

Chapter 45 – Stormwater Regulations

Subchapter A - General Provisions

45.010. FINDINGS OF FACT

It is hereby determined that:

(1) Land development activities and associated increases in site impervious cover alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, sediment transport and deposition;

(2) This stormwater runoff contributes to increased quantities of water-borne pollutants;

(3) Illicit and non-stormwater discharges to the storm drain system can contribute a wide variety of pollutants to waterways, and the control of these discharges is necessary to protect public health and safety and water quality;

(4) Improper design and construction of stormwater best management practices (BMPs) can increase the velocity of stormwater runoff thereby increasing stream bank erosion and sedimentation;

(5) Clearing and grading during construction increases soil erosion and add to the loss of native vegetation;

(6) Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;

(7) Substantial economic losses can result from these adverse impacts on the waters of the City;

(8) Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;

(9) The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.

(10) Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of stormwater runoff from development.

45.020 **INTENT AND PURPOSE**

The purpose of this ordinance is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within the City of Holts Summit. This ordinance seeks to meet that purpose through the following objectives:

- (1) To protect the safety and welfare of citizens, property owners, and businesses by minimizing the negative impacts of increased stormwater discharges from new land development and redevelopment.
- (2) To control the rate, quality and volume of stormwater originating from development and redevelopment sites so that surface water and groundwater are protected and flooding and erosion potential are not increased.
- (3) To encourage responsible development to occur in the City of Holts Summit
- (4) To control nonpoint source pollution and stream channel erosion.
- (5) To maintain the integrity of stream channels and networks for their biological functions, drainage, and natural recharge of groundwater.
- (6) To protect the condition of state (and U.S.) waters for all reasonable public uses and ecological functions.
- (7) To provide long-term responsibility for and maintenance of stormwater BMPs.
- (8) To establish legal authority to carry out all the inspection and monitoring procedures necessary to ensure compliance with this ordinance.
- (9) To enable the City of Holts Summit to comply with the National Pollution Discharge Elimination System permit and applicable federal and state regulations.

45.030 **APPLICABILITY**

This ordinance shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, and grading applications, unless exempt pursuant to Section 1.4. These provisions apply to any new development or redevelopment site within the City of Holts Summit that meets one or more of the following criteria:

- (1) Land development or redevelopment that disturbs 1 acre or more.
- (2) Land development activities that are smaller than the minimum applicability criteria set forth above if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.

45.040 **EXEMPTIONS**

The following activities are exempt from this ordinance:

- (1) Projects that are exclusively for agricultural and silvicultural uses. Agricultural or silvicultural roads that are used to access other lands subject to this ordinance are

not exempt. Agricultural structures that are used for other uses subject to this ordinance are not exempt.

(2) Maintenance and repair to any stormwater BMP.

(3) Any emergency project that is immediately necessary for the protection of life, property, or natural resources.

(4) Linear construction projects, such as pipeline or utility line installation that does not result in the creation of impervious cover or land disturbance greater than one acre. Such projects must be designed to minimize the number of stream crossings and width of disturbance, and are subject to City erosion and sediment control practices.

(5) Any part of a land development that was approved by the City of Holts Summit prior to the effective date of this ordinance.

45.050.
REQUIREMENTS

COMPATIBILITY WITH OTHER PERMIT AND ORDINANCE

This ordinance is not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law. The requirements of this ordinance should be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, 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.

45.060.
LIMITATIONS ON LIABILITY.

Floods from stormwater runoff may occur which exceed the capacity of stormwater drainage facilities constructed and maintained under this chapter. This chapter does not guarantee that property will always be free from stormwater flooding or flood damage. This chapter shall not create a liability on the part of, or cause of action against, the City or any officer or employee thereof for any flood damage. This chapter does not purport to reduce the need or the necessity for obtaining flood insurance.

Subchapter B - Definitions

45.100. Definitions. Unless specifically defined below, words or phrases in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application:

1. **"Applicant"** means a property owner or agent of a property owner who has filed an application for a permit.
2. **"Bankfull"** means an established stream stage/elevation at a given location along a stream which is intended to represent the maximum safe water level that will not overflow the stream banks or cause any significant damage within the stream reach.
3. **"Best Management Practice (BMP)"** Activities, practices and procedures which control soil loss and reduce or prevent water quality degradation caused by nutrients, animal wastes, toxins, organics and sediment in the runoff. BMPs may either be structural (grass swales, terraces, retention and detention ponds, and others); or non-structural (disconnection of impervious surfaces, directing downspouts onto grass surfaces, ordinances and educational activities).
4. **"Board"** means the Holts Summit Board of Aldermen.
5. **"Buffer"** means a vegetated area including trees, shrubs, managed lawn areas, and herbaceous vegetation which exists or is established to protect a stream system. Alteration of this natural area is strictly limited.
6. **"Building"** means any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than 160 square feet of area.
7. **"Channel"** means a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.
8. **"Clearing"** means any activity which removes the vegetative surface cover through disturbance of the root zone.
9. **"City"** means the City of Holts Summit, Missouri.
10. **"Dedication"** means the deliberate appropriation of property by its owner for general public use.
11. **"Detention"** is the temporary storage of storm runoff in a stormwater BMP with the goals of controlling peak discharge rates and providing gravity settling of pollutants.
12. **"Developer"** is a person directing or participating in the direction of improvements on and/or to land, including, but not limited to, the owner of the land, a general contractor or a commercial agent engaged for such activity.

13. “Development” means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations. Development must meet the applicability requirements in Section 1.3.

14. “Director” means the City Administrator or his/her designee.

15. “Drainage Facility” is a man-made structure or natural watercourse used for the conveyance of stormwater runoff. Examples are channels, pipes, ditches, swales, catch basins and street gutters.

16. "Easement" means a legal right granted by a landowner to a grantee allowing the use of private land for conveyance or treatment of stormwater runoff and access to stormwater practices.

17. "Erosion and Sediment Control Plan" is a plan designed to minimize the loss of soil at a site during construction activities, by implementation of practices that will prevent accelerated runoff.

18. “Grading” means excavation or fill of material, including the resulting condition thereof.

19. “Hazardous Materials” means 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.

20. “Holts Summit Stormwater Design Manual” means the engineering and/or project review document maintained by the City containing technical standards and specifications, policies, procedures, and other materials deemed appropriate to assist with compliance with the provisions of this ordinance.

21. “Indigenous Vegetation” means any species that was present in Missouri prior to European Settlement or any plant identified as native or indigenous on lists maintained by agencies such as the Missouri Department of Conservation or United States Department of Agriculture.

22. “Illegal Discharge” means any direct or indirect non-storm water discharge to the storm drain system, except as exempted by this ordinance.

23. "Illicit Connections” means any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system. These include but are not limited to any conveyances that allow any non-storm water discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said

drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency.

24. "Impaired Waters" means those streams, rivers and lakes that currently do not meet their designated use classification and associated water quality standards under the Clean Water Act.

25. "Impervious Cover" includes those surfaces that cannot effectively infiltrate rainfall (e.g., building rooftops, pavement, sidewalks, driveways, etc).

26. "Industrial Stormwater Permit" means a National Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries that regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

27. "Infill Development" means land development that occurs within designated areas based on local land use, watershed, and/or utility plans where the surrounding area is generally developed, and where the site or area is vacant.

28. "Infiltration" means the process of percolating stormwater into the subsoil.

29. "Infiltration Facility" means any structure or device designed to infiltrate retained water to the subsurface. These facilities may be above grade or below grade.

30. "Jurisdictional Wetland" Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions.

31. "Land Disturbing Activity" means any activity that changes the volume or peak flow discharge rate of rainfall runoff from the land surface. This may include the grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal of vegetation, or any activity that bares soil or rock or involves the diversion or piping of any natural or man-made watercourse.

