17.32.010: PURPOSE

The purpose of the hillside overlay zone is to establish standards for the development and excavation of hillside slope areas located in the city; to maintain soil and slope stabilities; to minimize erosion and other adverse effects of grading, cut and fill operations; to preserve the character of the city's hillsides; and to otherwise supplement and amplify the city subdivision and zoning ordinances. (Ord. 99-02-18-01 § 2)
17.32.020: DEFINITION

The hillside overlay zone applies to any lot, plot or other parcel of land containing areas of slopes exceeding the slope class 1 specification. (See definition of terms in section 17.08.020 of this title.) (Ord. 2002-5 § 1, 2002)

17.32.030: ADMINISTRATIVE AUTHORITY

In the event that provisions of this zone conflict with the provisions of other zones, building codes or subdivision ordinances, the most restrictive provisions shall apply. (Ord. 99-02-18-01 § 2)

17.32.040: STANDARDS

The standards, guidelines, and criteria to be achieved by the overlay zone shall include, but are not limited to, the following:

A. The protection of the public from natural hazards of stormwater runoff and erosion;

B. The protection of the public from the threat of, and the subsequent damage from, fires in the foothills;

C. The establishment of roads and streets, with minimum cuts and fills or visible scam, that will ensure ingress and egress of vehicles, including construction, maintenance and emergency vehicles, into all developed areas;

D. The encouragement of a variety of development designs and concepts that are compatible with the natural foothill terrain. (Ord. 99-02-18-01 § 2)

17.32.050: TERM DEFINITIONS

GEOLOGICAL HAZARD AREA: An area, or areas, identified by FEMA, state or county maps or engineering studies that are identified as potentially dangerous areas because of earthquake faults, landslides, liquefaction potential, or other such geologic condition.

GEOTECHNICAL ENGINEER: A person with a four (4) year degree in civil engineering or engineering geology from an accredited university who, through training and experience, is able
to assure that geological factors affecting engineering works are recognized, adequately interpreted, and presented for use in engineering practice.

TABLELAND: Land where the surface slope in any direction is less than or equal to ten percent (10%). (Ord. 99-02-18-01 § 2)

17.32.060: PERMITS
All development on slopes in the hillside development overlay zone, or in a geological hazard area, shall require a hillside development permit granted by the planning commission prior to any excavation or construction activity. No building construction will be allowed on slopes in the slope class 5 specification, except for streets that are necessary to access buildable areas at a higher elevation. In such circumstances, street grades must comply with slope and width specifications for all other streets, and the city engineer must approve the design. This rule applies to private lanes, drives and driveways as well. (Ord. 2018-14, 2018: Ord. 2002-5 § 1, 2002)

17.32.070: APPLICATION REQUIREMENTS
All applications to the planning commission for development in the hillside overlay zone of the geologic hazardous area shall be accompanied by the following technical information reports, all prepared by a licensed civil engineer or landscape architect, as the case may be, in sufficient detail to allow evaluation of the health, safety and general public welfare aspects of the development. The reports shall include:

A. Site Development Plans:
   1. A grading or earth moving plan showing:
      a. Existing and proposed contours of the property. The contour lines shall extend to at least one hundred feet (100') outside the property lines, or a sufficient distance to show on and off site drainage channels (contour intervals by two feet (2') on slopes less than fifteen percent (15%) and five feet (5') on slopes of fifteen percent (15%) or greater),

      b. The slopes and cross sections of proposed cuts and fills. The height of any cut or fill shall not exceed four feet (4') nor shall the combined height of cuts and fills on any cross section exceed six feet (6') unless supported by retaining walls, terracing, landscaping or other techniques for stabilizing the cut and fill slopes and are approved by the city council,
based on the recommendation of the city engineer. All excavation and fill areas shall conform to the uniform building code as amended, and

c. Material disposal plans including disposal sites and locations;

2. Detailed plans of all surface and subsurface drainage systems and control structures including retaining walls, cribbing and other erosion protection devices to be constructed in connection with, or as part of, the proposed project, together with a map showing the drainage area to be served;

3. Detailed site plans and elevation drawings showing the location of all existing and proposed streets, easements and drainage channels;

4. Traffic flow study if deemed necessary by the city engineer;

5. Detailed site plan showing the location and proposed connection points of utilities, including, but not limited to, water, natural gas, electricity, sewer and telecommunications;

6. A fire protection plan accompanied by letters of approval from the fire chief and the county fire marshal;

7. Detailed site plan showing the boundaries of any established FEMA or any other floodplain within the property and within six hundred feet (600') of the property lines.

B. Drainage Control Plan And Report: A drainage control plan and report based upon the following criteria:

1. All drainage systems shall be separate and independent from the sanitary sewer system.

2. Drainage and flood control designs shall be in conformance with the city flood control master plan.

3. No natural drainage channel shall be filled, obstructed, or diverted, nor shall the point of entrance and exit from the property be changed without the approval of the city engineer.

