Chapter 81. Land Disturbance Code

Section 81.010. Administration. Section 81.020. Definitions.

Section 81.030. Design Requirements.

Chapter 81. Land Disturbance Code

Section 81.010 Administration.

Section 101.0 Scope.

- **101.1 Title.** These regulations shall be known as the "Land Disturbance Code" of Webster Groves, Missouri, hereinafter referred to as "this code."
- **101.2 Introduction.** On Construction or Land Disturbance Sites, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Deposits of eroded soil also necessitate maintenance of sewers and ditches and the dredging of lakes. In addition, clearing and grading during construction cause the loss of native vegetation necessary for terrestrial and aquatic habitat. Construction activities also utilize materials and generate wastes, which if not properly controlled can pollute receiving waters.
- **101.3 Purpose and Scope.** The purpose of this article is to safeguard persons, protect property, and prevent damage to the environment in the City of Webster Groves. This article will also promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land in the City of Webster Groves.

Section 102.0 Applicability.

102.1 Other Laws. The provisions of this article shall not be deemed to nullify any provisions of City, state or federal law. When a conflict occurs between this code and any other legally adopted provision, the most stringent shall apply.

Section 103.0 Enforcement.

- **103.1 Department of Planning and Development.** The Department of Planning and Development shall have the authority and responsibility to perform the following functions related to the enforcement of this article as associated with Major Land Disturbance Permits:
 - 1. Receive applications for Land Disturbance Permits;
 - 2. Plan review of Land Disturbance Activities;
 - 3. Coordinate the review of Land Disturbance permit applications and accompanying documents with the Department of Public Works;
 - 4. Administer the determination, collection and release of site development escrows required by this article in coordination with the Departments of Finance:
 - Inspect Land Disturbance Activities;

- 6. Inspect Land Disturbance Activities within or abutting areas designated as one hundred (100) year flood plains; and
- 7. Coordinate the inspection of Land Disturbance Activities with the Department of Public Works when Land Disturbance Activities are in areas under the jurisdiction of the Department of Public Works including, but not limited to, rights-of-way and easements.
- **103.2 Permits.** No Major Land Disturbance Permit or Ordinary Land Disturbance Permit shall be issued where the Department of Planning and Development finds that the proposed land disturbance activity would result in a material change in the amount or pattern of surface water run-off to the substantial injury of neighboring public or private property or right-of-way.

All land disturbance activities shall be carried out in such a manner as to minimize inconvenience and harm to adjacent properties and property owners.

- **103.3** Rule-Making Authority. The Department of Planning and Development shall have the authority, as necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations to interpret and implement the provisions of this article, in order to secure the intent thereof, and to designate requirements applicable because of local climatic or other conditions. Such rules and regulations shall not have the effect of waiving requirements specifically provided for in this article or of violating accepted engineering practices involving the purpose of this article.
- **103.4 Administration and Enforcement.** The Department of Planning and Development may delegate responsibility for the administration and enforcement of the provisions of this code to other agencies including but not limited to the Department of Public Works of the City of Webster Groves, the Department of Finance of the City of Webster Groves, and the Department of Parks and Recreation of the City of Webster Groves.
- **103.5 Plan Review.** The Department of Planning and Development will review the following plans for their conformance to the Land Disturbance Code:
 - 1. Major Land Disturbance Activities; or
 - 2. Ordinary Land Disturbance Activities; or
 - 3. Land Disturbance Activities located within the road right-of-way of the City of Webster Groves; or
 - 4. Land Disturbance Activities within or directly abutting areas designated as the one hundred (100) year flood plain.

The Department of Planning and Development will issue a Land Disturbance Permit for all Land Disturbances.

Exception: The Department of Planning and Development may delegate the review of plans for land disturbance activities located within the road right-of-way.

Section 104.0 Violations.

- **104.1 Unlawful Acts.** It shall be unlawful for any person, firm, corporation or other entity to perform any Land Disturbance Activities, or cause or allow same to be done in conflict with or in violation of any of the provisions of this article.
- **104.2 Notice of Violation.** When the Department of Planning and Development determines that a violation of this article exists, the Director shall notify the violator. The notification shall be in writing and shall be delivered to the violator or his/her legally authorized representative or mailed to his last known address via first class mail postage prepaid. Any person having been so notified that a violation exists and who fails to abate the violation within ten (10) days after said notification, shall be subject to the penalties enumerated in Sections 104.4 and 104.4.1.
- **104.3 Prosecution of Violation.** If the violator does not abate the violation within ten (10) days of notification as set forth in 104.2, the Department of Planning and Development shall request the City Attorney to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation.
- **104.4 Violation, Penalties.** Any person, firm, corporation or other entity who shall violate any provision of this article, or who shall fail to comply with any of the requirements herein, or who shall perform work in violation of the approved construction documents or the Stormwater Pollution Prevention Plan, or any directive of the Department of Planning and Development, or of a permit or certificate issued under the provisions of this article, or who shall start any work requiring a permit without first obtaining a permit therefor, or who shall continue any work in or about a structure after having been served a stop-work order, except for such work which that person, firm or corporation has been directed to perform to remove a violation or unsafe condition, or any person who commits, takes part or assists in any violation of this article or who maintains any property on which such violation shall exist, shall be guilty of a violation, punishable by a fine of not more than One Thousand Dollars (\$1,000.00) or by imprisonment not exceeding ninety (90) days, or both such fine and imprisonment. Each day that a violation continues shall be deemed a separate offense.
 - **104.4.1 No-Permit Penalty.** When the Director determines that work has been started prior to the issuance of a Land Disturbance Permit as required by this article, the Director shall cause a stop work order to be issued. The Land Disturbance Permit fee for work so stopped shall be double the fee as set forth in Section 108 herein, including inspections. The decision of the Director that work has been started prior to issuance of a permit shall be appealable in the same manner as other decisions of the Director.
- **104.5 Abatement of Violation.** The imposition of the penalties herein prescribed shall not preclude the City Attorney from instituting appropriate action to prevent unlawful construction or to restrain, correct or abate a violation, or to prevent illegal use of a property or to stop an illegal act.
- **104.6 Permit Suspension or Revocation.** When a Land Disturbance Activity is conducted in violation of the requirements of this article or the terms of the permit in such a manner as to materially and adversely affect the safety, health or welfare of persons, or to be materially detrimental or injurious to property or improvements, the Department of

