

TO: JAMES L. APP, CITY MANAGER
FROM: WARREN FRACE, COMMUNITY DEVELOPMENT DIRECTOR
SUBJECT: REVIEW OF CITY HILLSIDE GRADING REGULATIONS
DATE: SEPTEMBER 1, 2015

Needs: To review issues and options related to implementation of the City's hillside grading regulations.

- Facts:**
1. Residential development grading regulations are included in the City's Zoning Ordinance, within two separate sections consisting of 13 pages: Section 21.14A Hillside Development District, and Section 21.16E R-1 District Regulations, provided in Attachment 2.
 2. Regulations pertaining to grading and development have been modified and expanded several times since the initial Hillside Development Ordinance was adopted in 1982.
 3. Amendments to hillside grading and development standards have occurred in response to changes in development preferences and comfort level in the City's discretionary review process.
 4. The current hillside grading regulations apply to development proposed on property in the Hillside Overlay District (see Attachment 1, Hillside District Overlay Map), and property with slopes that are 10% or greater.
(Slope = Rise / Run, for example a 1 ft. rise / 10 ft. run = 10% slope.)
 5. The grading regulations prohibit mass or pad grading for property covered under the ordinance.
 6. The development community has expressed interest in updating the City's grading regulations.
 7. The City Council requested staff prepare a report on the grading ordinance for council review.
 8. Any amendment to the grading ordinance will require an environmental review, and Planning Commission and City Council hearings.
 9. Staff has met with local engineers and toured numerous subdivisions to better understand the effects of the grading ordinance.

Analysis and

Conclusion: The purpose of the Hillside Development District is, "to establish development that conserve the natural character of hillside areas, preserve and enhance the scenic amenities of the City and minimize environmental impacts resulting from extensive grading in visually sensitive areas." The Hillside Grading regulations include the following development standards:

- Formulas for calculating slope.
- Grading restrictions for sites with slopes over 10%.
- Lot size increases based on slope.
- Restrictions on the heights of graded slope banks and retaining walls.
- Restrictions on creating padded (flat) lots and “stair step mass grading.”
- Methods to mitigate visual impacts that may result from grading.

Attachment 1, Section 21.14A (Hillside Development District), includes a map designating where grading standards apply. The Hillside regulations are referenced in the R-1 Single-Family District Standards. Most of the areas within the City that are included in the Hillside District have been built out with the exception of Chandler Ranch and a few infill areas of undeveloped land. Larger areas yet to be developed with slopes over 10% include the Olsen, Beechwood, and Borkey Specific Plan areas.

The R-1 Standards provide details on how grading standards are implemented in terms of calculating average slope and maximum density, and applying it to determine the “building envelop” for development. In general, the minimum lot size for new parcels are required to be larger as slope increases. This is a fairly universal approach to reducing grading impacts on steeper slopes. Table 21.16E.090 below establishes the minimum lot sizes based on slope.

**Table 21.16E.090
Minimum Lot Size Per Zoning District**

Slope	R-1	R-1, B-1	R-1, B-2	R-1, B-3	R-1, B-4	R-1, B-5
(percent)	(sq. ft.)	(sq. ft.)	(sq. ft.)	(sq. ft.)	(sq. ft.)	(sq. ft.)
0—4	7,000	7,500	10,000 (¼ acre +/-)	20,000 (½ acre +/-)	1 acre (43,560 sf)	2 acres (87,120 sf)
5—9	10,000	10,000	10,000	20,000	1 acre	2 acres
10—14	12,500	12,500	12,500	20,000	1 acre	2 acres
15—24	15,000	15,000	15,000	20,000	1 acre	2 acres
25—34	20,000	20,000	20,000	20,000	1 acre	2 acres

In determining the minimum lot size, an applicant would need to determine the average slope of the developable area of a property. To calculate the “average slope”, the following formula is used. This method for determining average slope is unique to Paso Robles.

$$\frac{I \times L \times 0.0023}{A}$$

Where:

I = Contour interval in feet. Contour intervals shall not exceed five feet.

L = Combined length of contour lines measured within the net developable area.

0.0023 = A constant that converts square feet into acres and expresses slope in percent.

A = Acreage of net developable area.

Other communities often determine average slope by measuring the property “rise” (number of contour intervals) divided by the length or “run” of the area measured.

The two main issues with the existing grading regulations are:

- Complexity of the ordinance.
- Blanket restriction of pad grading.

Complexity

As noted above, from a technical perspective, the grading ordinance is difficult to administer because the methodology for determining slope is cumbersome and must be calculated by computer. City staff must rely on the applicant for this information.

Often properties have highly variable slope ranging from flat to steep on the same site. This has resulted in relatively flat sites being restricted as hillsides, when there is a limited area with a steep slope.

Pad Grading Restriction

Secondly, the existing ordinance restricts the use of “mass” and “pad” grading, whereby several lots are graded together in a uniform pattern. This grading technique is typically used in “production” or semi-custom home construction. Without the use of mass grading, subdivision with lots smaller than ½ acre may have awkward slopes between adjacent properties and/or streets. Often small steep lots result that add to the cost of construction, since it requires stepped foundations and other custom architectural solutions to absorb slope. This also limits the ability to have a single foundation/floor level in design, which may not be suitable for all housing markets. Rear lot and cross lot drainage patterns also complicate tract design and long term maintenance. In general non-padded lots (natural slope lots) with stepped house foundations work best on lots over a ½ acre in size.

Summary

The current ordinance is complicated and voluminous as the result of years of amendments. In visiting subdivision tracts, staff was concerned that the grading ordinance may not be yielding the desired results. With new Graphic Information System (GIS) and 3-D analysis tools available, it may be the time to rethink the approach of the entire grading ordinance.

Options to consider for updating the grading ordinance include, but are not limited to:

- Ridgeline and bluff protection measures.
- Modify the methodology for calculating the developable area and average slope of property.
- Allow mass and pad grading in tracts with lots smaller than a ½ acre, where it can be demonstrated that the property not result in severe visible cut and fill slopes that cannot be mitigated with grading techniques, architectural design, and/or landscaping.
- Use zoning/specific plans to require large, non-padded lots on steep slopes and prominent ridges and bluffs.
- Require contour grading techniques for all manufactured cut and fill slopes visible from the public right-of-way.
- Use 3-D modeling to visualize appropriate height of retaining walls and graded slopes.
- Require discretionary review of grading plans by the Development Review Committee for grading on slopes that are 10 percent or greater. For projects associated with a Planned Development or Tentative Parcel/Tract Map, continue to require approval by the Planning Commission.

