CHAPTER 241

EROSION AND SEDIMENT CONTROL

Section 24101: Introduction/ Purpose

Soil is most vulnerable to erosion by wind and water during the construction process. Excessive soil in streams endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates repair of sewers and ditches, and the dredging of lakes. Clearing and grading during construction causes the loss of native vegetation necessary for terrestrial and aquatic habitat, and a healthy living environment for the citizens of Jackson County, Missouri.

The purpose of this ordinance is to safeguard persons, protect property, prevent damage to the environment and promote public welfare by effectively minimizing soil erosion and sedimentation during land development, building, landscaping or any other type of land disturbance in Jackson County, Missouri. Further, it provides builders, developers and property owners with soil erosion and sedimentation control standards and regulations.

The regulations and standards herein shall accomplish the following:

- Establish standards for soil erosion and sedimentation control.
- Minimize soil erosion and sedimentation during land development, building, 2.

landscaping or other land disturbing activities.

- Minimize pollution of streams, ponds and lakes.
- Encourage management of natural resources.
- Preserve the beauty of the community and the value of the land.
- Reduce maintenance costs of public and private improvements and services.
- Promote and protect the public's health, safety, comfort and welfare.

7.

(Ord. 3606, Eff. 03/08/05)

Section 24102: Definitions

Applicant: Any legal entity requiring approval to develop, landscape or otherwise disturb

land pursuant to Section 24103 of this ordinance. Legal entities shall include but not be limited to the following: individuals, sole proprietorships, limited liability companies, partnerships, limited partnerships, joint ventures, or corporations or other business organizations. Every name under which the applicant is currently doing or has done business in Jackson County, Missouri, other than the true name of such applicant, is hereby declared a fictitious name and shall be subject to Section 24103.

APWA: American Public Works Association.

Clearing: Any activity which removes the vegetative surface cover.

Director: The Director shall be the Director of Jackson County Public Works or the designated agent.

Drainage Way: Any surface feature that conveys surface runoff throughout the site.

Erosion: The wearing away of the land surface by the action of wind, water or gravity.

- **Erosion and Sediment Control Permit:** Written authorization that regulates the quality of stormwater runoff due to the disturbance of land associated with development construction.
- Erosion and Sediment Control Plan: A set of plans prepared by or under the direction

of a licensed professional engineer or a certified erosion and sediment control professional indicating the specific measures and sequencing to be used controlling sediment and erosion on a development site before, during and after construction.

Erosion and Sediment Control Manual: APWA, Division III, Erosion and Sediment Control Specifications, and Design Standards pursuant to Section 24103 of this ordinance. All references are to current standards and any subsequent amendments.

Erosion Control: Measures that prevent erosion.

Grading: Excavation or fill of material, including the resulting conditions thereof.

Permanent Vegetation: Grass, sod or ground cover sufficient to prevent erosion.

Phasing: Clearing a parcel of land in distinct phases, with the stabilization of each phase within a specified time period.

Sediment: Solid material moved by erosion and deposited away from its point of origin.

Sediment Control: Regulates the amount of eroded sediment leaving the site.

- **Site:** A parcel of land, or a contiguous combination thereof, where grading work is performed as a single unified operation.
- **Site Development:** Altering terrain, vegetation and/or constructing improvements.

Stabilization: The use of practices that protects the exposed soil from excessive erosion.

Start of Construction: 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.

Stormwater runoff: Water that flows overland during a rain storm.

Streambank: The top of the natural incline bordering a stream.

- **Stripping:** Any activity by which the vegetative cover is removed or significantly disturbed, including tree removal, clearing, grubbing and storage, or removal of topsoil.
- **Vegetative Cover:** Any grasses, shrubs, trees and other vegetation that protects and stabilizes soils.
- Watercourse: Any body of water, including, but not limited to lakes, ponds, rivers,

streams, and bodies of water, which are delineated by Jackson County.

