

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2007

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HOUSE DRH30419-RI-3 (12/20)

Short Title: Safe Artificial Slope Construction Act. (Public)

Sponsors: Representatives Rapp, Haire, and Fisher (Primary Sponsors).

Referred to:

A BILL TO BE ENTITLED

AN ACT TO (1) REQUIRE LOCAL GOVERNMENTS TO ADOPT ORDINANCES TO REGULATE SITE PLANNING, DESIGN, AND CONSTRUCTION OF ARTIFICIAL SLOPES IN MOUNTAINOUS AREAS TO PROMOTE SAFE AND STABLE SLOPES FOR DEVELOPMENT AND TO REDUCE THE LIKELIHOOD OF SLOPE FAILURES ON DEVELOPED OR DISTURBED LAND, IN ORDER TO PROTECT HUMAN SAFETY AND PROPERTY; (2) DIRECT THE SEDIMENTATION CONTROL COMMISSION TO ASSIST LOCAL GOVERNMENTS IN DEVELOPMENT AND IMPLEMENTATION OF SAFE SLOPE CONSTRUCTION PROGRAMS; AND (3) PROVIDE FOR DISCLOSURE OF LANDSLIDE HAZARDS TO PURCHASERS OF PROPERTIES LOCATED IN AREAS VULNERABLE TO LANDSLIDES AS INDICATED ON MAPS PREPARED BY THE NORTH CAROLINA GEOLOGICAL SURVEY.

The General Assembly of North Carolina enacts:

SECTION 1. Chapter 113A of the General Statutes is amended by adding a new Article to read as follows:

"Article 19.

"Safe Artificial Slope Construction.

"§ 113A-261. Short title.

This act shall be known as the Safe Artificial Slope Construction Act of 2007.

"§ 113A-262. Definitions.

Except with respect to the term 'land-disturbing activity,' the definitions set forth in G.S. 113A-52 apply to this Article. In addition, the following definitions apply to this Article:

- (1) 'Affected area' means an area located on a mountain face or steep hillside that (i) has a slope of twenty-five percent (25%) or greater, or

- 1 (ii) is designated with a slide hazard ranking of 'moderate' or 'high' on
2 a Stability Index Map prepared by the North Carolina Geological
3 Survey.
- 4 (2) 'Artificial slope construction' means any land-disturbing activity that
5 creates or changes any slope, or attempts to do so.
- 6 (3) 'Bench' means a relatively long, narrow linear step or break that is
7 excavated or built into consolidated earth material of a slope that
8 generally runs with the contour.
- 9 (4) 'Construction' means any land-disturbing activity, and includes
10 reconstruction, repair, stabilization, alteration, or expansion.
- 11 (5) 'Critical slope' means any cut slope, fill slope, or retaining wall where
12 failure due to mass instability would be a hazard to human safety,
13 property, natural watercourses, or use of a public road.
- 14 (6) 'Cut slope' means any area of ground that is (i) subject to a
15 land-disturbing activity that forms an artificial incline, expressed as the
16 ratio of horizontal to vertical projection; and (ii) where earth material
17 is to be or has been removed by excavation or other methods, and that
18 exposes lower horizons of earth material in situ, and where any face of
19 the excavated area lies in repose at any angle other than a horizontal
20 plane.
- 21 (7) 'Earth material' means any rock, natural soil, fill, or combination
22 thereof.
- 23 (8) 'Excavation' means a land-disturbing activity that is the mechanical
24 removal of earth material.
- 25 (9) 'Factor of safety' means a dimensionless number computed using the
26 infinite slope equation that represents the ratio of the stabilizing forces
27 that resist slope movement to destabilizing forces that drive slope
28 movement. A factor of safety greater than one indicates a stable slope,
29 a factor of safety less than one indicates an unstable slope, and a factor
30 of safety equal to one indicates the marginally stable situation where
31 the resisting forces and the driving forces are in balance.
- 32 (10) 'Fill slope' means any area of ground (i) that is subject to a
33 land-disturbing activity that forms an artificial incline; or (ii) where
34 soil is to be or has been placed by excavation or other methods, and
35 where any face of the excavated area lies in repose at any angle other
36 than a horizontal plane.
- 37 (11) 'Land-disturbing activity' means any use of the land by any person in
38 residential, industrial, educational, institutional, or commercial
39 development, and highway and road construction and maintenance that
40 results in a change in topography of the land.
- 41 (12) 'Natural watercourse' means any lake, stream, river, brook, wetland,
42 sound, bay, creek, run, branch, canal, waterway, estuary, and any
43 reservoir, lake or pond, natural or impounded.

1 (13) 'Slope' means an inclined ground or earth material surface, the
2 inclination of which is expressed as a ratio of horizontal distance to
3 vertical distance.

4 (14) 'Terrace' means a relatively long, narrow linear step or break that is
5 excavated or built into unconsolidated earth material of a slope, which
6 generally runs with the contour, that is built to control runoff, reduce
7 erosion, and provide for maintenance of the slope.