Planning and Development may suspend or revoke such permit.

- **104.7 Stop Work Order.** Upon notice from the Department of Planning and Development that work on any property is being prosecuted contrary to the provisions of this article or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be posted on the property, or given to the owner of the property involved, or to the owner's agent, or to the person doing the work; and shall state the conditions under which work will be permitted to resume. Where an emergency exists, the Director shall not be required to give a written notice prior to stopping the work.
 - **104.7.1 Unlawful Continuance.** Whenever a stop work order has been issued as provided herein, the owner or the person performing such work shall immediately stop such work. Any person, who shall continue any work in or about the property after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as specified in Sections 104.4 or 104.4.1 of this article.

Section 105.0 Appeals.

- **105.1 Application for Appeal.** Any person shall have the right to appeal a decision of the Director to the Board of Adjustment pursuant to the procedures set forth in Chapter 20 of the Municipal Code.
- **105.2** Basis for Appeals. An appeal shall be based solely on a claim that:
 - 1. The true intent of this article or the rules or regulations legally adopted thereunder have been incorrectly interpreted; or
 - 2. The provisions of this article do not fully apply; or
 - 3. An equally good or better form of construction is proposed.

Section 106.0 Land Disturbance Permits Required.

- **106.1 City Permit Required.** Except as provided for in Section 106.3 of this article, any person who intends to conduct any Major or Ordinary Land Disturbance Activity, as defined herein, must obtain a Land Disturbance Permit prior to beginning the activity.
 - **106.1.1 Applications.** Applications for Major Land Disturbance Permits and Ordinary Land Disturbance Permits shall be filed with the Department of Planning and Development.
 - **106.1.2 City Building Permit and Related Ordinary Land Disturbance Activities.** The Department of Planning and Development may include Ordinary Land Disturbance Activities associated with the construction of a building, structure, or parking lot authorized by a permit issued under The Building Code, as an integrated permit for the proposed construction.
- **106.2** Limitation on Transfer of Land Disturbance Permits. Any person who buys or otherwise acquires land from a person or entity that has been issued a Land Disturbance

Permit under this article must obtain a separate land disturbance permit from the City. Such permits are not transferable.

Exception: Land Disturbance permits may be transferred to a new land owner provided the original permit holder obtains the approval of the Department of Planning and Development to retain responsibility for the Land Disturbance Activities on such property.

106.3 Land Disturbance Permit Exceptions. Land Disturbance Permits are not required under the following circumstances:

106.3.1 Minor Grading. Land Disturbance permits are not required for the following specific activities, provided the activity does not alter, or cause to alter, the present surface of the ground by any cut or fill: a) within 4 feet of a property line; or b) that would permanently divert one drainage area to another drainage area; or c) that would deposit mud or harmful silt or create erosion or damage adjoining properties; or d) that would block or affect an existing swale or drainage path in a manner to cause damming and ponding:

- 1. Gardening and similar activities on property occupied by one- or two-family dwellings.
- Land Disturbance Activities associated with additions to and accessory structures, including in-ground swimming pools, for one- and two-family dwellings.
- 3. Land Disturbance activities for construction other than those exempted by Exemption #2 above involving less than 30 cubic yards of earth/soil moved and less than 2,000 square feet of disturbed area provided the Land Disturbance Activity is for the improvement of the property. Erosion and sediment control measures shall be provided when necessary until grass or other vegetation is established or other approved means of ground cover means are used.
- 4. Removal of existing or dying grass or similar vegetation by disturbing not more than 10,000 square feet and re-sodding or re-seeding with new landscaping to include preparation of the seed bed; provided erosion and sediment control measures are provided until grass or other vegetation is established; and provided any cut and fill in conjunction with the preparation of the seedbed shall not exceed thirty (30) cubic yards.
- 5. Existing farming, nursery and agricultural operations conducted as a permitted or accessory use.

