

RAVINE OVERLAY DISTRICT ORDINANCE

Section I. Purposes

- A) The Illinois River Bluff and ravine steep slopes are an inherent natural resource which imparts a unique and substantial character to the Tri-County area. This unique character has a direct relationship to property values, not only for Lots containing or adjacent to ravine and bluff steep slopes, but for Lots throughout the City/County. It is vital to understand that these steep sloped areas are interdependent throughout their reaches. Erosion, slope failures, and loss of vegetation along one portion of a slope can have an adverse impact upon adjacent sloped areas. Because these areas may be abused (intentionally or unintentionally) so as to create conditions which jeopardize property values and the natural ecosystem, appropriate controls are necessary. Thus, it is the intent of this Ordinance that all land use and development controlled by this Ordinance:
1. Protects people and property from the potentially hazardous geological and hydrological conditions characteristic of ravine and bluff areas;
 2. Recognizes and furthers maintenance of stable ecological relationships and minimizes environmental degradation of the forested Illinois River Bluffs and ravine areas, and reduces sedimentation of the Illinois River;
 3. Recognizes that land should support new structures for a minimum life span of fifty (50) years, and that construction should not contribute to erosion or slope stabilization problems;
 4. Utilizes building techniques within the criteria stipulated in this Ordinance.
- B) This ordinance provides for the reasonable use of steep slope areas and related lands while protecting the public health, safety, and welfare by:
1. Determining whether certain types of soil conditions exist (such as loose or easily eroded or rocky soils) and utilizing appropriate engineering technology to result in stable slopes during and subsequent to development;
 2. Controlling stormwater runoff, soil erosion, and mud slides by minimizing grading, encouraging the preservation of Trees and other vegetation and, where necessary, requiring revegetation ;
 3. Permitting intensity of development compatible with the natural characteristics of steep slope terrain, such as degree of sloping, soil suitability and existing natural and man-made drainage patterns;
 4. Preserving the scenic quality of the ravine and bluff environment through the retention of dominant steep slopes and ridges in their natural state; and

5. Reducing the physical impact of top of slope and bluff development by encouraging innovative site and architectural design, minimizing grading and requiring restoration of graded areas.

Section II. Definitions

ACCESSORY BUILDING or ACCESSORY STRUCTURE: A subordinate detached building or structure located on the same lot as a principal building, the use of which subordinate building or structure is incidental to that of the principal building or to the principal use of the lot. In connection with regulation of the Steep Slope Zone, "Accessory Structure" means any deck, gazebo, patio and/or shed.

AGGREGATE DIAMETER: The combined diameter of a multiple trunk Tree measured at Breast Height.

BLUFF: An elevated segment of the Illinois River Valley which normally has a precipitous front inclining steeply on the riverward side.

BOTTOM, or TOE, OF RAVINE SLOPE OR TOE OF BLUFF SLOPE: The lowest elevation of soil grade adjacent to the base of a ravine or a bluff slope, as the case may be.

DIAMETER BREAST HEIGHT OR "DBH": The diameter of a Tree measured at four and one-half feet (4-1/2') above the existing grade at the base of the Tree.

DRAINAGE LINE: The artificial removal of surface and subsurface water by pipes, tiles, ditches, etc.

ENCOUNTERED STRUCTURAL FILLS: Fill materials which have been placed under controlled and monitored conditions which verify that satisfactory materials have been placed and adequately compacted in accordance with generally accepted industry standards and practices.

EROSION: The general process whereby soils are detached and moved by flowing water or wave action.

NATIVE (VIRGIN) SOILS: Naturally occurring, undisturbed soils consisting of normally consolidated and/or preconsolidated soils which possess numerous development considerations as a result of variations in the composition and structural integrity of the soil types.

PROTECTED TREE: Any Tree having a diameter of eight inches (8") DBH or larger or having an Aggregate Diameter of fifteen inches (15") DBH or larger.

