

# Chapter 450. Stormwater Management

## Section 450.010 Storm Water Detention Requirements

### A. Applicability

The provisions of this chapter apply to all land disturbance construction activities including residential (single-family and multi-family), commercial and industrial development. Storm water detention facilities shall be constructed and in operation prior to any construction of impervious surface and so noted on the engineering drawings.

### B. Developer Responsibility

There are many methods and/or combination of methods, which may be utilized to provide the amount of storage required. It is the responsibility of the developer to choose which method or combination of methods he/she will use. All required improvements must be designed and built according to the latest edition of the Kansas City Metropolitan A.P.W.A. unless otherwise required by the City of Raymore "Standard Contract Documents and Technical Specifications and Design Criteria for Utility and Street Construction." Whenever these two are in conflict, the more restrictive applies.

### C. Methods of Storage

The following is a list of various methods of detention including conditions and limitations, which shall be observed in the selection of a method of detention.

#### 1. Rooftop Storage

- a. Building Codes require roof load designs for rain and snow. The design load may be converted to an equivalent water depth in inches, which can be safely contained on flat roofs.
- b. The maximum storage allowed for design purposes should not exceed this depth unless a building is designed to withstand a greater roofload. The depth of water can be controlled by proper sizing of downspouts and by constructing scuppers through the parapet walls.
- c. Overflow drains should be used to protect against possible roof overloading. Roofwater tightness is required to prevent leakage from water accumulation.

#### 2. Parking Lots

- a. Considerable area in commercial areas is occupied by parking lots. Planned correctly these paved areas can provide adequate detention with minimum inconvenience to the public and without functional interference. This method involves storage of runoff in depressions constructed near drains.
- b. In parking lots, detention is permitted to a maximum depth of seven inches. The maximum limits of ponding may not be designed closer than 10 feet from a building unless waterproofing of the building and pedestrian accessibility are properly documented. The minimum freeboard from the maximum ponding elevation to the lowest sill elevation of a building is one foot.
- c. When detention is used on parking lots by means of retaining walls or curbs, these retaining walls and curbs must be constructed with reinforced concrete.

### 3. Recreation Areas

- a. Recreation areas, such as open space or sports fields, generally have a substantial area of grass cover which can have high infiltration rates. A secondary use of such recreation areas can be made by providing for limited detention storage of runoff from adjacent areas. Because these areas are not used during periods of precipitation, detention ponding should not impede their primary use.
- b. To minimize the effects of detention, the recreation area should be designed so that it will thoroughly drain. Additionally, the vegetation used on the area should be tolerant of periodic inundation and wetness. The developer and the Parks and Recreation Department should work closely to provide open space that can also be used for limited detention storage.

### 4. Dry Reservoirs

Dry reservoirs shall be designed in accordance with the latest revision of the Standard Specifications of the Kansas City Metropolitan Chapter of the American Public Works Association as modified below:

#### a. Earth Bottoms

All dry detention facilities shall be constructed with earth bottoms unless there is not sufficient runoff to support a plant community as determined by the Director of Public Works. The pond bottom shall be designed as a wetland and plantings shall be installed in accordance with wetland design criteria as specified in the latest revision of the Mid-America Regional Council and American Public Works Association "Manual for Best Management Practices for Storm Water Quality."

#### b. Maintenance

- (1) Stormwater facilities shall be maintained by the owner or other responsible party as outlined in a maintenance agreement approved by the City Council at the time of final plat approval.
- (2) Disposal of waste from maintenance of facilities shall be constructed in accordance with applicable federal, state and local laws and regulations.
- (3) Records of installation and maintenance and repair shall be retained by the owner or other responsible party for the current five year period and shall be made available to the City Public Works Department upon request.
- (4) Any failure to maintain a stormwater facility in accordance with City requirements or to correct problems with a stormwater facility as required by the City after receipt of due notice shall be handled under the procedure for nuisances as outlined in Chapter 220 of the Raymore City Code.

#### c. Inspection

- (1) Stormwater systems shall be inspected by the City Public Works Department during and after construction and annually thereafter to assure consistency with the approved stormwater management plan.
- (2) All stormwater systems shall be subject to the authority of the on-site detention inspection program of the City Public Works Department to ensure compliance with this code and may be inspected when deemed necessary.

- (3) Routine or area inspections shall be based upon such reasonable selection processes as may be deemed necessary to carry out the objectives of this chapter, including but not limited to, random sampling and/or sampling in areas with evidence of stormwater pollution, illicit discharges, or similar factors.