106.3.2 Public Entities.

 Land Disturbance Activities by any public utility; for the installation, inspection, repair or replacement of any of its equipment or for its collection or distribution lines or piping systems; provided erosion and sediment control measures are provide until grass or other vegetation is established or other approved ground cover means are used. This exception does not

- apply to any Land Disturbance Activity associated with work that requires a building permit.
- 2. Land Disturbance Activities by the following Governmental Agencies when acting in their official capacity:
 - a. City of Webster Groves Departments of Public Works
 - b. City of Webster Groves Department of Parks and Recreation
 - c. St. Louis County Department
 - d. Missouri State Highway Department
- **106.3.3 Emergencies.** Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
- **106.4 State of Missouri Permits Required.** The permit applicant must obtain a land disturbance permit from the State of Missouri Department of Natural Resources for any site where 1 acre or more of land will be disturbed, before beginning any site work authorized by a City permit. This requirement applies to sites of less than 1 acre that are part of a proposed development that will ultimately disturb 1 acre or more.

Section 107.0 Land Disturbance Permit Applications.

- **107.1 Permit Applications.** Applications for Land Disturbance permits required by this article shall be in the form prescribed by, and accompanied by the site plans and documents determined necessary by, the Department of Planning and Development.
- **107.2** Stormwater Pollution Prevention Plan (SWPPP) Required for Major Land Disturbance Permits. All applications for Major Land Disturbance Permits shall be accompanied by a Stormwater Pollution Prevention Plan, prepared for the specific site by or under the direction of a Qualified Professional. The application shall contain a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with the Stormwater Pollution Prevention Plan, and the applicant will assume and acknowledge responsibility for compliance with this article and the Stormwater Pollution Prevention Plan at the site of the permitted activity.
- 107.3 Required Site Development Escrows for Major Land Disturbance Permits. Applicants for Major Land Disturbance permits shall file a site development escrow, in the form of a letter of credit, cash deposit or other improvement security in an amount deemed sufficient by the Department of Planning and Development to cover all costs of installation and maintenance of each Best Management Practice proposed in the SWPPP for such period as specified by the Department of Planning and Development. The site development escrow shall include engineering and inspection costs sufficient to cover the cost of failure, or repair, of improvements installed on the site.
 - **107.3.1 Release of Escrows.** Project Closure: Any site development escrow or deposit will not be fully released to the property owner, site operator or permit holder until all of the following have been completed:

- 1. All temporary stormwater control Best Management Practices (BMP's) have been removed and the site has been fully stabilized.
- 2. All permanent stormwater control Best Management Practices (BMP's) have been completed.
- 3. All final inspections/certifications have been completed.
- **107.3.2 Use of Escrows by City.** At any time following the suspension or revocation of a Land Disturbance Permit, the City may utilize site development escrow funds to implement or restore a BMP due to the failure of the property owner, site operator, or permit holder to install a required BMP or remedy a deficiency arising during the course of the land disturbance activity.
- **107.4** Submittal Requirements for Ordinary Land Disturbance Permits. Submittal requirements for Ordinary Land disturbance permits shall be as required by Chapter 20 Article I of the Municipal Code. (Adopts Building Code refer to Appendix J, Appendix U, and Appendix W)

Section 108.0 Fees.

- **108.1 Issuance of Permits.** Land Disturbance permits shall not be issued until the fees associated with the permits are paid as specified in Sections 108.1.1 through 108.1.2 of this article.
 - **108.1.1 Department of Planning and Development.** Fees for plan review, inspection, and permit administration by the Department of Planning and Development related to Land Disturbance permits shall be in accordance with the fee rates for building permits as set forth in Chapter 20 of the Municipal Code. In applying the Fee Schedule, the total estimated cost of Land Disturbance Activities shall include applicable grubbing, site clearing, rough grading, sediment and erosion control measures, excavating, backfill, final grading, concrete flatwork, asphalt pavement, and final landscaping. The Department of Planning and Development may require a bona fide contract(s) or affidavit(s) of the applicant and owner of the project, in which the applicant and owner verify the total cost of the site improvements related to the permit. The Department of Planning and Development is authorized to establish the fee by determining the plan review cost and estimating the total number of inspections required, when in the opinion of the Department of Planning and Development, the fee resulting from this method more closely relates to the cost of enforcing the requirements of this article.
 - **108.1.2 Department of Public Works.** Fees for the activities related to Land Disturbance permits that are normally under the jurisdiction of the Department of Public Works shall be in accordance with the fee rates set forth in Chapter 10 of the Municipal Code.

Section 109.0 Inspections.

109.1 Typical Inspection Requirements. The City department(s) having enforcement authority and responsibilities described in Section 103.0 of this article shall make inspections as herein required and shall either approve that portion of the work completed

or shall notify the permit-holder where the work fails to comply with the SWPPP as approved. Plans for land disturbance, stripping, excavating, and filling work bearing the stamp of approval of the City department issuing the permit shall be maintained at the site during the progress of the work. To obtain inspections, a permit-holder shall notify the Department of Planning and Development or the Department of Public Works at least two (2) working days before the following:

