

**AN ORDINANCE AMENDING CHAPTER 422 STORMWATER MANAGEMENT, BEING  
PART OF TITLE IV LAND USE OF THE MUNICIPAL CODE OF THE CITY OF  
OLIVETTE, REGARDING DETENTION REQUIREMENTS FOR RESIDENTIAL  
PROPERTIES**

**WHEREAS**, The City of Olivette Planning and Community Design Commission ("Commission") has reviewed and discussed certain revisions to Chapter 422 Stormwater Management as it applies to residential new construction and redevelopment, and

**WHEREAS**, on February 2, 2017, the Commission reviewed this ordinance, and by a unanimous vote motioned to recommend approval and forward this ordinance to the Olivette City Council ("Council") following a Public Hearing in accordance with the procedures outlined in Article XX Changes and Amendments of Chapter 400 Zoning Regulations; and

**WHEREAS**, due and lawful notice of a public hearing on the proposed amendment to Chapter 222 Stormwater Management of Title IV Land Use of the Olivette Municipal Code, to be held by the Council on February 28, 2017, at 7:00 PM in the City Council Chambers at City Hall, 9473 Olive Boulevard, Olivette, Missouri, was published in the St. Louis Countian, a newspaper of general circulation in the City of Olivette, on February 13, 2017; and

**WHEREAS**, a public hearing was duly and properly held by the Council at the time and place provided for in the notice and all comments, statements, objections, and suggestions concerning the adoption of the proposed amendment to the City's regulations regarding Chapter 422 Stormwater Management were duly heard and considered by the Council; and

**WHEREAS**, the Council, after careful and due deliberation, has determined that the proposed amendments to Chapter 422 Stormwater Management of Title IV Land Use of the Olivette Municipal Code, is in the interest of the public health, safety, welfare, and morals of the City of Olivette.

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF OLIVETTE, ST. LOUIS COUNTY,  
MISSOURI, AS FOLLOWS**

**SECTION 1.** Chapter 422 Stormwater Management, being part of Title IV Land Use of the Olivette Municipal Code, is hereby amended by repealing in its entirety and in lieu of, a new Chapter 422 Stormwater Management attached hereto as Exhibit A, is made a part of this ordinance as fully set out herein.

**SECTION 2.** The sections of this ordinance shall be severable. In the event any section of this ordinance is found by a court of competent jurisdiction to be invalid, the remaining sections of this ordinance are valid, unless the court finds the valid sections of this ordinance are so essentially and inseparably connected with, and so dependent upon, the void section that it cannot be presumed the city council would have enacted the valid sections without the void section, or unless the court finds that the valid sections standing alone are incomplete and are incapable of being executed in accordance with the legislative intent.

**SECTION 4.** This ordinance shall become effective from and after its enactment according to law.

Passed and approved this 28<sup>th</sup> day of February, 2017.

  
MAYOR RUTH SPRINGER

ATTEST:

  
MYRA G. BENNETT, CMC/MPCC  
CITY CLERK

# EXHIBIT A

(Version 2017 02-14)

## Chapter 422. Stormwater Management

### Article I. Short Title, Intent and Purpose

#### Section 422.010. Short Title.

This Chapter shall be known and may be cited as "The Stormwater Management Ordinance of the City of Olivette, Missouri".

#### Section 422.020. Intent and Purpose.

- A. This Chapter is intended to be utilized in conjunction with the Zoning Ordinance, Subdivision Code, Stream Buffer Protection Ordinance and Rights of Way Usage and Grading Ordinance of the City of Olivette, Missouri, to ensure that the development of land in the City of Olivette occurs in a manner that protects, provides for and promotes the public health, safety, convenience, comfort and general welfare of the residents of Olivette.
- B. The Clean Water Act Phase II Stormwater Regulations were promulgated to provide appropriate stormwater management of non-point source pollution in urbanized areas, and these regulations apply to the watersheds located within the Metropolitan St. Louis Sewer District (MSD). Olivette recognizes that as an urban mature community which has traditionally been developed to facilitate stormwater drainage onto streets, catch basins, detention areas and streams, the City must be cognizant of the quality of water that is being generated and directed into surrounding watersheds. The intent of this Chapter is to establish the regulations and guidelines for how stormwater is managed, purified and detained on private and public property.
- C. Specific purposes of this Chapter include the following:
1. To control and manage stormwater on developed property;
  2. Minimize adverse stormwater effects on adjoining and nearby properties;
  3. Improve the water quality and limit the sources of impairment within adjacent streams, basins and watersheds;
  4. Commit the City of Olivette to the St. Louis County Phase II Stormwater Management Plan;
  5. To ensure the orderly development of land; and
  6. To protect and to conserve the value of building and other improvements and to minimize adverse impact of development on adjoining or nearby properties.