Policy

Reference: Paso Robles General Plan and Zoning Ordinance

Fiscal

Impact: None.

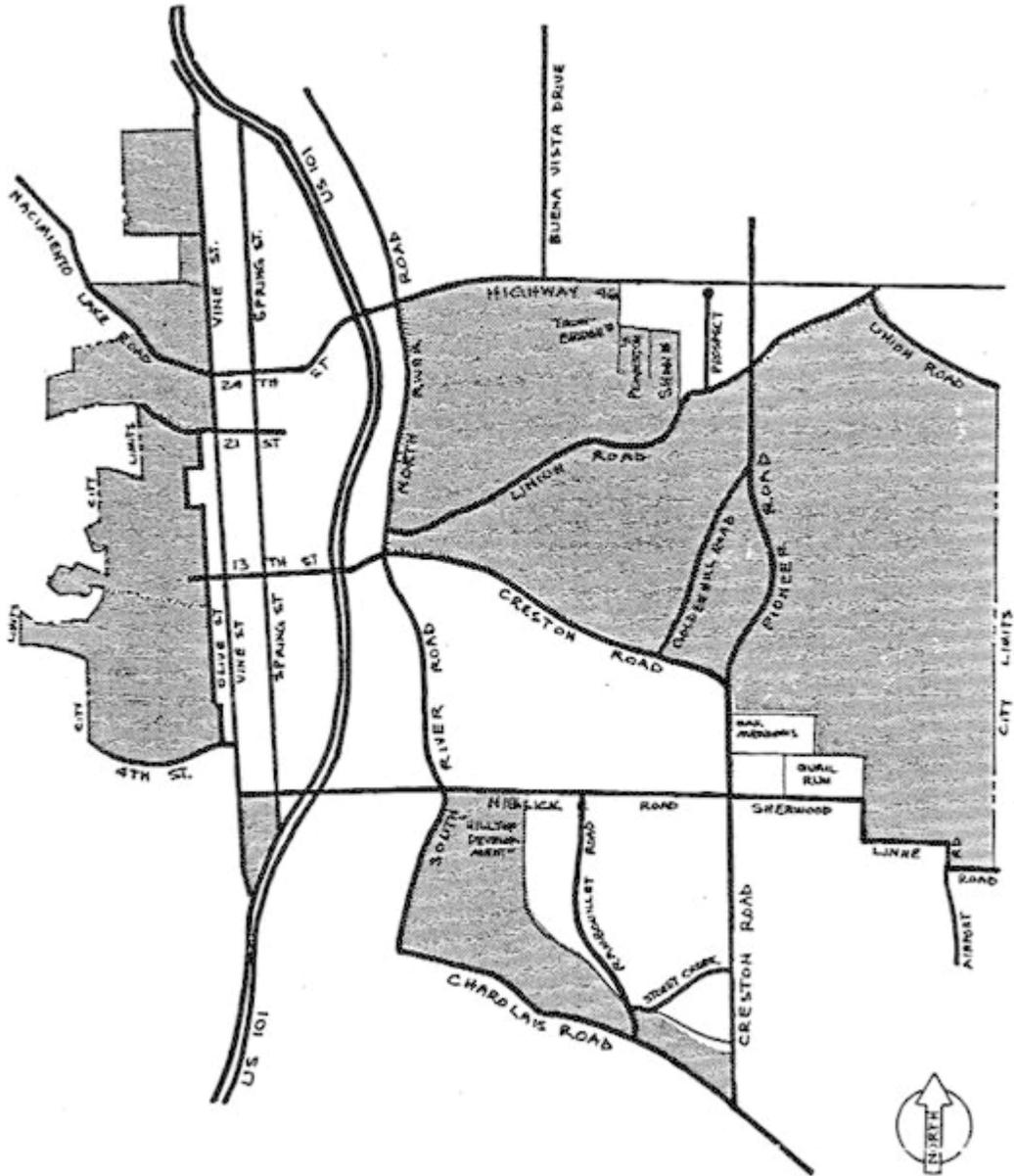
Options: After consideration of any public testimony, the City Council may consider the following options:

- a. Appoint an Ad Hoc or Blue Ribbon Committee to work with staff on revisions to the grading ordinance.
- b. Provide direction to staff on updating the City’s grading ordinance.
- c. Amend, modify or reject the foregoing options.

Attachments:

- 1 – Map of Hillside Overlay District
- 2 – Zoning Code excerpt of grading regulations

FIGURE 21.14A.020



SHADED AREAS ARE WITHIN THE HILLSIDE DEVELOPMENT DISTRICT

* See the Union/46 Specific Plan for more detail. (The Trowbridge, Pemberton, and Shinn properties are within the Hillside Dev't District.)

Chapter 21.14A - HILLSIDE DEVELOPMENT DISTRICT

Sections:

21.14A.010 - Purpose.

The purpose of the hillside development district is to establish development standards that conserve the natural character of hillside areas, preserve and enhance the scenic amenities of the city and minimize the environmental impact resulting from extensive grading in visually sensitive areas.

The hillside development district is not a grading code; compliance with these hillside development standards does not in any way imply that the resultant development is safe from erosion, land slippage or other hazards related to development on land with significant slopes, cuts or fills. Any development in hillside areas shall be performed in a manner consistent with recommendations of licensed civil engineers and subject to approval of the city engineer.

(Ord. 571 N.S. § 1 Exh. A (part), 1989)

21.14A.020 - Applicability.

A. The hillside development district is established as an overlay district on the properties shown on Figure 21.14A.020 and over all properties, including properties outside of the hillside development district boundaries, where the average natural (ungraded) slope of the net developable areas of a property is ten percent or greater.

1. The average slope of the net developable area of a property shall consist of the gross acreage of a property, minus the following:
 - a. Any dedication necessary to provide for the full rights-of-way of arterial and/or collector streets, as designated by the circulation element of the general plan, adjacent to and/or within a proposed subdivision, parcel map or lot line adjustment, in accordance with adopted standards for city streets;
 - b. Any areas of the site with natural slopes of thirty-five percent or greater;
 - c. Any areas of the site within the outer driplines of a compact grouping of ten or more oak trees ("mature" as defined in Chapter 10.01 of this code), where driplines between trees in the grouping are separated by ten feet or less;
 - d. Any areas of the site within the floodway of the Salinas River.
2. Average slope of the net developable area shall be calculated using the following formula:

Average slope =	$\frac{L \times I \times 0.0023}{A}$
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Where:

I = Contour interval in feet. Contour intervals shall not exceed five feet.

