

## **Part 4**

### **Section §75-26.3 Constrained Lands**

#### **TOWN REVIEW COPY**

**The following pages include proposed new section §75-26.3 of the zoning code.**

#### **The purpose of these proposed edits is:**

- To develop basic regulatory control for development which encroaches or is adjacent to typical constrained or sensitive land areas such as steep slopes, wetlands, waterways and karst geology.

Note: All text shown is proposed new, unless otherwise noted.

### §75-26.3 – Constrained Lands

**A. Intent.** The Town of Rosendale contains many geologic and natural features which are sensitive to disturbance through continued development. These areas include steep slopes, rivers, streams, lakes, wetlands and sensitive natural habitats. The method by which these areas, and their immediate vicinity, are developed is of great importance to the future well being and prosperity of the town. The purpose of this section is to identify these natural features, provide for their proper management and create reasonable protections from development while permitting continued growth.

**B. Applicability.**

- (1) The provisions of this section apply to projects seeking site plan or subdivision approval within the Town of Rosendale which is proposed in the vicinity of any of the following geologic or natural features:
  - (a) Terrain slopes in excess of 10%;
  - (b) Rivers, streams or creeks;
  - (c) Lakes or ponds;
  - (d) Wetlands;
  - (e) Carbonate Rock Areas.
- (2) The provisions of this section may also apply to applicants seeking building permits where the Code Enforcement Officer has determined that the proposed site disturbance warrants referral for further review by the Planning Board, as per the criteria listed in §27-4(L). Such referrals shall only be reviewed in the context of determining impacts to constrained lands, design changes or mitigations to protect them under the intent of this section. The Planning Board shall provide the Code Enforcement Officer with a written report detailing any recommended or required design changes or mitigations within the scope of this section as deemed appropriate within no more than 60 days of the date of referral. Failure to respond within 60 days shall constitute approval with no required changes. The referral review time may be extended by no more than an additional 60 days, with approval of the Code Enforcement Officer, to complete additional site investigation if necessary.

**C. Definitions.** For the purposes of this section, the following definitions shall apply:

**CARBONATE ROCK AREA** - Those land areas identified on the Rosendale Natural Resources Inventory as being “Areas of Moderate Karst Potential” and “Areas of High Karst Potential” for likelihood of being underlain by carbonate rock formations.

**CARBONATE ROCK** - Rock consisting chiefly of calcium and magnesium carbonates.

**DISSOLUTION** - A space or cavity in or between rocks, formed by the solution of part of the rock material.

**FAULT** - A surface or zone of rock fracture along which there has been noticeable differential movement.

**FISSURE** - An extensive crack, break or fracture in the rock.

**INTERMITTANT STREAM** - A river, stream, brook, or creek in which there is not a permanent flow of water. For the purposes of this Chapter, an intermittent stream is one in which water flows for at least 3 (three) consecutive months in a 12 (twelve) month period.

**KARST** - A type of topography that is formed over limestone or dolomite by dissolving or solution of the carbonate rocks, characterized by sinkholes, closed depressions, caves, solution channels, internal drainage and irregular bedrock surfaces.

**LAND DISTURBANCE** — Site preparation, consisting of the removal of vegetation and/or the excavation, filling, grading or removal of earth, soil or rock, or retaining structures.

**LIMESTONE** - A carbonate sedimentary rock consisting chiefly of calcium carbonate. Limestone is commonly used as a general term for that class of rocks which consists of at least 80% calcium or magnesium carbonate.

**OVERBURDEN** - The unconsolidated material, for example soil, sand or gravel, that is located between the ground surface and the uppermost bedrock surface.

**PERENNIAL STREAM** - A river, stream, brook, or creek that flows continuously throughout the year in most years.

**SINKHOLE** - A localized land subsidence, generally a funnel-shaped or steep-sided depression, caused by the dissolution of underlying carbonate rocks or the subsidence of the land surface into a subterranean passage, cavity or cave. Sinkholes are formed by the underground removal of soil and rock material.

**D. Steep slopes.**

(1) Findings.