Waterway: A conveyance that directs surface runoff to a watercourse, or to the public storm drain. (Ord. 3606, Eff. 03/08/05)

Section 24103: Application and Permits Process

A. No person, firm, corporation or other legal entity may develop, landscape or disturb

land without the issuance of an Erosion Control permit and the approval of an Erosion and Sediment Control Plan by the Director of Public Works for Jackson County. Each applicant must disclose on the application all names under which it has conducted the business of developing, landscaping or otherwise disturbing land within Jackson County, Missouri. Disclosure shall include but not be limited to the status of the applicant as owner, proprietor, shareholder or investor. (Ord. 3606, Eff. 03/08/05)

B. All design, construction and maintenance standards shall be in accordance with the

most current standards as established in APWA sections 5100, 5600, 2100, 2150, BMP Best Management Practices Manual and APWA Division III Standard Drawings. It is the Director's option to delete portions of these regulations that may not be appropriate for unincorporated Jackson County. The Director shall promulgate a list of any deleted regulations or portions thereof by means of public posting, brochures and/or posting on the County's website. (Ord. 3606, Eff. 03/08/05; Ord. 3654, Eff. 08/09/05)

- C No site development permit is required for the following activities:
 - 1. any land disturbance activity that involves less than 100 cubic yards of earth movement; or
 - 2. existing nursery and agricultural operations conducted as a permitted main or accessory use, or
 - 3. home landscaping or gardening; or
 - 4. reestablishment of lawn areas; or
 - 5. any emergency activity which is immediately necessary for the protection of life, property or natural resources. (Ord. 3606, Eff. 03/08/05)
- D. Any applicant having ten (10) or more violations with soil erosion ordinances within Jackson County will not be allowed to proceed with the application for a permit to develop in the unincorporated areas of Jackson County until submitting the following to the Director:

1. Explanation of each occurrence of violation of an erosion and sediment control ordinance for which applicant received notice; and

2. A copy of a final certificate of occupancy or certificate of completion for each project in which a violation occurred and applicant received notice.

3. Upon receipt of the required documents the Director will review and decide whether applicant may proceed with the application process. Applicant will be notified of the Director's decision in writing. (Ord. 3606, Eff. 03/08/05)

- E. The applicant is responsible for any and all other permits that may be required from the Missouri Department of Natural Resources, Army Corps of Engineers and any other regulator as required by law. (Ord. 3606, Eff. 03/08/05)
- F. Each application shall bear the name(s), address(es) and telephone number of the owner or developer of the site, and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm, and shall be accompanied by a filing fee. (Ord. 3606, Eff. 03/08/05)
- G. The issuance of a permit shall constitute authorization to do only that work described or shown on the approved plan. Each application shall include a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with the Erosion and Sediment Control Plan. (Ord. 3606, Eff. 03/08/05)
- H The permit shall be valid from the time that it is issued until a final certificate of

completion has been issued. (Ord. 3606, Eff. 03/08/05)

- I. Final Acceptance and Certificate of Completion permit will not be issued until final grading has been completed and the site has been seeded and mulched or sodded. When conditions prevent ground cover from being established, an occupancy permit
 - may be issued following installation of temporary erosion control measures sufficient to maintain sediment boundaries of the site, and the permittee agrees to maintain all erosion control materials. (Ord. 3606, Eff. 03/08/05)
- If the permittee sells the property, or any portion thereof, before the expiration of the
 - permit, the permit or portion of the permit, may be reassigned to the new owner of the site. The reassignment must first be approved by the Director. The new permittee(s) shall be responsible for compliance of the permit(s) until a final acceptance and /or a final certificate of occupancy is issued. The original <u>permittee</u> remains liable to Jackson County for only the land disturbance work through the date of reassignment. The original permittee will be released from that liability upon issuance of a final certificate of completion. The new permittee(s) shall make all submissions required to obtain a new erosion control permit. (Ord. 3606, Eff. 03/08/05)
- K. The applicant(s) will be required to file, with the Director a faithful performance

bond(s) or, letter(s) of credit in an amount of 120% of the estimated costs of the improvements, landscaping, and maintenance of improvements. The bond(s) or letter(s) of credit must remain in full force and effect for a period of not less than three (3) years. Each year within thirty (30) days of the anniversary date of the issuance of the permit the applicant will submit to the Director verification of current status of bond(s) or letter(s) of credit. This bond or letter of credit will cover the cost of repair when a failure of the installed soil erosion and sediment control improvements has occurred on the site. (Ord. 3606, Eff. 03/08/05)