L = Combined length of contour lines measured within the net developable area.

0.0023 = A constant that converts square feet into acres and expresses slope in percent.

A = Acreage of net developable area.

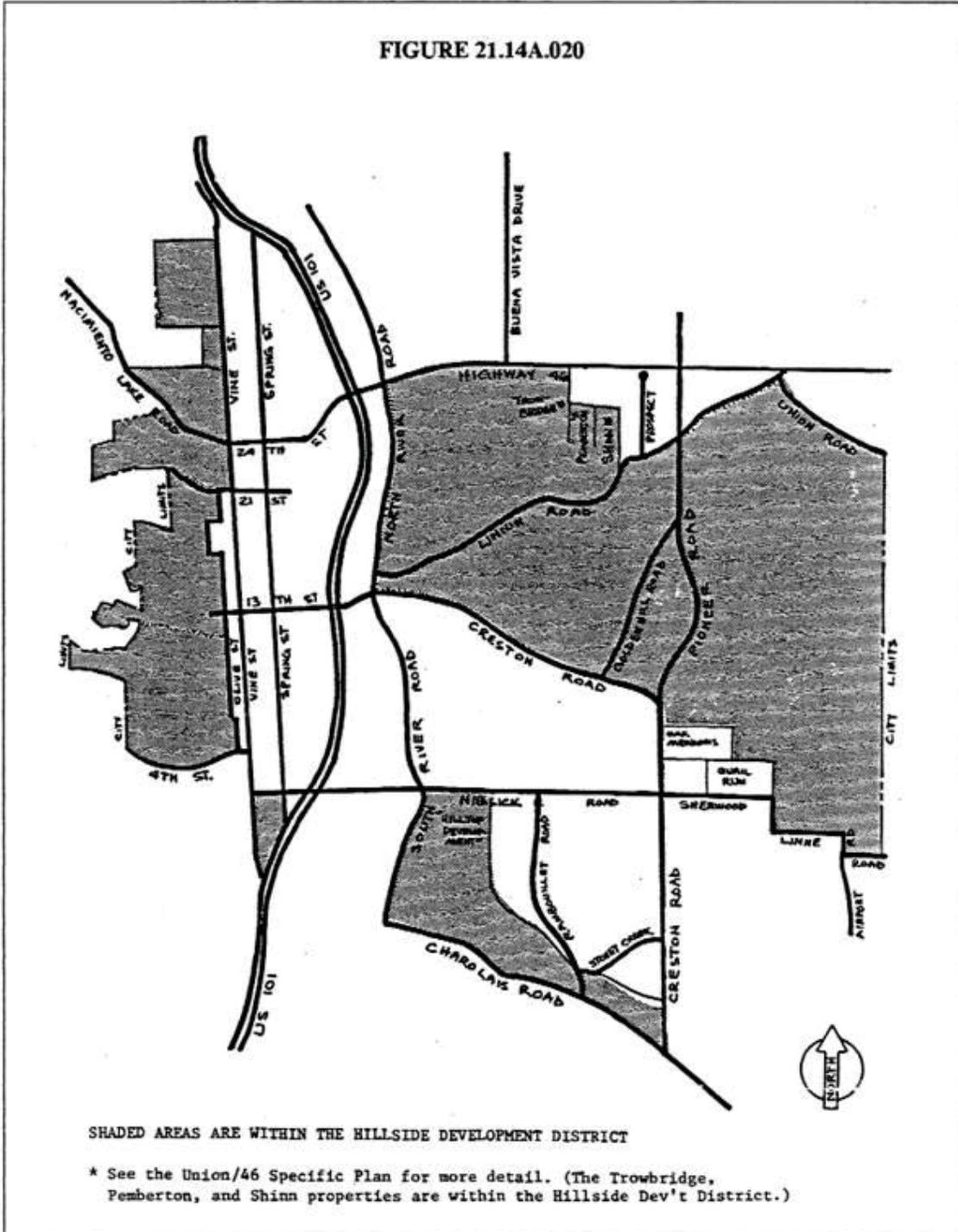
- B. The hillside development standards are in addition to those development standards established within Chapter 21.16 (district use tables) except where the development standards for the primary district, as listed in the district use tables, are more restrictive than the development standards for hillside areas.
- C. Where necessary to accomplish the purposes of this chapter, the city council, planning commission and development review committee and community development director may impose additional conditions which may serve to limit the types and intensities of land uses to achieve the purpose and intent of this chapter.

(Ord. 807 N.S. § 1, 2001; Ord. 635 N.S. Exh. A (part), 1992; Ord. 571 N.S. § 1 Exh. A (part), 1989)

21.14A.030 - Standards for the creation and development of hillside lots.

Within the hillside development district, the requirements and standards for the creation of new lots, via tract or parcel maps, the reconfiguration of existing lots via lot line adjustment, or the development of existing lots shall be as follows in the respective primary zoning districts:

FIGURE 21.14A.020



- A. Within the R-1 district, as specified within the R-1 district regulations (Section 21.16.020);
- B. Within other zoning districts, the standards specified within the R-1 district regulations (Section 21.16.020) shall be used as guidelines, and may be used as the basis for requirements by the planning commission and city council.

It is recognized that the minimum lot sizes, widths, depths and development standards prescribed for the R-1 district may not be appropriate for hillside development within other zoning districts. Therefore,

where necessary to accomplish the purposes of this chapter, the planning commission and city council may require minimum lot sizes, widths, depths and development standards which are greater (more restrictive) than those prescribed by the primary district regulations other than the R-1 district. In no instance shall lot sizes or development standards be less than those prescribed in either the R-1 district or the other primary zone district, whichever is more restrictive.

(Ord. 571 N.S. § 1 Exh. A (part), 1989)

21.14A.040 - Standards applicable to existing hillside lots.

Within the hillside development district, the following requirements and standards for development of already-created lots shall be in addition to those required in the regulations for the primary zoning districts:

- A. Those existing hillside lots which were created prior to the effective date of the ordinance codified in this chapter shall incorporate into their development all of the above-referenced standards for development of already-created lots, to the maximum extent feasible.
- B. It is not the intent of these regulations to preclude development of an existing and legally recognized parcel, and the planning commission and city council may modify these standards to allow reasonable development of existing parcels where such modifications can be found by the planning commission and city council to be consistent with the purpose and intent of these regulations.