32. "Land Disturbance Permit" – an authorization for the permittee to develop land and conduct activities in accordance with City ordinances and erosion and sediment control practices outlined in an approved Stormwater Pollution Prevention Plan.

33. "Maintenance Agreement" is a legally recorded document that acts as a property deed restriction, and that provides for long-term maintenance of stormwater BMPs.

34. "Municipal Separate Storm Sewer System (MS4)" a publicly-owned facility by which stormwater is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, catch basins, inlets, piped

storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage ditches/channels, reservoirs, and other drainage structures.

35. “National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit” a permit issued by the State under authority delegated pursuant to 33 USC § 1342(b), that authorizes the discharge of pollutants to waters of the State, whether the permit is applicable on an individual, group, or general area-wide basis.

36. “Non-Stormwater Discharge” any discharge to the storm drain system that is not composed entirely of stormwater.

37. “Non-Structural Measure” a stormwater control and treatment technique that uses natural processes, restoration or enhancement of natural systems, or design approaches to control runoff and/or reduce pollutant levels. Such measures are used in lieu of or to supplement structural practices on a land development site. Non-structural measures include, but are not limited to: minimization and/or disconnection of impervious surfaces; development design that reduces the rate and volume of runoff; creation, restoration or enhancement of natural areas such as riparian areas, wetlands, and forests; and on-lot practices such as rain barrels, cisterns, and vegetated areas that intercept rainfall and surficial runoff.

38. "Nonpoint Source Pollution" pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

39. “Ordinary High Water Mark” – That line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter or debris, or other appropriate means that consider the characteristics of the surrounding area.

40. "Off-Site Facility" means a stormwater BMP located outside the subject property boundary described in the permit application for land development activity.

41. "On-Site Facility" means a stormwater BMP located within the subject property boundary described in the permit application for land development activity.

42. “Owner” the owner or owners of the freehold of the premises or lesser estate therein, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee, lessee or other person, firm or corporation in control of a piece of land. As used herein, owner also refers to, in the appropriate context: (i) any other person authorized to act as the agent for the owner; (ii) any person who submits a stormwater management concept or design plan for approval or requests issuance of a permit, when required, authorizing land development to commence; and (iii) any person responsible for complying with an approved stormwater management design plan.

43. “Perimeter Control” means a barrier that prevents sediment from leaving a site either by filtering sediment-laden runoff, or diverting it to a sediment trap or basin.

44. “Permanent Stormwater BMP” a stormwater best management practice (BMP) that will be operational after the construction phase of a project and that is designed to become a permanent part of the site for the purposes of managing stormwater runoff.

45. “Person” means a natural person, corporation, partnership or other entity.

46. “Phasing” is the clearing a parcel of land in distinct phases, with the stabilization of each phase before the clearing of the next.

47. “Point source” is any discernible, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, separate storm sewer or vessel or other floating craft from which pollutants are, or may be, discharged. (Code of State Regulations – 10 CSR 20-2)

48. “Pollutant” means anything that causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

49. “Professional Engineer” – a licensed engineer who is registered with and authorized to practice engineering in the state of Missouri

50. “Receiving Stream or Channel” means the body of water or conveyance into which stormwater runoff is discharged.

51. "Recharge" means the replenishment of underground water reserves.

52. "Redevelopment" means a change to previously existing, improved property. This includes but is not limited to the demolition or building of structures, filling, grading, paving, or excavating. Redevelopment excludes ordinary maintenance activities such as remodeling of buildings on the existing footprint, resurfacing and/or repaving of existing paved areas, and exterior changes or improvements that do not materially increase or concentrate stormwater runoff or cause additional nonpoint source pollution.

53. “Responsible Party” means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns that is named on a stormwater maintenance agreement as responsible for long-term operation and maintenance of one or more stormwater BMPs.

54. “Runoff Reduction” is defined as the total annual runoff volume reduced through canopy interception, soil infiltration, evaporation, transpiration, rainfall harvesting engineered infiltration or extended filtration.

55. “Sediment Control” means measures that prevent eroded sediment from leaving the site.

56. “Stabilization” means the use of practices that prevent exposed soil from eroding.

57. “Start of Construction” means the first land-disturbing activity associated with a development, including land preparation such as clearing, grading and filling; installation of streets and walkways; excavation for basements, footings, piers or foundations; erection of temporary forms; and installation of accessory buildings such as garages.

58. "Stop Work Order" means an order issued that requires that all construction activity on a site be stopped except as necessary to remedy the issue(s) for which the order was issued.

59. “Stormwater” means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation (such as rain or snow), and resulting from such precipitation.

60. “Stormwater drainage system” means all drainage facilities used for collecting and conducting stormwater to, through and from drainage areas to the points of final outlets including, but not limited to, any and all of the following: Conduits and appurtenant features, canals, ditches, streams, gullies, flumes, culverts, streets, gutters and pump stations.

61. "Stormwater Management" means the use of structural or non-structural practices that are designed to reduce stormwater runoff pollutant loads, discharge volumes, peak flow discharge rates and detrimental changes in stream temperature that affect water quality and habitat.

62. “Stormwater Pollution Prevention Plan (SWPPP)” means a narrative plan, usually required by a permit, to manage stormwater associated with industrial, commercial, institutional, or other land use activities, including construction. The SWPPP commonly describes and ensures the implementation of practices that are to be used to reduce pollutants in stormwater and non-stormwater discharges.

63. "Stormwater Retrofit" means a stormwater BMP designed for an existing development site that previously had either no stormwater BMP in place or a practice inadequate to meet the stormwater management requirements of the site.

64. "Stormwater Runoff" means flow on the surface of the ground, resulting from precipitation.

65. “Stream Buffer” means an area of land at or near a streambank, wetland, or waterbody that has intrinsic water quality value due to the ecological and biological

processes it performs or is otherwise sensitive to changes which may result in significant degradation to water quality.

66. "Streams" mean perennial and intermittent watercourses identified through site inspection and United States Geological Survey (USGS) maps and having a drainage area of greater than 50 acres.

67. "Water Quality Volume (WQv)" means the storage needed to capture and treat 90% of the average annual stormwater runoff volume.

68. "Watercourse" means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

69. "Watershed" is the entire geographical area drained by a river and its tributaries; an area characterized by the conveyance of all runoff to the same outlet.

Subchapter C - Plan Submittal/Review Requirements

Each developer/owner subject to this ordinance shall submit to the City for review and approval a stormwater management plan as provided herein:

45.200. PRE-APPLICATION MEETING

All applicants shall participate in a pre-application meeting with City staff to discuss potential approaches for stormwater design and opportunities to use design techniques to reduce runoff rates, volumes, and pollutant loads. During the pre-application meeting, the applicant shall provide information regarding design considerations as outlined in Chapter 2 of the Holts Summit Stormwater Design Manual.

45.220. PRELIMINARY STORMWATER MANAGEMENT PLAN

(1) **Plan Requirements:** After the pre-application review, the applicant shall prepare a preliminary stormwater management plan describing, in general, how stormwater runoff through and from the development will be treated and conveyed. Required information is provided in Chapter 2 of the Holts Summit Stormwater Design Manual.

(2) **Maximize Use of Techniques to Reduce Runoff by Design:** The stormwater management preliminary plan shall utilize to the maximum extent practicable site planning and design technique that reduce runoff rates, volumes, and pollutant loads. Such techniques include, but are not limited to, minimization and/or disconnection of impervious surfaces; development design that reduces the rate and volume of runoff; restoration or enhancement of natural areas such as riparian areas, wetlands, and forests; and distributed practices that intercept and treat runoff from developed areas.

(3) **Preliminary Plan Prior to Design Plan:** The preliminary stormwater management plan must be approved by the City prior to submission of a stormwater management design plan (as part of the construction or final site plan) for the entire development, or portions thereof. In addition, the applicant or his representative shall meet on-site with the Director prior to approval of the stormwater management construction plan for the purposes of verifying the conditions of the site and all receiving channels.