### d. Existing Dry Reservoirs

- (1) In residential subdivisions where dry reservoirs/wet weather ponds currently exist, if a majority of the lot owners in that subdivision file a written request with the City Council to have the reservoir/pond either filled in or converted to another method of stormwater detention and there are curbs and gutters and a stormwater inlet located nearby to safely control the volume of a 100-year storm event, the City Council shall hold a public hearing and vote on the request.
- (2) In residential subdivisions where dry reservoirs/wet weather ponds have been approved but are less than 25 percent constructed, if a majority of lot owners file a written request with the City Council asking that another method of stormwater detention be used, then the City Council shall hold a public hearing and vote on the request.
- (3) For commercial property, if a majority of the owners of that property file a written request with the City Council asking that another method of stormwater detention be used, then the City Council shall hold a public hearing and vote on the request.

### 5. Permanent Lakes

Permanent lakes must be constructed according to the Kansas City Metro A.P.W.A. standards and specifications.

### 6. Underground Storage

- a. Storm water runoff may be controlled by a holding tank or large size pipe. This method should be limited to areas where surface ponding is prohibited due to lack or high cost of available land or areas where the surface topography is not conducive to above-ground storage.
- b. These systems must be designed so that the water surface from the 25-year storm does not exceed the elevation of the top of the storage pipe or vault or come within six inches of the bottom of any inlet grate or exceed the top of any upstream pipe; and provision must be made to safely control the 100-year storm.
- c. Underground storage systems must be designed to be relatively maintenance free by using adequate trash screens at all inlets to the system and at the control structures avoiding the use of moving parts and avoiding the use of small control pipes and narrow weir openings.
- d. Privately maintained underground storage systems located on private property must be constructed of materials which have a similar expected life as that of the project. Tanks, vaults or oversized pipes and multiple parallel pipes may be used in these private systems.
- e. All underground storage systems must have a reasonable number and type of access locations to allow easy inspection and maintenance.

### **Section 450.020 Stormwater Treatment Purpose and Findings** *(Amendment 21 – Ordinance 2015-005 1.26.15)*

- A.** The purpose of this chapter is to minimize and prevent the discharge of pollutants from developed land into the surface waters of the City by establishing reasonable requirements for the treatment of stormwater runoff from new development and redevelopment activities.
- B.** The City of Raymore finds that land development and the associated increases in impervious cover can increase the quality and nature of pollutants carried by stormwater runoff, increase stormwater runoff rates and volumes, aggravate stream channel erosion and sediment transport, alter the hydrologic response of watersheds, and degrade the ecological function of downstream rivers, creeks, streams, lakes and other water bodies.
- C.** Further, the City of Raymore finds that Stormwater Treatment Facilities and requirements can minimize those impacts by reducing pollutant levels carried in stormwater runoff, removing or reducing the concentrations of those pollutants that are carried, reducing stream bank erosion, and by restoring stormwater runoff rates and volumes to levels closer to the pre-development hydrologic regimes.

### **Section 450.030 Definitions**

For the purposes of this chapter, these words and phrases shall have the following meaning:

- A.** “Applicant” means a property owner or agent of a property owner who has filed an application for a permit that is subject to the requirements of this chapter.
- B.** “Channel” means a natural or artificial Watercourse with defined bed and banks.
- C.** “City” means the City of Raymore, Missouri.
- D.** “Code” means the Raymore Municipal Code.
- E.** “Dedication” means the deliberate appropriation of property by its owner for general public use.
- F.** “Developer” means a person who engages in Development of real estate, whether or not that person is the Landowner.
- G.** “Development” means any man-made changes to improved or unimproved real estate, including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.
- H.** “Director” means the Director of Public Works Department or the Director’s authorized representative.
- I.** “Director of Public Works” means the Director of the Public Works Department or the Director’s authorized representative.
- J.** “Impervious Cover” means those surfaces that cannot effectively infiltrate rainfall, including building rooftops, pavement, sidewalks, and driveways.
- K.** “Infiltration” means the process of percolating Stormwater into the subsoil.
- L.** “Infill Development” means Development on a vacant or substantially vacant tract of land surrounded by existing Development except that tracts of land larger than ten (10) acres shall not be considered “Infill Development.”
- M.** “Land Disturbance” means any activity that changes the physical condition of landform, vegetation and hydrology, creates bare soil, or otherwise may cause erosion or sedimentation. Such activities

include, but are not limited to, clearing, removal of vegetation, stripping, grading, grubbing, excavating, filling, logging and storing of materials.