(Ord. 571 N.S. § 1 Exh. A (part), 1989)

21.14A.050 - Permit requirements for development of hillside lots.

Development review approval, in accordance with Chapters 21.23A and 21.23B, shall be obtained prior to issuance of grading and building permits on hillside lots.

(Ord. 635 N.S. Exh. A (part), 1992; Ord. 571 N.S. § 1 Exh. A (part), 1989)

21.14A.060 - Development review requirements.

Applications for development review of development on hillside lots shall consist of the plans (including topographic detail), drawings and other information to explain a development project as required in the city's standardized development handbook. Additional information shall be provided when it is determined by the community development director to be necessary to illustrate the applicant's intent and/or impacts resulting from a specific project design element.

(Ord. 635 N.S. Exh. A (part), 1992; Ord. 571 N.S. § 1 Exh. A (part), 1989)

Article I. - Generally

21.16E.010 - Purpose.

The purpose of the R-1 district is to provide a district reserved for the development of single-family residential (one dwelling unit per lot) neighborhoods and compatible land uses, in both hillside and nonhillside areas.

(Ord. 572 N.S. § 2 Exh. A (A), 1989)

21.16E.020 - Applicability of hillside regulations.

The hillside overlay district is defined in Chapter 21.14A. The overlay district defines geographic areas subject to hillside development standards. Properties defined in this chapter in terms of degree of existing topographic slope are also subject to the same hillside development standards.

(Ord. 572 N.S. § 2 Exh. A (B), 1989)

21.16E.030 - Planned development overlay district applicability.

- A. The planned development overlay district (Chapter 21.16A) may be used as an overlay district to the R-1 district for the purposes of modifying the R-1 development standards contained within this chapter in order to create a subdivision with uniform lot areas and/or dimensions or to cluster lots in order to provide common open space.
- B. The number of single-family lots that may be created on a property via a subdivision or parcel map in the R-1, PD zoning district may be determined via application of density factors to the net developable acreage of a property via the two-step process outlined in this subsection.
 - 1. Step 1: Determine net developable acreage of a property. The area eligible for calculation of density shall consist of the acreage of a parcel, minus the following:
 - a. Any dedication necessary to provide for the full rights-of-way of arterial and/or collector streets, as designated by the circulation element of the general plan, adjacent to and/or within a proposed subdivision, parcel map or lot line adjustment, in accordance with adopted standards for city streets;
 - b. Any areas of the site with natural slopes of thirty-five percent or greater;
 - c. Any areas of the site within the outer driplines of a compact grouping of ten or more oak trees ("mature" as defined in Chapter 10.01 of this code), where driplines between trees in the grouping are separated by ten feet or less;
 - d. Any areas of the site within the floodway of the Salinas River.
 - 2. Step 2: Determine maximum density.
 - a. Determine Average Slope of Net Developable Area. General plan policy provides that densities be decreased as the underlying slope increases. Prior to applying the maximum densities allowed under a property's land-use category to the net developable acreage, the average slope of the net developable acreage shall be calculated using the following formula:

Average slope:	$\frac{I \times L \times 0.0023}{A}$
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Where:

I = Contour interval in feet. Contour intervals shall not exceed five feet.

L = Combined length of contour lines measured within the net developable area.

0.0023 = A constant that converts square feet into acres and expresses slope in percent.

A = Acreage of net developable area.

- b. Determine Maximum Density for Average Slope. The maximum density, (single-family lots per acre) of a property proposed for development shall be determined by multiplying the property's net developable acreage by the maximum number of dwelling units (single-family lots) per net developable acre listed in the table below for the average slope of the net developable area.

Average Slope of Net Developable Area (%)	Maximum number of dwelling units (single-family lots) per net developable acre					
	R-1,PD	R-1,B-1,PD	R-1,B-2,PD	R-1,B-3,PD	R-1,B-4,PD	R-1,B-5,PD
0-4.99	4.2	4.0	3.3	1.7	0.9	0.45
5-9.99	3.3	3.3	3.3	1.7	0.9	0.45
10-14.99	2.7	2.7	2.7	1.7	0.9	0.45
15-24.99	2.1	2.1	2.1	1.7	0.9	0.45
25-34.99	1.7	1.7	1.7	1.7	0.9	0.45

3. Exceptions.

- a. On properties where the land use element of the general plan establishes maximum densities at one, two or three units per acre (i.e., RSF-1, RSF-2 and RSF-3 land use categories), maximum densities shall not exceed that established by the general plan.
- b. On properties that have been assigned zoning that includes a density factor appended to the base zoning district (e.g., R-1, PD2, which allows up to two single-family lots per acre), maximum densities shall not exceed the appended density factor.

(Ord. 771 N.S. Exh. A, 1999; Ord. 635 N.S. Exh. A (part), 1992; Ord. 572 N.S. § 2 Exh. A(C), 1989)

21.16E.040 - Permitted uses.

Uses permitted by right and subject to approval of a conditional use permit in the R-1 district shall be as listed in Section 21.16.200. As noted in Table 21.16.200, accessory crop production, which includes dry and irrigated farming, orchards, and vineyards, shall be a permitted use when all of the following conditions are met:

- A. It is accessory to a single-family dwelling;
- B. There are no commercially-applied pesticides, which could impact surrounding properties transmitted through surface runoff, ground water infiltration or air emissions; and
- C. There are no use of audible pest control methods.

(Ord. 743 N.S. § 16, 1998; Ord. 703 N.S. § 6, 1995; Ord. 673 N.S. § B, 1994; Ord. 572 N.S. § 2 Exh. A(D), (Table 21.16.020-1), 1989)

Article II. - New Lots

21.16E.050 - Applicability.

The minimum standards set out in this article shall apply to the creation of new lots via parcel or tract maps or the reconfiguration of existing lots via lot line adjustments. (Note: Notwithstanding the requirements of Section 21.20.150 (Lots less than minimum size), all lots which do not conform to the size, width or depth and maximum developable slope standards contained within this chapter, but which were legally created prior to the effective date of the ordinance amending this chapter, are still legal lots and may be developed, subject to compliance with the current development standards of the zoning code.)

(Ord. 572 N.S. § 2 Exh. A(E) (part), 1989)

21.16E.060 - Maximum developable slope.

