

Chapter 455. Natural Resource Protection

flood or fire hazards, the Director of Public Works or the designee will cause the City to immediately abate the hazardous condition. The contractor, permittee or owner must pay all actual and administrative costs incurred by the City in correcting the hazardous condition within 30 days. If the contractor, permittee or owner fails to pay the City for correcting the hazardous condition, the Director of Public Works may take any or all of the actions listed above.

4. Conviction of any violation enumerated in this section will be subject to the penalties contained in Section 480.030 I.

Section 455.030 Dams, Retention Basins and Siltation Control

Where dams are proposed in any subdivision, they must be designed by a professional engineer registered in the State of Missouri. A preliminary engineering report including soil investigations and design procedures must be submitted to the Director of Public Works for review. When a dam is planned on private property, the engineer must certify that the dam is constructed according to the approved plans and specifications.

Section 455.040 Stream Buffer Protection *(Amendment 19 – Ordinance 2014-063 9.8.14)*

A. Applicability

1. This section applies to all streams within the jurisdiction of the U.S. Army Corps of Engineers except those streams located upon land which:
 - a. is on land covered by an approved, unexpired final plat; or
 - b. is on land covered by an approved, unexpired preliminary plat or preliminary plan; or
 - c. is on land covered by a development agreement containing provisions for post development water quality mitigation and best management practices; or
 - d. is on land being used for agricultural operations.
2. To identify those stream segments to which this section applies, a letter of jurisdictional determination shall be provided from the U.S. Army Corps of Engineers for any property proposed for development.
3. No development shall be approved that proposes disturbance on any parcel of land wholly or partially within the defined stream corridor unless the proposed development is in compliance with the applicable provisions of this section.
4. Except as otherwise provided by this section, the Director of Public Works shall administer, implement and enforce the provisions of this section. The director may delegate any powers or duties granted by this code to other City personnel or authorized representatives.
5. The City is authorized to develop administrative policies and guidelines to implement this section.
6. Stream buffers, as required by this section, are a part of the City's Storm Water Management Program.
7. If a development obtains a CWA Section 404 permit allowing a stream to be relocated or otherwise altered, this section shall apply to the new stream location and order.

B. Buffer and Stream Setback Requirements

Stream buffers required by this section shall meet the following requirements:

1. Plan Requirements

- a.** A buffer plan shall be submitted for all stream segments to which this section applies. The plan shall set forth an informative, conceptual, and schematic representation of the proposed activity so as to enable the City an opportunity to make a reasonably informed decision regarding the proposed activity.
- b.** The delineation of the stream buffer and its component zones shall be shown on any building construction plans, preliminary plat and final plat, as may be required by City Code. The buffer plan shall be submitted in conjunction with the required preliminary plat, or final plat if no preliminary plat is required, and engineering plans for any development and the boundaries of the stream buffer shall be clearly delineated.
- c.** A buffer plan shall contain the following information:
 - (1)** A location or vicinity map showing the limits of the FEMA-delineated 100-year flood limits or the 100-year elevation for areas not identified as special flood hazard areas.
 - (2)** Field-delineated and/or surveyed streams, springs, bodies of water (include a minimum of 150 feet into adjacent properties).
 - (3)** Labels for the stream buffer zones and any structures or activities by the zone where they are to be located.
 - (4)** A plan that specifies the required annual maintenance tasks and procedures necessary to maintain stream buffer health.
 - (5)** A restoration plan identifying the percentage removal of colonizing species of native and non-native trees and shrubs and the replacement of such woody perennial species with desirable hardwood species. The restoration plan shall also specify the requisite herbaceous seed mix required for restoration of the soil where disturbed through tree and shrub removals.
- d.** The stream buffer plan must be approved by the Director of Public Works prior to submittal of the preliminary plat to the Planning and Zoning Commission.

2. Boundary Markers

Boundary markers shall be installed prior to final approval of the required clearing and grading plan.

3. Construction Fencing

Construction fencing shall be placed to delineate the buffer and shall be maintained throughout the construction of the project.

4. Final Plats

All final plats and survey documents prepared for recording shall clearly:

- a.** show the extent of any stream buffer on the subject property.
- b.** provide a note to reference any stream buffer stating: “There shall be no clearing, grading, construction or disturbance of vegetation except as permitted by the approved maintenance plan.”
- c.** provide a note to reference any conservation easements governing all stream buffer

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areas stating: “Any stream buffer shown hereon is subject to conservation easements that restrict disturbance and use of these areas.”

C. Design Standards for Stream Buffers *(Amendment 14 – Ordinance 2012-079) (Amendment 19 – Ordinance 2014-063 9.8.14)*

1. A buffer for a stream shall consist of a strip of land extending along both sides of a stream.
2. Stream buffers shall be measured as follows:
 - a. The required width for all stream buffers shall be as follows:

Stream	Minimum Average Buffer Width (feet) Each Side of Stream
First order	50
Second order	90
Third order	100
Fourth order	140
Fifth order	185
Sixth order	300

- b. All buffers are measured from the top of the bank of the stream and are required on each side of the stream.
 - c. If a feature exists wherein it would be impractical to provide a buffer equidistant on each side of the stream bank then the location of the buffer area can be modified, subject to approval by the Director of Public Works.
 - d. The default setback distance is specified in Section 455.040C2. A property owner may choose to submit a Geomorphic Study to justify lesser setback distances. The Geomorphic Study must be completed by a licensed professional trained in such evaluations. Such studies are subject to approval by the Director of Public Works.
3. The buffer shall not be greater than the flood plain limits as shown on the Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) for Cass County, Missouri Panels 29037C0028F, 29037C0029F, 29037C0034F, 29037C0035F, 29037C0036F, 29037C0037F, 29037C0038F, 29037C0039F, 29037C0041F, 29037C0042F, 29037C0043F and 29037C0044F dated January 2, 2013, as amended, and any future revisions thereto.
4. If stream buffers, or stream channels, are disturbed or destroyed during development or construction activities, they shall be restored using native vegetation or plantings as outlined in the required restoration plan.
5. Except as specifically authorized by the developer’s CWA 404 permit, the following structures, practices, and activities are permitted in the stream buffer, with specific design or maintenance features, subject to the review and approval of the Director of Public Works:
 - a. Activities for the purpose of building any of the following:
 - (1) a stream crossing by a driveway, transportation route or utility line;
 - (2) public water supply intake or public wastewater outfall structures;
 - (3) public access facilities that must be on the water including boat ramps, docks, foot trails leading directly to the river, fishing platforms and overlooks;
 - (4) paved foot trails and paths; or