- (a) Steep slopes are environmentally sensitive landforms requiring appropriate management to ensure the stability of slopes and soils, the protection of surface waters and groundwater, and the prevention of hazards and property damage caused by alteration of drainage patterns, excessive storm-water flows, and landslides and soil slumping. The environmental sensitivity of steep slopes is affected not only by steepness but also by shallow depth to bedrock, the erosion potential of soils, subsurface hydrology, drainage patterns, and proximity to surface water bodies, among other factors. Development on steep slopes often necessitates significantly more clearing and grading than on more gently sloping land, further increasing the environmental impacts as well as the costs of construction and remediation.
- (b) Protection of steep slopes would benefit the Town of Rosendale by helping to ensure the public health, safety, and welfare of residents as well as the protection of property and important natural resources.
- (c) The Town has the authority to protect steep slopes pursuant to the police power vested in and granted to the Town of Rosendale under the Municipal Home Rule Law which recognizes the right of local governments to protect the general health, safety and well-being of persons and property therein.

(2) Intent. This section is intended to:

- (a) Preserve the quality of the natural environment from the adverse effects of site preparation, construction, and development on steep slopes. These adverse effects can include:
  - [1] Pollution of lakes, ponds and watercourses from silt or other materials.
  - [2] Unnecessary destruction of trees and other vegetation important for slope stability and prevention of storm-water run-off.
  - [3] Excessive exposure of soil to erosion.
  - [4] The destruction of physically sensitive landscapes and habitats.
  - [5] Unnecessary modification of natural topography or unique geological features.

- (b) Protect people and properties from adverse effects of site preparation, construction, and development on steep slopes, such as:
  - [1] Increased runoff, erosion and sedimentation.
  - [2] Increased threat to life and property from storm-water flows and flooding.
  - [3] Increased slope instability and hazards from landslides and slumping.
  - [4] Modifications of the groundwater regime that adversely affect wells and water levels.
- (c) Protect the Town of Rosendale from having to undertake, at public expense, programs involving storm-water management, repairing of roads, and other mitigation measures arising from the adverse effects of site preparation, construction, and development on steep slopes.
- (3) Definitions. For the purposes of this section, Steep slopes shall be defined as land having a topographic gradient equal to or greater than 10%, as follows:
  - (a) CLASS I SLOPES: Areas of terrain equal to or greater than 1,500 square feet in size which have a topographical gradient equal to or greater than 10% but less than 15%, measured by utilizing two-foot contours.
  - (b) CLASS II SLOPES: Areas of terrain equal to or greater than 1,500 square feet in size which have a topographical gradient greater than 15% but less than 25%, measured by utilizing two-foot contours.
  - (c) CLASS III SLOPES: Areas of terrain equal to or greater than 1,500 square feet in size which have a topographical gradient equal to or greater than 25%, measured by utilizing two-foot contours.
  - (d) STEEP TERRAIN WETLAND/WATERCOURSE TRANSITION AREAS: Consist of all steep terrain located within 50 feet of a watercourse, controlled wetland or lands that are regulated by the State of New York pursuant to the Freshwater Wetlands Act (Article 24 of the New York Environmental Conservation Law).
- (4) Criteria for use, protection and management.
  - (a) During any pre-application review or site plan review meetings with the Planning Board, the presence and location of any steep slope areas defined above shall be identified on the proposed development plans. The Planning Board shall then direct the applicant to adjust or modify any proposed disturbances on site as follows:
    - [1] On Class I slopes, land disturbance shall be limited to areas clearly needed for building development and site improvements where such elements cannot be reasonably located elsewhere.
    - [2] On Class II slopes, land disturbance shall be limited, to the maximum extent practicable, to only those areas clearly needed for the following:
      - (i) Streets and site access roads shown on an approved plat and proposed for acceptance by the Town of Rosendale.
      - (ii) Open development area private rights-of-way or easements of access shown on an approved plat.
      - (iii) A motor-vehicle driveway from the permitted buildable area to the street-line boundary of the lot.
      - (iv) Footpaths, recreational trails, essential utility corridors and similar low-impact development.
    - [3] On Class III slopes and within steep terrain wetland/watercourse transition areas, land disturbance shall be limited, to the maximum extent practicable, to only those areas clearly needed for footpaths, trails, essential utility corridors and similar low-impact development.

Additional land disturbance on Class III slopes and within steep terrain wetland/watercourse transition areas, may be authorized with Planning Board approval to enable access to or within a tract or upon an existing lot when no practical alternative for access is available and without such access substantially all reasonable use of the tract or lot would be precluded.

