

**MINUTES
BREVARD PLANNING BOARD MEETING
FEBRUARY 20, 2018**

Brevard Planning Board met for a regular meeting, Tuesday, February 20, 2018, at 6:00 PM in Council Chambers of City Hall.

Members Present: Jimmy Perkins, Chair
Chris Strassner
Demi Loftis, Vice Chair
Keenan Smith
John Folger

Absent: Donna Ross

Staff Present: Daniel Cobb, Planning Director
Paul Ray, Senior Code Enforcement Officer
Janice Pinson, Clerk to the Board

I. Welcome

At 6:04 PM, Chair, Jimmy Perkins called the meeting to order and welcomed those in attendance.

II. Introduction of Planning Board Members

Board members and Staff introduced themselves.

III. Certification of Quorum

Chair, Jimmy Perkins confirmed with the Clerk to the Board that a quorum of the board was present.

IV. Approval of Agenda

Motion to approve agenda by K. Smith, seconded by C. Strassner, unanimously carried.

V. Approval of Minutes

a. Minutes of the December 12, 2017 meeting, motion was made to approve by K. Smith, seconded by D. Loftis, unanimously carried.

VI. Public Comment

None.

VII. New Business

a. Steep slope text amendments

Daniel Cobb, Planning Director, presented his staff report, which is attached hereto and labeled, Exhibit "A".

After discussion, the Board requested that Staff present more information about the origination of the formula, how it is working in the real world and agreed that a mathematical approach is necessary.

D. Cobb stated that Staff would communicate with other jurisdictions, would bring more examples and detail to the map at the next meeting.

IX. Unfinished Business

a. Election of Officers

D. Loftis nominated J. Perkins to serve as Chair, seconded by C. Strassner, unanimously carried.

K. Smith nominated D. Loftis to serve as Vice Chair, seconded by C. Strassner, unanimously carried.

X. Remarks –

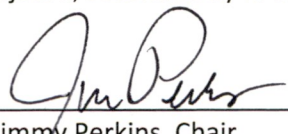
J. Perkins, Chair, requested an update on the Form Based Codes Project after City Council's Retreat in January. D. Cobb stated that it was Council's general opinion to move forward with the project at this time.

D. Cobb stated that Transylvania County Planning Director had requested a joint meeting with their Planning Board on May 17th. The Board agreed to try to accommodate that date and would prefer to meet at 6PM.

Clerk to the Board asked the board if they would like to attend the Regional Workshop presented by UNC School of Government, "Planning and Development Regulation". K. Smith, J. Perkins, C. Strassner and possibly D. Loftis agreed that they would like to attend.

XI. Adjourn –

There being no further business, C. Strassner moved to adjourn, seconded by K. Smith, unanimously carried, and the meeting adjourned at 7:00 PM.


Jimmy Perkins, Chair


Janice H. Pinson, Board Secretary

STAFF REPORT

Planning Board, Tuesday, February 20, 2018

Title: **Text Amendments – UDO Chapters 6**

The Board will hear a presentation from Staff regarding potential changes to the City's Steep Slope Protection ordinance.

Speaker: Daniel Cobb, AICP, Planning Director

Prepared by: Daniel Cobb, AICP, Planning Director
Paul Ray, CZO, Senior Code Enforcement Officer

Approved by: Daniel Cobb, AICP, Planning Director

Background

Chapter 6 of the Unified Development Ordinance (UDO) provides development standards related to environmental protections. These include surface water protections, steep slopes, and erosion control among others. The existing steep slope standards are clear, however the way in which the slope is calculated is somewhat vague and open to interpretation. The intent of these amendments is to clarify this language and set specific standards for how the slope is calculated.

Discussion

Chapter 6, Subsection 6.4 states the following:

The provisions contained in this section shall apply to all areas within the planning jurisdiction of the City of Brevard that are classified as "steep slope areas". These provisions do not limit or negate the effect of other provisions of this ordinance which may apply to steep slope areas.

Steep slopes are later defined as those slopes with an **average** grade of 15 percent or greater. However, these slopes are still open for development. New development is restricted to lands with slopes of 25% or less. This calculation of existing conditions is the main point of discussion.

Calculating the *average existing grade* is a different measurement than the existing grade.

This proposal provides a specific formula which can be applied by anyone on any given piece of property as to calculate the average existing grade.

Current ordinance language in UDO 6.4.D.4 states the following:

*Steep slope areas with an **average** slope of 25 percent or greater shall be delineated upon all final development plans and plats and shall be noted as protection areas for which no development shall be permitted. These areas shall be off-limits to all development or land disturbances of any kind whatsoever and shall be maintained in a*

naturally vegetated state, except that forest management in accordance with the provisions set forth in this ordinance may be permitted.

This language straightforward to apply in areas of uniform elevation changes. However, Brevard and Transylvania County are not home to these types of elevation changes. Oftentimes properties may be flat near the road, slope upwards towards the rear, then perhaps plateau. There is no clear point at which to begin the slope measurement.

The amendments as proposed include the following formula.

$$S = ((.0023 \times (l) \times (i)) / a$$

Where:

S = Slope (existing grade)

i = Contour interval of map in feet

l = Total length of contour interval of parcel

a = Area of parcel in acres

Example:

Attachment A includes an example on a three acre tract with 2' contour intervals. There are 14,518 feet of contour intervals across the site.

$$S = \frac{((l \times i) .0023)}{a}$$

$$S = \frac{((14,518 \times 2) .0023)}{3}$$

$$S = \frac{((29,036) .0023)}{3}$$

$$S = \frac{66.78}{3}$$

$$S = 22.26\%$$

Therefore the existing, average preconstruction grade of the site is 22.26%.