- 1. Pre-construction
- 2. Post-Installation of sediment and erosion measures
- 3. Completion of site clearing
- 4. Completion of rough grading
- 5. Completion of final grading
- 6. Close of the construction season
- 7. Completion of final landscaping
- **109.2 Extra Inspections.** In addition to the inspections otherwise required, the Department of Planning and Development and the Department of Public Works are authorized to perform and charge fees for extra inspections or re-inspections which in their judgment are reasonably necessary due to non-compliance with the requirements of this article, or work not ready or accessible for inspection when requested.
- **109.3 Pre-Land Disturbance Inspection.** After a Major Land Disturbance permit is issued by the Department of Planning and Development, and prior to any site disturbance activity, an Inspection must be obtained from the Department of Planning and Development.
- 109.4 Permit-Holder Inspection and Report Responsibilities Major Land **Disturbances.** In the event the Director determines that a proposed Land Disturbance Activity may require extraordinary monitoring to assure compliance with an approved Stormwater Pollution Prevention Plan (SWPPP), the City may require and the holder of a Major Land Disturbance Permit, or his/her agent, shall cause regular inspections of land disturbance sites by a qualified Special Inspector retained by the Permit holder. Inspections shall include all erosion and sediment and other pollutant control measures, outfalls and off-site receiving waters in accordance with the inspection schedule outlined in the approved Stormwater Pollution Prevention Plan (SWPPP). Inspections must be scheduled at least three (3) times per month and no later than seventy-two (72) hours after heavy rain. The purpose of such inspections will be to ensure proper installation, operation and maintenance of Best Management Practices (BMPs) and to determine the overall effectiveness of the Stormwater Pollution Prevention Plan (SWPPP) and the need. if any, for additional control measures. All inspections shall be documented in writing on forms provided by the Department of Planning and Development, and submitted weekly to the Department of Planning and Development at the time interval specified in the permit.
 - **109.4.1 Notification and Correction of Deficiencies.** The permit-holder shall notify the site contractor(s) responsible for any deficiencies identified so that

deficiencies can be corrected within seven (7) calendar days of the weekly inspection report.

109.4.2 City Inspections. The Department of Planning and Development may make inspections as deemed necessary to ensure the validity of the reports filed under Section 109.2 of this article or to otherwise ensure proper installation, operation and maintenance of stormwater Best Management Practices (BMPs), to determine the overall effectiveness of the Stormwater Pollution Prevention Plan (SWPPP), and to assess the need for additional control measures.

Section 81.020. Definitions.

Section 201.0 Definitions.

201.1 Definitions. For the purpose of this article, the following terms, phrases, words, and their derivations shall have the meanings given herein. Where terms are not defined by this section, such terms shall have ordinarily accepted meanings such as the context implies.

"Article," "this Article," or "Article III" means the "Land Disturbance Code" of the City of Webster Groves, Missouri, as adopted by this ordinance.

"Best Management Practices (BMPs)" means practices, procedures or a schedule of activities to reduce the amount of sediment and other pollutants in stormwater discharges associated with construction and Land Disturbance Activities.

"City" means City of Webster Groves, Missouri.

"Clearing" means any activity that removes the vegetative surface cover.

"Code of Webster Groves" means the Revised Code of Ordinances of the City of Webster Groves, Missouri as amended from time to time.

"County" means St. Louis County, Missouri.

"Construction Site or Land Disturbance Site" means a parcel or contiguous parcels, where Land Disturbance Activities are performed as part of a proposed development.

"Department of Finance" means the Department of Finance of the City of Webster Groves, Missouri.

"Department of Planning and Development" means the Department of Planning and Development of the City of Webster Groves, acting through its Director, or his/her duly authorized designee.

"Department of Public Works" the Department of Public Works of the City of Webster Groves, acting through its Director, or his/her duly authorized designee.

"Director" means the Director of the Department of Planning and Development of the City of Webster Groves, Missouri or his/her duly authorized designee.

"Drainage Way" means any channel that conveys surface runoff through a site.

"Erosion" means the wearing away of land surface through the action of wind or water.

"Erosion Control" means any Best Management Practices (BMPs) that prevents or minimizes erosion.

"Grading" means reshaping the ground surface through excavation and/or fill of material, including the resulting conditions.

"Heavy Rainfall" means a rainfall intensity that causes erosion.

"Historic Preservation Commission" means the Historic Preservation Commission of the City of Webster Groves, Missouri.

"Land Disturbance Activities" means any activity such as clearing, grading or any other land disturbance related work which results in removal of the natural site vegetation and destruction of the root zone or otherwise results in leaving the ground surface exposed to soil erosion through the action of wind or water.

"Land Disturbance Code" means the Land Disturbance Code of the City of Webster Groves as adopted by ordinance and its amendments.

"Land Disturbance, Major" means any Land Disturbance Activity involving 1 acre or more of land, or a site involving less than 1 acre that is part of a common plan proposed development that will disturb 1 acre or more.

"Land Disturbance, Ordinary" means any Land Disturbance Activity involving less than 1 acre of land.

"Land Disturbance Permit" means a permit issued by the City of Webster Groves authorizing a Land Disturbance Activity at a specific site subject to conditions stated in the permit. A Permit may be for any one or more Major or Ordinary Land Disturbance Activities.

"Municipal Code" means the Code of Webster Groves, Missouri.

"Perimeter Control" means a barrier that prevents sediment from leaving a site by filtering sediment laden runoff or diverting it to a sediment trap or basin.

"Phasing" means clearing a parcel of land in distinct phases stages, with the stabilization of each phase substantially completed before the clearing of the next.