45.230 CLEARING AND ROUGH GRADING

If the developer/owner only desires to obtain a land disturbance permit for purposes of clearing and grading, they may do so upon approval of the preliminary plan, erosion and sediment control plan and a stormwater pollution prevention plan.

45.240. STORMWATER MANAGEMENT CONSTRUCTION PLAN

(1) **Submittal:** A stormwater management design plan containing all appropriate information as specified in this Ordinance and outlined in the Holts Summit Stormwater Design Manual Chapter 2 shall be submitted to the Director in conjunction with the final subdivision plat, final development plan, final site plan, construction plan, or any other land development plan subject to this ordinance.

(2) **Application Requirements:** The stormwater management design plan submittal shall contain:

- a completed application form provided by the City for any applicable permits as outlined in Section 8,
- the fee(s) required by Section 8.6,
- a stormwater management construction plan that satisfies the requirements of this section and the Holts Summit Stormwater Design Manual,
- a stormwater facilities and/or BMP maintenance plan

(3) **Consistency between Preliminary Plans and Construction Plans:** A copy of the approved preliminary stormwater management plan shall be submitted with the construction plans. The Director shall check the construction plan for consistency with the preliminary plan.

(4) **Stormwater Management Design Plan Content:** The stormwater management design plan shall contain maps, charts, graphs, tables, photographs, narrative descriptions, explanations, calculations, citations to supporting references, a record of all major permit decisions, and other information as may be necessary for a complete review of the plan, and as specified in the Holts Summit Stormwater Design Manual.

45.250. CONSTRUCTION PLAN REVIEW PROCEDURES

(1) **Review Period:** A thirty (30) calendar day review period begins on the day the complete stormwater management construction plan is accepted for review by the City. During the thirty (30) day review period, the City shall either approve or disapprove the

plan and communicate the decision to the applicant in writing. Approval or denial shall be based on the plan's compliance with this Ordinance and the Holts Summit Stormwater Design Manual. Within thirty (30) days after receiving an application, the City shall, in writing:

- A. approve the permit application; or
- B. approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
- C. disapprove the permit application, indicating the deficiencies and the procedure for submitting a revised application and/or submission.

(3) **Modifications Needed for Approval:** In cases where modifications are required to approve the plan, the City shall have an additional thirty (30) days to review the revised plan from the initial and any subsequent resubmission dates. If the plan is approved, one copy bearing certification of such approval shall be returned to the applicant. If the plan is disapproved, the applicant shall be notified in writing of the reasons.

(4) **Substantive Changes to Plan:** No substantive changes shall be made to an approved plan without review and written approval by the Director. The City may request additional data with a plan amendment as may be necessary for a complete review of the plan and to ensure that changes to the plan will comply with the requirements of this ordinance.

(5) **Expiration of Plan Approval:** The stormwater management construction plan's approval expires one year from the date of approval unless work has begun on the site or an extension request from the owner or design engineer has been received by the Director. If the stormwater management construction plan approval expires and is not granted an extension, the applicant shall file with the Director for reapproval of the stormwater management construction plan.

45.260. COORDINATION WITH OTHER APPROVALS AND PERMITS

(1) **Approval of Other Permits:** Unless exempt, no stormwater discharge permit or building permit shall be issued for land development without approval of a stormwater management construction plan.

(2) **Coordination with Other Plans:** Approval of the stormwater management construction plan shall be coordinated by the City with approval of an erosion and sediment control or construction stormwater plan with regard to the location, schedule, and/or phasing for temporary and permanent stormwater management measures. If natural drainage features or other natural areas are to be preserved, then these areas must be shown and measures provided for their protection on both the erosion and sediment control plan and the stormwater management construction plan. If other elements of the stormwater management construction plan utilize soils, vegetation, or other natural features for infiltration or treatment, then these areas must be shown on the erosion and sediment control plan and measures provided for their protection during construction

(3) **Other Permits or Approvals May Be Needed:** Approvals issued in accordance with this ordinance do not relieve the applicant of responsibility for obtaining all other necessary permits and/or approvals from other federal, state, and/or local agencies. If requirements vary, the most restrictive shall prevail. These permits may include, but are not limited to: applicable state and federal permits for stream and wetland impacts and applicable dam safety permits. Applicants are required to show proof of compliance with these regulations before the City of Holts Summit will issue a land disturbance, stormwater discharge, or building permit.

(4) **Stormwater Measures within Designated Flood Hazard Areas:** Construction of stormwater measures or facilities within a Federal Emergency Management Agency (FEMA) designated floodplain or floodway shall be avoided to the extent possible.

45.270. MAINTENANCE AGREEMENT AND PLANS

Prior to approval by the City of a stormwater management construction plan, each owner shall submit a maintenance agreement and maintenance plan in accordance with the following:

(1) **Responsible Party:** The owner shall be responsible for the operation and maintenance of such measures and shall pass such responsibility to any successor owner, unless such responsibility is accepted by the City.

(2) **Requirement for Maintenance Agreement & Plan:** If a stormwater management construction plan requires structural or nonstructural measures, the owner shall execute a stormwater maintenance agreement prior to the City granting final approval for the plan, or any plan of development or other development for which a permit is required under this Ordinance. The agreement shall be recorded in the office of the Callaway County Recorder of Deeds and shall run with the land.

(3) **Required Elements for Maintenance Agreement & Plan:** The stormwater maintenance agreement shall be in a form approved by the City, and shall, at a minimum:

(a) **Designate Responsible Party:** Designate for the land development the owner, governmental agency, or other legally established entity (responsible party) which shall be permanently responsible for maintenance of the structural or non-structural measures required by the plan.

(b) **Pass Responsibility to Successors:** Pass the responsibility for such maintenance to successors in title.

(c) **Right of Entry for Stormwater Authority:** Grant the City and its representatives the right of entry for the purposes of inspecting all stormwater facilities and BMPs at reasonable times and in a reasonable manner. This includes the right to enter a property when the City has a reasonable basis to believe that a violation of this Ordinance is occurring or has occurred and to enter when necessary for correction of a violation of this Ordinance.

(d) **Maintenance Plan:** Ensure the continued performance of the maintenance obligations required by the plan and this ordinance through a maintenance plan (which may be an attachment to the actual maintenance agreement). The plan shall include a list of inspection and maintenance tasks, a schedule for routine inspection and maintenance, actions to be taken when maintenance is required, and other items listed in the Holts Summit Stormwater Design Manual.

Subchapter D - Performance Criteria for Stormwater Management

45.300.

GENERAL STORMWATER MANAGEMENT CRITERIA

(1) **Compliance with Federal & State Regulations:** All stormwater facilities and conveyance systems shall be designed in compliance with all applicable state and federal laws and regulations, including the Federal Clean Water Act and all applicable erosion and sediment control, wetland and flood plain regulations.

(2) **Protect Public Health, Safety & General Welfare:** The design of stormwater BMPs shall consider public health, safety, and general welfare. These considerations include, but are not limited to: preventing the flooding of structures; safe passage of vehicles on roadways; preventing standing water in facilities, manholes, inlets, and other structures in a manner that promotes breeding of mosquitoes; preventing attractive nuisance conditions and dangerous conditions due to velocity or depth of water and/or access to orifices and drops; and preventing aesthetic nuisances due to excessive slopes, cuts and fills, and other conditions.

(3) **Adherence to Holts Summit Stormwater Design Manual:** All stormwater facilities and BMPs shall be designed to the standards of the Holts Summit Stormwater Design Manual, unless a variance is granted or the applicant is exempt from such requirements.