No new lots shall be created which would necessitate the placement of building foundations upon natural slopes of thirty-five percent or greater. A subdivider may be required to demonstrate that a lot has an adequate buildable area, in a manner subject to the approval of the planning commission and/or city council.

(Ord. 572 N.S. § 2 Exh. A(E)(1), 1989)

21.16E.070 - Effect of slope on lot sizes, widths and depths.

- A. Lot sizes, widths and depths shall be determined by the category of the natural (ungraded) slope of the developable area of the lot. For this purpose, the following slope categories are established: zero to four percent, five to nine percent, ten to fourteen percent, fifteen to twenty-four percent, and twenty-five to thirty-four percent.
- B. For new lots to be created by tract maps, parcel maps and lot line adjustments, "developable area" shall be defined as that area used for pads, benches, driveways and graded slopes for buildings and driveways.
- C. Where a proposed lot has more than one slope category, the developable area shall be determined by plotting a dimensioned building envelope on the proposed lot. (A separate detailed map or survey information may be required by the city planner for this purpose.) The building envelope shall represent the horizontal extent of pads, benches, driveways and graded slopes for buildings and driveways. If any portion of the building envelope overlays a natural slope of a steeper slope category, the lot size, width and depth requirements of the steeper category shall apply. It is the responsibility of the applicant to demonstrate that a particular building envelope will feasibly accommodate the horizontal extent of pads, benches, driveways and graded slopes for buildings and driveways.

(Ord. 572 N.S. § 2 Exh. A(E)(2), 1989)

21.16E.080 - Slope determination.

- A. A slope map shall be prepared for each application for a tentative tract map, tentative parcel map, and lot line adjustment. The slope map shall consist of a copy of the proposed tentative tract or parcel map or lot line adjustment map and shall show the following:

1. Contour intervals of two feet except where the slope is thirty percent or greater, in which case five-foot intervals shall be shown;
 2. The percent of slope shall be determined as the vertical rise divided by the horizontal run, where the run is perpendicular to the contour lines, multiplied by one hundred;
 3. The slope percent categories identified in this chapter for determining lot size, width and depths shall be overlaid on the map so that the boundaries of the categories are clearly delineated.
- B. Where a slope map reveals that a proposed tentative tract map has areas that fall under several slope categories, and that one or more of these areas are relatively small or narrow, the planning commission and/or city council may apply the standards applicable to the nearest predominant slope category to ensure that strict compliance with the minimum lot size, width and depth requirements would not result in a subdivision with nonuniform lot areas or nonorderly development.

(Ord. 572 N.S. § 2 Exh. A(E)(3), 1989)

21.16E.090 - Lot sizes.

Minimum lot sizes shall be as set out in Table 21.16E.090. (Note: lot sizes are shown in square feet, unless otherwise noted. Lot sizes do not include fee or easement dedications for public street purposes.)

21.16E.100 - Lot widths.

Minimum lot widths shall be as set forth in Table 21.16E.100. Lot widths shall be measured at the front building setback line for all lots and shall not include driveway strips for flag lots.

**TABLE 21.16E.090
MINIMUM LOT SIZE PER ZONING DISTRICT**

Slope	R-1	R-1, B-1	R-1, B-2	R-1, B-3	R-1, B-4	R-1, B-5
(percent)	(sq. ft.)					
0—4	7,000	7,500	10,000	20,000	1 acre	2 acres
5—9	10,000	10,000	10,000	20,000	1 acre	2 acres
10—14	12,500	12,500	12,500	20,000	1 acre	2 acres
15—24	15,000	15,000	15,000	20,000	1 acre	2 acres
25—34	20,000	20,000	20,000	20,000	1 acre	2 acres

(Ord. 572 N.S. § 2 Exh. A(E)(4), 1989)

**TABLE 21.16E.100
MINIMUM LOT WIDTH PER ZONING DISTRICT**

Slope	R-1	R-1, B-1	R-1, B-2	R-1, B-3	R-1, B-4	R-1, B-5
(percent)	(sq. ft.)					
0—4	70	70	80	100	100	100
5—9	80	80	80	100	100	100
10—14	100	100	100	100	100	100
15—24	120	120	120	120	120	120
25—34	150	150	150	150	150	150

(Ord. 572 N.S. § 2 Exh. A(E)(5), 1989)

21.16E.110 - Lot depths.

The minimum depth of any lot shall be one hundred feet where the natural (ungraded) slope beneath the developable area of a lot is less than ten percent, and shall be one hundred twenty feet where the natural (ungraded) slope beneath the developable area of a lot is ten percent or greater.

(Ord. 572 N.S. § 2 Exh. A(E)(6), 1989)

21.16E.120 - Buildability demonstration.

As part of an application for a tract or parcel map or lot line adjustment, it shall be the responsibility of the applicant to demonstrate, to the satisfaction of the city planner, that the new lots to be created are buildable in a manner consistent with this code; the city does not in any way warrant that it will be economically feasible to build on any property. For the purpose of demonstrating that lots are buildable, detailed drawings of conceptual site and grading plans for individual lots may be required by the city planner to be submitted with the application. The number and location of existing trees, especially oak trees, shall be a consideration in the design and sizing of lots. Oak tree preservation is a high priority for the city of El Paso de Robles, and parcels shall be configured in a manner designed to preclude future conflicts between creation of an adequate building envelope and the preservation of oak trees.

(Ord. 797 N.S. § 1 (part), 2000; Ord. 572 N.S. § 2 Exh. A(E)(7), 1989)

21.16E.130 - Flag lots.

The driveway strips for flag lots may be used for calculation of minimum lot size but shall be ineligible for calculation of minimum lot widths and depths.

21.16E.140 - Grading limitations.

The following grading standards shall apply:

- A. Preliminary grading plans shall be submitted with every application for a subdivision map and may be required for submittal of parcel maps and lot line adjustment applications.
- B. Mass grading and padding shall be prohibited on all lots located within the hillside development district, as defined by Section 21.14A.020. Outside of the hillside development district, the extent of cut-and-fill grading shall be minimized. Where mass grading or padding can be accomplished in a manner consistent with the purpose and intent of this chapter and such grading is necessary for the reasonable use of the property, extraordinary efforts shall be made to minimize exposed slope and retaining wall heights and to install mitigating landscaping.