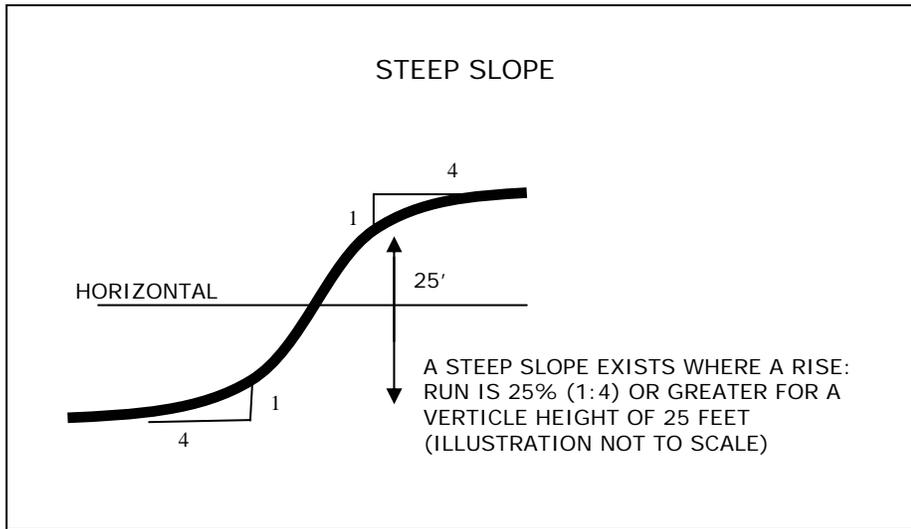
RAVINE: A deep gully or gorge worn by the flow of water to the Illinois River.

RAVINE OVERLAY DISTRICT: All land comprising Steep Slopes and a 100-foot buffer surrounding all Steep Slopes.

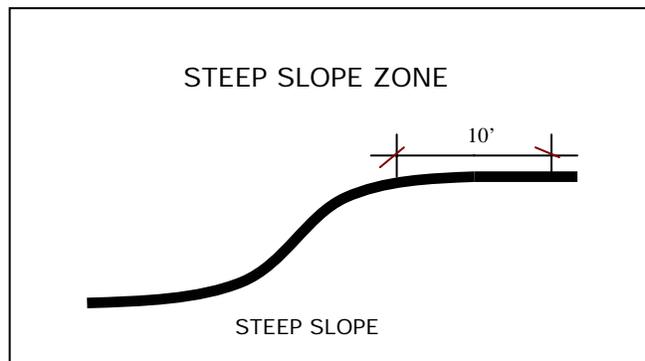
REMOVE or REMOVAL: The causing or accomplishing of the actual physical removal of a Tree, or the effective removal through damaging, poisoning, or other direct or indirect action resulting in, or likely to result in, the death of a Tree.

RESTORATION: To re-establish the grade, slope, stability, vegetation, or drainage systems of a steep slope property by bringing the property back to its former condition prior to the adverse impact(s) caused.

STEEP SLOPE: Land comprising a ravine or bluff where the slope in ascent or descent meets or exceeds twenty-five (25) percent from the horizontal for a vertical height of 25 feet.



STEEP SLOPE ZONE: All land which lies between the bottom of a steep slope and a line being farthest from the bottom of a steep slope to tableland and ten (10) feet from the top edge of a Steep Slope.



TABLELAND: A large elevated region with a relatively low relief surface in which borders are defined by Steep Slopes.

TREE: A self-supporting, woody plant, together with its root system, having a well defined stem or trunk or a multi-stemmed trunk system, a more or less well defined crown, and a mature height of at least eight feet. "Tree" shall not include trees in containers or nursery stock trees maintained for resale.

UNCONTROLLED FILLS: Fill materials deposited on a site which have not been placed in accordance with generally accepted industry standards with regard to moisture conditioning and adequate compaction effort and which may or may not possess satisfactory structural integrity for site development.

UNDESIRABLE SPECIES: Are those species which are invasive, nonnative, and/or shallow-rooted, including, but not limited to, buckthorn, Norway maple, mulberry, box elder, and willow.

Section III. Aesthetic and Safety Control of Steep Slopes

As set forth above, this Ordinance has as its purpose protection of public health and safety by adopting and attempting to prevent erosion and protecting the aesthetics of ravines and bluffs through the regulation and management of the Steep Slope Zone. It is not the intent of this Ordinance to remove areas of use nor is it the purpose of this Ordinance to increase development costs.

- A) Except as set forth in this Ordinance, no structures shall be constructed in a Steep Slope Zone and the Steep Slope Zone shall be vegetated either in the natural state or using appropriate, native vegetation. In addition, whenever there is construction upon property abutting a Steep Slope Zone, a fence will be erected temporarily along the top edge of the Steep Slope Zone, during any construction and/or demolition activity upon such property.