- N.** “Landowner” means the legal or beneficial owner or owners of a lot or tract. The holder of a contract to purchase or other person having an enforceable proprietary interest in a lot or tract shall be deemed a landowner.
- O.** “Maintenance Agreement” means a legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.
- P.** “Off-site Facility” means a Stormwater Treatment Facility located outside the subject property boundary described in the permit application for land Development activity, including Facilities that may accept runoff from multiple projects.
- Q.** “Pollutant” means any substance or material which contaminates or adversely alters the physical, chemical or biological properties of water, including changes in temperature, taste, odor, turbidity, or color.
- R.** “Previously Constructed Development” means all buildings, parking, sidewalks, and other impervious surfaces that currently exist on a site that were built in accordance with an approved Development plan.
- S.** “Redevelopment” means Development on a tract of land that has been previously developed in substantial accordance with an approved Development plan or final plat, either under City or County zoning codes, and where all or a majority of the existing structures and/or site improvements built under that plan are proposed to be razed and a new structure or structures or other site improvements are proposed to be constructed in accordance with an approved Development plan or plat.
- T.** “Stop Work Order” means an order issued which requires that all construction activity on a site be stopped.
- U.** “Stormwater” means stormwater runoff, snow melt runoff, and surface runoff and drainage from precipitation.
- V.** “Stormwater Treatment Facilities” or “Facilities” means all structures, plantings, natural features, or other physical elements that are designed, constructed and maintained in accordance with this chapter and which are provided to prevent or reduce Stormwater Pollution or to control Stormwater runoff volume and discharges.
- W.** “Stormwater Treatment Standards” or “Standards” means the detailed design criteria, specifications, standard details, and maintenance requirements adopted in writing by the Director.
- X.** “Watercourse” means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

### **Section 450.040**      **Applicability** *(Amendment 22 – Ordinance 2015-068 - 9.14.15)*

No land shall be developed without full compliance with this chapter unless Development occurs as allowed by the following exceptions:

- A.** Standard Exceptions:      Projects meeting any of the following criteria are exempt from the provisions of this chapter:
  - 1.**      Land Disturbances of less than one acre that are not part of a common plan for Development that will cumulatively disturb more than one acre.

2. Expansions and modifications to Previously Constructed Developments otherwise subject to this chapter where the proposed increase in impervious surface is less than 5,000 square feet. This exception shall not apply to multiple applications in the approval process and/or under construction at the same time that cumulatively exceed 5,000 square feet of impervious surface.
  3. Land Disturbances for utility construction.
  4. Agricultural land uses.
  5. Single lot residential Developments that are not part of a larger common plan for Development.
  6. Repairs to any Stormwater Treatment Facility or practice deemed necessary by the Director of Public Works.
  7. Required Rezoning and Conditional Use Permits to allow a specific use with no physical changes proposed to the approved Preliminary Development Plan.
- B. City Administered Construction:** Construction projects administered and constructed directly by the City shall comply with this chapter, except that compliance is not required for street and thoroughfare construction: (1) that would be exempt under the standard exceptions in Section 450.040A of this chapter; and (2) that will maintain, enhance, or reconstruct existing roadways, including the intersection improvements, turn lane additions, safety improvements, or new entrances, but which will not add additional through lanes.

Unless subject to another agreement, Stormwater Treatment Facilities installed as part of City administered projects are owned and maintained by the City.

The City does not assert jurisdiction under this chapter over any construction work on State of Missouri right-of-way.

- C. Previously Approved Plans:** Single-family and two-family residential projects having a preliminary plan, preliminary plat, or final plat approval, and multi-family and nonresidential projects having site plan approval are exempt from the provisions of this chapter. “Substantial or Significant Changes” to approved plans must comply with this chapter in the same manner as a new Development.

“Substantial or Significant Changes” shall mean any of the following criteria:

1. Increases in the density or intensity of residential uses of more than five percent (5%) when the increase creates additional impervious surface (typically horizontal in nature).
2. Increases in the total floor area of all nonresidential buildings covered by the plan of more than ten percent (10%) when the increase creates additional impervious surface (typically horizontal in nature).
3. Increase in lot coverage of more than five percent (5%).
4. Changes in ownership patterns or stages of construction that will lead to a different Development concept.
5. Decreases of areas devoted to open space of more than five percent (5%) or the substantial relocation of such areas.
6. Decreases of any peripheral setback of more than five percent (5%).
7. Changes of traffic circulation patterns that will affect traffic outside of the project boundaries.
8. Modification or removal of conditions or stipulations to the approved plans.

- D.** Infill and Redevelopment Projects: Substantial or Significant Changes to approved plans after the effective date of this chapter are subject to the provisions as required under Section 450.040C of this chapter.