8 **"§ 113A-263. Legislative findings.**

9 Improper development on steep slopes poses a threat to human safety and property.
10 Economic pressures, unknown site conditions, inadequate or inappropriate design, and
11 inexperienced persons conducting land-disturbing activity can affect the quality, safety,
12 and stability of development on steep slopes. It is the intent of this Article to implement
13 reasonable, effective control standards for artificial slope construction and to improve
14 construction and development practices that will result in higher levels of safety and
15 stability on developed land, and to decrease the potential for damage to human health,
16 property, and natural resources. This Article provides for a cooperative program of
17 artificial slope safe construction to be administered by local governments consistent
18 with minimum statewide management requirements established by the Sedimentation
19 Control Commission. If a local government required to do so fails to adopt an artificial
20 slope safe construction ordinance or does not adequately carry out its responsibility to
21 enforce its approved program, the Commission shall administer and enforce the
22 minimum statewide requirements.

23 **"§ 113A-264. Applicability of this Article.**

24 This Article applies to artificial slope construction in any affected area as defined in
25 G.S. 113A-262. This Article shall not apply to artificial slope construction activities
26 conducted in connection with the following:

27 (1) Graves for the burial of human remains.

28 (2) Local government operation of a landfill.

29 (3) Excavations for wells or tunnels.

30 (4) Exploratory excavations not requiring a building permit that are less
31 than one-half acre of disturbed area conducted under the direction of a
32 professional engineer licensed under Chapter 89C of the General
33 Statutes or other professional approved by the agency having
34 jurisdiction.

35 (5) Natural slope failures, including, but not limited to, landslides.

36 (6) Underground storage tanks exempt from regulation under the
37 Occupational Safety and Health Act.

38 (7) Ditches exempt from regulation under the Occupational Safety and
39 Health Act.

40 (8) Artificial slope construction for below grade portions of a residential
41 or commercial structure for which an unexpired building permit has
42 been issued if the construction complies with all applicable local,
43 State, and federal regulations, including, but not limited to, the North
44 Carolina State Building Code.

1 (9) Activities set forth in G.S. 113A-52.01, except that this Article applies
2 to land-disturbing activity for the construction of roads for any
3 purpose, including roads for the harvesting of timber or timber
4 products.

5 **"§ 113A-265. Duties of the Sedimentation Control Commission.**

6 (a) The Commission shall identify the jurisdictions that are required to adopt
7 ordinances pursuant to this Article by showing them on a map or drawing, describing
8 them in a document, or any combination thereof. These maps, drawings, or documents
9 shall identify the affected areas within the jurisdiction. The Commission shall file this
10 information with the governing body of each identified jurisdiction. Determinations by
11 the Commission of slopes under this section shall be conclusive in the absence of fraud.

12 (b) The Commission shall provide assistance to local governments in the
13 development of safe artificial slope construction programs that comply with this Article.
14 Local government programs shall include an implementing local ordinance and shall
15 provide for inspection and enforcement procedures. As part of its assistance to local
16 governments, the Commission shall approve and make available a model safe artificial
17 slope construction ordinance. The model ordinance adopted by the Commission shall, at
18 a minimum, include the requirements set forth in G.S. 113A-267, 113A-268, and
19 113A-269.

20 (c) The Commission shall review each ordinance that regulates the construction
21 of artificial slopes in affected areas submitted by a local government pursuant to
22 G.S. 113A-266 and within 90 calendar days of receipt thereof shall notify the local
23 government submitting the ordinance that the ordinance has been approved, approved
24 with modifications, or disapproved. The Commission shall approve an ordinance only if
25 it determines that the requirements of the ordinance meet or exceed the requirements of
26 this Article.

27 (d) The Commission shall assume responsibility for safe artificial slope
28 construction programs in affected areas if a local government fails to adopt an ordinance
29 that meets the requirements of this Article or if a local government fails to adequately
30 administer and enforce the provisions of an adopted ordinance. The Commission shall
31 not assume responsibility for a program until it notifies the local government in writing
32 by certified mail, return receipt requested, of local program deficiencies,
33 recommendations for changes and improvements in the local program, and the deadline
34 for compliance. The Commission shall allow a local government a minimum of 120
35 calendar days to bring its program into compliance. The Commission shall order
36 assumption of a local program if it finds that the local government has made no
37 substantial progress toward compliance. The Commission may make this finding at any
38 time between 120 calendar days and 365 calendar days after receipt of notice under this
39 subsection by the local government, with no further notice. Proceedings to review a
40 Commission order to assume responsibility for a local program shall be conducted by
41 the superior court pursuant to Article 4 of Chapter 150B of the General Statutes based
42 on the agency record submitted by the Commission.

43 (e) If the Commission assumes responsibility for a safe artificial slope
44 construction program in an affected area pursuant to subsection (d) of this section, it

1 may establish a fee for the review of artificial slope construction plans and related
2 activities.

3 **"§ 113A-266. Mandatory local programs.**

4 (a) Each local government having within its jurisdiction an affected area shall
5 adopt an ordinance that regulates the construction of artificial slopes in affected areas by
6 any person. The ordinance shall at least meet and may exceed the minimum
7 requirements of this Article and rules adopted pursuant to this Article.