(5) Additional Provisions

- (a) On Class II and III slopes, additional land disturbance may occur in connection with lawful temporary soil mining or timber harvesting operations conducted in a manner to avoid the adverse effects of land disturbance on such slopes and providing for appropriate site restoration.
- (b) Activities, uses and construction which involve land disturbance on Class II and III slopes and within steep terrain wetland/watercourse transition areas shall be referred to the Rosendale Environmental Commission for review and advice with regard to the effects of the land disturbance, alternatives for development and mitigation measures consistent with the purpose of this chapter.
- (c) Land disturbance on steep terrain within the 100-year flood zone is subject to permit under §75-27.
- (d) Revegetation required. Any slope disturbed or created as a result of new development on Class I, II or III slope areas shall be revegetated or landscaped with noninvasive species as soon as possible after land disturbance occurs, and such landscaping shall be properly maintained to prevent erosion and periodically inspected by the Code Enforcement Officer for compliance.

(6) Waivers.

- (a) The Planning Board may authorize development on slopes which would not otherwise be permitted under the following conditions:
  - [1] The proposed development is integrated into the natural slope of the terrain in such a way as to have a minimal disturbance to the immediate area with little or no regrading or clearing required; and,
  - [2] The boundaries of the proposed site disturbance during and after construction are agreed upon prior to approval of the site development plan. Such boundaries shall be fenced off with construction fencing prior to the start of any clearing or construction activity and shall be inspected periodically by the Code Enforcement Officer for compliance; and,
  - [3] The applicant shall include a full Storm Water Pollution Prevention Plan (SWPPP) (parts I and II) in keeping with the New York State Stormwater Management and Design Manual and the New York Standards and Specifications for Erosion and Sediment Control, as approved by the Planning Board, to mitigate negative impacts from the proposed disturbance; and,
  - [4] The Planning Board shall make a Findings Statement outlining the specific reasons the disturbance is permitted, the alternative site layouts which were considered and the reasons they were not pursued.

**E. Watercourses, Water bodies and Wetlands.**

(1) Findings.

- (a) The surface water resources of Rosendale contribute greatly to the well-being and quality of life of residents while also benefiting local businesses and the economy, agriculture, and property values. Maintaining the quality of wetlands, watercourses, and water bodies is critical to ensuring adequate water supplies for domestic, municipal, agricultural and commercial uses now and in the future; to support of fish and wildlife and maintenance of biodiversity; to recreational enjoyment; and to the continued provision of numerous ecological services. These services include:
  - [1] controlling flooding and storm-water runoff by storing and/or regulating natural flows;
  - [2] recharging groundwater and aquifers and serving as actual or potential sources of water supply;

- [3] providing important breeding, nesting, feeding, cover, and seasonal and year-round habitat for diverse fish and other wildlife species;
  - [4] providing areas of comparatively high plant productivity which support wildlife diversity and abundance;
  - [5] in the case of wetlands, serving as nutrient traps for nitrogen and phosphorus, and filters for surface water pollutants;
  - [6] Preserving the quality and value of water-related recreational activities.
- (b) Maintaining the full function and benefits of wetlands, watercourses, and water bodies is closely linked to the presence of intact natural buffers directly adjacent to them. These buffers provide critical services, including:
- [1] controlling flooding by slowing overland runoff and absorbing and storing substantial amounts of sheet flow, thereby assisting wetlands and watercourses in controlling flooding and gradually releasing flood flows to lower watersheds;
  - [2] providing the first line of defense in the protection of water bodies and watercourses against the adverse impacts of stormwater-borne pollutants;
  - [3] protecting stream-channel and stream-bank stability, thereby controlling and reducing erosion, flooding, and related property damage and risks to safety and welfare;
  - [4] serving as important and often critical travel corridors and wetland-to-upland transitional habitats for many wetland/watercourse dependent species;
  - [5] providing unique and ecologically significant habitat, such as floodplain forests;
  - [6] providing a practical and cost-effective means of protecting wetlands and watercourses and controlling or preventing pollution.
- (c) Non-point source pollution is the primary cause of water quality problems in more than 90 percent of New York State's impaired water bodies and watercourses. Local legislation to avoid the destructive impacts of non-point source pollution, by protecting watercourses, wetlands, and water bodies and adjacent buffers, is warranted to reduce the damage from water-polluting and degrading activities.
- (d) The Town has the authority to conserve and protect surface waters and adjacent buffers pursuant to the police power vested in and granted to the Town of Rosendale under the Municipal Home Rule Law which recognizes the right of local governments to protect the general health, safety and well-being of persons and property therein.
- (2) Intent. It is the intent of this section to protect the health, safety and well-being of the citizens of the Town of Rosendale and of property therein by preventing the contamination or destruction of water bodies, watercourses, wetlands and their immediate buffers, and by preserving their ecological, water quality, and recreational values. These provisions are intended to conserve and protect areas that are not currently regulated under state and federal programs, to provide additional protections to areas currently regulated by state and federal programs, and to avoid the loss or impairment of the natural functions and values of water bodies, watercourses and wetlands.
- (3) Definitions. For the purposes of this section, terminology shall be defined as follows;
- (a) **WATER BODY:** Any lake or pond within the Town of Rosendale which has an area of one acre or more.
  - (b) **WATERCOURSE:** Any river, stream, brook, or creek in the Town of Rosendale, both intermittent and perennial.