### Section 450.050 Performance Criteria

- A.** Stormwater Treatment Standards (Standards): The City shall adopt and maintain Stormwater Treatment Standards to implement and interpret the provisions of this chapter. The latest edition of the *Mid-America Regional Council and American Public Works Association Manual of Best Management Practices for Stormwater Quality (MARC BMP Manual)*, and all appendices, shall be the basis for these Standards. Included in the Standards shall be additional technical guidance or exceptions to the *MARC BMP Manual* which have been adopted by the Director. The additional guidance or exceptions may include, but not be limited to, modified best management practices, design criteria, construction specifications, or standard details. Copies of all adopted standards shall be on file and available in the Department of Public Works.
- B.** Modifications to Standards: The Standards shall be amended by the following process: The public input process shall include the following minimum steps: (1) posting proposed documents in draft form a minimum of 30 days prior to the City holding a public informational meeting; and (2) extending a written comment period for a minimum of 30 days after the public informational meeting.
- C.** Minimum Control Requirements: All Stormwater Treatment Facilities shall be designed to provide a combination of pollutant removal and water volume control that satisfies the level of service and value rating calculations set forth in the Stormwater Treatment Standards and other requirements established by City approved watershed management plans or studies.
- D.** Non-Structural Stormwater Practices: Non-structural stormwater treatment practices are encouraged to minimize reliance on structural practices. Applicants wishing to obtain credit for using non-structural practices must ensure that these practices are documented and will remain unaltered by subsequent property owners by locating the facility in a conservation easement, separate tract dedicated for stormwater treatment facilities or similar instrument as approved by the Director.
- E.** Infill and Redevelopment Projects: The Standards may modify or reduce requirements on infill and redevelopment projects.
- F.** Modifications to Allow Alternate Compliance: In addition, the Director may waive or modify any of the Stormwater Treatment Standards to encourage the implementation of alternative or innovative practices that implement the intent of the modified standards and provide equivalent public benefits without significant adverse impacts on surrounding development. Such modification may be granted for issues including, but not limited to:
- 1.** Approval of alternate materials, devices, techniques, details or specifications for individual treatment facilities that would be expected to provide similar or better performance.
  - 2.** Evaluations of credits, ratings, or level of service calculations to account for unique or special technical considerations.
  - 3.** Corrections, clarifications or modifications to requirements which the Director has found to give inadequate or undesirable performance.
- G.** Appeals or decisions made by the Director related to the Standards shall be made to the City of Raymore Board of Appeals.

### Section 450.060 Site Location and Placement

The location of Stormwater Treatment Facilities shall be consistent with their function while also conforming to the uses and constraints of the site. The Facility locations shall be approved by the Director, and ownership and maintenance responsibility established. At a minimum, all Stormwater Treatment Facilities will be shown on final construction plans and in the maintenance plan.

- A.** Centralized and Common Stormwater Treatment Facilities: Centralized and common Facilities for Stormwater treatment shall be shown on preliminary plans, preliminary plats, final plats and site plans. The perimeter of the Facility shall be dimensioned on a plan provided as an attachment to the Maintenance Agreement. Provisions shall be made for maintenance of the Facilities, documentation of their presence, and rights of access, as set forth in Section 450.110.
- B.** Distributed Stormwater Treatment Facilities: Distributed Stormwater Treatment Facilities shall be dimensioned on a plan provided as an attachment to the Maintenance Agreement. Provisions shall be made for maintenance of the Facilities, documentation of their presence, and rights of access, as set forth in Section 450.110.
- C.** Residential Single-Family and Two-Family Areas: Generally, Stormwater Treatment Facilities for residential single-family and two-family Developments shall be centralized and located on a common tract, to be owned and maintained by the entity holding fee title to the property or other person contracted or obligated by other agreement to implement and maintain post-construction Stormwater BMP's.

The Director may allow a limited number of distributed Facilities on individual residential tracts, provided the applicant demonstrates that substantial provisions are in place to ensure long-term operation, maintenance and inspection of such Facilities without undue burden to the City for tracking or monitoring compliance.

- D.** Private Facilities in the Public Street Right-of-Way: Privately owned and operated Stormwater Treatment Facilities shall be located outside of the public street right-of-way unless approved in writing by the Director and a corresponding right-of-way Maintenance Agreement shall be recorded that provides for private maintenance responsibility in the public street right-of-way.
- E.** Coordination with Utility Easements: Stormwater Treatment Facilities shall not be co-located within utility easements unless approved by the Director.
- F.** Detention Ponds: When detention facilities for peak flood control are required under the provisions of Chapter 450 of the Code, such basins may be co-located with Stormwater Treatment Facilities, provided that the Facilities are designed to meet the requirements of both uses.
- G.** Off-site Facilities: The Director may consider proposals to manage Stormwater runoff in Off-site Facilities that treat runoff from the proposed Development and comply with the Stormwater Treatment Standards. The Off-site Facility shall be in place prior to or concurrently with the proposed Development. Long-term operations and maintenance responsibilities for the Facilities must be established by legal agreements, approved by the City and recorded with the Cass County Recorder.
- H.** Existing stream corridors as required in Section 455.040 of the Code are considered a beneficial Stormwater Treatment Facility, therefore credit will be granted by the Stormwater Treatment Standards. In limited circumstances, which are specifically included in the Stormwater Treatment Standards, the outer one-third (1/3) of the designated stream corridor may incorporate additional features which enhance the corridor's Stormwater treatment function. Such Facilities must be consistent with the long-term integrity of the stream corridor as a natural, riparian zone.