- B) Basic Technical Standards. All land use and development controlled by this Ordinance shall be judged by the application of the following basic standards of landscape planning, soil mechanics engineering, hydrology, geology, environmental design and architecture. These standards are supplemented elsewhere in this Ordinance.
 - 1. Planning development to recognize and fit the natural topography, soils, geology, hydrology and other existing conditions on the proposed sites.
 - 2. Orienting development so that earth moving, landscaping and other site preparation is kept to an absolute minimum.
 - 3. Preserving and enhancing the landscape through minimized disruption of natural terrain and existing vegetation.
 - 4. Minimizing disruption or alteration of natural drainage ways.
 - 5. Minimizing the time in which areas are bare and exposed.
 - 6. Minimizing the amount of impervious surface to be placed on the tableland adjacent to Steep Slopes.
 - 7. Designing structures so that significant weight is not oriented toward the top edge of Steep Slopes.

Section IV. Special Setbacks.

Swimming pools are prohibited within ten (10) feet of the Steep Slope Zone. However, at or above grade pool decks and patios may extend into this special

setback; but in no case shall these structures encroach upon or extend into the Steep Slope Zone.

Section V. Maintenance of the Steep Slope Zone.

- A) General. Owners of Steep Slope real estate shall have and properly maintain drainage lines conveying storm water runoff either to a public storm sewer or to the ravine channel. Private drainage lines which leak water onto the surface of a Steep Slope must be repaired within thirty (30) days of notification by the City. Owners of Steep Slope real estate shall also remove dumped lawn waste or other man-made debris which may damage underlying vegetation.
- B) Restoration. All governmental entities, private property owners, and all other private entities having authorized access to Steep Slopes and engaged in the maintenance, repair, or construction of utilities or other structures within a Steep Slope Zone, or engaged in any modifications to a Steep Slope, shall adhere to the applicable provisions of this Ordinance.
- C) Protection. Prior to the recordation of a plat of subdivision, the City Council may require covenants placed upon such plat as may be necessary to ensure the long-term maintenance of the above-described slope control measures.

Section VI Exemptions.

Within the Steep Slope Zone, the following structures may be constructed and rebuilt and the following activities are permitted:

- A) Provided a building permit has been issued by the Director in accord with the terms of this Ordinance, retaining walls and other structures which are necessary for slope stabilization may be constructed in the Steep Slope Zone in the manner approved by the Director.
- B) Provided the rebuilt or remodeled structure does not extend beyond the previous footprint within the Steep Slope Zone, the applicant can provide proof satisfactory to the Director of the location of the previous legal non-conforming structure, and the applicant has been issued a building permit within one year after the date on which the structure was damaged or demolished, legal non-conforming structures may be remodeled or rebuilt.
- C) The installation of mechanical or electrical lifts, bridges, walkways, steps, and/or fences which do not obstruct the flow of light and water, and utility service lines, in the manner approved by the Director and subject to conformance with the standards and policies of this Chapter. Stairs constructed in the Steep Slope Zone shall be no greater than five feet in width. Landings constructed in the Steep Slope Zone shall be no larger than five feet by ten feet. No fence shall be constructed across the channel of a ravine and, when constructed within a ravine, such fence shall be set back at least 10 feet from the bottom or toe of the ravine slope.
- D) Provided in the opinion of the Director an emergency situation exists and s/he has issued a permit to remedy the emergency situation, immediate action to remediate an unstable or insecure slope which poses an imminent menace to an authorized structure or to the health, safety, or welfare of the public or nearby property, provided further that the remedial action involves the least

possible disruption of the natural features of the site and as possible is in conformance with the standards and policies of this Chapter.

- E) Normal landscape maintenance or routine arboreal activities, including small scale planting of ornamental flowers or shrubs, and/or the removal of diseased, dead or damaged Trees, provided such activities shall be carried out in conformance with the standards of vegetation or revegetation contained in this Ordinance.
- F) Other accessory structures having a total ground cover area not exceeding 150 square feet may be permitted within the Steep Slope Zone.

Section VII. Required Plans - Review Required.

- A) Soil Type and Subsurface Material. Every application for a building permit within 100 feet of a Steep Slope shall be accompanied by a Soil Types and Subsurface Materials Investigation. This investigation shall include the following:
 1. A thorough subsurface investigation using techniques such as borings, test pits, in situ tests, laboratory tests or other procedures performed to a depth sufficient to determine foundation conditions for the proposed construction; and
 2. A description of the soil and subsurface materials found on the subject site to a depth extending below any proposed excavation as well as the engineering properties of the subsurface soil materials.