- L. Review and approval
 - 1. The Director will review each application for an erosion control permit to
 - determine its conformance with the provisions of this regulation. Within thirty (30) days after receiving an application, the Director 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. (Ord. 3606, Eff. 03/08/05)

2. Failure of the Director to act on original or revised applications within thirty (30)

days of receipt shall authorize the applicant to proceed in accordance with the plans as filed unless such time is extended by written agreement between the applicant and Director. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by the Director. (Ord. 3606, Eff. 03/08/05)

M. Permit Fee: Jackson County shall charge \$500.00 for each permit plus \$100.00 per acre of distributed land. (Ord. 3606, Eff. 03/08/05; Ord. 3654, Eff. 08/09/05)

Section 24104: Education, Training and Certification

- A. The Engineer and Developer or Project Manager are required to meet the minimum education and training requirements as required in APWA section 5102. (Ord. 3606, Eff. 03/08/05)
- B. Projects with any type of Erosion Control Permit in unincorporated Jackson County must have at least one individual actively involved on the site who meets the Education, Training, and Certification requirements of APWA section 5102. (Ord. 3606, Eff. 03/08/05)

Section 24105: Erosion and Sediment Control Plan

- A. The erosion and sedimentation control plan must be prepared and certified by a Professional Engineer or certified erosion and sediment control professional on behalf of the applicant and must outline the measures that will be implemented to ensure soil and sediment is contained on the development site. (Ord. 3606, Eff. 03/08/05)
- B. The Erosion and Sediment Control Plan shall include:
 - 1. The property owner's name, address and telephone number.
 - 2. The applicant's name, address, and telephone number.
 - 3. A natural resources map, at a scale no smaller than one (1) inch equals one hundred (100) feet, identifying the location; soils; forest cover; the surrounding area's watercourses, water bodies and other significant geographic and natural features; and resources protected under other chapters of this code.

4. A one (1) inch equals one hundred (100) feet scale map of the site showing proposed excavation, grading or filling.

- 5. A one (1) inch equals one hundred (100) feet scale map of the site showing existing and proposed contours at two (2) feet intervals on USGS datum, clearing limits and delineation of one hundred (100) year flood plain and floodway.
- 6. A sequence of construction of the development site, including stripping and clearing; rough grading; construction of utilities, infrastructure, and buildings; final grading and landscaping; and removal of temporary erosion control devices. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, and the sequence of clearing, installation of temporary erosion and sediment measures, installation of storm drainage, paving of streets and parking areas, and establishment of permanent vegetation.
- 7. All erosion and sediment control measures necessary to meet the objectives of Jackson County and APWA Erosion and Sediment Control Specifications and Design Criteria throughout all phases of construction are required. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.
- 8. Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.
- 9. Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance.
- 10. Location of proposed and existing utility lines.
- 11. Details of temporary drainage system to direct stormwater runoff from graded portions of the site and details of the permanent drainage plan.
- 12. Temporary access routes.
- 13. Any additional items indicated in the APWA Erosion and Sediment Control Specifications and Design Criteria, current standards and any subsequent amendments.
- 14. The signature and seal of a Professional Engineer or certified erosion and sediment control professional.