### Section 450.070 Deviation

- A.** The Planning Commission of the City of Raymore may, in the process of approving preliminary plans, preliminary plats, final plats, and site plans, approve deviations from the specific terms of this chapter which would not be contrary to the public interest and where, owing to special conditions, a literal enforcement of the provisions of this chapter would result in unnecessary hardship for the Applicant, and provided that the spirit of this chapter shall be observed, the public safety and welfare secured and substantial justice done for the Applicants.
- B.** An application for a deviation may be granted only upon a finding that all of the following conditions have been met:
- 1.** That the granting of the deviation will not adversely affect the rights of adjacent Landowners.
  - 2.** That the strict application of the provisions of this chapter would constitute unnecessary hardship upon the Landowner represented in the application.
  - 3.** That the deviation desired will not adversely affect the public health, safety, morals, order, convenience, prosperity or general welfare.
  - 4.** That granting the deviation will comply with the general spirit and intent of this chapter.
  - 5.** That it has been determined the granting of a deviation will not result in extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local, federal or state laws.

Upon consideration of the factors listed above and the purposes of this chapter, the City may attach such conditions to the granting of deviations as it deems necessary to further the purpose of this chapter.

- C.** In considering deviation applications, the City has the discretion of using any or all of the following project evaluations when, in the judgment of the Planning Commission or City of Raymore, these evaluations are relevant and appropriate. No individual or combination of evaluations are necessarily required for an application to be approved and the Planning Commission or City of Raymore may weigh these evaluations in light of all relevant considerations in determining whether or not to approve an application.
- 1.** That alternative standards for Stormwater management, water quality protection, and ecological preservation have been established, and/or that mitigation measures are undertaken.
  - 2.** That existing physical or natural characteristics of the site make strict application of the chapter infeasible.
  - 3.** That concerns for flooding, stream bank erosion, stream instability, and maintenance of culverts, bridges or other structures are addressed.
  - 4.** That the deviation is the minimum necessary to afford relief.
- D.** For City administered street construction, a request for deviation will be initiated and recommended by the Director and must be approved by the City of Raymore. The City may consider, as part of a deviation request, the constraints posed by lack of available right-of-way, interaction with previously planned or approved Stormwater drainage systems, and the nature of surrounding land uses.

### Section 450.080 Stormwater Treatment Facility Plan Requirements

- A.** Preliminary Stormwater Treatment Facility Plan Requirements: No application for development shall be accepted unless it includes a preliminary Stormwater Treatment Facility plan detailing in concept

how runoff and associated water quality impacts resulting from the development will be controlled or managed. This plan must be prepared by a registered professional engineer in the State of Missouri and must show whether stormwater will be managed on-site or off-site, and show the general location and type of practices.

The preliminary Stormwater Treatment Facility plan must include: conceptual stormwater management plans, sufficient information to evaluate the existing environmental characteristics of the project site, impacts of the proposed development, preliminary sizing for Stormwater Treatment Facilities, and locations of any proposed access easements or conservation easements, and a description of the maintenance responsibility for proposed stormwater treatment facilities. The Director may set additional minimum submittal requirements.

- B.** Final Stormwater Treatment Facility Plan Requirements: Unless waived by the Director, the application shall obtain City approval for the final Stormwater Treatment Facility plan prior to obtaining a permit. The final Stormwater Treatment Facility plan, in addition to the information from the preliminary Stormwater Treatment Facility plan, shall include all of the information required in the Standards and any other submittal requirements as determined by the Director.
- C.** Landscaping and Stabilization Requirements: The landscape plan for permitting purposes shall include all of the following:
  - 1.** Vegetative stabilization and management techniques to be used at a site after construction are completed.
  - 2.** An explanation of how the site will be stabilized after construction.
  - 3.** Identify the responsible party for the maintenance of vegetation at the site.
  - 4.** Identify the practices that will be employed to ensure adequate vegetative cover is preserved.
  - 5.** The design is prepared by a registered landscape architect in the State of Missouri.
  - 6.** The design is approved prior to receiving a permit to construct the Stormwater Treatment Facility.

