

ARTICLE XI. - EROSION AND SEDIMENT CONTROL

Sec. 11.1. - Plan requirement.

An erosion and sediment control plan shall be required for all developments in Elberta's corporate limits. Such plan shall be required prior to the commencement of any land-disturbing activity.

Sec. 11.2. - Plan submission and review.

Whenever the area to be disturbed comprises more than one acre, a copy of the plan shall be filed with the Building Inspector and the Town Engineer a minimum of thirty (30) days prior to beginning any land-disturbing activity. A copy of the plans shall also be on file at the job site. If the Building Inspector and/or the Town Engineer determines, either upon review of such plan or on inspection of the job site, that a significant risk of off-site sedimentation or erosion exists, he will require that a revised plan be prepared. Pending the preparation of the revised plan, the work shall be either suspended or continued under conditions outlined by the Building Inspector or the Town Engineer.

Sec. 11.3. - Plan content.

Erosion and sediment control plans shall contain architectural and engineering drawings, maps, assumptions, calculations, and narrative statements as needed to describe accurately the proposed development of the site and the measures planned to meet the basic control objectives. Plan content may vary to meet the needs of the specific site conditions.

Sec. 11.4. - Protection of property.

Persons engaged in land-disturbing activities shall take all reasonable measures to protect all public and private property, including roadways, from damage by such activities.

Sec. 11.5. - Basic control objectives.

The basic control objectives which should be considered in developing and implementing an erosion and sediment control plan are to:

- 11.5.1 *Identify Critical Areas.* On-site areas which are subject to severe erosion, and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation, are to be identified and receive special attention.
- 11.5.2 *Limit Exposed Areas.* All land-disturbing activities should be planned and conducted to minimize the size of the area to be exposed at any one time.
- 11.5.3 *Limit Time of Exposure.* All land-disturbing activities should be planned and conducted

to limit exposure to the shortest feasible time.

- 11.5.4 *Control Surface Water.* Surface water runoff originating upgrate of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure.
- 11.5.5 *Control Sedimentation.* All land-disturbing activities should be planned and conducted so as to minimize off-site sediment damage.
- 11.5.6 *Manage Storm Water Runoff.* When the increase in the peak rates and velocity of storm water runoff resulting from a land-disturbing activity is sufficient to cause damaging accelerated erosion of the receiving ditch or channel stream, plans are to include measures to control both the velocity and rate of increase so as to minimize accelerated erosion and increased sediment deposition in the ditch or stream channel.

Sec. 11.6. - Standards.

- 11.6.1 *Mandatory Standards.* No land-disturbing activity subject to these provisions and guidelines shall be undertaken except in accordance with the following requirements:
- 11.6.1.1 No land-disturbing activity shall be permitted in proximity to a lake, natural watercourse, or adjacent property where applicable unless a buffer zone is provided along the boundary of sufficient width to confine visible siltation and/or prevent erosion, provided that the land-disturbing activity is not in connection with the construction of facilities to be located on, over, or under a lake, natural watercourse, or adjacent property.
- 11.6.1.2 The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control devices or structures. In any event, slopes left exposed will, within thirty (30) working days of completion of final grading, be planted or otherwise provided with ground cover, devices, or structures sufficient to restrain erosion.
- 11.6.1.3 Whenever land-disturbing activity is undertaken on a tract comprising more than one acre, if more than one contiguous acre is uncovered, a ground cover sufficient to restrain erosion must be planted or otherwise provided within thirty (30) working days on that portion of the tract upon which further active construction is not being undertaken, provided, that this activity shall not apply to cleared land forming the basin of a reservoir later to be inundated.
- 11.6.2 *Design and Performance Standards.* Erosion and sediment control measures, structures, and devices shall be so planned, designed, and constructed as to provide control from the calculated peak rates of runoff from a ten-year frequency storm. Runoff rates may be calculated using the procedures in the USDA, Soil Conservation Services "National

Engineering Field Manual for Conservation Practices," or other acceptable calculation procedures. Runoff computations shall be based on rainfall data published by the National Weather Service for the area.

Sec. 11.7. - Other requirements.

- 11.7.1 *Permanent Downstream Protection of Stream Banks and Channels.* Provision shall be made for the permanent protection of off-site stream banks and channels from the erosive effects of increased volume of storm water runoff resulting from certain land-disturbing activities.
- 11.7.1.1 A combination of storage and controlled release of storm water runoff shall be required for all highway construction; commercial, industrial, educational, institutional developments of one acre or more; and for all residential developments unless excepted by Section 11.7.1.2.
- 11.7.1.2 Detention, storage and controlled release will not be required in those instances where the person planning to conduct the activity can demonstrate that the storm water release will not cause an increase in accelerated erosion or sedimentation of the receiving ditch, stream channel, or other drainage facility, taking into consideration any anticipated development of the watershed in question.
- 11.7.2 *Borrow and waste areas.* When the person conducting the land-disturbing activity is also the person conducting the borrow or waste disposal activity, areas from which borrow is obtained shall be considered as part of the land-disturbing activity where the borrow material is being used or from which the waste material originated. When the person conducting the land-disturbing activity is not the person obtaining the borrow and/or disposing of the waste, these areas shall be considered a separate land-disturbing activity.
- 11.7.3 *Access and haul roads.* Temporary access and haul roads, other than public roads, constructed or used in connection with any land-disturbing activity shall be considered a part of such activity.
- 11.7.4 *Operations in Lakes or Natural Watercourses.* Land-disturbing activity in connection with construction, in, on, over, or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disturbance of the stream channel. The relocation of a stream, where relocation is an essential part of the proposed activity, shall be planned and executed so as to minimize changes in the stream flow characteristics, except when justification for significant alteration to flow characteristic is provided.

Sec. 11.8. - Responsibility for maintenance.

The person engaged in or conducting the land-disturbing activity shall be responsible for maintaining all temporary and permanent erosion and sediment control measures and facilities during the development of a site. The responsibility for maintaining all permanent erosion and sediment control measures and

facilities, after site development is completed shall lie with the landowner.

Sec. 11.9. - Guidelines for erosion and sediment control practices.

Persons engaged in planning, designing, installing and maintaining erosion and sediment control measures may use generally accepted references on the subject following standard engineering and/or agricultural practices. All plans will be subject to review by the Building Inspector and the Town Engineer.

Sec. 11.10. - Additional measures.

Whenever the Building Inspector and/or the Town Engineer determines that significant erosion or sedimentation is occurring as a result of a land-disturbing activity, despite application and maintenance of protective practices, the person conducting the land-disturbing activity or the person responsible for maintenance will be required to take additional protective action.