Utilizing this formula clearly indicates that this site is not considered a steep slope under the current standards of the UDO and can be developed accordingly. One approach is to apply this formula city-wide without exception, regardless of elevation or geographic location. However,

other jurisdictions apply both this formula as well as elevation and grading ratios. Staff recommends the latter approach.

For example, properties located below a certain elevation can be entirely exempt from steep slope regulations, while those above it may be subject. Staff has created several examples for the Board's review using 2,250' above sea level as a starting point.

Under this approach properties located below 2,250 are exempt from steep slope regulations, regardless of size or grade. Those properties at and above are subject to the steep slope standards subject to the following grading ratios:

Average Existing Slop: $S = ((l \times i) .0023)) / a$	Maximum Percent of Site Graded
0% - 5%	95%
5.1% - 10%	90%
10.1% - 15%	80%
15.1%-20%	75%
20.1%-25%	60%
25.1%-30%	50%
30.1%-35%	40%
35.1% - 40%	30%
40%+	20%

If a property has areas both above and below 2,250 then the average slope calculation and resulting grading ratio is only applied to the area which is at and above 2,250.

Policy Analysis

The 2015 Comprehensive Plan is very clear in its intent to protect steep slopes and environmentally sensitive areas. The proposed amendments are not intended to lessen protections. Rather, they are to provide a method by which these areas can be more precisely identified.

The 2015 Comprehensive Plan specifically describes mountain and slope protection and preservation in the Environmental Health Element:

OBJECTIVE 3.1: Preservation of surrounding natural assets of mountains, farmlands, woods, and water for future generations.

POLICY 3.1.A: Continue using land development regulations and incentives to steer future development away from environmentally sensitive areas such as steep slopes and floodplains.

Recommendation

Staff recommends the Board consider the attached maps and changes to the method of calculating steep slopes.

Staff will provide specific examples of how this formula is to be used on specific properties during the Board's meeting.

Attachments

- A. Slope calculation example
- B. Properties at, or above 2,250'
- C. Percent Slope with 2,250ft Contour

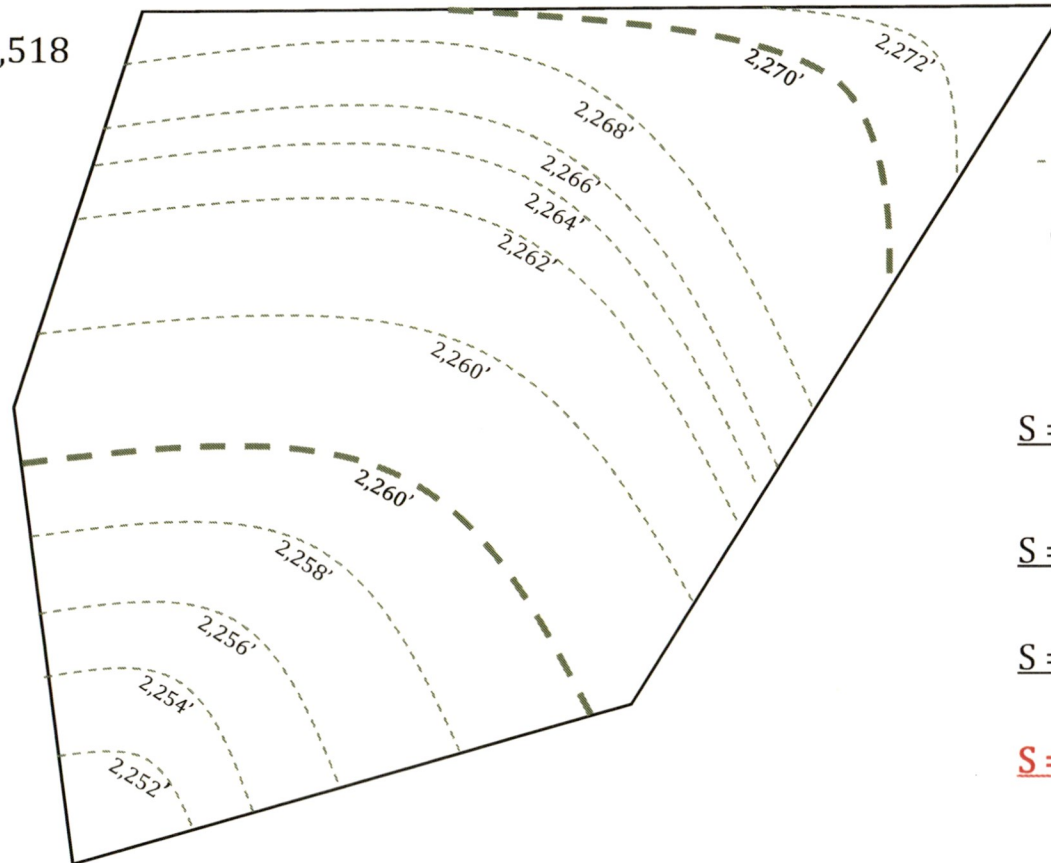


Existing Slope Calculation Example

Contour Length - 14,518

Contour Interval - 2'

Area - 3 acres



$$S = \frac{(l \times i)}{a} .0023$$

--- Contour line
 Parcel

$$S = \frac{(14,518 \times 2)}{3} .0023$$

$$S = \frac{(29,036)}{3} .0023$$

$$S = \frac{66.78}{3}$$

$$S = 22.26$$

Not to Scale

Elevation