"Qualified Professional" means a Missouri licensed professional engineer or other person or firm certified by an agency approved by the Director in the principles and practices of erosion and sediment control, including the Best Management Practices described in this article.

"Runoff Coefficient" means the fraction of total rainfall that exits at the outfalls from a site.

"Sediment Control" means any Best Management Practices (BMPs) that prevents eroded sediment from leaving a site.

"Special Inspector" means a person as herein required who has the special expertise to ensure compliance with the approved Land Disturbance Code and Best Management Practices (BMPs) of the City of Webster Groves.

"Stabilization" means the use of Best Management Practices (BMPs) that prevent exposed soil from eroding from a land disturbance site.

"Start of Construction" means the first Land Disturbance Activity associated with a development.

"Stormwater Pollution Prevention Plan (SWPPP)" means a management plan, the purpose of which is to ensure the design, implementation, management and maintenance of Best Management Practice (BMP) in order to reduce the amount of sediment and other pollutants in stormwater discharges associated with Land Disturbance Activities, comply with the standards of the City of Webster Groves and ensure compliance with the terms and conditions of the applicable state permits, including adherence to the land disturbance program contained in Missouri State issued MS4 NPDES permits.

"Water Course" means a natural or artificial channel or body of water, including but not limited to, lakes, ponds, rivers, streams, ditches and other open conveyances that carry surface runoff water either continuously or intermittently.

Section 81.030. Design Requirements.

Section 301.0 General.

301.1 Design Guidelines. The Model Best Management Practices (BMPs) for Land Disturbance, Sediment and Erosion Control of St. Louis County, as adopted herein, shall be the general design guidelines for addressing land disturbance activities.

301.2 State Operating Permit from the Missouri Department of Natural Resources. Prior to any Major Land Disturbance Activity, an Operating Permit from the State of Missouri Department of Natural Resources will be required.

301.3 Tree Preservation Permit from the Department of Planning and Development. Prior to any Land Disturbance Activity, a tree preservation permit from the Department of Planning and Development will be required. (See Chapter 10, Article IV of the Code of Webster Groves.)

301.4 Requirements of Permit Holder. The permit-holder shall sign a "**Developer Agreement**" attesting to the following:

- 1. Notify all contractors and other entities (including utility crews, City employees, or their agents) that will perform work at the site, of the existence of the Stormwater Pollution Prevention Plan (SWPPP) and what actions or precautions shall be taken while on site to minimize the potential for erosion and the potential for damaging any Best Management Practices (BMPs);
- 2. Determine the need for and establish training programs to ensure that all site workers have been trained, at a minimum, in erosion control, material

- handling and storage, and housekeeping; and
- 3. Provide copies of the Stormwater Pollution Prevention Plan (SWPPP) to all parties who are responsible for installation, operation or maintenance of any Best Management Practices (BMPs); and
- 4. Maintain a current copy of the Stormwater Pollution Prevention Plan (SWPPP) on the site at all times.

301.5 Submission Requirements of the Department of Planning. The submission requirements of the Department of Planning and Development are as follows:

- Completed application on a form provided by the Department of Planning and Development
- 2. Four (4) copies of the sketch plan
- 3. Four (4) copies of the SWPPP (the sketch plan and SWPPP may be incorporated into one plan)
- 4. Application Fee

301.6 Issuance of Permit. Land Disturbance Permits shall be issued upon the following:

- 1. Approval of a SWPPP for the proposed Land Disturbance Activity
- 2. Issuance of Tree Preservation Permit, if required.
- 3. Payment of Permit and inspection fees as provided in Section 108.
- 4. Payment of escrow per Section 107.3, if required
- 5. Receipt of State Operating Permit issued by Missouri Department of Natural Resources
- 6. Signed Developer Agreement
- 7. Identification and qualifications of retained Special Inspector, if required.

Section 302.0 Stormwater Pollution Prevention Plans (SWPPP).

- **302.1 General.** A Stormwater Pollution Prevention Plan (SWPPP), signed and sealed by a Professional Engineer licensed in the State of Missouri, must be submitted for any Major Land Disturbance Activity. The plans shall contain a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with the Stormwater Pollution Prevention Plan, and the person issued a Land Disturbance Permit assumes and acknowledges responsibility for compliance with the Land Disturbance Code and the approved Stormwater Pollution Prevention Plan at the site of the permitted activity.
- **302.2 Stormwater Pollution Prevention Plan (SWPPP) Contents.** A Stormwater Pollution Prevention Plan (SWPPP) shall include the following information:

