to this section shall be liable for all cost incurred by the City as the result of such failure to comply and a violation shall constitute a public nuisance.
- (2) Any Person discharging to the MS4 in violation of this chapter may have its MS4 access terminated if such termination would abate or reduce an Illicit Discharge. The City will notify a violator of the proposed termination of its MS4 access. A Person violates this chapter if the Person reinstates MS4 access to a premise terminated pursuant to this section, without the prior approval of the City.

**ARTICLE VII. STORMWATER EASEMENTS AND MAINTENANCE AGREEMENTS**

**SECTION 11.71 APPLICABILITY OF REQUIREMENTS**

The requirements of this article concerning stormwater easements and maintenance agreements shall apply to all Persons required to submit a drain Plan to the City for review and approval.

**SECTION 11.72 STORMWATER MANAGEMENT EASEMENTS**

The Property Owner shall provide all stormwater management easements necessary to implement the approved drain Plan and to otherwise comply with this chapter in form and substance required by the City and shall record such easements as directed by the City. The easements shall assure access for proper inspection and maintenance of Stormwater Management Facilities and shall provide adequate emergency Overland Flow-ways.

**SECTION 11.73 MAINTENANCE AGREEMENTS**

- (1) The Developer shall provide all stormwater maintenance agreements necessary to implement the approved drain Plan and to otherwise comply with this chapter in form and substance as required by the City, and shall record such agreements as directed by the City. A maintenance agreement shall, among other matters, assure access for proper inspection and maintenance or corrective actions of stormwater BMPs, including emergency Overland Flow-ways, and include provisions for tracking the transfer of operation and maintenance responsibility to ensure the performance standards are met in perpetuity.
- (2) Maintenance Agreement Provisions.
  - (a) The maintenance agreement shall include a maintenance plan and schedule for routine, emergency and long-term maintenance of all structural and vegetative stormwater BMPs installed and implemented to meet the performance standards, with a detailed annual estimated budget for an initial three (3) years, and a clear statement that only future maintenance activities in accordance with the maintenance agreement shall be permitted without the necessity of securing a new Permit.
  - (b) Written notice and submittal of maintenance documentation shall be provided to the City by the Property Owner at the interval set forth in the maintenance agreement and subject to the provisions of articles V and VI.
  - (c) If it has been found by the City, following notice and an opportunity to be heard by the Property Owner, that there has been a material failure or refusal to undertake maintenance as required under this chapter and/or as required in the approved maintenance agreement as required hereunder,

the City shall be authorized, but not required, to hire a Person with qualifications and experience in the subject matter to undertake the monitoring and maintenance required, in which event, the Property Owner shall be obligated to advance or reimburse payment for all costs and expenses associated with such monitoring and maintenance, together with a reasonable administrative fee. The maintenance agreement required under this chapter shall contain a provision spelling out the requirements and, if the Developer objects in any respect to such provision or the underlying rights and obligations, such objection shall be resolved prior to the commencement of construction of the proposed Development.

#### **SECTION 11.74 ESTABLISHMENT OF COUNTY DRAINS**

Prior to final approval of a platted subdivision, all stormwater management facilities for platted subdivisions shall be established as county drains, as authorized in Section 433, Chapter 18 of the Drain Code of 1956, as amended.

### **ARTICLE VIII. PERFORMANCE AND DESIGN STANDARDS**

#### **SECTION 11.81 PERFORMANCE STANDARDS**

In order to achieve the goals and purposes of this chapter, the following stormwater management performance standards are hereby established:

- (1) Treat the calculated site runoff for the entire Project Site from the ninety percent (90%) annual non-exceedance storm, which is approximately equal to one inch (1”) of rain (i.e. on average, ninety percent (90%) of the storms in a given year produce one inch (1”) of rainfall or less). The treatment volume specified is based on capturing and treating the volume of stormwater that is the first to runoff in a storm and expected to contain the majority of Pollutants. This volume of runoff is often referred to as the “first flush.” This water quality treatment standard is required for all sites.
- (2) The methods selected to treat the volume of water calculated for the water quality treatment performance standard shall be designed on a site-specific basis to achieve either a minimum of eighty percent (80%) removal of total suspended solids (“TSS”), as compared with uncontrolled runoff, or a discharge concentration of TSS that does not exceed eighty (80) milligrams per liter. This performance standard is based on TSS as a surrogate for other Pollutants normally found in stormwater runoff. Control of TSS to meet this standard is expected to achieve control of other Pollutants to an acceptable level that protects water quality.
- (3) Maintain the post-development Project Site runoff volume and peak flow rate at or below pre-development levels for all storms up to the two-year, twenty four-hour event. At a minimum, pre-development is defined as the last land use prior to the planned new Development or redevelopment. The channel protection standard is required for stormwater discharges to surface waters or the MS4.