(4) **Stormwater Authority Discretion:** If hydrologic, geologic, topographic, or land use conditions warrant greater control than that provided by the minimum control requirements, the Director may impose additional requirements prior to the approval of the preliminary stormwater management plans, as deemed reasonable and necessary to control the volume, timing, rate and/or quality of runoff.

(5) **Hydrologic Computation Assumptions:** Hydrologic parameters shall reflect the ultimate land development and shall be used in all engineering calculations. All pre-development calculations shall consider woods and fields to be in good condition, regardless of actual conditions at the time of application.

(6) **Location of Stormwater Facilities on Lots:** Stormwater facilities within residential subdivisions that serve multiple lots and/or a combination of lots and roadways shall be on a lot owned and maintained by an entity of common ownership, unless an alternative arrangement is approved by the Director. Stormwater practices located on individual lots shall

be placed within an easement and either maintained by the lot owner or maintained by an entity of common ownership.

45.310. ENGINEERED SYSTEMS

(1) **Replicating Pre-Development Hydrology:** Stormwater management designs shall preserve the natural hydrologic functions, stream channel characteristics, and groundwater recharge of the pre-developed site as outlined in the Holts Summit Stormwater Design Manual and to the maximum extent practical. This shall be accomplished by treating runoff at the source, disconnecting impervious surfaces, preserving or enhancing natural flow paths and vegetative cover, preserving or enhancing natural open spaces and riparian areas, and other measures that replicate pre-development hydrologic conditions. The Director shall exercise discretion in the application of this standard, especially in cases of infill development, redevelopment, or other unique circumstances.

(2) **Overland Flood Routes:** Overland flood routing paths shall be used to convey stormwater runoff from the 100-year storm event to an adequate receiving water resource or stormwater BMP such that the runoff is contained within the drainage easement for the flood routing path and does not cause flooding of buildings or related structures. The peak 100-year water surface elevation along flood routing paths shall be at least one foot below the finished grade elevation at the structure. When designing the flood routing paths, the conveyance capacity of the site's storm sewers shall be taken into consideration.

(3) **Velocity Dissipation:** Velocity dissipation devices shall be placed at discharge locations of the stormwater conveyance system and along the length of any outfall to provide non-erosive flow velocity from the structure to an adequate receiving stream or channel so that the natural physical and biological characteristics and functions of the receiving stream are maintained and protected.

(4) **Discharges to Adjacent Property:** Concentrated discharges from the stormwater conveyance system or stormwater best management practices shall not be discharged onto adjacent property without adequate conveyance in a natural stream or storm sewer system. Drainage easements are required where stormwater discharges must cross an adjacent or off-site property before reaching an adequate conveyance.

(5) **Flow toward streets:** In order to have sufficient traffic safety, any concentration of surface flow in excess of two (2) cubic feet per second (cfs) for the ten-year frequency rain shall be intercepted before reaching the street right-of-way and shall be carried by a storm drain to connect with a drainage structure at the low point in the street right-of-way or to discharge to a watercourse.

45.320. NATURAL SYSTEMS/STREAM BUFFERS

(1) **Stream Buffers:** Stream buffers will be required as part of all new and redevelopment in the City of Holts Summit in order to promote the health, safety, comfort, and/or general welfare; conserve the values of property throughout the City; and lessen or avoid undue impact of stormwater runoff on adjoining properties and the environment. This section establishes

minimum acceptable standards for the design of stream buffers to protect the streams, wetlands, floodplains and riparian and aquatic ecosystems of the City of Holts Summit.

A. Stream Buffer Plan Requirements

1. General Plan Requirements. All administrative surveys, plats, development plans and building permits shall set forth an informative, conceptual and schematic representation of the proposed stream buffers by means of maps, graphs, charts, or other written or drawn documents so as to enable the Director an opportunity to make a reasonably informed decision regarding the proposed activity.

2. Specific Plan: Stream buffer plans shall contain the following information and shall be shown on one or more sheets as required by the Director:

- A site plan map at a minimum scale of 1"=200'.
- Map delineated streams, springs, seeps, bodies of water, and wetlands (include a minimum of 200 feet into adjacent properties).
- Delineated stream buffers.
- Limits of the 100-year floodplain as shown on the adopted floodplain maps.

B. Plan Submittal. The buffer plan shall be submitted in conjunction with the required development permit application or land disturbance plan for any development, whichever is submitted first. The buffer must be clearly delineated on the site grading plan. Provide a note on the site grading and drainage plans or development site plan stating, "There shall be no clearing, grading, construction or disturbance of vegetation except as specifically approved by the Director."

C. Temporary Boundary Markers. Markers will be installed by the applicant prior to commencing clearing and grading operations and maintained throughout the applicant's development activities. The markers will be placed on the outside edge of the buffer zone prior to the start of any activity within 50-feet of the buffer or as shown on a land disturbance plan approved by the City. Markers shall be clearly visible and shall be spaced at a maximum of 100 feet. The markers shall be joined by marking tape or fencing.

D. Plan Preparation. Stream buffer plans, except for single family dwellings, two family dwellings or administrative surveys, shall be prepared by a professional surveyor, engineer or architect licensed to practice in the State of Missouri.

E. Design Standards for Stream Buffers

1. General. An adequate buffer for a stream system shall consist of a predominantly undisturbed strip of land extending along both sides of a stream.

2. Buffer Measurement. The buffer shall begin and be measured from the ordinary high water mark of the channel during base flows.

3. Minimum Buffer Width. The required base width for all buffers shall be 25 feet.

4. No Buffer Required. A stream buffer shall not be required for portions of a stream that are less than 150 feet in length due to the stream having been previously enclosed within a pipe or box structure immediately upstream and downstream of the subject location. In such cases, said stream portion may be similarly enclosed in a pipe or box structure. Also, this article shall not be construed so as to prevent modifications to stream channels or wetlands if such modifications have been approved and permitted by a Federal Agency such as the U.S. Army Corps of Engineers.

5. Waivers and Variances. The Director may grant a waiver upon written request for those projects or activities serving a public need where no feasible alternative is available or for projects where the repair and maintenance of public improvements where avoidance and minimization of adverse impacts to wetlands and associated aquatic ecosystems have been addressed.

Where undue hardships or practical difficulties may result from strict compliance with this section, the developer may file a variance in accordance with Section 9.3.

F. Stream Buffer Permitted Uses

1. Allowable uses within the stream buffer. The following uses are allowed within the stream buffer:

- Flood control structures, stream gauging and water quality monitoring equipment, stormwater treatment facilities in accordance with an approved plan
- Utilities
- Foot and bicycle paths
- Road crossings
- Stream restoration, stream bank restoration or restoration of indigenous vegetation in accordance with an approved plan
- Roads that exist on or before the date of adoption of these regulations, and associated maintenance activities
- Detention/retention structures
- Stormwater BMPs

2. Restricted uses in the stream buffer. The following uses are prohibited except where incidental to an allowable use:

- Clearing of existing vegetation
- Grading, stripping or other soil-disturbing practices
- Filling or dumping
- Draining the buffer area by ditching, underdrains or other systems
- Use, storage or application of pesticides, except for the spot spraying of noxious weeds or other species consistent with recommendations of the Missouri Department of Conservation,

United States Department of Agriculture or University of Missouri Extension Service

- Storage or operation of motorized vehicles except for maintenance or emergency use
- Structures or any type of impervious surface except as provided above.

G. Stream Buffer Management and Maintenance

1. Management, Responsible Party. The stream buffer shall be managed by the landowner to enhance and maximize the unique value of these resources. Management includes specific limitations on alteration of the natural conditions of the land and vegetation.