8 (b) Prior to adoption of an ordinance that regulates the construction of artificial
9 slopes in affected areas, or modification of the ordinance, a local government shall
10 submit the ordinance to the Commission for review and receive approval from the
11 Commission for the ordinance.

12 (c) The governing body of a local government must hold a public hearing on the
13 question of adoption of an ordinance that regulates the construction of artificial slopes
14 in affected areas prior to adoption. The public hearing required by this section shall be
15 held upon at least 10 calendar days' notice in a newspaper of general circulation in the
16 jurisdiction adopting the ordinance. Testimony at the hearing shall be recorded, and any
17 and all exhibits shall be preserved within the custody of the governing body of the local
18 government. The testimony and evidence shall be made available for inspection and
19 scrutiny by any person.

20 (d) Each local government that adopts an ordinance pursuant to the provisions of
21 this Article shall file a copy of the ordinance with the Commission. The local
22 government shall file the information provided by the Commission pursuant to
23 G.S. 113A-265(a) with the register of deeds in the jurisdiction where the affected area is
24 located. Copies of the maps, drawings, or documents that are certified by the register of
25 deeds shall be admitted in evidence in all courts and shall have the same force and effect
26 as would the original.

27 (e) An ordinance adopted pursuant to the provisions of this Article shall apply to
28 all affected areas as defined in G.S. 113A-262 within the jurisdiction. A local
29 government may apply the ordinance to other areas within its jurisdiction if it finds that
30 this application is reasonably necessary to protect against some or all of the hazards or
31 problems set forth in G.S. 113A-263. Determinations by a local government of slopes
32 made pursuant to the provisions of this Article shall be conclusive in the absence of
33 fraud.

34 (f) An ordinance adopted by a local government may establish a fee for the
35 review of an artificial slope construction plan and related activities.

36 (g) Each local government that is required to adopt an ordinance pursuant to the
37 provisions of this Article shall implement and enforce the ordinance in accordance with
38 the requirements of this Article and rules adopted thereunder.

39 (h) Local governments are authorized to create or designate agencies or
40 subdivisions of local government to administer and enforce the ordinance. Two or more
41 units of local government are authorized to establish a joint program and to enter into
42 any agreements that are necessary for the proper administration and enforcement of a
43 safe artificial slope construction ordinance. The resolutions establishing any joint
44 program must be duly recorded in the minutes of the governing body of each local

1 government participating in the program, and a certified copy of each resolution must be
2 filed with the Commission.

3 (i) The agency having jurisdiction shall inspect or cause to be inspected the sites
4 of slope construction activities to ensure compliance with this Article and to assess
5 whether the measures required in an approved plan are effective to construct a stable
6 artificial slope at the site. Notice of this right of inspection shall be included in the
7 certificate of approval of each plan.

8 (j) The agency having jurisdiction shall require the submission of reports or
9 certifications from financially responsible persons and their agents undertaking artificial
10 slope construction concerning the activity to document compliance with the provisions
11 of this Article.

12 (k) If an agency having jurisdiction determines that the person engaged in the
13 slope construction activity has failed to comply with an ordinance adopted pursuant to
14 the provisions of this Article, the agency shall immediately serve a notice of violation
15 upon that person. The notice may be served by any means authorized under G.S. 1A-1,
16 Rule 4. A notice of violation shall specify a date by which the person must comply with
17 this Article and the governing ordinance and inform the person of the actions that need
18 to be taken for compliance. Any person who fails to comply within the time specified is
19 subject to civil and criminal penalties for violations as provided in G.S. 113A-270.

20 (l) A local government shall not issue any permit to allow occupancy of any
21 building or structure located on land where slope construction activity that is subject to
22 the provisions of this Article has occurred until the appropriate inspector for the
23 jurisdiction has documented that the completed work complies with this Article.

24 **"§ 113A-267. Artificial slope construction plans.**

25 (a) No person shall initiate any artificial slope construction activity on affected
26 areas unless, 30 or more calendar days prior to initiating the activity, an artificial slope
27 construction plan for the activity is filed with the agency having jurisdiction. An
28 artificial slope construction plan may be filed less than 30 calendar days prior to
29 initiation of an artificial slope construction activity if the plan is submitted under an
30 approved express permit program.

31 (b) An artificial slope construction plan must contain the applicant's address and,
32 if the applicant is not a resident of North Carolina, designate a North Carolina agent for
33 the purpose of receiving notice from the agency having jurisdiction of compliance or
34 noncompliance with the plan, this Article, or a governing ordinance adopted pursuant to
35 this Article. If the applicant is not the owner of the land on which the slope construction
36 activities are to occur, the artificial slope construction plan must include the owner's
37 written consent for the applicant to submit the plan and to conduct the anticipated slope
38 construction activity. The agency having jurisdiction shall approve, approve with
39 modifications, or disapprove an artificial slope construction plan for slope construction
40 activities for which prior plan approval is required within 30 calendar days of receipt of
41 a completed plan. The agency having jurisdiction shall only approve a plan if it
42 determines that the plan is adequate to meet the requirements of this Article and rules
43 adopted pursuant to this Article. The agency shall condition approval of an artificial
44 slope construction plan upon the applicant's compliance with federal, State, and local

1 laws, regulations, and rules. Failure to approve, approve with modifications, or
2 disapprove a completed artificial slope construction plan within 30 calendar days of
3 receipt of a completed plan shall be deemed approval of the plan. If the agency
4 disapproves an artificial slope construction plan or a revised plan, it must state in
5 writing the specific reasons that the plan was disapproved. Failure to approve, approve
6 with modifications, or disapprove a revised artificial slope construction plan within 30
7 calendar days of receipt of a completed plan shall be deemed approval of the plan.