#### Section 422.030. Conflicts With Other Ordinances.

Wherever conflicts exist between the regulations and minimum standards set forth in this Chapter with other regulations, ordinances or resolutions, the more restrictive or higher standard shall apply.

### Article II. Definitions

#### Section 422.040. Definitions.

The following words, terms and phrases, when used in this Chapter, shall have the meanings ascribed in this Section.

#### **BEST MANAGEMENT PRACTICES**

Also known as BMPs, best management practices are control measures taken to mitigate changes to both quantity and quality of urban runoff caused through changes in land use. Generally BMPs focus on water quality problems caused by increased impervious surfaces from land development. BMPs are designed to reduce stormwater volume, peak flows and/or non-point source pollution through evapotranspiration, infiltration, detention, and filtration or biological and chemical actions.

#### **BMPs**

Best Management Practices.

#### **CLEAN WATER ACT PHASE II STORMWATER REGULATIONS**

The Clean Water Act amendments of 1987 Phase II regulations, which were published in the December 8, 1999 Federal Register. These regulations require all municipalities to have National

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Pollution Discharge Eliminations System (NPDES) permit. The City of Olivette is a co-permittee under the NPDES titled St. Louis County Phase II Stormwater Management Plan.

## COMMISSION

The City of Olivette Planning and Community Design Commission.

## COMMUNITY DESIGN REVIEW

The review of site plan documents by the City of Olivette Planning and Community Design Commission in accordance to the procedures outlined in Chapter 425 Community Design—Generally or Chapter 428 Community Design—Olive Boulevard Corridor of the Olivette Municipal Code.

## CONCEPT STORMWATER MANAGEMENT PLAN

A plan specified in Section 422.070 that identifies and illustrates how stormwater will be managed on the site grounds.

## DIRECTOR

The City's Director of Planning and Community Development or his or her designee.

## EXCAVATION AND GRADING ORDINANCE

Chapter 520 of the Olivette Municipal Code regulating excavations, acts by which earth, sand, gravel, rock or any other similar material is cut into, dug, quarried, uncovered, removed, displaced, relocated or bulldozed and shall include the conditions resulting therefrom, and grading, any excavation or fill or any combination thereof and shall include the conditions resulting from any excavation or fill.

## IMPERVIOUS SURFACE

A surface that does not allow water or other liquids to pass through it. (for example: concrete or asphalt streets, sidewalks, driveways, parking lots and patio pavements; building rooftops; etc.)

## LOT COVERAGE

The residential lot coverage as defined under Chapter 400 Zoning Regulations.

## MSD

The Metropolitan Saint Louis Sewer District.

## NATURAL RESOURCES

As applied under this Chapter, a natural resource is an undisturbed environment consisting of, or a combination of, streams, waterways, recreational green space, wildlife habitats, natural vegetated areas, a congregation of trees and foliage, slopes, rock cropping and hillsides that is unique to the built-up urban surrounding.

## NON-POINT SOURCE POLLUTION

Water pollution affecting a water body from diffuse sources, in this case contaminated stormwater washed off of parking lots, roads and highways, and lawns.

## PERVIOUS SURFACE

A surface that allows inflow of rainwater or other liquids into the underlying construction or soil. (for example: grass or vegetated area, pervious concretes or pervious construction materials.)