- (4) Detain the portion of the channel protection volume unable to be retained onsite for a minimum of twenty four (24) hours with a maximum release rate no greater than the existing two-year peak discharge, and a drawdown time no greater than seventy-two (72) hours. A waiver from the City must be granted to use this alternative approach.
- (5) Control the volume of site runoff from the Flood control rainfall event with a maximum allowable release rate to reduce the potential for property damage from overbank Flooding and preserve existing Floodplains. The Flood control event and maximum allowable release rate shall be determined by the City. The Flood control standard is required for all sites.
- (6) Acceptable overflow routes for the one hundred-year Flood shall be identified for the site and for downstream areas between the site and the nearest acceptable Floodway or outlet. Stormwater conveyance systems are usually designed to handle flows generated by the ten-year storm. When larger storms generate higher flows, the conveyance system is expected to surcharge resulting in stormwater accumulating on the surface of the ground. Gravity will cause such stormwater to flow overland to lower elevations. By carefully managing the shape of the land surface such overland stormwater flow can be directed to locations that will not cause property damage. Adequate emergency Overland Flow-ways will direct stormwater flows generated by the one hundred-year storm to avoid damage to structures and facilities.
- (7) Pretreatment of site runoff is required on a site specific basis prior to discharging to certain stormwater BMPs. Pretreatment provides for the removal of fine sediment, trash and debris, and preserves the longevity and function of the BMP.
- (8) Some land use activities have a potentially greater risk of polluted runoff than others. Project sites with these types of activities are referred to as “hot spots” and include uses such as gas stations, commercial vehicle maintenance and repair, auto recyclers, recycling centers, and scrap yards. Hot spots also include areas with the potential for contaminating public water supply intakes. Pretreatment of stormwater runoff to address Pollutants associated with hot spots is required for the site. Stormwater management strategies and BMPs that reduce the potential to mobilize existing soil and groundwater contaminants, or that capture and treat stormwater runoff and/or accidental spills to protect groundwater or nearby surface waters are required.
- (9) Stormwater management strategies and BMPs that minimize thermal impacts from site runoff and maximize groundwater recharge are required for sites with a surface water discharge to a coldwater Stream as determined by MDNR.

## **SECTION 11.82      DESIGN STANDARDS**

Stormwater BMPs shall be designed to manage stormwater flow within the available capacity of the downstream conveyance system as determined by the City.

In addition, stormwater BMPs shall be designed to meet Performance Standards as described in section 11.41. Stormwater system design shall be in accordance with the latest version the Stormwater Standards Manual of the City.

## **SECTION 11.83      ALTERNATIVE APPROACH FOR CHANNEL PROTECTION**

In many cases, infiltration will likely be used as the primary means of Retention. It is not, however, the sole means of providing onsite Retention, and the Developer must include consideration of stormwater reuse, interception, evapo-transpiration, and other vegetative (non-structural) BMPs at the Project Site. Site constraints that limit the use of infiltration may include:

- (1) poorly draining soils (<0.24 inches per hour; typically hydrologic soil groups C and D);
- (2) bedrock;
- (3) high groundwater, or the potential of mounded groundwater to impair other uses;
- (4) wellhead protection areas;
- (5) stormwater hot spots; and
- (6) part 201 and Part 213 of the Michigan Natural Resources and Environmental Protection Act sites, and areas of soil or groundwater contamination.

The City may grant a waiver of the on-site Retention criteria for channel protection described in Section 11.41(3), and allow an alternative approach to meet the channel protection performance standard if the Developer demonstrates that site constraints preclude sufficient Retention onsite. If a waiver is granted, the developer must meet the extended Detention criteria in Section 11.41(4) for channel protection.

## **SECTION 11.84      RESOLUTION TO IMPLEMENT PERFORMANCE AND DESIGN STANDARDS**

The City Council may adopt a resolution establishing more detailed design and performance standards for Stormwater Management Facilities, consistent with the terms of this chapter, and in order to further implement its goals and purposes.

**Section 3. Effective Date.** This ordinance shall take effect ten days after it, or a summary thereof, is published in *The Rockford Squire*, a newspaper of general circulation in the City.

**Section 4. Publication.** After its adoption, this ordinance or a summary thereof, as permitted by law, shall be published by the City Clerk in *The Rockford Squire*, a newspaper of general circulation in the City.

**ORDINANCE DECLARED ADOPTED.**

Dated: \_\_\_\_\_, 2018

\_\_\_\_\_  
Steve Jazwiec, Mayor

\_\_\_\_\_  
Christine M. Bedford, City Clerk

**CERTIFICATION**

I, the undersigned duly appointed City Clerk of the City of Rockford, Kent County, Michigan, do hereby certify that the above ordinance, or a summary thereof, was published in *The Rockford Squire*, a newspaper of general circulation in the City on \_\_\_\_\_, 2018, and that such ordinance was entered with the Ordinance Book of the City on \_\_\_\_\_, 2018.

Dated: \_\_\_\_\_, 2018

\_\_\_\_\_  
Christine M. Bedford, City Clerk