Exceptions: In the hillside development district, padding may be authorized as part of site plan review required by Section 21.23B.030 in the following situations:

- 1. On lots with areas one acre or larger (gross area, including half of the width of the right-of-way of adjacent streets) where the development review committee finds that the proposed pad does not create adverse visual impacts to other properties or to the public at large, when viewed from public streets and other vantage points open to the public (which could include private property designated for commercial use); and
 - 2. Where the natural slope of the developable area of a lot, which includes the area under the footprint of a dwelling, necessary areas around the footprint for drainage (as specified by the adopted version of the Uniform Building Code codified in Title 17 of this Code) and usable yard, and a driveway, is less than ten percent, padding may be permitted, subject to the following conditions: (a) all graded slopes and retaining walls shall conform with the vertical height limits set forth in subsection D, of this section; and (b) a setback, no less than ten feet in width, from all interior property lines (those not abutting a street), in which there shall be no graded slopes or retaining walls, shall be provided.
- C. Benching shall be encouraged and may be required as a construction technique in order to minimize the extent of grading and height of both retaining and stem walls.
 - D. The vertical height of graded slopes and/or exterior retaining walls to create pads or benches shall be limited as specified in this subsection. The maximum vertical height of a graded slope or combination of graded slope and the exposed face of an exterior retaining wall used to create a pad or a bench shall be related to the size of the lot and shall not exceed the following limits.
 - 1. Between two side yards or between a side and a rear yard:
 - a. For each lot, the maximum height of the exposed face of an exterior retaining wall shall not exceed four feet. If more than one retaining wall is used, the minimum horizontal distance between the exposed faces shall be equal to, or greater than, the height of the exposed face of the higher of two adjacent walls. See Figure 21.16E.020A for a graphic example of this requirement.
 - b. The average maximum height of a graded slope, series of exterior retaining walls, or combination of both shall be limited as follows:
 - i. Four feet on lots with areas of seven thousand square feet or less;
 - ii. Eight feet on lots with areas of ten thousand square feet or less;
 - iii. Twelve feet on lots with areas greater than ten thousand square feet.

Notes: (1) The average height for all graded slopes is based on the standard ratio of two to one for graded slopes and shall be determined in the manner indicated in Figure 21.16E.020B. The average maximum heights of graded slopes may be increased

proportionately if lower ratios such as three to one or four to one are utilized; please see Figure 21.16E.020C for an illustration of the proportionate change. (2) The heights of graded slopes on each individual lot shall, except as provided herein, be evaluated independent of the heights of cut and/or fill slopes on adjacent parcels. (3) Where graded slopes are located on adjacent lots such that the combined height of graded slopes across adjacent lots exceeds twelve feet, flat (zero to five percent) bench to be a minimum of ten feet wide shall be provided. Said bench shall be placed between the adjacent lots and between the adjacent slopes in order to accommodate fencing, drainage facilities, maintenance access and landscaping. The bench shall be heavily landscaped in a manner to be approved by the development review committee, with the intent of mitigating the visual impact of two adjacent slopes.

2. Between two rear yards:
 - a. For each lot, the maximum height of the exposed face of an exterior retaining wall shall not exceed six feet. If more than one retaining wall is used, the minimum horizontal distance between the exposed faces shall be equal to, or greater than, the height of the exposed face of the higher of two adjacent walls. See Figure 21.16E.020A for a graphic example of this requirement.
 - b. The average maximum height of a grade slope, series of exterior retaining walls, or combination of both shall be limited as follows:
 - i. Six feet on lots with areas of seven thousand square feet or less;
 - ii. Eight feet on lots with areas of ten thousand square feet or less;
 - iii. Twelve feet on lots with areas greater than ten thousand square feet.

Notes: (1) The average height for all graded slopes is based on the standard ratio of two to one for graded slopes and shall be determined in the manner indicated in Figure 21.16E.020B. The average maximum heights of graded slopes may be increased proportionately if lower ratios such as three to one or four to one are utilized; please see Figure 21.16E.020C for an illustration of the proportionate change. (2) The heights of graded slopes on each individual lot shall, except as provided herein, be evaluated independent of the heights of cut and/or fill slopes on adjacent parcels. (3) Where graded slopes are located on adjacent lots such that the combined height of graded slopes across adjacent lots exceeds twelve feet, flat (zero to five percent) bench to be a minimum of ten feet wide shall be provided. Said bench shall be placed between the adjacent lots and between the adjacent slopes in order to accommodate fencing, drainage facilities, maintenance access and landscaping. The bench shall be heavily landscaped in a manner to be approved by the development review committee, with the intent of mitigating the visual impact of two adjacent slopes.

3. Notes:
 - a. Where streets are parallel with contour lines, the regulations set out in this subsection may require that downhill lots be graded to drain to a drainage easement in the rear of the downhill lots instead of draining to the street.
 - b. Benching, raised (stem) wall foundations, interior retaining walls, and similar construction methods may be required in order to comply with the limits set out in this subsection for vertical height of graded slopes and/or exterior retaining walls for pads or benches.
 - c. Gravity/Crib Wall Option. If the applicant can demonstrate to the satisfaction of the planning commission/development review committee that use of a gravity or crib wall will reduce the amount of grading/landform modification and will provide a suitable alternative to a terraced retaining wall (series of two or more retaining walls on a single slope), the planning commission/development review committee shall consider and may approve use of a gravity or crib wall design for side and/or rear yard locations. The maximum acceptable height of the gravity/crib wall, and the individual

design factors of such walls (for example, whether or not a bench and/or landscaping is required), shall be evaluated on a case by case basis. The extent to which the wall would be in public view shall be a consideration for the planning commission/development review committee.