### **Section 450.090 Permit Procedures, Requirements, and Performance Surety**

- A.** Permit Required: No person shall receive any permits for building, grading or other land Development without meeting the requirements of this chapter. Generally, permits for Stormwater Treatment Facility construction will be completed under the authorization of a building, site Development, or land disturbance permit. Application requirements and procedures are described in Chapter 455 and Chapter 470 of the Code.
- B.** Construction Plan Requirements: The Director shall have the authority to set minimum construction plan submittal requirements by written policy or checklist.
- C.** Performance Surety Required: The Director shall require the submittal of a performance surety in the form of an irrevocable letter of credit, surety bond, cash deposit or similar guarantee. If a letter of credit is provided, it shall be on the form as prescribed by the Director. The amount of the performance surety shall be 1.25 times the total construction cost of the Stormwater Treatment Facility as estimated by the project designer and approved by the Director.

Performance Surety Waiver for Single Lot Developments: If Stormwater Treatment Facilities only serve a single building and lot and a building is being constructed, a performance surety may be waived by the Director provided all Stormwater Treatment Facilities are constructed and certified prior to issuance of a Certificate of Occupancy. When seasonal or environmental conditions cause a

delay in constructing the Stormwater Treatment Facilities, the Director may approve issuing a Certificate of Occupancy provided a performance surety is posted in accordance with this section.

- D. Release of Performance Surety:** The performance surety will be released only when all of the following conditions have been met:
- 1.** At least 90% of the land area served by the Stormwater Treatment Facilities has permanent stabilization in place.
  - 2.** All of the Stormwater Treatment Facilities covered by the surety have been constructed and certified in accordance with this chapter.
  - 3.** If the Stormwater Treatment Facility is constructed prior to final stabilization of at least 90% of the land area served by the facility, and the most recent certification of the facility is more than 90 days old, an updated certification shall be required to verify that the facility is fully functional.
- E. Maintenance Surety:** Prior to issuance of a final certificate of occupancy, the Director shall require the submittal of an irrevocable letter of credit, surety bond, cash deposit, or similar guarantee for required maintenance to the Stormwater Treatment Facility. The Landowner shall be responsible for all regular maintenance and repairs to the Stormwater Treatment Facility while the maintenance surety is in effect including, but not limited to, repairs necessary due to damage caused by intentional or unintentional acts of others. The maintenance surety shall be in the amount as required below and can be utilized for any maintenance or rehabilitation costs associated with the Stormwater Treatment Facility deemed necessary by the City, including, but not limited to, removal of siltation, mowing, replacement of vegetation, piping repairs, replacement of underdrains, other repairs to the facility, and any administrative or engineering costs associated with such maintenance and repairs. Maintenance sureties shall conform to the following:
- 1.** For a period of two (2) years from the date of initial certification of the Stormwater Treatment Facility the maintenance surety shall be in the amount of 50% of the construction costs and:
    - a.** If the maintenance surety is in the form of a maintenance bond, it shall remain in effect for a period of two (2) years following initial certification of the Stormwater Treatment Facility.
    - b.** If the maintenance surety is in the form of a letter of credit, the contractor or Developer shall deposit with the City's Finance Director an irrevocable letter of credit from an acceptable financial institution payable to the City, collectable no later than two (2) years from the date of initial certification of the Stormwater Treatment Facility.
    - c.** If the maintenance surety is in the form of cash, or letter of credit, all remaining money and any interest accrued thereon shall be returned to the contractor no later than three (3) years after the date of initial certification of the Stormwater Treatment Facility.
  - 2.** Prior to expiration of the 2-year maintenance surety the Landowner shall submit a long-term maintenance surety in an amount determined by the Director to be the estimated annual cost of maintenance of the Stormwater Treatment Facility during the time period which the designated party in the Maintenance Agreement has maintenance responsibility. If the responsibility for maintenance is passed on to another entity the Director shall release the portion of the financial guarantee under this section, less any costs incurred by the Director, at such time that the new entity responsible for maintenance has submitted a new maintenance surety.