8 (c) An artificial slope construction plan shall contain architectural and
9 engineering drawings, maps, assumptions, calculations, analysis, construction details,
10 and narrative statements as needed to adequately describe the slope construction to be
11 conducted, and the measures planned to comply with the requirements of this Article
12 and a governing ordinance adopted pursuant to this Article using methods,
13 requirements, and criteria of standard engineering practices used in the State of North
14 Carolina. Plans submitted shall also contain the following:

15 (1) A description of the slope construction activity to be conducted,
16 including identification of who will perform the work associated with
17 the slope construction.

18 (2) A specific time schedule for the slope construction activity.

19 (3) Maps and accompanying material containing the following
20 site-appropriate features:

21 a. A true scale that is adequate to describe the slope and a contour
22 interval of not more than five feet.

23 b. Boundaries, interior lines or easements, relation to streets,
24 roads, or highways, proposed location and height of all
25 retaining walls, delineation of all cut and fill slopes, length of
26 slope, shape of slope, steepness of slope, placement within
27 slope of structures or appurtenances, scale and north arrow,
28 proposed drainage easements, road locations and centerlines, as
29 well as accurate estimates, cross-sectional views, and surface
30 area calculations.

31 c. Information on existing surrounding conditions including
32 buildings, septic tank and drain field locations, driveways,
33 creeks, or other bodies of water, wetlands, seeps, springs,
34 culverts, bridges, road grades, soil erodibility, areas of special
35 environmental concern or those subject to any hazard from
36 slope failure from the activity, or other information that may be
37 pertinent in evaluation of the artificial slope construction plan.

38 d. Information on soils, soil types, soil analysis, rock types,
39 analysis of the strike and dip of rock formations, stability and
40 load bearing capability of rock and soil formations from the
41 standpoint of strength of the material, faults and slip plans,
42 compaction of fills, compacted or engineered lifts, water
43 bearing formations and hydrology, aspect, benches, terraces,
44 drainage patterns and topographic conditions, base preparation,

1 other criteria as specified by the professional that prepares the
2 artificial slope construction plan, proposed ground cover,
3 proposed methods for intercepting stormwater runoff, and
4 groundwater conditions so as to protect the slope from unstable
5 saturation, the geomorphology of the area relating to soil
6 stability and mass wasting, and any other item of consideration
7 that may be important in addressing site-specific slope
8 stabilization.

9 e. Delineation of cut slopes and fill slopes, proposed soil densities,
10 waste areas, ditches, measures and structures, and existing and
11 proposed ground cover.

12 f. Supporting documentation, calculations, yardage estimates, and
13 methods to be used for slope construction.

14 (4) If a Stability Index Map prepared by the North Carolina Geological
15 Survey exists for the affected area on which the artificial slope
16 construction activity is to be conducted, the slope construction plan
17 shall include documentation that:

18 a. The Stability Index Map has been examined to determine
19 whether areas upslope of the area on which the artificial slope
20 construction activity is to be conducted have been designated
21 with a slide hazard ranking of 'moderate' or 'high' on the map.

22 b. If upslope areas have been designated with a slide hazard
23 ranking of 'moderate' or 'high' on a Stability Index Map, a
24 description of measures taken to site any residential structures
25 to be constructed on the site where artificial slope construction
26 activity is planned in order to minimize risks to human health
27 and property.

28 (d) An artificial slope construction plan shall be prepared by a professional
29 engineer licensed under Chapter 89C of the General Statutes to practice as a
30 professional engineer in the State. A completed plan shall be certified and stamped with
31 the seal or facsimile of the seal of the engineer that prepared the plan. Upon completion
32 of the artificial slope construction activity, the financially responsible party shall submit
33 a statement, certified and stamped with the seal or facsimile of the seal of a professional
34 engineer, that the construction was completed in accordance with the approved safe
35 slope construction plan.

36 (e) An artificial slope construction plan shall include a statement of ownership
37 and a demonstration of financial responsibility to guarantee compliance with the
38 provisions of this Article. The person financially responsible for the slope development
39 activity or his or her attorney shall sign the statement of financial responsibility and
40 ownership. The property owner shall also sign the statement. The statement shall
41 include the mailing and street address of the principal place of business of the
42 financially responsible person and of the owner of the land. If the financially
43 responsible person or the owner of the land is not a resident of the State, a North
44 Carolina agent shall be designated in the statement for the purpose of receiving notice of

1 compliance or noncompliance with the plan, this Article, a governing ordinance, or
2 rules or orders adopted or issued pursuant to this Article.