- E. All retaining walls to create building pads shall be constructed of masonry materials.
- F. The exposed face of a stem wall shall not exceed nine feet in average height and shall be heavily landscaped and/or screened in a manner subject to approval of the city council or its designee.
- G. The overall shape, height and grade of graded slopes shall not exceed two to one; four to one slopes are preferred. (Exception: The city engineer may approve steeper cut slopes for construction of streets, where a registered soils engineer recommends such approval.)
- H. Slope grading design shall be based on the concepts of "contour grading," a technique that strives to maintain the pre-existing landform or to replicate natural landform patterns in the case of extensive grading.
- I. The crest of all graded slopes in excess of eight feet vertical height shall be rounded. Where graded slopes intersect, the ends of each slope shall be horizontally rounded and blended.
- J. All graded slopes with vertical heights of three feet or greater shall be provided with landscaping materials and irrigation systems that are under the control of a single property owner or under the jurisdiction of a homeowner's association.
- K. All grading activities are subject to specific erosion-control measures required by the city engineer. Grading plans shall be prepared by a California-licensed engineer. (Exception: If a California-licensed architect prepared the structural plans for a building, the architect may prepare the grading plans.)
- L. Manufactured Slopes.
 - 1. Multi-Parcel Grading. These requirements apply when a grading permit is submitted for more than one lot or parcel (located outside of the hillside development district).
 - a. All Manufactured Slopes Requiring a Grading Permit. All manufactured slopes shall be prepared and maintained with erosion protection. This control shall consist of hydroseeding and other materials approved by the city engineer and director of community development to be completed within one month of the grading operation unless granted an extension by the city engineer. Soil amendment and soil preparation may be required by the city engineer prior to hydroseeding to ensure the establishment of the plant material. Hydromulch seeds should be applied following the first measurable rainfall in the fall of the year or a temporary irrigation method may be required to ensure germination and minimum growth. If the natural rainfall fails to provide adequate moisture for germination, supplemental irrigation and replanting may be required.
 - b. Manufactured Slopes Visible From a Public Street. Manufactured slopes determined by the planning division to be visible from a public street will be required to install landscaping in addition to the hydroseeding prescribed above. If there is a question regarding the visibility of a slope, the planning division may defer the determination to the development review committee. The additional landscaping must be installed prior to certificate of occupancy for associated building construction.
 - c. Plan Required. A landscaping plan shall be submitted for review and approval by the development review committee. The landscaping plan shall be designed by a landscape architect. Soil amendment, plant material, installation and irrigation shall be included in the landscape plan. New landscaping shall incorporate plant species, which meet the following criteria:

- (A) New vegetation should be compatible with natural vegetation and that on surrounding properties.
 - (B) All planting within thirty feet of buildings should be fire-retardant.
 - (C) For water conservation purposes, drought-resistant species are encouraged.
- ii. Quantity of Vegetation. Manufactured slopes shall be planted and irrigated per the following standards:
- (A) Groundcover. Manufactured slopes shall be planted with groundcover materials for erosion control. Groundcover may be as hydromulch or planted from rooted cuttings.
 - (B) Trees and Shrubs. Manufactured slopes have a mixture of trees and shrubs incorporated within groundcover to assure soil stabilization and to promote varying height and mass of landscaping. However, within the private portions of single-family lots, sloped areas which are less than eight feet in height are not required to be planted with shrubs, and sloped areas less than five feet in height are not required to be planted with trees.

There shall be a minimum of one tree for every five hundred square feet of slope area. If permanent groundcover is applied as a hydromulch, there shall be a minimum of one shrub for every one hundred twenty-five square feet of slope area. If rooted cuttings are utilized as groundcover, there shall be one shrub for every three hundred square feet of slope area. There should be a mix of one gallon to fifteen-gallon trees and shrubs to promote varying height and mass of landscaping. Box-sized trees require retaining walls on slopes to prevent slope failure.

- iii. Landscaping Installation. The landscape architect that prepared the landscaping plan shall supervise the installation of soil amendments, landscaping materials, and irrigation system to insure that the required work is done per the approved plan. The landscape architect shall provide the city of El Paso de Robles with a written confirmation that the soil amendments, landscaping materials, and irrigation system are installed per the plan approved by the city.

2. Individual Lot Grading. These requirements apply when a grading permit is submitted for a single lot.
- a. All Manufactured Slopes Requiring a Grading Permit. All manufactured slopes shall be prepared and maintained with erosion protection as prescribed in subsection (L)(1)(a) of this section.
 - b. Manufactured Slopes Visible From a Public Street. Manufactured slopes determined by the planning division to be visible from a public street will be required to install landscaping as prescribed in subsection (L)(1)(b) of this section. However, a landscape architect is not required to design the landscaping plan. Applicants are encouraged to consult a landscape professional when designing the landscape plan.

- M. 1. Usable Rear Yard, For All Lots, Regardless of Location. In the rear yard of all lots, a usable, unobstructed natural or manufactured (graded) area ten feet in depth shall be provided. "Usable" means that the slope is a minimum of two percent but not more than five percent. Where a residential building is designed to be built into existing natural slopes, this requirement may be met by providing either a five-foot wide usable manufactured area no less than the full width of a dwelling unit, or a deck a minimum of ten feet in depth and no less than the full width of a dwelling unit. The underside of decks that are three feet or higher above grade shall be screened with landscaping and/or architectural features such as wooden lattice.

Exception: The planning commission, development review committee or staff shall consider and may approve proposals for the usable rear yard requirement to be met by

designating an equivalent (in area as noted above) side yard (or a combination of rear and side yard). The minimum dimension for any usable yard area shall be ten feet.

2. For Lots That are Adjacent to, and Elevated Above, an Arterial or Collector Street, as Designated by the Circulation Element of the General Plan.

- a. Where a dwelling unit is placed on a manufactured pad, and the average height of the manufactured slopes for this pad in the rear or street side yard adjacent to an arterial or collector street is ten feet or more, the dwelling unit shall be set back a minimum of fifteen feet from the top of the manufactured slope.
- b. Where a residential building is designed to be built into existing natural slopes, and a deck is proposed to be the means to meet the usable yard requirement described in subsection (M)(l) of this section, if the rear yard is adjacent to an arterial or collector street, the underside of such a deck, regardless of height above grade, shall be screened with landscaping and/or architectural features such as wooden lattice. Alternative solutions may be proposed to the development review committee (DRC).