- 1. Name, address and telephone number of the site owner and the name, address and twenty-four (24) hour telephone number of the individual who will be in overall responsible charge of construction/development activities at the site.
- 2. Site address or location description and parcel identification number(s).
- 3. A site map showing the outlines of the total project area, the areas to be disturbed, existing land uses, locations and names of surface water bodies, locations of flood plains, and locations of temporary and permanent Best Management Practices (BMPs).
- 4. Existing contours of the site and adjoining strips of off-site property and proposed contours after completion of the proposed land disturbance and development, based on United States Geological Survey datum, with established elevations at buildings, walks, drives, street and roads; and information on necessary clearing and grubbing, removal of existing structures, excavating, filling, spreading and compacting.
- 5. A natural resources map identifying soils, forest cover, and resources protected under other provisions of the Code of Webster Groves.
- 6. An estimate of the Runoff Coefficient of the site prior to disturbance and the Runoff Coefficient after the construction addressed in the permit application is completed.
- 7. Estimated quantity of land to be disturbed.
- 8. Details of the site drainage pattern both before and after Major Land Disturbance Activities.
- 9. Access to the construction site.
- 10. Description of the Best Management Practices (BMPs) to be utilized to control erosion and sedimentation during the period of land disturbance. A table is to be provided that lists each BMP to be utilized and the quantity of each (the quantity for silt fence, etc. is to be listed in linear footage).
- 11. Description of the Best Management Practices (BMPs) to be utilized to prevent other potential pollutants (construction wastes, toxic or hazardous substances, petroleum products, pesticides, herbicides, site litter, sanitary wastes, etc.) from entering the natural drainage ways during the period of construction and land disturbance.
- 12. Description of the Best Management Practices (BMPs) that will be installed during land disturbance to control pollutants in stormwater discharges that will occur after land disturbance activity has been completed.
- 13. Location of temporary off-street parking, and wash-down area for related vehicles.

- 14. Sources of off-site borrow material or spoil sites, and all information relative to haul routes, trucks and equipment.
- 15. The anticipated sequence of construction and Land Disturbance Activities, including installation of Best Management Practices (BMPs), removal of temporary Best Management Practices (BMPs), stripping and clearing; rough grading; construction utilities, infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date(s) on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.
- All erosion and sediment control measures necessary to meet the objectives of this ordinance Code throughout all phases of construction and after completion of site development. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.
- 17. 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.
- 18. Provisions for maintenance of control facilities, including easements.
- 19. Plans for responding to any loss of contained sediment to include the immediate actions the permit-holder will take in case of a containment failure. This plan must include documentation of actions and mandatory reporting to the Department of Planning and Development.
- 20. Schedules and procedures for routine inspections of any structures provided to prevent pollution of stormwater or to remove pollutants from stormwater and of the site in general to ensure all Best Management Practices (BMPs) are continually implemented and are effective.
- **302.3 Simplified SWPPP.** Major Land Disturbance Activities meeting all of the following conditions may submit a Simplified SWPPP:
 - 1. Area(s) of land disturbance total more than 1 acre but are less than 5 acres
 - 2. Minimal change (approximately < 1 foot) in grade elevation for entire area of disturbance
 - 3. Purpose is to restore an unpaved surface such as a sports field, etc.
 - **302.3.1 Simplified SWPPP Contents.** The following information shall be shown on the SWPPP in conjunction with all information required on a sketch plan*:
 - a. Show existing & proposed contours, and land disturbance limits (i.e., by shading, etc.).

- b. Show and label perimeter siltation control around or along the disturbance required for any situation where the area of disturbance would drain onto adjacent public or private property. Show siltation control around inlets or storm sewer systems that could receive water from the disturbed area. Provide BMP quantities of materials to be disturbed and details on the plan.
- c. Show and label the temporary entrances and washdown area.
- d. Add statement/notes:
 - i. Any land clearing, construction, or development involving the movement of earth shall be in accordance with the Stormwater Pollution Prevention Plan, and the person issued a Land Disturbance Permit assumes and acknowledges responsibility for compliance with the Land Disturbance Code and the approved Stormwater Pollution Prevention Plan at the site of the permitted activity.
 - ii. Clearing techniques that retain existing vegetation to the maximum extent practicable shall be used and the time period for disturbed areas to be without vegetative cover shall be minimized to the extent practical.
 - iii. Additional siltation control shall be installed as required by the Department of Planning and Development.
 - iv. Areas shall be seeded when no activity will occur within thirty (30) days.
 - (1) List the name, address and twenty-four (24) hour telephone number of the individual who will overall be responsible (in charge of) construction activities at the site.
 - (2) Signed and sealed by a Missouri Professional Engineer
- **302.3.2 Additional Contents.** No additional information will be required on the plan unless otherwise determined by the Department of Planning and Development.
- **302.4 Stormwater Pollution Prevention Plan (SWPPP) for Clearing and Grubbing.** The following minimum information must be shown on a SWPPP submitted for clearing and grubbing only:
 - 1. All information required on a sketch plan, as required by the Department of Planning and Development.
 - 2. Show existing contours, and only those proposed contours necessary for the construction of a temporary entrance and washdown area, etc.

- 3. Clearly show clearing and grubbing limits (i.e., by shading, etc.)
- 4. Show and label perimeter siltation control.
- 5. Show and label temporary entrances and washdown area.
- 6. List BMPs and provide quantities of materials to be disturbed.
- 7. Show BMP details.
- 8. Missouri P.E. sign and seal plan.
- 9. Add statement: Any land clearing, construction, or development involving the movement of earth shall be in accordance with the Stormwater Pollution Prevention Plan, and the person issued a Land Disturbance Permit assumes and acknowledges responsibility for compliance with the Land Disturbance Code and the approved Stormwater Pollution Prevention Plan at the site of the permitted activity.