3 (f) The agency having jurisdiction may disapprove an artificial slope
4 construction plan upon finding that an applicant or a parent, subsidiary, or other affiliate
5 of the applicant has done any of the following:

6 (1) Is conducting or has conducted slope construction activity without an
7 approved artificial slope construction plan as required by this Article,
8 or has received notice of violation of a plan previously approved by
9 the agency having jurisdiction and has not complied with the notice
10 within the time specified in the notice.

11 (2) Has failed to pay a civil penalty assessed pursuant to this Article or a
12 local ordinance adopted pursuant to this Article by the time the
13 payment is due.

14 (3) Has been convicted of a misdemeanor pursuant to G.S. 113A-270 or
15 any criminal provision of a local ordinance adopted pursuant to this
16 Article.

17 (4) Has failed to substantially comply with the provisions of this Article,
18 or rules or local ordinances adopted pursuant to this Article.

19 (g) In the event that an artificial slope construction plan is disapproved by the
20 agency having jurisdiction pursuant to subsection (f) of this section, the agency having
21 jurisdiction shall state in writing the reasons that the plan was disapproved. The
22 applicant may appeal the disapproval of the plan to the agency having jurisdiction. For
23 purposes of this subsection and subsection (f) of this section, an applicant's record may
24 be considered for only the two years prior to the application date.

25 (h) Artificial slope construction activity shall be initiated and conducted in
26 accordance with the artificial slope construction plan once the plan has been approved.
27 If, following commencement of a slope construction activity pursuant to an approved
28 artificial slope construction plan, a professional engineer licensed under Chapter 89C of
29 the General Statutes determines after an inspection of the slope construction activity that
30 a modification is required to meet the requirements of this Article, the modification may
31 be made as directed by the engineer. Any modification of approved slope construction
32 activity shall be promptly reported to the agency having jurisdiction.

33 (i) If, following commencement of a slope construction activity pursuant to an
34 approved artificial slope construction plan, the agency having jurisdiction determines
35 that the plan is inadequate to meet the requirements of this Article or rules adopted
36 pursuant to this Article, the agency may require any revision of the plan that is
37 necessary to comply with this Article. Failure to approve, approve with modifications,
38 or disapprove a revised plan within 30 calendar days of receipt of a completed plan shall
39 be deemed approval of the plan.

40 (j) The financially responsible person or his or her agent shall perform an
41 inspection of the slope construction covered by the artificial slope construction plan
42 after each phase of the plan has been completed. The person who performs the
43 inspection shall maintain and make available a record of the inspection at the site of the
44 slope construction activity. The record shall set out any significant deviation from the

1 approved slope construction plan, identify any measures that may be required to correct
2 the deviation, and document the completion of those measures. The record shall be
3 maintained on the site for 30 calendar days after completion of the slope construction
4 activities as approved under the plan. The inspections required by this subsection shall
5 be in addition to inspections required by G.S. 113A-266.

6 (k) The financially responsible person shall promptly notify the agency having
7 jurisdiction of any change in information provided pursuant to subdivision (1) of
8 subsection (c) of this section concerning identification of who will perform the work
9 associated with the slope construction.

10 (l) Slope construction activity authorized under an approved artificial slope
11 construction plan shall be commenced within 24 months of notification of approval. If
12 work is not commenced within 24 months of approval of a plan, that plan shall be
13 deemed void, and a new plan shall be submitted for approval of the work to be
14 conducted.

15 **"§ 113A-268. Slope inclination; site-specific assessment; measurements;**
16 **limitations.**

17 (a) Determination of stable slope inclination shall be based upon guidelines used
18 historically by the State of North Carolina and professionals experienced in the design
19 and construction of artificial slopes and shall be based on site-specific conditions,
20 including soil types, hydrology, geology, weather patterns, natural slope, aspect,
21 surrounding uses, planned use, historic use, depth to bedrock, quality of construction,
22 and other applicable factors. The financially responsible person shall be responsible for
23 proper assessment of site conditions.

24 (b) Site-specific slope measurement shall be taken by the following methods:

25 (1) On residential lots, the average slope will be determined by
26 triangulating the line of the highest natural elevation to the lowest
27 natural elevation in relation to the horizontal. However, if convex
28 slopes, concave slopes, bluffs, cliffs, other areas of concern, or signs of
29 failure including slope creep are evident, then horizontal lines may be
30 adjusted to more specifically describe slope in areas of concern.

31 (2) On roadwork, the average slope will be determined from the toe of the
32 fill to the top of the cut plus any areas of concern above or below the
33 roadwork area, this triangulated against the horizontal.

34 (3) Slope steepness may be measured by using standard engineering
35 methods used in the State of North Carolina and approved by the
36 agency having jurisdiction.

37 (c) Any slope or contiguous series of graded or filled slopes 40 feet or greater on
38 the face, and steeper than 1:1 for cut slopes or steeper than 1.5:1 for fill slopes, shall not
39 be allowed unless a variance is granted by the agency having jurisdiction. In considering
40 a variance request, the agency having jurisdiction shall consider whether other
41 alternatives exist, slope factor of safety, stability, and likelihood of failure among other
42 factors. In cases where a variance is requested, the financially responsible person shall
43 secure the services of a professional engineer licensed under Chapter 89C of the
44 General Statutes or other professional approved by the agency having jurisdiction with

1 regard to adequate site assessment, planning, design, and construction of stable artificial
 2 slopes.