## Metropolitan Saint Louis Sewer District.

Also referred to as MSD. In the interest of the public health and for the purpose of providing adequate sewer and drainage facilities within defined boundaries which wholly include the City of Olivette, Section 30 of Article VI of the Constitution of Missouri established a metropolitan sewer district known by and under the name of "The Metropolitan St. Louis Sewer District."

## RESIDENTIAL FLOOR AREA

The residential floor area as defined under Chapter 400 Zoning Regulations.

## SINGLE-FAMILY SITE ALTERATIONS

Any site alteration of single-family homes, residential additions, single-family detached and attached residential exterior alterations and single-family residential detached structures.

## SITE ALTERATIONS

Any development or redevelopment requiring the application for community design review, site plan review or the subdivision of land in accordance with the procedures outlined in the Subdivision Code.

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## SITE PLAN

A series of construction documents required under Chapter 400, Zoning Ordinance with additional requirements under Chapter 425, Community Design—Generally or Chapter 428, Community Design—Olive Boulevard Corridor of the Olivette Municipal Code.

## SITE PLAN REVIEW

The review of site plan documents by the City of Olivette Planning and Community Design Commission in accordance to the procedures outlined in Chapter 400, Zoning Ordinance with additional requirements under Chapter 425 Community Design—Generally or Chapter 428, Community Design—Olive Boulevard Corridor of the Olivette Municipal Code.

## SITE RESOURCE MAP

A part of the Concept Stormwater Management Plan specified in Section 422.070.

## ST. LOUIS COUNTY PHASE II STORMWATER MANAGEMENT PLAN

Also known as the SWMP, the SWMP was developed in partnership with sixty (60) co-permittees and MSD to comply with stormwater permit requirements for the St. Louis Metropolitan Small Municipal Separate Storm Sewer System (MS4) to meet the National Pollution Discharge Elimination System permit system required under the Clean Water Act Phase II Stormwater Regulations. The purpose of the SWMP is to prevent harmful pollutants from being carried by stormwater runoff into local water bodies and to improve the water quality in the area.

## STORMWATER

Rainfall or other forms of precipitation. Stormwater runoff is the result of stormwater washing across impervious surfaces, carrying with it the pollutants found on streets, parking lots, rooftops, etc. These pollutants end up in watersheds.

## STREAM BUFFER PROTECTION ORDINANCE

Chapter 420 of the Olivette Municipal Code which creates buffer zones along the streams of Olivette for the protection of water resources; and minimizes land development within such buffers by establishing buffer zone requirements and by requiring authorization for any such activities.

## SUBDIVISION CODE

Chapter 405 of the Olivette Municipal Code governing the division or redivision of land into two (2) or more lots, creation of condominiums, consolidation of two (2) or more tracts of land into one (1) lot, and any adjustment of boundaries of property or subdivisions.

## UNDISTURBED

As applied under this Chapter, a naturally developed vegetated area or other natural terrain features.

## WATERSHEDS

An area of land where the runoff from rain and snow will ultimately drain to a particular stream, river, wetland or other body of water.

## ZONING ORDINANCE

Chapter 400 of the Olivette Municipal Code, which specifies the type of use to which property may be put in specific areas, defines:

1. The purpose for which the ordinance is adopted;
2. The various zoning classifications and permitted uses within each;
3. Restrictions, such as height limitations;
4. The procedure for handling non-conforming uses;
5. The procedure for granting amendments, variances and hearing appeals; and
6. Penalties for violation of the ordinance.

## Article III. General Regulations

### Section 422.050. Applicability.

- A. Provisions of this Chapter shall apply to all residential and non-residential site alterations. These requirements are in addition to, and do not replace or supersede, any other applicable stormwater regulations established under State law and approval or exemption from these requirements do not

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constitute approval or exemption from stormwater management regulations established under State law or from other applicable local, State or Federal regulations.