The Soil Type and Subsurface Material on the proposed development site, as detailed in the Soil Type and Subsurface Material Investigation, shall determine the necessity of further development plans and reports. Table 1 illustrates the maximum distance from the Steep Slope requiring the site-specific Means and Methods of Construction, Geotechnical Characteristics, Earth Moving, Hydrological Control and Vegetative Plans discussed in the following subsections B- F. When proposed development takes place within the parameters of Table 1, these plans shall be required for submission to and approval by the Director prior to issuance of any permit for construction, demolition, or earth moving with the Ravine Overlay District.

Table 1

Soil type & Subsurface Material	Maximum distance from the Steep Slope requiring the following plans and reports
Uncontrolled fill	100 ft.
Native (virgin) soils	50 ft.
Encountered structural fills	20 ft.

- B) Means and Methods of Construction. Because work to be performed in the Ravine Overlay District may have adverse impacts on Steep Slopes, all permit applications shall contain a written description of the proposed means and methods of accomplishing such work, which means and methods shall be carefully selected to minimize slope damage. Upon approval of the building

permit by the Director, such written description shall be the enforceable means and method of construction.

C) Geotechnical Characteristics.

1. Foundation. All proposed structures shall have foundations designed in a manner consistent with sound engineering and geological principles.
2. External Factors.
 - i. In the design of the stability of all proposed structures, consideration shall be given to the effect of undercutting at the base of Steep Slopes or bluffs caused by wave action, storm water flow, and erosion and/or channel changes.
 - ii. In addition, no part of any structure above the foundation thereof may extend more than one (1) foot into the Steep Slope Zone for each three (3) feet of height of such structure. Any such extension shall be unsupported by any structure or foundation located within the Steep Slope Zone.
3. Additional Report and Subsoil Investigation. The report shall be prepared by a licensed professional civil engineer or structural engineer, trained and experienced in the practice of geotechnical engineering, and shall include the following:
 - i. Stability. A description of the stability of surface patterns of water flow as well as indication of the presence or absence of permeable Zones in underlying soils and susceptibility of slope instability due to water table changes.
 - ii. External Influences. A description of any existing or anticipated problems from undercutting at the base of Steep Slopes caused by wave action, ravine flows, or channel changes.
 - iii. Absence of Special Hazards. An opinion that the soil types, soil stability, subsurface hydrology, and external influences affecting the site will not cause any significant hazards for the proposed use; or if they may cause such hazards, an opinion that such hazards can be overcome, together with a reasonably detailed description of how it is proposed to overcome them.

D) Earth Moving Plan. Each application for a building permit pursuant to this Ordinance shall be accompanied by an earth moving plan, which plan shall include the following:

1. A topographic survey, showing property contours at one foot intervals for tableland and five (5) foot intervals for Steep Slopes, including special notes and details of the existing terrain;

2. Proposed earth moving details, including the dimensions, elevations, and contours of any proposed earth moving and the placement of excavated materials;
 3. A description of the methods to be employed in disposing of soil and other material removed, including the location of the disposal site;
 4. A time-table of when each stage of the project will be completed, including the estimated starting and completion dates; and
 5. A provision requiring the placement of a temporary snow fence on the tableland at the top edge of Steep Slope Zone until construction is completed.
- E) Hydrological Control Plan. Construction documents shall include a plan for intercepting and containing drainage at the site and from the structure.
- F) Vegetation Plan. A vegetation plan, subject to the provisions of Section VIII of this Ordinance, prepared or approved in writing by a landscape professional trained and experienced in both the characteristics of plant material and proper procedures for installation, shall be submitted with each application for a building permit, which plan shall include the following:
1. An inventory describing the existing floral and Tree cover of the construction site, including identification of Undesirable Species and Protected Trees showing those areas where the vegetation will be removed as part of the proposed development;
 2. A description of proposed revegetation of disturbed areas, specifying the materials to be used;
 3. A written description detailing methods of slope stabilization and revegetation, together with the rationale for selecting the plant materials and planting techniques proposed to be used; and
 4. A maintenance guideline, instructing Steep Slope owners of necessary actions to be taken following construction and/or earth moving in order to maintain plantings in good and serviceable health.

Section VIII. Development Standards.