10. Add Notes.

- a. Clearing techniques that retain existing vegetation to the maximum extent practicable shall be used and the time period for disturbed areas to be without vegetative cover shall be minimized to the extent practical.
- b. Additional siltation control shall be installed as required by the Department of Planning and Development.
- c. Areas shall be seeded after clearing and grubbing when no activity will occur within thirty (30) days.
- d. A Stormwater Pollution Prevention Plan (SWPPP) and a Major Land Disturbance (MLD) Permit will be required prior to any grading on the site, beyond what is approved on this plan.
- 11. List name, address and twenty-four (24) hour telephone number of the individual who will overall be responsible (in charge of) construction/development activities at the site.
- **302.5** Permit Requirements for Test Holes. "Land Disturbance Activities" are defined as any activity such as clearing & grubbing, grading and any other land disturbance work that results in the removal of the natural site vegetation and destruction of the root zone, or otherwise results in leaving the ground surface exposed to soil erosion through the action of wind or water.

If the area of the test hole excavation, the area where the excavation is stockpiled temporarily, the path created by machinery to get to the test hole locations, or any other additional area of disturbance needed to perform the work, fall under the above definition for "Land Disturbance Activities", and collectively total the following amounts, the following requirements apply:

Collective Total Amount	Requirement
Greater than 1 acre, and includes grading other than the excavation for each test hole	Need SWPPP approval and a Major Land Disturbance Permit
Greater than 1 acre, and does not include grading other than the excavation for each test hole	Need to meet the SWPPP requirements for clearing and grubbing and a Major Land Disturbance Permit
Greater than 2000 square feet and less than 1 acre	Need an Ordinary Land Disturbance Permit
Less than 2000 square feet, and includes grading other than the excavation for each test hole in an amount greater than 30 cubic yards	Need an Ordinary Land Disturbance Permit
Less than 2000 square feet, and includes grading other than the excavation for each test hole in an amount less than 30 cubic yards	No Land Disturbance Permit required

Note: A permit will be required from the Department of Planning and Development for the construction of a temporary entrance.

302.6 Amending the Stormwater Pollution Prevention Plan. The permit-holder shall amend the Stormwater Pollution Prevention Plan whenever:

- 1. Design, operation or maintenance of Best Management Practices (BMPs) is changed.
- 2. Design of the construction project is changed that could significantly affect the quality of the stormwater discharges;
- 3. Site operator's inspections indicate deficiencies in the Stormwater Pollution Prevention Plan (SWPPP) or any Best Management Practices (BMPs).
- 4. Inspections by the Department of Planning and Development or by the Missouri Department of Natural resources indicate deficiencies in the Stormwater Pollution Prevention Plan (SWPPP) or any Best Management Practices (BMPs).
- 5. The Stormwater Pollution Prevention Plan (SWPPP) is determined to be ineffective in significantly minimizing or controlling erosion or excessive sediment deposits in streams or lakes.
- 6. The Stormwater Pollution Prevention Plan (SWPPP) is determined to be ineffective in preventing pollution of waterways from construction wastes, chemicals, fueling facilities, concrete truck washouts, toxic or hazardous

- materials, site litter or other substances or wastes likely to have an adverse impact on water quality;
- 7. Total settleable solids from a stormwater outfall exceeds 0.5 ml/L/hr if the discharge is within the prescribed proximity of a "Valuable Resource Water" as defined by the Missouri Department of Natural Resources;
- 8. Total settleable solids from a stormwater outfall exceeds 2.5 ml/L/hr for any other outfall; or
- 9. The Department of Planning and Development or the Missouri Department of Natural Resources determines violations of water Quality Standards may occur or have occurred.

Section 303.0 Performance Standards.

- **303.1 Design of Erosion and Sediment Controls.** The design of erosion and sediment controls required for Land Disturbance Activities shall comply with the following minimum requirements:
 - 1. Land disturbance, erosion and sediment control practices, and watercourse crossings shall be adequate to prevent transportation of sediment from the site.
 - 2. Materials brought to any site or property under a permit issued under the Land Disturbance Code, where said material is intended to be utilized as fill material at the site for land disturbance, erosion or sediment control, shall consist of clean uncontaminated inert materials (soil, rock, concrete, ,sand, etc. void of any asphaltic concrete, wood, metals, plastics, textiles, hydrocarbons, etc.). Sludge of any kind may not be used as a clean fill.
 - 3. Cut and fill slopes shall be no greater than 3:1 except as approved by the Department of Planning and Development to meet other community or environmental objectives.
 - 4. Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with the Code of Webster Groves.
 - 5. Clearing techniques that retain existing vegetation to the maximum extent practicable shall be used and the time period for disturbed areas to be without vegetative cover shall be minimized to the extent practical.
 - Clearing, except that necessary to establish sediment control devices, shall
 not begin until all sediment control devices have been installed and have
 been stabilized.
 - 7. Phasing shall be required on all sites disturbing greater than 30 acres of land. The size of each phase to will be established by the Department of Planning at the time of plan review for the issuance of a Major Land Disturbance permit.