2. Allowed maintenance practices and activities in the stream buffer. All allowed uses may be maintained subject to the review of the City. Any entity conducting an allowed activity within the stream buffer shall restore any disturbed area to its previous condition or in accordance with a plan approved by the Director. In addition to maintenance of allowed uses, the following maintenance activities may be conducted:

- Roads, bridges, paths, and utilities existing as of the date of adoption of these regulations.
- Rights of way for roads and utilities should be the minimum width to allow for installation, access and maintenance.
- Removal of diseased or dead trees, brush and trash.
- Maintenance of all City-approved improvements, including utilities
- Removal of debris which could cause flooding.
- Selective (spot) spraying of noxious or other vegetation

3. Restricted maintenance practices and activities within the stream buffer:

- Clearing of existing vegetation
- Soil disturbance by grading, stripping, or other practices
- Filling or dumping
- Drainage by ditching, under drains or other systems
- Use, storage, or application of pesticides
- Storage or operation of motorized vehicles, except for maintenance and emergency use approved by the City or when operated on a legally established roadway.

(1) **Stream & Wetland Crossings:** All stream and wetland crossings subject to Section 404 of the Clean Water Act and/or state stream and/or wetland regulations shall minimize impacts on streams and wetlands, to the extent practical and achievable, by crossing streams and wetlands at a right-angle, reducing the footprint of grading and fill, matching the existing stream profile grade, and utilizing bridges, open bottom arches, spans, or other structures that do not restrict or alter stream or wetland hydrology. If culverts are placed within streams

and/or wetlands, at least one culvert shall be countersunk at least one foot (1') below the natural channel flowline (or 10% of the pipe diameter) to allow movement of aquatic organisms. As much as possible, the natural multi-stage channel shape shall be mimicked.

- (2) **Limited Stream Assessment Required:** A limited stream assessment as outlined in the Holts Summit Stormwater Design Manual is required when construction will enter the stream buffer.

45.330.

STORMWATER QUANTITY CONTROL

- (1) **Runoff Reduction:** In order to replicate pre-development hydrologic conditions, and to promote baseflow to streams and wetlands, ten percent (10%) of the water quality volume shall be permanently reduced. This may be accomplished by disconnecting impervious areas, maintaining sheet flow to areas of natural vegetation such as riparian corridors and undisturbed forest lands, infiltration practices where soils conditions allow and/or collection and reuse of runoff.
- (2) **Water Quality Protection:** In order to protect the receiving waters from nonpoint source pollution, the remainder of the water quality volume that was not removed through runoff reduction, shall be treated through filtration BMPs such as sand filters, vegetated swales, or proprietary products.

Post-development runoff from the water quality rainfall event that is not permanently removed through the application of the runoff reduction criterion shall be captured and treated in a water quality BMP to prevent or minimize water quality impacts from land development. Up to 10%, but not more than 1 acre, of a site's total impervious surface may discharge in a sheet flow condition through existing established vegetation such as may exist in a stream buffer without otherwise being treated.

- (3) **Channel Protection Criteria:** The stormwater system shall be designed so that post-development discharges will not erode natural channels or steep slopes. This will protect in-stream habitats and reduce in-channel erosion.

A. Site design techniques that decrease runoff volumes and peak flows. This shall be accomplished by controlling the post-development peak discharge rate to the pre-development rate. This criterion shall be met for the 1-year, 24-hour storm event, (or equivalent storm runoff volume using other methodologies). The release rate shall be equal to or less than the 1-year, 24-hour storm event. The City of Holts Summit will give credit for the application Runoff Reduction and WQv measures towards meeting the storage requirements.

B. Wherever practical, maintain sheet flow to stream buffers or vegetated filter strips. Vegetation in buffers or filter strips must be preserved or restored where existing conditions do not include dense vegetation .

C. Energy dissipaters and level spreaders must be used to spread flow at outfalls.

D. On-site conveyances must be designed to reduce velocity through a combination of sizing, vegetation, check dams, and filtering media (e.g., sand) in the channel bottom and sides.

E. If flows cannot be converted to sheet flow, they must be discharged at an elevation that will not cause erosion or require discharge across any constructed slope or natural steep slopes.

(4) **Flood Control Criteria:** Downstream overbank flood and property protection shall be provided by controlling the post-development peak discharge rate to the pre-development rate. This criterion shall be met for the 10-year, 24-hour storm event on residentially zoned properties and the 25-year, 24 hour storm event on non-residentially zoned properties.

Stormwater BMPs that impound water shall demonstrate that the 100-year storm can safely pass through the structure without overtopping or creating damaging conditions downstream.

The Director may waive some or all of the requirements of this section as specified in (A), (B), (C), (D) and (E) below:

- A. **Discharge to Large Waterbody:** The land development discharges directly to a flood plain, major river or waterbody and the Director determines that waiving the flooding criteria will not harm public health and safety. The applicant shall secure drainage easements from any downstream property owners across whose property the runoff must flow to reach the flood plain, major river or waterbody. The applicant shall also demonstrate that any piped or open-channel system in which the runoff will flow has adequate capacity and stability to receive the project's runoff plus any off-site runoff also passing through the system.
- B. **Insignificant Increases in Peak Flow:** The land development results in insignificant increases in peak flow rates, as determined by the Director.
- C. **Alternative Criteria Provided:** The land development is subject to a floodplain study that recommends alternative criteria for flood control.
- D. **Increases in Downstream Peak Flows or Flood Elevations:** The Director determines that complying with the requirements of this section will result increases in peak flows or downstream flooding conditions due to coincident peaks from the site and the contributing watershed or another factor.
- E. **Site Constraints:** Areas characterized by high water table, shallow bedrock, contaminated soils, and other constraints may be subject to reduced volume control requirements, as determined by the Director. The Director may impose reasonable conditions in granting such a waiver.
- F. **Documentation for Waiver:** When seeking a waiver in accordance with either (A), (B), (C), (D) or (E) above, the applicant shall demonstrate that stormwater discharges will not unreasonably increase the extent, frequency, or duration of flooding at downstream properties and structures or have an unreasonable adverse effect on streams, aquatic

habitats, and channel stability. In making its determination to allow full or partial waivers, the Director shall consider cumulative impacts and also the land development's adherence to the land use plans and policies of the City of Holts Summit, including the promotion of infill and redevelopment in particular areas.

45.340. STORMWATER RUNOFF TREATMENT

- (1) **Treat Entire Land Development:** The stormwater design shall provide for treatment of runoff from the water quality rainfall event to the maximum extent practicable through the use of structural and non-structural BMPs. Up to 10%, but not more than 1 acre, of a site's total impervious surface may discharge in a sheet flow condition in a non-erosive manner through existing established vegetation such as may exist in a stream buffer without otherwise being treated.
- (2) **Landscape Plan:** The design of vegetative stormwater BMPs shall include a landscape plan detailing both the vegetation to be in the practice and how and who will manage and maintain the vegetation.
- (3) **Pretreatment:** Each stormwater BMP shall have an acceptable form of water quality pretreatment if required to provide adequate long term operation and maintenance of the BMP.
- (4) **Treatment of Off-Site Stormwater:** Off-site stormwater conveyed through a land development shall be placed within an easement and conveyed in a manner that does not increase upstream or downstream flooding. Off-site stormwater shall be conveyed around on-site stormwater BMPs, unless the facilities are designed to manage the off-site stormwater. The Director may allow the treatment of off-site stormwater in lieu of up to 10% of the site's water quality volume.

45.350. REDEVELOPMENT CRITERIA

Land development that qualifies as redevelopment shall meet one of the following criteria:

- (1) **Reduce Impervious Cover:** Reduce existing site impervious cover by at least 20%.
- (2) **Provide Treatment:** Provide runoff reduction and water quality treatment for at least 20% of the site's pre-development impervious cover and 100% of any new impervious cover through stormwater BMPs designed in accordance with the criteria in Sections 4.2 through 4.3 and the Holts Summit Stormwater Design Manual.
- (3) **Apply Innovative Approaches:** Utilize innovative approaches to reduce stormwater impacts across the site. Examples include green roofs and pervious parking materials.
- (4) **Provide Off-Site Treatment:** Provide equivalent stormwater treatment at an off-site facility within the same watershed and as immediately downstream of the site as feasible.
- (5) **Address Downstream Issues:** Address downstream channel and flooding issues through channel restoration, increase in existing system capacity and/or other off-site remedies.