1. Grandfather provisions. This Chapter shall not apply to the following activities:
  - a. Work consisting of the repair or maintenance of any lawful use of land that is zoned and approved for such use on or before the effective date of this Chapter.
  - b. Existing development and ongoing land disturbance activities including, but not limited to, existing agriculture, silviculture, landscaping, gardening and lawn maintenance, except that new development or land disturbance activities on such properties will be subject to all applicable zoning and buffer requirements.
  - c. Any land development activity that is under construction, fully approved for development, scheduled for permit approval or has been submitted for approval as of the effective date of this Chapter.
  - d. Land development activity that has not been submitted for approval, but that is part of a larger master development plan, such as for an office park or other phased development that has been previously approved within two (2) years of the effective date of this Chapter.
2. Exemptions. The following specific activities are exempt from this Chapter. Exemption of these activities does not constitute an exemption for any other activity proposed on a property.
  - a. Activities for the purpose of building one (1) of the following:
    - (1) A stream crossing by a driveway, transportation route or utility line;
    - (2) Public water supply intake or public wastewater structures or stormwater outfalls;
    - (3) Intrusions necessary to provide access to a property;
    - (4) Public access facilities that must be on the water including boat ramps, docks, foot trails leading directly to the river, fishing platforms and overlooks;
    - (5) Unpaved foot trails and paths;
    - (6) Activities to restore and enhance stream bank stability, vegetation, water quality and/or aquatic habitat, so long as native vegetation and bioengineering techniques are used.
  - b. Public sewer line easements. This includes such impervious surface cover as is necessary for the operation and maintenance of the utility including, but not limited to, manholes, vents and valve structures.
  - c. Land development activities within a right-of-way existing at the time this Chapter takes effect or approved under the terms of this Chapter.
  - d. Within an easement of any utility existing at the time this Chapter takes effect or approved under the terms of this Chapter, land disturbance activities and such impervious surface cover as is necessary for the operation and maintenance of the utility including, but not limited to, manholes, vents and valve structures.
  - e. Emergency work necessary to preserve life or property. However, when emergency work is performed under this Section, the person performing it shall report such work to the Public Services Department on the next business day after commencement of the work. Within ten (10) days thereafter, the person shall apply for a permit and perform such work within such time period as may be determined by the Public Services Department to be reasonably necessary to correct any impairment such emergency work may have caused to the water conveyance capacity, stability or water quality.
  - f. Any activities approved under a 404 permit issued by the Corps of Engineers and 401 water quality certification issued by the Missouri Department of Natural Resources.

### **Section 422.060. Principles and Acceptable Practices.**

- A. Purpose and objective. The City of Olivette recognizes that redevelopment of property, either in the form of expansion or new construction, in a developed community is unique and challenging as it relates to managing stormwater. Given that redevelopment in Olivette, whether residential or non-residential, occurs on a lot by lot basis, addressing stormwater issues that go beyond the scope of the property being developed is limited.

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In an effort to adequately plan for and resolve stormwater issues on a City-wide basis as individual lots redevelop, the adoption of the following underlying principles are intended to provide the City guidance during the review of site alterations. These principles will be applied so as to manage stormwater on two (2) levels:

- a. The stormwater impacting the property under review from adjacent and surrounding properties, and
- b. The impacts of the stormwater generated by the existing and proposed improvements on the property grounds under review onto adjacent and surrounding properties.

These principles and acceptable practices will be utilized by the City to manage stormwater generated on a site due to new construction or reconstruction and to minimize the adverse impact of any increase of stormwater onto adjacent and surrounding properties. These principles and acceptable practices are to manage stormwater and should not be construed as a means for reducing or eliminating stormwater that is already generated on or surrounding the site.