303.1.1 Erosion Control Requirements. Erosion control requirements shall include the following:

- a. Soil stabilization shall be completed within five (5) days of clearing or inactivity in construction.
- b. If seeding or another vegetative erosion control method is used, it shall become established within two weeks or the site shall be reseeded or a non-vegetative option employed.
- c. Techniques shall be employed to ensure stabilization on steep slopes and in drainage ways.
- d. Soil stockpiles must be stabilized or covered at the end of each workday or perimeter controls must be in place to prevent silt from the stockpile from leaving the site.
- e. The entire site must be stabilized, using a heavy mulch layer or another method that does not require germination to control erosion, at the close of the construction season.
- f. Techniques shall be employed to prevent the blowing of dust or sediment from the site.
- g. Techniques shall be employed to divert upland runoff past disturbed slopes.

303.1.2 Sediment Control Requirements. Sediment control requirements shall include:

- a. Sediment basins, sediment traps, or tanks and perimeter controls.
- b. Sediment basins shall be provided for each drainage area within 10 or more acres disturbed at one time and shall be sized to contain 1/2 inch of sediment from the drainage area and be able to contain a two (2) year, twenty-four (24) hour storm. If the provision of a basin of this size is impractical, other similarly effective Best Management Practices (BMP's), as evaluated and specified in the Stormwater Pollution Prevention Plan (SWPPP), shall be provided.
- c. Sediment basins shall be designed in a manner that allows adaptation to provide long-term stormwater management, as required by the Department of Planning and Development.
- d. Sediment basins shall have stabilized emergency spillways to minimize the potential for erosion of the spillway or basin embankment.
- e. Protection for adjacent properties by the use of a vegetated buffer

strip in combination with perimeter controls.

303.2 Water Course Protection Requirements. Water course protection requirements shall include:

- Encroachment into or crossings of active water courses / riparian areas and wetlands shall be avoided to the maximum extent practicable. All County, State and Federal permits and approvals shall be obtained by a permit holder prior to beginning work authorized by a Land Disturbance permit issued by the Department of Planning and Development.
- 2. Stabilization of any watercourse channels before, during, and after any inchannel work.
- 3. If a defined watercourse is to be re-aligned or re-configured, clearing and grubbing activities within 50 feet of the watercourse shall not begin until all materials and equipment necessary to protect the watercourse and complete the work are on site. Once started, work shall be completed as soon as possible. Areas within 50 feet of the watercourse shall be recontoured and re-vegetated, seeded or otherwise protected within five (5) working days after land disturbance activities have ceased.
- 4. All stormwater conveyances shall be designed according to the criteria of the Metropolitan Saint Louis Sewer District (MSD) and the necessary MSD permits obtained.
- 5. Stabilization adequate to prevent erosion shall be provided at the outlets of all pipes and paved channels.
- **303.3 Construction Site Access Requirements.** Construction site access requirements for Major Land Disturbance Activities shall include:
 - 1. A temporary access road provided at all land disturbance sites including a wash down area supporting all active sites.
 - The Department of Planning and Development may require other measures to ensure that construction vehicles do not track sediment onto public streets or be washed with wash effluent channeled directly into storm drains.
- **303.4 Control Requirements for Construction Materials.** Control requirements for construction materials, construction wastes and other wastes generated on site at land disturbance sites shall include provisions, satisfactory to the Department of Planning and Development for:
 - Spill prevention and control facilities for materials such as paint, solvents, petroleum products, chemicals, toxic or hazardous substances, substances regulated under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and any wastes generated from the use of such materials and substances, including their containers. Any

- containment systems employed to meet this requirement shall be constructed of materials compatible with the substances contained and shall be adequate to protect both surface and ground water.
- 2. Collection and disposal of discarded building materials and other construction site wastes, including those listed above.
- 3. Litter control.
- Control of concrete truck washouts.
- 5. Assurance that on-site fueling facilities will adhere to applicable federal and state regulations concerning storage and dispensers.
- 6. Provision of sufficient temporary toilet facilities to serve the number of workers on Major Land Disturbance sites.

Section 304.0 Sketch Plan Requirements for Major Land Disturbance Permit.

304.1 Purpose. To allow land disturbance on legal lots prior to submission of a site plan or preliminary plat for development on the site, the proposed land disturbance should be compatible with development in the area, and the plan should reflect the minimal amount of land disturbance necessary until a site plan or preliminary plat is submitted for review. The Sketch plan does not need to be sealed by a registered engineer or surveyor.

304.2 Sketch Plan Contents. Sketch plan requirements for a Major Land Disturbance Permit shall include the following:

- 1. A locator number, address and zoning of the tract.
- 2. Existing contours.
- 3. A key map showing the tract in relationship to the surrounding area.
- 4. The approximate location of all existing structures and current uses within the tract and wooded areas within the tract and within 100 feet thereof. All historic buildings, as identified by the Historic Preservation Commission, should be identified.
- 5. The name, address, and phone number of the owners of the tract and the same for the permit applicant if different.
- 6. All existing roads and approximate location of wet and dry weather water courses, flood plain areas, sinkholes, and other physical features within the tract and within 100 feet thereof.
- 7. Approximate location of future uses including buildings and parking areas for commercial uses and lot lines/units for residential uses. Proposed access to the site and proposed roads should be included. These features do not have to be to scale, but should clarify the relationship of future uses to the areas being cleared and grubbed.

- 8. The areas to be cleared and grubbed.
- 9. Phasing if any. (Required on 30 acres or greater in size) (Ord. No. 8591, § 2, 5-20-08)