- (6) **Combination of Measures:** Any combination of (1) through (5) above that is acceptable to the City.

Subchapter E – Construction Site Runoff Control

45.400. GENERAL

Grading, erosion control practices, sediment control practices, and waterway crossings shall be adequate to prevent transportation of sediment from the site. The design and construction guidance in the Holts Summit Stormwater Design Manual shall be followed insofar as it is applicable. Other pollutants shall be controlled as necessary to prevent potential discharge to waters of the State.

45.410. CLEARING AND GRADING

- (1) Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with all other City regulations.
- (2) Clearing techniques that retain natural vegetation and retain natural drainage patterns shall be used to the maximum extent practicable.
- (3) Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.
- (4) Cut and fill slopes shall be *no greater than 2:1*, except as approved by the City to meet other community or environmental objectives.
- (5) Phasing shall be required on all sites disturbing greater than *thirty* acres, with the size of each phase to be established at plan review.
- (6) Other measures may be required in order to ensure that sediment is not tracked onto public streets by construction vehicles, or washed into storm drains.

45.420. EROSION CONTROL

- (1) Soil must be stabilized within 14 days of clearing or inactivity in construction, unless otherwise authorized, and shall be effectively maintained throughout the duration of any inactivity.
- (2) Soil stockpiles must be stabilized or covered at the end of each work day unless otherwise protected from allowing sediment to leave the site.
- (3) Techniques shall be employed to prevent the blowing of dust or sediment from the site.
- (4) Techniques that divert upland runoff past disturbed slopes shall be employed.

45.430. SEDIMENT CONTROLS

- (1) Sediment controls shall be provided in the form of settling basins or sediment traps or tanks, and perimeter controls.
- (2) Where possible, settling basins shall be designed in a manner that allows adaptation to provide long term stormwater management.
- (3) Adjacent properties shall be protected by the use of a vegetated buffer strip, in combination with perimeter controls wherever possible.

45.440. WATERWAYS AND WATERCOURSES

- (1) When a wet watercourse must be crossed regularly during construction, a temporary stream crossing shall be provided, and an approval obtained from the U.S. Army Corps of Engineers and the Missouri Department of Natural Resources if deemed a jurisdictional stream.
- (2) When in-channel work is conducted, the channel shall be stabilized before, during and after work.
- (3) Stabilization adequate to prevent erosion must be provided at the outlets of all pipes and paved channels.

45.450. CONSTRUCTION SITE ACCESS

- (1) A temporary access road or driveway shall be provided at all sites.
- (2) Regardless of the amount of land disturbance at a particular site, it shall be the responsibility of the permit holder and/or property owner to ensure streets open to the public surrounding a permitted site are kept free of debris and sediment throughout construction. Upon notification that a problem exists, the permit holder and/or property owner shall remedy the issue within 24 hours.

45.460. CONTROL OF OTHER CONSTRUCTION POLLUTANTS

- (1) **Concrete Truck Washout:** Concrete truck washout shall not discharge surplus concrete or drum wash water on the site in such a manner that promotes contact with storm waters discharging from the site.
- (2) **Construction Waste:** All construction waste material shall be collected, deposited, and stored in a manner to prevent contact with storm waters discharging from the site and shall be disposed of by a licensed solid waste management contractor. No waste shall be buried on the site.

- (3) **Sanitary Waste:** A licensed sanitary waste management contractor shall collect all sanitary waste from portable units that will be maintained on a regular basis for any site that cannot provide other means of sanitary waste disposal.
- (4) **Petroleum Products:** All construction equipment and vehicles shall be monitored for leaks and receive regular preventative maintenance to ensure proper operation and reduce the risk for leaks or spills. Petroleum products shall be stored in clearly labeled and tightly sealed containers or tanks. Any soil contaminated by fuel or oil spills shall be removed and disposed of properly.
- (5) **Fertilizers:** Fertilizers shall be applied following manufacturer's recommendations. Fertilizers shall be stored in a covered area or in watertight containers. Partially used products shall be properly sealed and stored to avoid spills or leaks.
- (6) **Hazardous materials:** Storage areas for hazardous materials such as oils, greases, paints, fuels, and chemicals, shall be provided with secondary containment to ensure that spills in these areas do not reach waters of the State. All hazardous waste materials shall be disposed of according to state regulation or the manufacturer's recommendations.

Subchapter F - Ongoing Maintenance for Stormwater BMPs

45.500. GENERAL MAINTENANCE REQUIREMENT

All stormwater facilities and BMPs shall be maintained in accordance with the approved and recorded stormwater maintenance agreement and stormwater maintenance plan. If no maintenance agreement or plan is in place, the owner shall maintain the facility as it was designed in order to continue the mitigation of stormwater quantity and quality impacts. This maintenance shall include removal of overgrown vegetation, repair of erosion, repairs to any inlet/outlet structures, and removal of excess silt or any other maintenance deemed necessary to provide said mitigation. The design of stormwater facilities shall incorporate maintenance accommodation and long-term maintenance reduction features.

45.510. MAINTENANCE RESPONSIBILITY

The responsible party named in the recorded stormwater maintenance agreement (Section 3.7) shall maintain in good condition and promptly repair and restore all structural and non-structural stormwater facilities and BMPs and all necessary access routes and appurtenances (grade surfaces, walls, drains, dams and structures, vegetation, erosion and sedimentation controls, and other protective devices) in order to maintain the mitigation of stormwater quantity and quality impacts. Such repairs or restoration and maintenance shall be in accordance with the approved stormwater management design plan, the stormwater maintenance agreement, and the stormwater maintenance plan.

45.520. INSPECTION

The City shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If the site has security measures in force which require proper identification and clearance before entry into its premises, the responsible party shall make the necessary arrangements to allow access to representatives of the City.

Unreasonable delays in allowing the City access to a permitted facility is a violation of a storm water discharge permit and of this ordinance.

If the City has been refused access to any part of the premises from which stormwater is discharged, and is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the City may seek issuance of a search warrant from any court of competent jurisdiction.

45.530. RECORDS OF MAINTENANCE ACTIVITIES

The responsible party shall make records of the installation and of 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.

45.540. FAILURE TO PROVIDE ADEQUATE MAINTENANCE

In the event that the stormwater BMP has not been maintained and/or becomes a danger to public safety or public health, the Director shall notify the responsible party by registered or certified mail. The notice shall specify the measures needed to comply with the maintenance agreement and the maintenance plan and shall specify that the responsible party has thirty (30) days or other time frame mutually agreed to between the Director and the responsible party, within which such measures shall be completed. If such measures are not completed, then the Director shall pursue enforcement procedures pursuant to Section 9 of this Ordinance.

If a responsible person fails or refuses to meet the requirements of an inspection report, maintenance agreement, or maintenance plan the Director, after thirty (30) days written notice (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient), may correct a violation of the design standards or maintenance requirements by performing the necessary work to place the practice in proper working condition. The Director may assess the responsible party of the practice for the cost of repair work which shall be a lien 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 City of Holts Summit.

45.550. REQUIRED EASEMENTS

Whenever improvements to land are made, easements for the stormwater management facilities including structural facilities, engineered channels and overflow paths, shall be provided across

private property. Easements through existing developments shall be obtained as deemed necessary. Drainage easements shall include access from a convenient public street or parking lot. Minimum dimensions are as follows:

1. Where a storm drain consists of a closed conduit, the width shall be the greater of fifteen (15) feet or the sum of the conduit diameter and twice the cover depth over the conduit.
2. Where the drainage system consists of an engineered channel, easements shall at a minimum be as wide as the top of bank width plus ten (10) feet each side.
3. The width of the easement must contain the overflow from the 100 year (1% annual chance) storm event and shall indicate the highest expected water surface elevation of said event.
4. Access easements to and around detention/retention facilities shall be a minimum of fifteen (15) feet wide with cross slopes less than 5 horizontal to 1 vertical in order to be safely accessible by a vehicle unless otherwise approved by the Director.