3 **"§ 113A-269. Specific requirements for artificial slope construction.**

4 No artificial slope construction subject to this Article shall be undertaken except in
 5 accordance with the following requirements:

- 6 (1) Any person who undertakes artificial slope construction shall be
 7 responsible for adequate site assessment, planning, design, and
 8 construction of stable artificial slopes.
- 9 (2) The financially responsible person shall provide proof to the agency
 10 having jurisdiction that all subdivision roads and shoulders on the site
 11 associated with the slope construction activity are compacted by
 12 methods approved by the agency having jurisdiction.
- 13 (3) Cut slopes steeper than 1:1 or fill slopes steeper than 1.5:1 and greater
 14 than 15 feet in vertical height shall be inspected by a professional
 15 engineer licensed under Chapter 89C of the General Statutes or other
 16 professional approved by the agency having jurisdiction to ensure that
 17 the slopes meet the provisions of this Article and a governing
 18 ordinance adopted pursuant to this Article.
- 19 (4) Cut slopes, fill slopes, or retaining walls subject to the requirements of
 20 this Article shall be designed, constructed, and repaired in a manner
 21 that they will be stable. A stable slope or retaining wall shall have a
 22 factor of safety against mass instability that is greater than or equal to
 23 the factors of safety shown in the following table.

24
 25 **Table 1 – Minimum Factors of Safety Against Mass Instability**

26
 27 **Minimum Factor of Safety**

28

29 <u>Type of Slope</u>	30 <u>Long-Term</u>	30 <u>End-of-Construction</u>	30 <u>Pseudo-Static</u>
	31 <u>(Effective Stress Conditions)</u>	31 <u>(Total Stress Conditions)</u>	31 <u>Conditions</u>
32 <u>Critical Slope</u>	32 <u>1.5</u>	32 <u>1.2</u>	32 <u>1.2</u>
33 <u>Slope</u>	33 <u>1.3</u>	33 <u>1.1</u>	33 <u>1.1</u>

34 a. Pseudo-static conditions are based on long-term (effective
 35 stress) conditions with the application of a pseudo-static
 36 coefficient. The pseudo-static coefficient is based on a design
 37 earthquake as one-half the peak ground acceleration from the
 38 United States Geological Survey of the United States
 39 Department of the Interior peak acceleration map for the eastern
 40 United States, with a two percent (2%) probability of
 41 exceedance in 50 years. In lieu of a site-specific value, a default
 42 acceleration value of fifteen percent (15%) of the standard
 43 acceleration of gravity may be used. Pseudo-static analyses
 44 should not be performed for sites evaluated with a Seismic Site

- 1 Classification of "E" or "F" as defined by the North Carolina
2 Building Code, as a more detailed assessment of seismic
3 stability would be needed.
- 4 (5) All fill slopes shall be compacted by methods approved by the agency
5 having jurisdiction.
- 6 (6) All fill slopes shall be constructed by placement of only soil.
7 Placement of trees, stumps, and logs in the construction of fill slopes is
8 prohibited.
- 9 (7) Fill slopes that have a slope length of 40 feet or greater on the face
10 shall be constructed with terraces that are adequate to protect the slope
11 and convey runoff in a non-erosive manner to stable outlets away from
12 the slope face. The terraces shall be stabilized and wide enough to also
13 provide for maintenance activities.
- 14 (8) Cut slopes that have a slope length of 40 feet or greater on the face
15 shall be constructed with benches that are adequate to protect the slope
16 and convey runoff in a non-erosive manner to stable outlets away from
17 the slope face. The benches shall be stabilized and wide enough to also
18 provide for maintenance activities.
- 19 (9) Stabilized ditches or other methods approved by the agency having
20 jurisdiction shall be used to prevent the uncontrolled runoff of
21 stormwater over artificially constructed slopes.
- 22 (10) The agency having jurisdiction shall establish required setbacks from
23 adjoining property lines, natural watercourses, buildings, and public
24 rights-of-way. Slope construction shall not be allowed within required
25 setbacks. Stormwater diversions within a setback shall protect
26 disturbed areas from upslope runoff and shall be adequate to divert and
27 carry runoff subject to crossing the slope, over, under, through, around,
28 or away from the slope face in a safe and non-erosive manner. All
29 diversions shall be stabilized. The diversions shall be constructed to
30 carry the runoff from the 25-year storm using calculations that
31 approximate the maximum urbanization of the watershed contributing
32 runoff based upon runoff data contained within the North Carolina
33 Erosion and Sediment Control Planning and Design Manual. Diverted
34 flows should be directed to and exit upon or into stabilized areas,
35 channels, or mitigated to the closest natural watercourse.
- 36 (11) Upon completion of slope construction activity, the financially
37 responsible person must submit a certification to the agency having
38 jurisdiction that the slope construction activity was completed in
39 accordance with this Article and any governing ordinance adopted
40 pursuant to this Article. Failure by the financially responsible person to
41 submit the required certification within 60 calendar days of work
42 completion shall be considered a violation of this Article.
- 43 (12) No person shall willfully resist, delay, or obstruct an authorized
44 representative of the agency having jurisdiction while the

1 representative, employee, or agent is inspecting or attempting to
2 inspect an artificial slope construction activity pursuant to
3 G.S. 113A-266.

