

10 - SITE GRADING AND EROSION CONTROL

10.01 APPROVALS AND PERMITS

- A. Site grading and erosion control plans must be certified by a professional engineer, architect, or landscape architect registered in the State of Iowa.
- B. Site grading and erosion control plans must be reviewed and approved by the City Engineer.
- C. Other local, state, and federal permits may be required, depending on the circumstances of the project. It shall be the responsibility of the registered design professional of record to acquire all applicable permits. A copy of all permits shall be provided to the City Engineer prior to the start of construction.

10.02 THRESHOLDS

- A. Stockpiling of granular construction material in excess of 5000 cubic yards on any site other than where permitted by State Law will require a site grading and erosion control plan.
- B. Grading a site for new subdivisions will require a site grading and erosion control plan.
- C. Grading or disturbing a site with a total area of 50,000 square feet will require a site grading and erosion control plan.

10.03 REQUIREMENTS

- A. Goals of the Site Grading and Erosion Control Plan.
 - 1. To protect the site from the significant loss of soil and topsoil due to erosion.
 - 2. To protect downstream properties and facilities from deposition of sediments.
 - 3. To protect onsite facilities and public improvements from damages due to erosion.
 - 4. To protect water quality.
- B. Grading Design Standards.
 - 1. In general, property shall be graded so that it drains to an approved piping or drainage system or street approved by the City Engineer. Alternative drainage will only be allowed where, due to existing topography, street drainage would be very difficult to achieve or would not be feasible.
 - 2. All proposed developments shall be graded so that storm water discharge is directed away from proposed building sites to a City approved piping system, to swales in drainage easements along property lines, to public rights-of-ways, or to another City approved drainage course.
 - 3. No storm water run discharge from a development shall flow onto other adjacent lands in a higher volume, with greater velocity or in a different location than under natural conditions.

4. The property owner shall design for overland flow of storm water from adjacent properties where the existing off site land slopes to the site.
5. Grading design should, to the greatest extent possible, maintain the natural gradient and contours of the site and include measures to preserve natural features including, but not limited to, trees larger than 6" caliper, natural drainage ways, and rock outcrops.
6. Graded slopes steeper than three (3) horizontal to one (1) vertical (3:1) shall be stabilized. Shallower slope angles may be required if detailed soils and geologic investigations indicate such.
7. No filling will be allowed on lands which lie, either wholly or in part, within the flood plain of a river, stream, creek, or lake unless such fill is approved under the terms of a permit granted by the applicable Federal, state, or county agency or the City of Coralville.
8. During construction, if a disturbed area is to be left idle for more than 21 days, temporary erosion control practices need to be initiated within 14 days of the disturbance. Temporary erosion control measures include temporary seeding, mulching, geotextiles, etc. Temporary erosion control measures shall be maintained at all times.
9. City approved permanent erosion control (e.g., seed, sod, etc.) is to be installed during or immediately following the completed work. Permanent erosion control measures shall be maintained at all times.

C. Drainage Standards:

1. To the maximum feasible extent, all natural drainage courses serving major drainage areas and containing significant vegetation that may constitute a significant wildlife habitat, as determined by the City, should remain in their natural state. Alterations to natural drainage courses may be allowed if the application of this Ordinance will result in upstream or downstream flooding hazards for which there is not other feasible means of mitigation consistent with the findings.
2. All grading work in drainage facilities (e.g., swales, ditches, detention basins, etc.) shall be in accordance with the City's Municipal Design Standards.
3. The overall drainage system shall be completed and made operational at the earliest possible time during construction or shall otherwise be provided for in a manner acceptable to the City.
4. If a development is to be phased, the approved drainage facilities will be completed or otherwise provided for in a manner acceptable to the City before the completion of the first phase.

A. Administration Responsibilities:

A grading permit applicant must designate the individual, including name, title, address, and phone number, who will perform the following duties:

1. Initial installation of the erosion control measures specified by the erosion control plan.

2. Site inspections on a weekly basis and after rains greater than 1/4" to assess the effectiveness of the existing erosion control measures and to direct installation of additional erosion control measures in response to problems noted during site inspections. Inspections are not required when the ground is frozen or snow covered.
3. Conduct weekly inspections until adequate groundcover is established to control erosion.
4. Keep a log of site inspections recording any corrective measures taken.

10.04 METHODS

- A. Methods of erosion control shall be consistent with those outlined in the Iowa Construction Site Erosion Control Manual or other community accepted engineering practices.
- B. The plan shall include provisions for responding to unanticipated erosion problems as they arise during the construction process.
- C. Special care shall be taken to prevent erosion behind the curbs and beneath the pavement of streets.