45.560. INTERFERENCE AND DAMAGE

No person shall damage, discharge or place any substance into the drainage system which will or may cause obstruction to flow or other interference with the operation of the stormwater drainage system. Any person violating this section or damaging the stormwater drainage system shall be liable to the City for all expense, loss or damage incurred by the City due to such violation or damage, in addition to any other penalties set forth herein.

Subchapter G - Illicit Discharge Detection and Elimination

45.600. GENERAL

- (1) **Purpose:** This ordinance is intended to regulate non-stormwater discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this ordinance are:
- A. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user
 - B. To prohibit Illicit Connections and Discharges to the MS4
 - C. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance

- (2) **Applicability:** This ordinance shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted.
- (3) **Ultimate Responsibility:** The standards set forth in this article and promulgated pursuant to this article are minimum standards. Compliance with this article does not insure that there will be no contamination, pollution or unauthorized discharge of pollutants into the waters of the United States. This article shall not create liability on the part of the City or any agent or employee of the City for any damages that result from any discharges, reliance on this article or any administrative decision made under this article.
- (4) **Stormwater Pollution Prevention:** Any owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of structural and non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliant with the provisions of this section. These BMPs shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

45.610. PROHIBITIONS

- (1) **Illegal Discharges:** It shall be unlawful for any person to discharge or cause to be discharged into the municipal separate storm sewer system or into any water course any material other than stormwater, except as provided below,.

The following discharges are exempt from the discharge prohibitions established by this article:

- A. Waterline flushing or other potable water sources;
- B. Landscape irrigation or lawn watering;
- C. Diverted stream flows;
- D. Rising groundwater;
- E. Groundwater infiltration;
- F. Uncontaminated pumped groundwater;
- G. Foundation or footing drains excluding active groundwater de-watering systems;
- H. Crawlspace pumps, air conditioning condensation;
- I. Springs;
- J. Non-commercial washing of vehicles;
- K. Natural riparian habitat or wetland flows;
- L. Swimming pools if de-chlorinated to less than 1 ppm chlorine;
- M. Fire fighting activities;
- N. Other water not containing pollutants;
- O. Discharges specified by the City as necessary to protect public health and safety;
- P. Dye testing if notification is given to the City before the test; and

Q. Any non-storm water discharge permitted under an NPDES permit, waiver or waste discharge order issued to the discharger and administered under the authority of the Environmental Protection Agency, provided that the discharger 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 municipal separate storm sewer system.

(2) **Illicit connections:**

A. It shall be unlawful for any person to construct, use, maintain or have an illicit connection.

B. This section expressly applies to illicit connections made in the past even if the connection was permissible under law or practices applicable or prevailing at the time of connection.

(3) **Waste disposal prohibitions:** It shall be unlawful for any person to place, deposit or dump or to cause or allow the placing, depositing or dumping any refuse, rubbish, yard waste, paper litter or other discarded or abandoned objects, articles and accumulations containing pollutants into the municipal separate storm sewer system or into any waterway.

(4) **Connection of sanitary sewer prohibited:** It shall be unlawful for any person to connect a line conveying sewage to the municipal separate storm sewer system or to allow such a connection to continue.

(5) **Industrial or construction activity discharges:** It shall be unlawful for any person subject to an industrial activity or construction NPDES storm water discharge permit to fail to comply with all provisions of such permit.

45.620. NOTIFICATION OF SPILLS

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the storm drain system, or water of the U.S. said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the City in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the City within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

45.630. REGULATIONS AND MONITORING

- (1) The Board of Aldermen may, by ordinance, adopt standards identifying best management practices (BMP) for any activity, operation or facility which may cause or contribute to pollution of storm water, the storm drain system, waters of the state or waters of the United States. These standards shall be on file at City Hall. It shall be unlawful for any person undertaking any activity or owning or operating any facility subject to such standards to fail to comply with the standards.
- (2) The owner or operator of a commercial or industrial establishment shall provide reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal separate storm sewer system or water courses through the use of structural and non-structural BMPs. Any person responsible for property which is or may be the source of an illicit discharge may be required to implement additional structural and non-structural BMPs to prevent further discharge. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity to the extent practicable shall be deemed in compliance with provisions of this section. These BMPs shall be a part of the storm water pollution prevention plan as necessary for compliance with the requirements of the NPDES permit.

Subchapter H – Permits

45.700. PROMULGATION OF RULES

The Director may promulgate rules governing the issuance of the permits required by this section and may produce forms to effectuate the intent of this ordinance.

45.710. STORMWATER DISCHARGE PERMIT

- (1) **Authorization to Discharge to MS4:** If runoff from a land development will flow to a municipal separate storm sewer system (MS4) or other publicly-owned storm sewer system, then the applicant shall obtain authorization from the system’s owner to discharge into the system. The applicant must demonstrate that the system has adequate capacity for any increases in peak flow rates and volumes.
- (2) **Permit Required:** No stormwater drainage facility shall be constructed, altered or reconstructed without a stormwater discharge permit. To obtain a permit, the application form provided by the City shall be completed and plans must be submitted for review and approval of the Director. All such construction shall comply with the general requirements and design procedures, as set forth in this chapter, and the criteria of the Holts Summit Stormwater Design Manual.
- (3) Prior to the issuance by the City of a permit for any type of construction, the property owner, the developer or their agent shall have a stormwater management plan approved by the City in accordance with Section 3. The property owner, developer or their agent shall, at his own expense, submit necessary plans, designs and specifications to the City for review and approval. This plan shall:
 - Include a pre- and post-development hydrologic analysis of the site
 - Identify pollutants of concern for each area of the site
 - Identify pollution prevention measures

- Identify controls that provide treatment and reduce stormwater volumes and velocities
 - Identify Low Impact Development opportunities that can best mimic the natural hydrology of the site and filter pollutants from the runoff.
 - Provide for long term operation and maintenance of controls
- (4) Provisions of this section for plan requirement shall be waived provided no land is disturbed and no trees, shrubs, grass or vegetation is destroyed or removed for construction, reconstruction, repair or alteration of any building provided the improvement does not alter or increase the flow of water.

45.720. LAND DISTURBANCE PERMIT

- (1) **Applicability:** No clearing, grading, borrowing or filling of land resulting in a land disturbance greater than one acre shall commence prior to obtaining a land disturbance permit. All such work shall also comply with an approved erosion and sediment control plan in conjunction with an approved site development plan.
- (2) **Individual Lots Not Separate Land Development:** Residential, commercial or industrial developments shall apply these stormwater management criteria to land development as a whole. Individual residential lots in new subdivisions shall not be considered separate land development projects, but rather the entire subdivision shall be considered a single land development project.
- (3) **Expiration:** Every approval under this subsection for clearing, grading, borrowing or filling of land shall expire within two (2) years from the date of issuance. This permit may be renewed for up to two (2) years by submitting a written request for an extension to the Director with the appropriate fee as listed in Section 8.6.