During construction and/or earth moving within the Ravine Overlay District, the permittee shall adhere to the following standards:

- A) Hydrological Controls.
1. Natural Channels. Natural drainage ways shall be preserved to the maximum extent possible.
 2. Controlled Run-Off. Concentrated run-off from impervious surfaces shall be conveyed to a municipal storm sewer system if available, or to the bottom of ravine or bluff slopes through grassed swales, infiltration trenches or other best management practices designed to infiltrate stormwater runoff and prevent erosion as deemed appropriate by the

Subsoil Investigation required by this Ordinance. If infiltration is not deemed appropriate, concentrated runoff from impervious surfaces shall be collected and transported in a pipe or other approved manner. Stormwater conveyance pipes shall generally be located above ground, but may be located below ground with the approval of the Director.

3. Interceptor Ditches. When sound professional engineering practice dictates and when required by the Director, interceptor ditches shall be established above Steep Slopes in order that soil shall not become saturated and the intercepted water shall be conveyed in a pipe or other approved manner to a municipal storm sewer system, if available, or to the bottom of ravine or bluff slopes in a manner designed to prevent erosion.
4. Discharge Point Stabilization in Steep Slopes. Natural drainage ways shall be stabilized by landscape integration, rip-rap, rolled erosion control products or other means consistent with sound professional engineering practice, to a distance below drainage and culvert discharge points sufficient to convey the discharge without channel erosion and in such a manner as to dissipate the energy of the discharge.
5. Early Completion. The overall drainage system shall be completed and made operational at the earliest possible time during construction.
6. Impact on Adjacent Property. The natural or usual flow of surface or subsurface water shall not be altered or obstructed in any way by grade changes that may adversely affect the property of another by either contributing to pooling or collection of waters or to the concentration or intensification of surface water discharge. However, construction which might otherwise be prohibited hereinabove may be allowed if such waters are properly drained by a pipe or other approved manner to a municipal storm sewer system, if available, or to the bottom of ravine or bluff slopes.

B) Vegetation and Revegetation.

1. Natural Vegetation. Every effort shall be made to maintain natural vegetation on the Steep Slopes.
2. Smallest Area. At all times, the smallest practical area of raw soil shall be exposed for as short a duration of time as practical. When sound professional engineering practice dictates and when required by the Director, temporary vegetation, or other acceptable cover shall be used to protect areas of raw soil exposed during development and to prevent airborne or waterborne transportation of soil.
3. Revegetation. A mix planting of perennial and woody species (preferably native species with adequate deep root systems) shall be used to landscape Steep Slope areas disturbed by construction, demolition, and/or earth moving.

C) Tree protection.

1. General. It shall be unlawful to remove any Protected Tree from the Steep Slope Zone within the Ravine Overlay District without the approval of the Director.
2. Protection measures. The Critical Root Zone (CRZ) of Protected Trees is one foot outside the general leaf canopy and shall be protected from damage during all construction operations. No construction activities, including the placement of topsoil, shall be permitted within the CRZ. In addition, all roadways, parking areas, and storage areas shall be located outside any CRZ.
3. Duration of protection. All required protection measures including construction fencing or approved equivalent shall be installed prior to the commencement of any site development activity and shall remain in place and in working, functional order until all site development activities have ceased or the surrounding area has been stabilized.

D) Earth Moving.

1. Minimum Alterations. Earth moving shall be limited to the minimum required for building foundations, driveways, drainage control structures, and immediate yard areas. With the exception of conservation or restoration efforts, substantial earth moving shall not be permitted and is prohibited.
2. Erosion Control. All earth moving shall be accomplished in a manner which will create the lowest possible potential for airborne or waterborne transportation of soil.
3. Soil Fill on Steep Sloped Land. All fill on Steep Sloped land is prohibited, other than back-fill which is determined by the Director to be necessary for slope stabilization.
4. Soil Fill on Tableland. Foundations for earthfill shall be stripped to remove vegetation and other unsuitable materials. In conformance with generally accepted engineering standards, all fill on tableland shall be stabilized to at least ninety (95) percent of maximum density as determined in ASTM procedure D-1557 or equivalent.
5. Excavated Materials. Surplus or unsuitable excavated materials shall not be placed within 20 feet of the Steep Slope Zone.
6. Prompt Completion. All earth moving shall be accomplished in the shortest practical period of time. All excavated material shall be removed from the Steep Slope Zone and no temporary or permanent material storage shall be permitted within the Zone. No existing natural vegetation shall be destroyed, removed or disturbed prior to the initiation of construction, demolition, or earth moving activities.