- F. Timing of Stormwater Treatment Facility Construction:** Stormwater Treatment Facilities shall be constructed as early as feasible during the Development process. However, since some commonly used Stormwater Treatment Facilities are sensitive to construction generated silt when upstream areas are under construction, the following provisions are allowable for timing of such Facility construction:
- 1.** For a Stormwater Treatment Facility serving a single building lot, the Facility shall be constructed concurrently with the Development of the site and building, subject to exceptions set forward in Section 450.040 of this chapter.
  - 2.** When Stormwater Treatment Facilities serve multiple Development lots within a common plan of Development, a Stormwater Treatment Facility can be final graded and permanent vegetation installed only after 90% of the land area served by the Facility has achieved permanent stabilization unless the Director approves a shortened schedule. Additionally, Stormwater Treatment Facilities must be installed and certified within six (6) months of permanent stabilization of the entire land area served by the Facility. Land area served by the Facility shall mean those areas served by the Facility within the common plan of Development and shall not include offsite areas even if they are tributary to the Facility.
  - 3.** For Stormwater Treatment Facilities serving multiple Development lots with a common plan of Development, no Certificate of Occupancy shall be issued for any building or site unless a permit has been issued authorizing construction of a required Facility to serve the building or site.
- G. Failure to Construct a Required Stormwater Treatment Facility:** When construction of a Stormwater Treatment Facility is delayed beyond the limits as provided in this section, the Director may utilize any or all of the following enforcement mechanisms:
- 1.** Draw upon performance surety funds as necessary to construct the Stormwater Treatment Facility. In the event that the performance surety funds are not adequate to cover all costs associated with construction of said Facility, the Director may assess the property owners for any additional costs in accordance with Section 450.110G of this chapter.
  - 2.** Withhold issuance of building permits for properties proposed to be served by such Stormwater Treatment Facility.
  - 3.** Withhold issuance of Certificate of Occupancy or Certificates of Compliance for permitted work that is proposed to be served by such Stormwater Treatment Facility.
  - 4.** Issue Stop Work Orders for permitted work for any or all property that is proposed to be served by such Stormwater Treatment Facility.

### **Section 450.100 Construction Inspections**

- A. Inspections:** Regular inspections of the Stormwater Treatment Facility construction shall be the responsibility of the project designer or other owner's representative who has been approved by the Director and inspection results forwarded to the City. For certain types and locations of Stormwater Treatment Facilities, the Director may at his discretion require additional or parallel inspections by City staff. A final inspection by the City is required before the release of any performance sureties can occur.
- B. Post Construction Certification:** Prior to refunding of performance securities, the project designer, or other party approved by the Director, must certify that the Stormwater Treatment Facility is fully functional and has been installed in accordance with the approved plans. For Developments not

requiring a performance surety, the certification shall be made prior to issuance of a Final Certificate of Occupancy or Certificate of Compliance.

### **Section 450.110 Maintenance and Repair of Facilities**

- A.** Required Maintenance Agreement: Prior to issuance of any permit that includes construction of a Stormwater Treatment Facility, the applicant or Landowner of the site shall provide a Maintenance Agreement for approval by the Director. At a minimum, the Maintenance Agreement shall:
1. Identify the responsible party for maintaining all Stormwater Treatment Facilities.
  2. Include an attachment showing the locations and dimensions of all Stormwater Treatment Facilities.
  3. Provide access for the responsible party to maintain all Stormwater Treatment Facilities, as well as right of access to the City as provided in other sections of this chapter.
  4. Establish minimum frequency and levels of maintenance to be done.
  5. Identify and itemize anticipated annual maintenance expenditures, periodic major maintenance items, facility replacement costs, and expected facility lifetime, so that the responsible party may better plan for future maintenance costs.
  6. Establish the frequency of inspections to meet or exceed the requirements of this chapter.
  7. Identify resources available to provide maintenance.
  8. Identify prohibited practices and homes or business association enforcement process for restoration.
  9. Identify the City's rights in the event that the responsible party fails or is unable to perform any of the obligations of the Maintenance Agreement.
  10. Clarify how modifications or additions can be made to the Maintenance Agreement.
  11. Be filed as a covenant to the recorded deeds of all lots to enforce the imposition of any special tax assessment that may be necessary to maintain Stormwater Treatment Facilities if the responsible party fails or is unable to perform any of the obligations in the Maintenance Agreement.
- B.** Formation of Homes or Business Association: The Landowner or Developer may form a homes or business association prior to the sale of any lots, and the homes or business association covenants may include, or reference, the provisions of the approved Maintenance Agreement. The homes association or business association covenants shall include provisions collecting maintenance costs for Stormwater Treatment Facilities to comply with the requirements of this section and Section 450.060C
- C.** Notice on Plat or Title: The final plat and homes or business association deed restrictions shall contain language approved by the Director to provide notice of facility presence and maintenance obligations. Said deed restriction shall be recorded with the Cass County Recorder concurrent or prior to recording of the final plat or approval of the final plans. The notice shall run with the land and failure to provide this notice to any purchaser prior to transferring any interest in the property shall be in violation of this chapter. The notice shall be in a form approved by the Director and substantially as set forth below:
- “Notice: This site includes Stormwater Treatment Facilities, as defined and regulated in the Raymore Municipal Code. Restrictions on the use or alteration of the said Facilities may apply. This property

is also subject to the obligations and requirements of the Stormwater Treatment Facility Maintenance Agreement approved by the City.”