45.730. PERFORMANCE BOND OR GUARANTEE

- (1) **Performance Bond or Guarantee Required:** No permits shall be issued unless the applicant furnishes a performance bond or guarantee in the amount of 5% of the estimated total construction costs of all infrastructure (such as streets, stormsewers, sanitary sewers, waterlines, parking lots, etc), not to include buildings, as reviewed and approved by the Director. This is to ensure that action can be taken by the City, at the applicant's expense, should the applicant fail to install or maintain those measures identified in the approved stormwater management construction plan and erosion and sediment control plan in order to control the discharge of pollutants from the site and maintain public safety. Action will only be taken after the property owner had been given a notice of violation, and has not addressed the issue within the time specified by the City. If the City takes such action upon such failure by the applicant, the City shall collect from the applicant the difference should the amount of reasonable cost of such action exceed the amount of the security held.
- (2) **Term of Performance Bond or Guarantee:** The performance bond or guarantee furnished pursuant to this section, or the unexpended or unobligated portion thereof, shall be returned to the applicant within sixty (60) days of the final acceptance of the permanent stormwater facilities or BMPs by the City.

- (3) **Term Extended for Initial Maintenance:** At the discretion of the City, the performance bond or guarantee may be extended beyond the time period specified above to cover a reasonable period of time for testing the practices during storm events and for initial maintenance activities. For the purposes of this section, the time shall not exceed 2 years.
- (4) **Partial Release of Bond:** The City shall have the discretion to adopt provisions for a partial pro-rata release of the performance bond or guarantee on the completion of various stages or phases of development.

45.740. F E E S

The City has the ability to require a fee to support local plan review, inspection and program administration. Each developer/owner seeking a land disturbance or stormwater discharge permit shall pay a fee upon submittal of the plans, in amounts according to the schedule on file at City Hall.

45.750. I N S P E C T I O N

- (1) The City may periodically inspect development sites. Through such periodic inspections, the City shall ensure that the Stormwater Pollution Prevention Plan (SWPPP) is properly implemented and any necessary amendments thereto made in order to protect the environment and the public's health, safety and welfare. The erosion and sediment control measures for the site must be maintained by the developer until the site is stabilized. Also through such periodic inspections the City shall ensure that the post-construction management plan is properly implemented. The improvements shall be maintained by the responsible party (per Section 6) until such time, if any, maintenance is taken over by the City.
- (2) The permittee shall notify the City at least two (2) working days before the start of site clearing.
- (3) The permittee or his/her agent shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved erosion and sediment control plan(s) or in the Stormwater Pollution Prevention Plan (SWPPP). The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for additional control measures and/or maintenance of existing measures. All inspections shall be documented in written form and kept readily on site.

Subchapter I - Violations, Enforcement and Penalties

45.800. V I O L A T I O N S A N D P E N A L T I E S F O R P E R M I T S

- (1) The City may suspend or revoke any permit associated with the site or any permit associated with the person(s) holding the permit(s) for the site for non-compliance with the Land Disturbance Permit or Stormwater Discharge Permit.

(2) Procedure:

- A. Upon discovery of a violation of this article, the contractor will be notified and given up to seven (7) days to remedy the violation in a Land Disturbance Permit or up to forty-five (45) days for a Stormwater Discharge Permit. Extensions of time may be granted in the Director's sole discretion.
- B. If the violation has not been remedied within the time frame set forth in the notice, a stop work order may be issued and the permit(s) will be suspended. The stop work order shall state the reason for the order and the conditions under which the order and suspension will be lifted.
- C. Any person who shall continue to engage in activity for which a permit is required after having been served with a stop work order, except in such work as that person is directed to perform to remove a violation or unsafe condition, shall be a violation of this ordinance.
- D. After two (2) stop work orders of a permit for the same site for similar violations, the permit(s) shall be revoked. All applicable procedures will have to be followed for re-issuance of the permit(s). Additionally, any remediation or abatement costs will be required to be paid prior to re-issuance.
- E. If the stop work order has not been lifted through compliance with its terms within thirty (30) days from the date of its issuance, the permit shall be revoked. All applicable procedures will have to be followed for re-issuance of the permit(s). Additionally, any remediation or abatement costs will be required to be paid prior to re-issuance.
- F. A person aggrieved by a decision to revoke any permit provided for herein may appeal the revocation to the City of Holts Summit Board of Adjustment.

- (3) Engaging in activity requiring a permit without first obtaining such permit shall be a violation of this ordinance.

45.810. ADMINISTRATION, PENALTIES AND REMEDIES

- (1) **Responsibility for Administration:** The provisions of this chapter shall be administered and enforced by the Director. The Director shall prescribe forms for attainment of the purposes of this chapter and for the proper enforcement thereof. The Director may delegate the administration of this chapter, or any part thereof, subject to limitations of the ordinances of the City, to duly qualified employees, deputies or agents of the City.
- (2) **Interpretation:** The provisions of this chapter shall be the minimum requirements for the protection of the public health, safety and general welfare and shall be liberally and broadly construed and applied to the greatest extent permitted by law in order to promote and protect the public health, safety and welfare. These regulations are not intended to conflict with, abrogate or annul any other rule, law or regulation. Where any provisions of these regulations impose restrictions different than from those imposed by any other regulation, rule or law, the provision which is more restrictive or imposes a higher standard shall control. These regulations are intended to be construed harmoniously and consistently with each other, the Holts Summit Stormwater Design Manual, and all other applicable rules, laws and regulations.

- (3) **Severability:** If any part or provision of these regulations is declared invalid or unconstitutional then the remainder of these regulations shall not be declared invalid or unconstitutional but shall remain in full force and effect to the greatest extent permitted by law.
- (4) **Penalties and Remedies:** Any owner, lessee, tenant, occupier of land or other person who violates any provision of these regulations shall be deemed guilty of a misdemeanor and shall be upon conviction punished as provided by law. In addition, any person permitting, aiding, abetting or concealing a violation of this ordinance shall be deemed guilty of a misdemeanor and shall be upon conviction punished as provided by law. Each day a violation of these regulations continues shall constitute a separate offense. The penalty provided in this section shall not be construed to be exclusive but is intended to be supplemental and in addition to any other remedy provided by law or at equity. The City may institute in the circuit court of Holts Summit any appropriate action or proceedings to prevent any unlawful activity proscribed in this ordinance or to correct any violations of this ordinance.

In addition to any specific penalties set forth in individual articles, any person found guilty of violating the provisions of this chapter, shall upon conviction be fined not more than five hundred dollars (\$500.00) per occurrence and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Holts Summit, Missouri, or other appropriate authority, from taking such other lawful action as is necessary to prevent or remedy any violation. Where a violation is declared a nuisance, all policies and procedures set forth in Chapter 51 of the City Code shall apply.

45.820.

VARIANCES

- (1) **General:** Where undue hardships or practical difficulties may result from strict compliance with this chapter, the developer may file an application for a variance. Said applications shall be directed to the City of Holts Summit Board of Adjustment organized and existing under the zoning regulations of the City of Holts Summit, Missouri, which shall have the jurisdiction and shall be charged with the duty of hearing and deciding applications for variances from the strict application of the provisions of this ordinance. The Board may grant a variance only if it finds after public hearing and upon competent and substantial evidence that the applicant meets the following criteria:
- A. The variance shall not have the effect of nullifying the intent and purpose of this stormwater ordinance;
 - B. The granting of the variance will not be detrimental to the public safety, health or welfare, or injurious to other property or improvements.
 - C. The conditions upon which the request for a variance is based are unique to the property for which the variance is sought, are not applicable generally to other property, and are not self-imposed.
 - D. Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if this chapter was strictly interpreted and carried out.

- (2) **Conditions:** In recommending variances and exceptions, staff may recommend and the Board may require such conditions as will, in the judgment of each, secure substantially the objectives of the standards or requirements of this chapter.

Application: An application for a variance shall be submitted at the time of filing for a preliminary plat or for application for a building permit, whenever possible. The application shall be on forms provided by the City and shall state fully the grounds for the request and all facts relied upon by the practitioner. The application shall be filed with the Director and after review thereof the Director shall make a recommendation to the Board to grant or deny the application and state the reasons for his or her recommendation. Either the applicant or the Director may appeal or seek judicial review of any decision of the Board as provided by law.

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