Section IX. Permits

Each application for a building permit (which includes demolition and earth moving) shall be made in compliance with the Building Code, the Zoning Ordinance, and this Ordinance. The seal of an Illinois licensed professional civil or structural engineer shall appear on all plans and specifications pursuant to which any building permit is issued for construction within the Ravine Overlay District. In addition, the following provisions shall be imprinted upon any building permit issued for any construction, demolition, or any earth moving activities authorized by the administration of this Ordinance:

- A) Limited Obligation. Compliance with the procedures of this Ordinance and the issuance of any related permits shall not be construed to impose any legal or moral obligation upon the Jurisdiction or its elected or appointed officials.
- B) Civil Claims. Compliance with the procedures of this Ordinance and the issuance of related permits shall not relieve the permittee and the property owner from civil liability claims by other property owners.
- C) Endorsement. Compliance with the procedures of this Ordinance and the issuance of related permits do not imply approval of the need for or the benefit or efficacy of the proposed construction; nor does it constitute any assertion that the proposed construction will not result in damage to the property in question or to adjoining property.

Section X. Appeals

- A) Any interpretation of this Ordinance by the Director may be appealed to the appropriate entity. The appropriate entity shall consider each appeal application at a public meeting within thirty (30) days of the director receiving the application. Within thirty (30) days after the public meeting, the appropriate entity shall uphold, modify or overrule the decision of the director.
- B) Upon formulation of the Ravine Overlay District, Jurisdiction, consulted with experts and considered information from federal, state, and local agencies; engineers; consultants; and other stakeholders. Appeals are subject to external and extensive internal review to help ensure that decisions are based on the best available data and conform to contemporary scientific principles.

Section XI. Enforcement and Penalties

- A) The Jurisdiction is authorized and empowered to enforce the requirements of this Ordinance in accordance with the procedures of this section.
- B) If, upon inspection or investigation, the Director or his/her designee is of the opinion that any person or entity has violated any provision of this Ordinance, he/she shall with reasonable promptness issue a correction notice to the person. Each such notice shall be in writing and shall describe the nature of the violation, including a reference to the provision within this Ordinance, which has been violated. In addition, the notice shall set a reasonable time for the abatement and correction of the violation.

- C) If it is determined that the violation(s) continue after the time fixed for abatement and correction has expired, the Director shall issue a citation by certified mail to the person or entity who is in violation. Each such notice shall be in writing and shall describe the nature of the violation, including a reference to the provision within this Ordinance which has been violated, and what penalty, if any, is proposed to be assessed. The person or entity charged has thirty (30) days within which to contest the citation or proposed assessment of penalty and to file a request for a hearing with the director or his designee. At the conclusion of this hearing, the Director or his/her designee will issue a final order, subject to appeal to the Circuit Court of Peoria County. If, within thirty (30) days from the receipt of the citation issued by the Director, the person or entity fails to contest the citation or proposed assessment of penalty, the citation or proposed assessment of penalty shall be deemed the final order of the Director.
- D) Any person or entity that violates any provision of this Ordinance may be liable for any cost or expenses incurred as a result thereof.
- E) Penalties, which may be assessed for those deemed to be in violation, may include:
1. A civil penalty not to exceed one-thousand dollars (\$1,000.00) for each violation with each day's continuance considered a separate violation;
 2. A criminal penalty in the form of a fine of not more than one thousand dollars (\$1,000.00) for each violation or imprisonment for not more than ninety (90) days, or both. Every day that such violation(s) shall continue will be considered a separate violation;
 3. Anyone who knowingly makes any false statements in any application, record, plat, or plan required by this Ordinance shall upon conviction be punished by a fine of not more than one thousand dollars (\$1,000.00) for each violation or imprisonment for not more than thirty (30) days, or both.

Section XII Corrective Measures.

In addition to the monetary penalties provided for herein, the City may apply to a court of competent jurisdiction for an order upon the parties responsible to re-establish or restore the grade, slope, stability, vegetation, and/or drainage systems of a Steep Slope property in order to eliminate and/or prevent an adverse impact upon any adjacent or subservient property, and for such other and further relief as may be appropriate in the circumstances.

Section XIII. Conflict with other regulation

Where the standards and management requirements of this Ordinance are in conflict with other laws, regulations, and policies regarding streams, steep slopes, erodible soils, wetlands, floodways, timber harvesting, land disturbance activities or other environmental protective measures, the more restrictive shall apply.