When the proposal involves a final plat, this notice shall appear on the face of the plat, as recorded. When the proposals do not involve a final plat, the notice shall be in the form of a notice of presence recorded with the Cass County Recorder, and the notice shall include the legal description of the property, the current owner, the application date and other reference to the project, and the notarized signature of the property owner or owners.

**Maintenance Inspections and Certifications by Property Owner:** The property owners of all Stormwater Treatment Facilities, except for distributed Facilities serving individual residential lots, must submit a maintenance certification report to the City, at the minimum of one (1) year following initial certification, and subsequently every two (2) years thereafter, or as required by the Director.

The maintenance certification report shall be completed and sealed by a registered professional engineer in the State of Missouri, unless the Director approves other qualified professionals to perform these duties. Such maintenance certification report shall document each item including, but not limited to, the need for removal of silt, litter and other debris, grass cutting, removal of undesirable vegetation, and replacement of landscape vegetation. Any maintenance needs found must be addressed in a timely manner, as determined by the Director, and the inspection and maintenance requirement may be increased as deemed necessary to ensure proper functioning of the Stormwater Treatment Facility.

- D. City Inspection of Stormwater Treatment Facilities:** The City may establish an inspection program, including but not limited to: routine inspections, random inspections, inspections based upon complaints or other notice of possible violations, inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or Pollutants, inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or Pollutants or with discharges of a type which are more likely than the typical discharge to cause violation of state or federal water or sediment quality standards or the NPDES Stormwater permit, and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to, reviewing maintenance and repair records, sampling discharges, surface water, groundwater, and material or water in drainage control facilities, and evaluating the condition of drainage control facilities and other Stormwater treatment practices.
- E. Right of Entry for Inspection:** When any Stormwater Treatment Facility is installed on private property, or when any new connection is made between private property and a public storm sewer system, the property owner shall grant to the City in a manner and form acceptable to the Director, the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. This includes the right to enter a property when it has a reasonable basis to believe that a violation of this chapter is occurring or has occurred, and to enter when necessary for abatement of a public nuisance or correction of a violation of this chapter.
- F. Records of Installation and Maintenance Activities:** Parties responsible for the operation and maintenance of a Stormwater Treatment Facility shall make records of the installation and all maintenance and repairs, and shall retain the records for at least five (5) years. These records shall be made available to the Director during inspection of the Facility and at other reasonable times upon request.
- G. Failure to Maintain Practices:** If a responsible party fails or refuses to meet the requirements of the Maintenance Agreement, the Director, after reasonable notice, may correct a violation of the

standards or maintenance needs by performing all necessary work to place the Facility in property working condition. In the event that the Stormwater Treatment Facility becomes a danger to public safety or public health, the Director shall notify the party responsible for maintenance of the Stormwater Treatment Facility in writing. Upon receipt of that notice, the responsible person shall have thirty (30) days to effect maintenance and repair of the Facility in an approved manner. In the event of an emergency, when the Director determines that the Facility poses an immediate danger to life or property, no notification period shall be required prior to beginning mitigation work. After proper notice, the Director will enforce the maintenance provisions of this chapter with any or all of the following enforcement measures:

1. Notice of Violation: The Director is authorized to serve a Notice of Violation or order on any person or entity responsible for maintaining the Facility. Such Notice shall order abatement of the violation by the responsible person or entity.
2. Special Assessment on Property: The Director may assess the owner(s) of the Facility for the cost of repair work and any penalties; and the cost of the work shall be added as a special tax assessment on the property, or prorated against the beneficial users of the property, and may be placed on the tax bill and collected as ordinary taxes by the County.

### **Section 450.120 Enforcement and Penalties**

- A. Violations: Any person or entity violating any provision of this chapter is guilty of a misdemeanor and shall be subject to penalties as provided in the Raymore Municipal Code. The Director shall be permitted to cite the owner, or any/all persons identified on the permit as being legally responsible to the City for any violations of this chapter pertaining to that permit.
- B. Restoration of Lands: Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the Director may take necessary corrective action, of which the cost to the City shall be added as a special tax assessment on the property.

### **Section 450.130 Miscellaneous**

- A. Compatibility with Other Permit and Ordinance Requirements: This chapter is not intended to interfere with, abrogate, or annul any other chapter, rule or regulation, statute, or other provision of law. The requirements of this chapter should be considered minimum requirements, and where any provision of this chapter, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.
- B. Severability: If the provisions of any article, section, subsection, paragraph, subdivision or clause of this chapter shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this chapter.
- C. Authority: The Director shall be responsible for the administration and enforcement of this chapter. The Director shall have the authority to adopt regulations, policies and procedures as necessary for the enforcement of this chapter.

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