4. All of the drainage basin upstream of the development shall be considered in the analysis as fully developed and considered in the design of any storm water drainage facilities.
5. The effects on the downstream property owners relative to increased flood potential shall also be considered in the design, including acquisition of easements, agreements, constructions or modification of improvements where needed.

6. Developments shall use existing drainage channels or newly constructed control structures and retention facilities to control its stormwater runoff so that no net increase in storm runoff will occur on the downstream properties.

7. Streets may be used for storm runoff up to reasonable limits consistent with traffic safety.

8. The storm water from a 50-year frequency storm with a duration equal to the time of concentration shall be adequately conveyed within the limits of the street right of way or in storm drainage channels, from the project to established drainage outlet channels without creating flood hazards to dwellings.

9. When an underground pipe system is required, it shall be designed to carry a 10-year storm. Major hydraulic structures shall be designed to carry a 25-year storm. The minimum storm drain size shall be twelve inches (12").

10. Unless specifically permitted, retention basins on hillsides shall not be allowed.

11. Detention basins shall be used to reduce the effects of the peak runoff from storms and to release water flow at the preproject or at an otherwise approved rate.

12. Detention basins shall not be allowed in locations where they will be incompatible with the surrounding landscape or where they would present a hazard to public safety.

13. Cross gutter drains on streets shall be avoided where possible. They shall not be allowed on major streets.

14. When springs or other ground water sources are found on the property, development plans must be reviewed and approved by the appropriate governing agency.

15. All building shall be constructed outside the limits of any 100-year floodplain. Foundations within five hundred feet (500') of the floodplain boundary shall be a minimum of eighteen inches (18") above the 100-year flood stage, except on floodplains subject to FEMA regulations, in which case they shall be two feet (2') above the 100-year flood stage.
16. Necessary measures shall be taken to prevent erosion surface and channel erosion throughout the development. Erosion mitigation shall be taken at all points of discharge and on the face and toe of any cut or fill slope.

17. During grading or construction on any property (including off-site construction), the developer shall control both water used for construction and storm runoff in such a manner as to not affect any adjoining properties, nor add silt or debris to any existing storm drain, wash, channel, or roadway.

C. Geology Soils Report: A geology soils report shall contain at the least the following information:

1. A slope stability analysis containing conclusions and recommendations on the effects of material removal, storm and irrigation water, ground shaking and erosion on slope stability;

2. A foundation investigation including bearing capacity, sheer strength, and shrink/swell potential of soils and conclusions and recommendations on the effects of soil conditions on foundation and structural stability;

3. The location and yield of springs and seeps;

4. A description of geological structural features, including any geological limitations.

5. Conclusions and recommendations regarding the effect of geologic conditions on the proposed development, together with recommendations identifying the means proposed to minimize any hazard to life or property or adverse impact on the natural environment.

D. A Landscape Plan: The plan shall be of adequate scale and detail to indicate general grading and plantings along irrigation and temporary erosion control. For areas to be used as surface retention basins for stormwater runoff, the plan shall identify the location and sizing of control facilities and address operation and maintenance of the control facility in conjunction with the landscape improvements. The plan shall describe how vegetation in excavated and filled areas will be restored. The plan shall specify types of retention being used, together with sprinkler plans and water usage methods suitable to the soil of the project.

E. Additional Information: Other reports, plans and information as may be deemed necessary by the planning commission, city council, or city engineer may be requested as a condition of the applicable procedures. (Ord. 2000-9 § 1; Ord. 99-02-18-01 § 2)
17.32.080: RESTORATION BOND
An escrow security or letter of credit to assure hillside restoration shall be provided prior to issuance of a development permit for projects disturbing more than one acre, or where determined necessary by the city engineer on projects involving less than one acre. Such financial guarantee shall be provided in the amount equal to one hundred twenty five percent (125%) of the estimated costs to ensure necessary soil stabilization, including grading, planting, and maintenance in the event the developer fails to complete the hillside restoration in accordance with the approved plan within one year from the issuance of the permit. The planning commission may grant additional time extension as may be necessary to allow completion of the restoration work if significant progress toward completion of the project is underway. The letter of credit shall cover the cost, as estimated by approved landscape architect, qualified contractor or geotechnical engineer and approved by the city engineer, to restore the hillside to an acceptable level of appearance and stability. In the case of a dispute over what constitutes an acceptable level of restoration, the decision of the planning commission shall prevail. (Ord. 2018-14, 2018: Ord. 99-02-18-01 § 2)

17.32.090: VERIFICATION OF COMPLIANCE
The developer shall request certification by the city engineer that the development has been completed in compliance with the approved hillside development permit. Restoration securities shall not be released and certificates of occupancy shall not be issued until such certification is obtained and a copy received by the planning commission. (Ord. 2000-16 § 1: Ord. 99-02-18-01 § 2)

17.32.100: PENALTY FOR VIOLATION
The city engineer shall have the right to order a halt to construction of any improvements within a hillside development overlay zone where, in his or her discretion, there exists a condition which violates or threatens to violate any of the provisions of this chapter. Such suspension shall continue until the city engineer is satisfied that measures have been implemented with this chapter. The developer or the owner may appeal to the city council. (Ord. 99-02-18-01 § 2)
A. Lot Size Standards: The minimum lot size within the hillside development overlay zone is:

Class 2 slope: Twenty thousand (20,000) square feet;

Class 3 slope: Twenty six thousand (26,000) square feet;

Class 4 slope: Thirty two thousand (32,000) square feet;

Building construction shall not be permitted on slopes in slope class 5. Any area within a lot that has slopes in slope class 5 shall not be included in the calculations for the minimum lot size.