- (c) WETLAND: All areas greater than 1/10 of an acre that contain hydric soils and are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation.
  - (d) BUFFER AREA - The land area adjacent to a water resource that serves to lessen the impact of human disturbance and serves as an integral component of the water resource ecosystem.
- (4) Criteria for use, protection and management.
- (a) Applications and sketch plans proposing a site disturbance within 125 feet of a wetland, watercourse, or water body shall be submitted within 10 days of receipt to the Rosendale Environmental Commission for review. The Planning Board shall take no action until the Commission has submitted its comments or a period of 45 days from the date of referral has expired.
  - (b) Wetland areas governed by this section and found within 125 feet of proposed site disturbance shall be delineated and mapped on all site development plans.
  - (c) At the earliest meeting with the Planning Board in the site plan and subdivision review process, the presence and location of any watercourse, water body or wetland as defined above shall be identified on the proposed development plans. The most up-to-date maps of the Town of Rosendale Environmental Commission, NYS Department of Environmental Conservation and National Wetlands Inventory maps shall be consulted in determining the possible presence of surface waters on the property.
  - (d) The Planning Board, with referral and comment from the Environmental Commission, may require changes to the proposed site layout and mitigations as necessary to protect surface waters and adjacent buffer areas, as follows:
    - [1] Adjacent to any watercourses, water bodies or wetlands on the property, any proposed site disturbances should, where possible, be located at least 100 feet from the edge of the water in order to preserve a vegetated buffer area between the proposed disturbance and the water and to prevent or minimize new impervious surface within the buffer area.
    - [2] A naturally vegetated buffer of 25 feet shall be maintained and site disturbances shall be limited to the following:
      - (i) Flood control structures, bank stabilization, stream restoration, and erosion and sedimentation control projects,
      - (ii) Footpaths,
      - (iii) Utility Rights of Way,
      - (iv) Road crossings,
      - (v) Removal of dead or dying trees that present a danger to people or property, and removal of diseased trees if the disease can spread to other trees in the immediate area,
      - (vi) Fallen or undermined trees that represent a direct threat to human life or are blocking stream channels,
      - (vii) Removal or pruning of invasive species,
      - (viii) Fishing, boating, and swimming access sites,
      - (ix) Removal of structures and other activities and uses that benefit the stream corridor.
    - [3] Within 26 to 50 feet of a wetland, water body, or watercourse, the following site disturbances are permitted in addition to those listed in E(4)(d)[2] above:
      - (i) Landscaping (preferably trees, shrubs, and groundcover),

- (ii) Sheds and gazebos no larger than 120 square feet.
- [4] The proposed site development layout and its associated disturbance should be planned for the site so as to avoid or minimize encroachment near the water, as deemed most practicable by the Planning Board.
- [5] Where proposed site disturbances are located greater than 50 feet and 100 feet or less from the water, and cannot reasonably be arranged elsewhere, the Planning Board shall direct the applicant to provide site design mitigations as deemed necessary to protect the water from potential contamination. In addition, the boundaries of areas of site disturbance shall be fenced off with construction fencing prior to and during site preparation and construction.
- [6] Proposed land disturbance adjacent to any wetland equal to or greater than 12.4 acres in size may be required to conform to the NYS Department of Environmental Conservation requirements regarding state regulated wetland areas pursuant to the Freshwater Wetlands Act (Article 24 of the New York Environmental Conservation Law).
- (e) Site Design Mitigations. Where proposed site disturbances cannot reasonably be located beyond 100 feet of the water, the Planning Board may require one or more site design mitigations, including but not limited to the following:
  - [1] The use of pervious surfaces such as pervious concrete, pervious asphalt, pervious pavers, gravel or brick for walkways, driveways and parking areas. Any impervious surface(s), including rooftops, shall be drained using storm-water mitigation techniques.
  - [2] Berms or swales to prevent stormwater migration to water resources;
  - [3] Limited clearing, grading or site disturbance to minimum extents practicable;
  - [4] Planting of new non-invasive and preferably native vegetation in disturbed areas;
  - [5] Rooftop runoff control and mitigation;
  - [6] The use of raingardens, open vegetative channels or other localized bioretention areas for redirection and containment of stormwater runoff;
  - [7] Limiting the use or size of impervious ground surfaces;
  - [8] Reduction of building footprint/roof areas;
  - [9] Enhanced runoff control, temporary erosion and sediment controls during construction;
  - [10] On-site construction & mitigation monitoring;
  - [11] Mitigation fees.
- (f) Additional provisions.
  - [1] The Planning Board shall consider watercourses, water bodies and wetlands located on adjacent properties and downhill from the proposed site disturbance when considering appropriate site design arrangements or mitigations.
  - [2] When determining appropriate site design arrangements or mitigations, the Planning Board shall consider impacts on connected wetlands, waterways and water bodies, the slope of the terrain and the potential for the proposed use or its construction to contaminate the water.
  - [3] Design mitigations should be selected by the Planning Board with the goal to reduce or eliminate any soil erosion, stormwater runoff or other contaminants from entering the water resource which could be introduced as a result of the proposed construction disturbance and use activities.