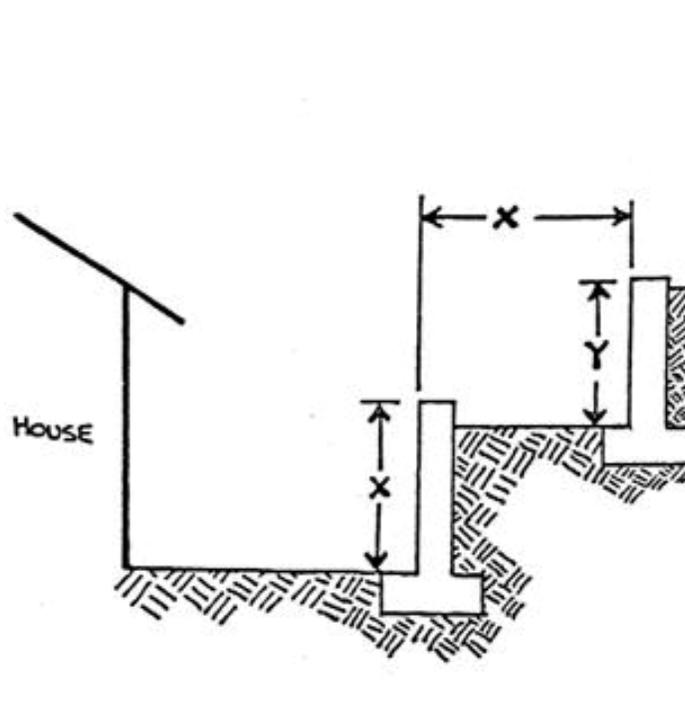
The DRC shall have the authority to limit the proposed size and dimensions of any deck, but not less than the minimum dimensions of ten feet of depth and full width of the dwelling unit, if it finds that a proposed deck of greater depth and width would create negative visual impacts.

- c. The requirements of subsections (M)(2)(a) and (M)(2)(b) of this section shall be applied to all lots created by tentative subdivision (tract) maps, tentative parcel maps or lot line adjustments that are approved after July 1, 1998. On any lot created prior to that date, the development review committee shall review a site plan application and require grading and landscaping treatment appropriate to the size and dimensions of the lot with the intent of reducing visual impacts.

(Ord. 807 N.S. § 2, 2001; Ord. 797 N.S. § 1 (part), 2000; Ord. 747 N.S. § 2, 1998; Ord. 727 N.S. Exh. A, 1997; Ord. 572 N.S. § 2 Exh. A(E)(9), 1989)

FIGURE 21.16E.020A

HORIZONTAL DISTANCE BETWEEN
EXTERIOR RETAINING WALLS



In this illustration, "x" is greater than "y."
The walls shall be separated by "x" feet.

21.16E.150 - Oak tree preservation.

Creation of new lots and streets shall be designed to protect oak trees in a manner consistent with the city's oak tree preservation ordinance (Chapter 10.01).

(Ord. 797 N.S. § 1 (part), 2000; Ord. 572 N.S. § 2 Exh. A(E)(10), 1989)

21.16E.160 - Utilities.

- A. All utility service lines shall be under-grounded.

- B. Transformers, control points and other utility housings shall be located so as to minimize their visual impact and shall be screened in a manner approved by the architectural review committee.

(Ord. 572 N.S. § 2 Exh. A(E)(11), 1989)

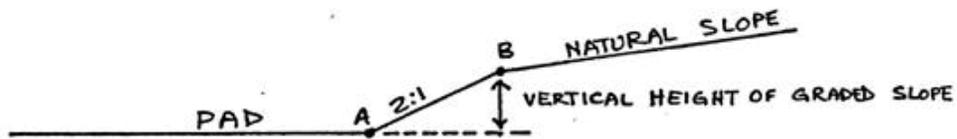
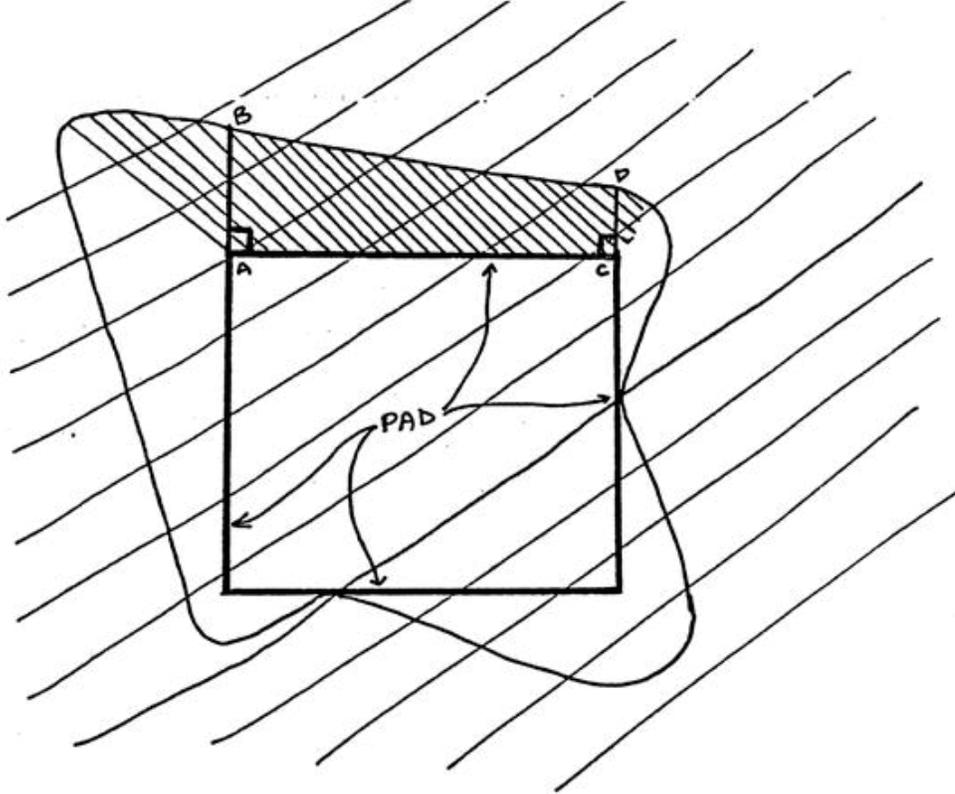
21.16E.170 - Hillside street standard.

Use of the hillside street standard shall be subject to planning commission or city council approval in conjunction with applications for tract maps, parcel maps, or a waiver of street improvements to be approved as specified in Chapter 21.23A.

(Ord. 572 N.S. § 2 Exh. A(E)(12), 1989)

FIGURE 21.16E.020B

METHOD OF DETERMINATION OF
AVERAGE HEIGHT OF GRADED SLOPE



The average height of the graded slope area is determined by the average heights of the graded slope as measured at two points at either end of a pad or bench in a direction perpendicular to the edge of the pad or bench.

In the above figure, the average height of the spaced graded slope is:

$$\frac{\text{vertical height from A to B} + \text{vertical height from C to D}}{2}$$

21.16E.180 - Vistas.

Subdivisions shall be designed to minimize landform alteration as viewed from outside the site. Landscaping shall be used to mitigate the visual effects of grading for streets.

(Ord. 572 N.S. § 2 Exh. A(E)(13), 1989)