4 (13) Refusal of the financially responsible person to make required
5 inspections, provide requested information, make requested repairs, or
6 take other action necessary for compliance with the provisions of this
7 Article and a governing ordinance adopted pursuant to this Article
8 shall constitute a violation of this Article.

9 (14) Any pipe or conduit to be placed or constructed within a fill slope in a
10 subdivision shall be placed or constructed within a stable fill slope.
11 The fill slope shall be designed and constructed to prevent slope
12 saturation by water from a sewer or water leak. A professional
13 engineer licensed under Chapter 89C of the General Statutes shall
14 inspect the work and shall submit a statement, certified and stamped
15 with the seal or facsimile of the seal of the engineer, to the agency
16 having jurisdiction that the work has been designed and constructed in
17 a stable manner within 60 calendar days of completion of the work.

18 **"§ 113A-270. Enforcement and penalties.**

19 (a) Civil Penalties. –

20 (1) The Commission may assess a civil penalty of not more than ten
21 thousand dollars (\$10,000) per month against any local government
22 that fails to adopt a safe artificial slope construction ordinance as
23 required by this Article, or willfully fails to administer or enforce the
24 provisions of its program in substantial compliance with the minimum
25 statewide safe slope construction requirements of this Article. The
26 Commission shall not impose a penalty against a local government
27 pursuant to this subsection until the Commission has assumed the
28 responsibility for administering and enforcing the safe slope
29 construction program. Civil penalties shall be imposed pursuant to a
30 uniform schedule adopted by the Commission. The schedule of civil
31 penalties shall be designed to recoup the costs of administration and
32 enforcement.

33 (2) The Commission or a local government that administers a safe slope
34 construction program may assess a civil penalty against any person
35 who violates any of the provisions of this Article or any ordinance,
36 rule, or order adopted or issued pursuant to this Article by the
37 Commission or by a local government, or who initiates or continues a
38 slope construction activity for which an artificial slope construction
39 plan is required except in accordance with the terms, conditions, and
40 provisions of an approved plan. The maximum civil penalty for a
41 violation is five thousand dollars (\$5,000). A civil penalty may be
42 assessed from the date of the violation. Each day of a continuing
43 violation shall constitute a separate violation.

- 1 a. The Commission or a local government that administers a safe
2 slope construction program shall determine the amount of the
3 civil penalty and shall notify the person who is assessed the
4 civil penalty of the amount of the penalty and the reason for
5 assessing the penalty. The notice of assessment shall be served
6 by any means authorized under G.S. 1A-1, Rule 4, and shall
7 direct the violator to either pay the assessment or contest the
8 assessment within 30 calendar days by filing a petition for a
9 contested case under Article 3 of Chapter 150B of the General
10 Statutes. If a violator does not pay a civil penalty assessed by
11 the Commission within 30 calendar days after it is due, the
12 Department shall request the Attorney General to institute a
13 civil action to recover the amount of the assessment. If a
14 violator does not pay a civil penalty assessed by a local
15 government within 30 calendar days after it is due, the local
16 government may institute a civil action to recover the amount of
17 the assessment. The civil action may be brought in the superior
18 court of any county where the violation occurred or the
19 violator's residence or principal place of business is located. A
20 civil action must be filed within three years of the date the
21 assessment was due. An assessment that is not contested is due
22 when the violator is served with a notice of assessment. An
23 assessment that is contested is due at the conclusion of the
24 administrative and judicial review of the assessment.
25 b. In determining the amount of the penalty, the Commission or a
26 local government that administers a safe slope construction
27 program shall consider the degree and extent of harm caused by
28 the violation, the cost of rectifying the damage, the amount of
29 money the violator saved by noncompliance, whether the
30 violation was committed willfully, and the prior record of the
31 violator in complying or failing to comply with this Article.

- 32 (3) The clear proceeds of civil penalties collected by the Commission
33 under this subsection shall be remitted to the Civil Penalty and
34 Forfeiture Fund in accordance with G.S. 115C-457.2. Civil penalties
35 collected by a local government under this subsection shall be used as
36 provided in Section 7 of Article IX of the Constitution of North
37 Carolina.

38 (b) Criminal Penalties. – Any person who knowingly or willfully violates any
39 provision of this Article or any ordinance, rule, regulation, or order duly adopted or
40 issued by the Commission or a local government, or who knowingly or willfully
41 initiates a slope construction activity for which an artificial slope construction plan is
42 required, except in accordance with the terms, conditions, and provisions of an
43 approved plan, shall be guilty of a Class 2 misdemeanor that may include a fine not to
44 exceed five thousand dollars (\$5,000).