- [4] Where crossing of a water resource is necessary, such crossing shall be designed and constructed so as to minimize disturbance to the water and associated riparian buffer to the maximum extent practicable.
  - [5] In areas where no significant natural vegetation is present between the proposed disturbance and the water, and the extents of the site disturbance are within 100 feet of the water, the Planning Board may require new native vegetation to be planted within the setback as directed to provide adequate protection.
  - [6] The Planning Board shall consider whether the proposed site disturbance is within the 100-year floodplain and whether the buffer should be extended as close as possible to the floodplain boundary.
  - [7] The Code Enforcement Officer shall periodically inspect all construction progress for compliance with the Planning Board design requirements and mitigations.
- (5) Measurement and Delineation. The boundary edges of any watercourse, water body or wetland covered by this section adjacent to proposed land disturbance shall be shown on a survey or site plan of the property prepared by a licensed land surveyor, landscape architect or professional engineer.
- (a) The edge of a watercourse or water body is defined by the mean high water mark, which should be determined by (1) available hydrologic data concerning water levels, including discharge, storage, and other recurrent water elevation data; (2) vegetative characteristics, such as location, presence, absence or destruction of terrestrial or aquatic vegetation; (3) physical characteristics, such as clear natural line impressed on a bank, scouring, shelving, or the presence of sediments, litter or debris; and (4) other appropriate means that consider the characteristics of the surrounding area.
  - (b) The edge of a wetland shall be determined by field investigation and delineation by a qualified wetland delineator. Such delineation shall be based upon standards and methodology at least as protective as specified in ECL Article 24 Freshwater Wetlands Act, and “Freshwater Wetlands Mapping and Classification” regulations which appear as 6 NYCRR Part 664 for NYSDEC.
    - [1] The boundaries of a wetland may be established by an existing jurisdictional and/or boundary determination issued by the USACE or NYSDEC. Such delineation shall be valid for a period not to exceed 8 (eight) years from the date of the delineation.
  - (c) All boundary determinations, whether by the USACE or NYSDEC, or by a qualified wetland delineator shall be subject to review by the Planning Board, who may consult with biologists, hydrologists, soil scientists, ecologists, botanists or such other experts as are necessary to confirm that the boundary determination complies with the requirements of this section. The reasonable and necessary costs of such consultations, including the preparation of an additional survey, shall be the responsibility of the applicant.
- (6) Waivers
- (a) The Planning Board may authorize development adjacent to watercourses, water bodies or wetlands which would not otherwise be permitted, under the following conditions:
    - [1] The proposed development cannot reasonably be located elsewhere on the site for its intended purpose; and,
    - [2] The boundaries of the proposed site disturbance during and after construction are agreed upon prior to approval of the site development plan. Such boundaries shall be fenced off with construction fencing prior to the start of any clearing or construction activity and shall be inspected periodically by the Code Enforcement Officer for compliance; and,
    - [3] The applicant shall include a full Storm Water Pollution Prevention Plan (SWPPP) (parts I and II) in keeping with the New York State Stormwater Management and Design Manual and the

New York Standards and Specifications for Erosion and Sediment Control, as approved by the Planning Board, to mitigate negative impacts from the proposed disturbance; and,

- [4] The Planning Board shall make a Findings Statement outlining the specific reasons the disturbance is permitted, the alternative site layouts which were considered and the reasons they were not pursued.

**F. Carbonate Rock Areas**

[SUBSECTION RESERVED FOR FURTHER REVIEW]

DRAFT