## B. Principles.

1. Applications for site alterations approvals shall be designed and reviewed in accordance to the following acceptable principles:
  - a. Encourage the reduction of:
    - i. disturbance to preserved greenspace, buffers, zoning setbacks, and sensitive areas such as flood plains and stream buffers;
    - ii. impervious surface areas such as rooftops, parking lots, sidewalks, roads, etc.;
    - iii. stormwater generation and the amount of stormwater leaving the site;
    - vi. the impact to environmentally sensitive areas; and
  - b. Minimize:
    - i. erosion of site soils;
    - ii. stream bank erosion;
    - iii. downstream flooding.
  - c. Promote the use of pervious surface materials, such as permeable paver blocks, porous asphalt, porous concrete and green roofs.
  - d. Encourage the stormwater generated on the site grounds to filter, disperse and permeate on the site grounds through the use of overland flow to vegetated buffers and other "green" infrastructure techniques that promote infiltration.
  - e. Avoid the direct flow of stormwater generated from impervious surface areas to the storm sewer system.
  - f. Encourage the installation of engineered systems that treat stormwater runoff and/or reduce peak stormwater runoff rates using techniques that employ vegetation and infiltration.
  - g. Adequately treat stormwater before discharge.
  - h. Stormwater controls shall be maintainable and enforceable.
2. Acceptable Practices. To promote the adopted principles, the City of Olivette has adopted the following two (2) documents developed by the MSD as reference resources for acceptable practices and tools to manage stormwater, as may be revised from time to time:
  - a. Site guidance design. Tools for incorporating post-construction stormwater quality protection into concept plans and land disturbance permitting. Revision 1, April 17, 2009
  - b. Landscape Guide for Stormwater BMPs Design. Copies of the adopted documents are on file in the office of the Director of Public Services. In addition to the adopted documents, the Commission may accept the utilization of other BMPs if the applicant can satisfactorily show the Commission, and that the Commission determines, that said practice will equally facilitate the principles and practices outlined in Section 422.060.

## Article IV. Review and Approval

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## Section 422.070. Concept Stormwater Management Plan.

- A. Intent and Purpose. The evaluation of a Concept Stormwater Management Plan is intended to ensure the adequate review and consideration of potential stormwater management impacts of proposed site alterations upon the surrounding uses, activities, properties, the existing stormwater infrastructure, and the watershed, and that the site alterations adhere to the principles and acceptable practices outlined in Section 422.060.
1. The Concept Stormwater Management Plan shall illustrate how the proposed site alterations will:
    - a. Preserve and/or protect existing natural resources areas that facilitate pollutant removal and reduce runoff.
    - b. Limit disturbance and preserve existing pervious surface areas and sensitive areas such as flood plains and stream buffers.
    - c. Reduce the amount of impervious surface area. (i.e., rooftops, parking lots, sidewalks, roads, etc.)
    - d. Disconnect the stormwater flow generated from impervious surface areas from the MSD built stormwater infrastructure system and utilize overland flow to vegetated buffers and other "green" infrastructure techniques that promote infiltration.
    - e. Use pervious surface materials, such as permeable paver blocks, porous asphalt, porous concrete and green roofs.
    - f. Install engineered systems that treat stormwater runoff and/or reduce peak stormwater runoff rates using techniques that employ vegetation and infiltration.
- B. Submission Requirements. Submission requirements for the Concept Stormwater Management Plan shall be in accordance with the standards identified in Section 400.1080.
1. The Concept Stormwater Management Plan may be incorporated into other documents identified in Section 400.1080, if in the opinion of the Director of Public Services, there will be sufficient detail provided.
- C. Review Procedure. Applications shall be reviewed in accordance with the review procedures identified in Section 400.1090.

## Section 422.080. Single Family Residential Development.

- A. Applications for Community Design Review for detached Single Family residential shall provide for the following onsite detention.
1. Construction of new detached Single family home. Volume designed to accommodate the entire roof area based on a 15-year, 20-minute rain event.
  2. Lot Coverage. Residential addition, reconstruction, or improvement in which the combined lot coverage is increased as follows:
    - a. 1,200 square feet or more. Volume designed to accommodate the proposed impervious area based on a 15-year, 20-minute rain event.
    - b. 400 square feet or more, but less than 1,200 square feet. Incorporate BMPs as noted under Section 422.060 to minimize the stormwater impact generated by the proposed improvement.
  3. Residential addition, reconstruction, or improvement in which the residential combined floor area is increased as follows:
    - a. 400 square feet or more. Incorporate BMPs as noted under Section 422.060 to minimize the stormwater impact generated by the proposed improvement.

## Section 422.090. Integration With Site Plan Review Procedures and MSD Stormwater Quality Review.

Before an application for a building permit is submitted for a site alteration, except single-family site alterations, the application for site alterations, including the site plan documents and Concept Stormwater Management Plan approved by the Commission, must be reviewed and approved by the MSD.