1 (c) Injunctive Relief. –

2 (1) Whenever the governing body of a local government having
3 jurisdiction has reasonable cause to believe that any person is violating
4 or is threatening to violate any ordinance, rule, regulation, or order
5 adopted or issued by the local government pursuant to this Article, or
6 any term, condition, or provision of an artificial slope construction
7 plan over which it has jurisdiction, may, either before or after the
8 institution of any other action or proceeding authorized by this Article,
9 institute a civil action in the name of the local government for
10 injunctive relief to restrain the violation or threatened violation. The
11 action shall be brought in the superior court of the county in which the
12 violation is occurring or is threatened.

13 (2) Whenever the Commission has reasonable cause to believe that any
14 person is violating or is threatening to violate the requirements of this
15 Article, the Commission may, either before or after the institution of
16 any other action or proceeding authorized by this Article, institute a
17 civil action for injunctive relief to restrain the violation or threatened
18 violation. The action shall be brought in the superior court of the
19 county in which the violation or threatened violation is occurring or
20 about to occur, and shall be in the name of the State upon the relation
21 of the Commission.

22 (3) Upon determination by a court that an alleged violation is occurring or
23 is threatened, the court shall enter any order or judgment that is
24 necessary to abate the violation, to ensure that restoration is
25 performed, or to prevent the threatened violation. The institution of an
26 action for injunctive relief under subsection (a) or (b) of this section
27 shall not relieve any party to the proceeding from any civil or criminal
28 penalty prescribed for violations of this Article."

29 **SECTION 2.** G.S. 143B-298 reads as rewritten:

30 **"§ 143B-298. Sedimentation Control Commission – creation; powers and duties.**

31 There is hereby created the Sedimentation Control Commission of the Department
32 of Environment and Natural Resources with the power and duty to develop and
33 administer a sedimentation control program as herein provided.

34 The Sedimentation Control Commission has the following powers and duties:

35 (1) In cooperation with the Secretary of the Department of Transportation
36 and Highway Safety and other appropriate State and federal agencies,
37 develop, promulgate, publicize, and administer a comprehensive State
38 erosion and sedimentation control program.

39 (2) Develop and adopt on or before July 1, 1974, rules and regulations for
40 the control of erosion and sedimentation pursuant to G.S. 113A-54.

41 (3) Conduct public hearings pursuant to G.S. 113A-54.

42 (4) Assist local governments in developing erosion and sedimentation
43 control programs pursuant to G.S. 113A-60.

- 1 (5) Assist and encourage other State agencies in developing erosion and
2 sedimentation control programs pursuant to G.S. 113A-56.
- 3 (6) Develop recommended methods of control of sedimentation and
4 prepare and make available for distribution publications and other
5 materials dealing with sedimentation control techniques pursuant to
6 G.S. 113A-54.
- 7 (7) Adopt a model safe artificial slope construction ordinance as provided
8 in G.S. 113A-265(b).
- 9 (8) Assist local governments in developing safe artificial slope
10 construction programs pursuant to G.S. 113A-265."

11 **SECTION 3.** G.S. 47E-4(b) reads as rewritten:

12 "(b) The North Carolina Real Estate Commission shall develop and require the
13 use of a standard disclosure statement to comply with the requirements of this section.
14 The disclosure statement shall specify that certain transfers of residential property are
15 excluded from this requirement by G.S. 47E-2, including transfers of residential
16 property made pursuant to a lease with an option to purchase where the lessee occupies
17 or intends to occupy the dwelling, and shall include at least the following characteristics
18 and conditions of the property:

- 19 (1) The water supply and sanitary sewage disposal ~~system;~~system.
- 20 (2) The roof, chimneys, floors, foundation, basement, and other structural
21 components and any modifications of these structural
22 ~~components;~~components.
- 23 (3) The plumbing, electrical, heating, cooling, and other mechanical
24 ~~systems;~~systems.
- 25 (4) Present infestation of wood-destroying insects or organisms or past
26 infestation the damage for which has not been ~~repaired;~~repaired.
- 27 (5) The zoning laws, restrictive covenants, building codes, and other
28 land-use restrictions affecting the real property, any encroachment of
29 the real property from or to adjacent real property, and notice from any
30 governmental agency affecting this real ~~property;~~ and property.
- 31 (6) Presence of lead-based paint, asbestos, radon gas, methane gas,
32 underground storage tank, hazardous material or toxic material
33 (whether buried or covered), and other environmental contamination.
- 34 (7) The location of the property within a landslide hazard area as
35 designated on maps prepared by the North Carolina Geological
36 Survey.

37 (b1) The disclosure statement shall provide the owner with the option to indicate
38 whether the owner has actual knowledge of the specified characteristics or conditions,
39 or the owner is making no representations as to any characteristic or condition. This
40 subsection does not apply to subdivision (7) of subsection (b) of this section."

41 **SECTION 4.** Section 1 of this act becomes effective 1 December 2008
42 except that G.S. 113A-265, as enacted by Section 1 of this act, becomes effective when
43 this act becomes law. Section 2 of this act and Section 4 of this act become effective
44 when it becomes law. Section 3 of this act becomes effective 1 December 2007. Each

1 local government that is required to adopt a safe artificial slope construction ordinance
2 pursuant to the provisions G.S. 113A-266, as enacted by Section 1 of this act, shall
3 submit its ordinance to the Sedimentation Control Commission for approval on or
4 before 1 August 2008.