15. The Director may require submission of other items such as graphic representation of existing and proposed drainage facilities; delineation of wetlands, water storage detention areas, drainage ditches, and easements; the quantity of soil to be excavated, filled or stored; copies of

other permits and applications for the site; and maximum surface runoff from the site. (Ord. 3606, Eff. 03/08/05)

- Additional information or data, may be required, by the Director. Requirements C. maps, plans, reports and/or drawings may be waived if the Director finds for information submitted is sufficient to show that the proposed work will that the conform to the erosion and sediment control requirements.
- Modifications to the plan D.
 - 1. Major amendments of the erosion and sediment control plan shall be submitted to the Director and shall be processed and approved, or disapproved, in the same manner as the original plans.
 - 2. Field modifications of a minor nature may be authorized by the Director by written authorization to the permittee.

Section 24106: Design Requirements

- Erosion control practices, sediment control practices, waterway crossings and Α. construction site access shall meet the design criteria set forth in the APWA. Erosion and Sediment Control Specifications and Design Criteria current standards and any subsequent amendments, as adopted within this ordinance by Jackson County, and shall be adequate to regulate transportation of sediment from the site to the satisfaction of the Director. (Ord. 3606, Eff. 03/08/05) Clearing and Grading of natural resources, such as forests and wetlands, Β.
- shall not be permitted, except when in compliance with all other chapters of this code, the Jackson County Unified Development Code, and all other county, state and federal regulations. (Ord. 3606, Eff. 03/08/05)
 - Phasing shall be required on all sites disturbing greater than thirty (30)
- C. acres, with the size of each phase to be established in the Erosion and Sediment Control Plan. (Ord. 3606, Eff. 03/08/05)
- **Erosion and Sediment Control** D.
 - 1. Graded areas must be stabilized as soon as work is completed or if work is interrupted for twenty-one (21) or more calendar days. This may be waved when a silt pond is used.
 - 2. Where natural vegetation is removed during grading, revegetation of the site shall be initiated as soon as is practicable following the initiation of grading work. Vegetation in sufficient density to provide effective erosion

control must be reestablished within fourteen (14) days following completion of major grading work.

- ^{3.} If vegetative erosion control methods, such as seeding, have not become established within two weeks, Jackson County may require that the site be reseeded, or that an approved non-vegetative option be employed.
- 4. Erosion and Sediment Control measures shall be initiated prior to any land

disturbance and shall be maintained until vegetative cover is established at a sufficient density to provide erosion control on the site. (Ord. 3606, Eff. 03/08/05)

- E. Waterways and Watercourses
 - 1. Buildings, decks, patios, parking lots and other improvements shall be set back a minimum of one hundred and fifty (150) feet from the center
 - of

the stream. (Ord. 3654, Eff. 08/09/05)

- When a wet watercourse must be crossed regularly during construction, a temporary stream crossing shall be provided, and an approval obtained from Jackson County. Additional permits may be required by the Missouri Department of Natural Resources and the Corps of Engineers.
- 3. When in-channel work is conducted, the channel shall be stabilized before, during and after work.
- 4. All on-site stormwater conveyance channels shall be designed according
 - to the criteria outlined in APWA section 5100.
- 5. Stabilization adequate to prevent erosion must be provided at the outlets
 - of all pipes and paved channels. (Ord. 3606, Eff. 03/08/05)

Section 24107: Mud, Material or Debris on Public Roadways

- A. No land disturbing, construction or other associated activities are permitted
 - that cause mud, soil, earth, sand, gravel, rock, stone, concrete, building materials or other materials to be deposited on public streets. Trucks and other construction equipment should be cleaned on site to prevent mud from being deposited on public streets.
- B. If mud, material or debris is deposited on a public or private street, the applicant responsible for the development site concerned will be

notified and shall abate the violation within four (4) hours of notification. Notification may be made by personal contact, telephone or the site will be posted. The notification will include the time notified and deadline for abating the violation. If the violation is not abated within four (4) hours, a stop work order shall be posted and Jackson County will cause the violation to be abated at property owner's expense. (Ord. 3606, Eff. 03/08/05)

Section 24108: Inspection

C.