B. Determination Of Slope And Slope Areas:

1. Slopes shall be determined from contour maps with contour intervals not greater than five feet (5').

2. The contour map shall identify the profile lines from which the slopes were determined. The profile lines shall be perpendicular to the contour lines and at maximum intervals of one hundred fifty feet (150') or seventy five feet (75') from a property line.

C. Drainage And Erosion:

1. All lots shall have adequate setbacks, which have been approved by the city engineer, from any drainage channel.

2. All lots shall have adequate buildable area located outside of the 100-year floodplain. No structures shall be allowed in the 100-year floodplain.

3. Storm water collection facilities shall be required to be constructed on the development site.

   a. Such facilities shall be the first improvement of facilities constructed on the site and shall be built to meet the requirements of the total project.

   b. Such facilities shall be designed to divert surface water away from the sloping faces of cuts and fills.
D. Design Specifications: Street design specifications shall be the same as for all other streets in the city with the following additional requirements:

1. Street grades shall be a maximum of eight percent (8%) unless otherwise approved by the city engineer.

2. Vertical curves at intersections require that the approach area where vehicles stop while waiting to enter the intersection shall not exceed four (4) to five percent (5%) from the gutter line of the street being intersected for a distance of fifty feet (50’), except for intersections where both intersecting streets are major streets, in which case the design grade for the approach are two (2) to three percent (3%) for a distance of one hundred feet (100’).

E. Additional Design Standards:

1. Except for cul-de-sacs, at least two (2) ingress and egress routes shall be provided for each subdivision.

2. Access shall be provided to all developed, partially developed or undeveloped areas for emergency firefighting equipment.

3. Cul-de-sacs shall not exceed six hundred feet (600’) in length and shall have a turnaround radius of fifty feet (50’).

4. Variations of the street design standard developed to solve special hillside visual may be presented to the planning commission for consideration.

F. Building Setbacks: The front setback along public streets where the slope is over ten percent (10%) will be a minimum of thirty (30) horizontal feet from the property line.

G. Vegetation And Revegetation:

1. All areas on development sites cleared of natural vegetation during construction or off site improvements shall be replanted with vegetation which, when established, shall have characteristics of erosion control equal to or exceeding the original vegetation.

2. New planting shall be protected with organic cover.

3. Developers shall use persons or a firm having expertise in the practice of revegetation (i.e., landscape architects or nursery workers) and shall be employed to supervise the planning and installation of vegetation cover.
4. Vegetation shall be removed only when absolutely necessary (i.e., for the construction of buildings, roads and filled areas).

5. Vegetation shall be planted in all disturbed areas within a reasonable time as determined by and under the direction of the city engineer. Such vegetation shall be of a perennial and low combustible nature, and which, when established, shall be efficient to stabilize the soil.

H. Fire Protection: Spark arresters shall be installed in every fireplace constructed indoors or outdoors. Screen openings in such arresters shall not be in excess of one-quarter inch (\(\frac{1}{4}\)) in diameter.

I. Grading, Cuts And Fills:

1. Exposed, unstable surfaces of an excavation or fill shall not be steeper than three (3) horizontal to one vertical.

2. All permanent fill shall be located so that settlements, sliding or erosions shall not damage or cover streets, curb, gutter, or sidewalk.

3. All fill and degrees of compaction shall comply with current standards of the uniform building code.

4. The top or bottom edges of a slope caused by an excavation or fill shall be at least three (3) horizontal feet from the property line and street right of way lines.

5. All structures, except retaining walls or soil stabilization improvements, shall have a setback from the crest of the cut or base of the fill of a minimum distance equal to the depth of the fill or the height of the cut, unless a structurally sound retaining wall is built for cut or fill slope. Retaining wall may be part of the dwelling unit. (Ord. 2002-5 § 1, 2002: Ord. 2000-16 § 1: Ord. 99-02-18-01 § 2)

17.32.120: ENGINEERING REVIEW FEE

At the time the application is filed for any development within a hillside development overlay zone, there shall be paid to the treasurer an engineering review fee as established by resolution of the city council. There shall be no action taken on the application until this fee is paid. This fee is not refundable. (Ord. 99-02-18-01 § 2)
17.32.130: APPLICATION PROCESS

A. Application is made first to the planning commission for review.

B. The planning commission reviews the application.

C. The planning commission sends the application to the city engineer for review.

D. The planning commission reviews the recommendations of the city engineer and then either grants or denies the application. (Ord 2018-14, 2018: Ord. 2000-16 § 2)