- A. By submitting a development plan or applying for a erosion control permit, the applicant consents to inspections of the proposed development site and all work in progress. The Director shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed.
- B. A copy of the permit must be available on the site for inspection by authorized representatives of Jackson County.
 - The Director shall make inspections as hereinafter required in
 - Subsection D and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the erosion and sediment control plan as approved. Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of Jackson County shall be maintained at the site during the progress of the work.
- D. In order to obtain required inspections, the permittee shall notify the Director at least two (2) working days <u>before</u> the following:
 - 1. Erosion and sediment control measures are in place and stabilized.
 - 2. Site Clearing has been completed
 - 3. Rough Grading has been completed
 - 4. Final Grading has been completed
 - 5. Close of the Construction Season
 - 6. Removal or substantial modification of any erosion and sediment control measure or practice
 - 7. Final Landscaping
- E. The permittee or his/her agent shall make regular inspections of all control measures in accordance with the inspection schedule outlined in subsection D

above. The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for additional control measures. All inspections shall be documented in writing.

F. In the event work does not conform to the permit or conditions of approval or to the approved plan or to any instructions of the Director, notice to comply shall be given to the permittee in writing. After a notice to comply is given, the permittee or the permittee's contractor(s) shall be required to make the corrections within the time period determined by the Director. If an imminent hazard exists, the Director shall require that the corrective work begin immediately. (Ord. 3606, Eff. 03/08/05)

Section 24109. Enforcement and Penalties

- A. Stop-Work Order; Revocation of Permit
 - 1. In the event that any legal entity holding an erosion control permit
 - pursuant to this ordinance violates the terms of the permit, or implements site development in such a manner as to materially adversely affect the health, welfare, or safety of persons residing or working in the neighborhood or development site so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, the Director may suspend or revoke the erosion control permit and issue a stop-work order.
 - 2. For the purposes of this ordinance, a stop work order is validly posted by

posting a copy of the stop work order on the site of the land disturbance activity in reasonable proximity to a location where the land disturbance activity is taking place. A copy of the order, in the case of work for which there is a permit, shall be mailed by first class mail, postage prepaid, to the address listed by the permittee on the permit. In the case of work for which there is no permit, a copy of the order shall be mailed to the person listed as the owner of the property on tax records filed with Jackson County.

- 3. No person is permitted to continue or permit the continuance of work in an area covered by a stop work order, except work required to correct deficiencies with respect to an erosion or sediment control measure and as authorized by the Director.
- 4. Forty-eight (48) hours after posting a stop work order, the Director, if the conditions specified in the stop work order to resume work have not been satisfied, may issue a notice to the permittee, owner, or land user that Jackson County will perform work necessary to comply with this regulation. Jackson County may go on the land and commence work after

forty-eight (48) hours from issuing the notice of intent. The costs incurred by Jackson County to perform this work shall be charged against the Performance Bond. (Ord. 3606, Eff. 03/08/05)

- B. Violation and Penalties
 - 1. No permittee, owner, or land user shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any terms of this ordinance.
 - 2. Any permittee, owner or land user violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and each day during which any violation of any of the provisions of this ordinance is committed, continued
 - or permitted, shall constitute a separate offense.
 - 3. Any waiver of a violation of this ordinance by the Director shall not be deemed or construed by permittee, owner, or land user to constitute a waiver of any prior or succeeding violation of this ordinance.

4. Upon conviction of any such violation, such permittee, owner, or land user shall be punished by a fine of not more than \$1,000.00 or up to 1 year in the Jackson County Department of Corrections, for each offense. In addition to any other penalty authorized by this ordinance, any of the above referenced entities convicted of violating any of the provisions of this ordinance shall be required to bear the expense of such restoration. (Ord. 3606, Eff. 03/08/05)

Section 24110. Separability

The provisions and sections of this ordinance shall be deemed to be separable, and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.

(Ord. 3606, Eff. 03/08/05)