

CITY OF PHOENIX, OREGON

ORDINANCE NO. 983

**AN ORDINANCE OF THE CITY OF PHOENIX
AMENDING SECTION 3.7.4 OF THE LAND DEVELOPMENT CODE**

WHEREAS, Oregon Statewide Planning Goal 10, Housing, requires local governments to “provide for the housing needs of citizens of the state” through a specific element within their Comprehensive Plans; and

WHEREAS, the City implements its Goal 10 requirements through the establishment of three Residential zones within its Land Development Code; and

WHEREAS, the Land Development Code contains special provisions for development on constrained lands such as hillsides and floodplain; and

WHEREAS, the City is in receipt of an application to amend the standards for Hillside Development to allow additional grading, larger lot sizes and narrower streets; and

WHEREAS, on June 5, 2017, the City mailed notices announcing a public hearing on the proposed amendments; and

WHEREAS, on June 26, 2017, the Planning Commission conducted a duly noticed public hearing on the proposed amendments, affording all citizens an opportunity to be heard on the subject; and

WHEREAS, on August 14, 2017, the Planning Commission continued the public hearing on the proposed amendments, affording all citizens an opportunity to be heard revisions to the original application; and

WHEREAS, following receipt of public testimony at the June 26 and August 14, 2017 public hearings, the Planning Commission deliberated and forwarded a unanimous recommendation of approval to the City Council; and

WHEREAS, the City Council has considered the Planning Commission’s recommendation, the staff reports in this matter, and testimony and evidence of interested parties, and has evaluated the draft amendments against Statewide Goals, state, county, and regional requirements, the Comprehensive Plan, and other applicable standards;

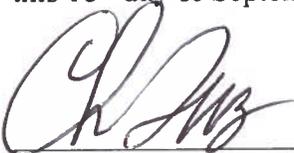
NOW, THEREFORE, THE CITY OF PHOENIX ORDAINS AS FOLLOWS:

Section 1. Findings. The City Council hereby adopts as findings and conclusions the foregoing recitals and the conclusionary findings in this matter attached hereto as Exhibit 1 and adopted as if set forth fully herein.

Section 2. Order. The City Council hereby adopts the amendments to Section 3.7.4 of the Land Development Code attached as Exhibit 2 incorporated as if set forth fully herein.

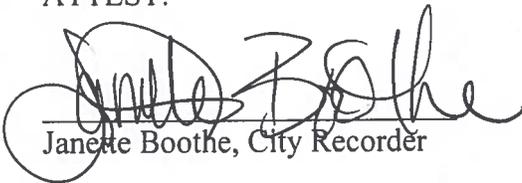
Section 3. Staff Directive. To reflect adoption of this Ordinance, Staff is directed to make conforming changes to the Land Development Code necessary to incorporate the amendments adopted herein.

PASSED AND ADOPTED by the City Council and signed by me in authentication of thereof on this 18th day of September, 2017.



Chris Luz, Mayor

ATTEST:



Janette Boothe, City Recorder

3.7.4 – Hillside Lands

- A. Purpose. It is the purpose of the Hillside Lands to provide supplementary development regulations to underlying zones to ensure that development preserves the value of these areas and the public health, safety, and general welfare by insuring that development does not create soil erosion, sedimentation of lower slopes, slide damage, flooding problems, and severe cutting or scarring.
- B. General Requirements. The following general requirements shall apply in Hillside Lands:
1. All development shall occur on lands defined as having buildable area. Slopes greater than 35% shall be considered unbuildable except as allowed below:
 - a. Existing parcels without adequate buildable area less than or equal to 35% slope shall be considered buildable for one unit.
 - b. Existing parcels without adequate buildable area less than or equal to 35% slope cannot be subdivided or partitioned.
 2. All newly created lots, either by subdivision or partition, shall contain a building envelope with a slope of 35% or less. **Lands with slope of 15%-25% may have a maximum lot size of 12,000 square feet. Lands in excess of 25% slope shall not be counted toward the density or maximum lot size of the applicable zone.**
 3. New streets, flag drives, and driveways shall be constructed on lands of less than or equal to 35% slope with the following exceptions:
 - a. The street is indicated on the City's Transportation System Plan.
 - b. The portion of the street, flag drive, alleyway, mid-block lane, or driveway on land greater than 35% slope does not exceed a length of 100 feet.
 4. Geotechnical Studies. For all applications on Hillside Lands involving subdivisions or partitions a geotechnical study prepared by a geotechnical expert indicating that the site is stable for the proposed use and development is required. The study shall include the following information:
 - a. Index map.
 - b. Project description to include location, topography, drainage, vegetation, discussion of previous work, and discussion of field exploration methods.
 - c. Site geology, based on a surficial survey, to include site geologic maps, description of bedrock and surficial materials, including artificial fill, locations of any faults, folds, etc., and structural data including bedding, jointing and shear zones, soil depth and soil structure.
 - d. Discussion of any off-site geologic conditions that may pose a potential hazard to the site, or that may be affected by on-site development.
 - e. Suitability of site for proposed development from a geologic standpoint.
 - f. Specific recommendations for cut and fill slope stability, seepage and drainage control or other design criteria to mitigate geologic hazards.
 - g. If deemed necessary by the engineer or geologist to establish whether an area to be affected by the proposed development is stable, additional studies and supportive data shall include cross-sections showing subsurface structure, graphic logs with subsurface exploration, results of laboratory test and references.
 - h. Signature and registration number of the engineer and/or geologist.
 - i. Additional information or analyses as necessary to evaluate the site.
 - j. Inspection schedule for the project.
 - k. Location of all irrigation canals and major irrigation pipelines.

C. Hillside Grading and Erosion Control. All development on lands classified as Hillside shall provide plans conforming to the following items:

1. All grading, retaining wall design, drainage, and erosion control plans for development on Hillside Lands shall be designed by a geotechnical expert. All cuts, grading, or fills shall conform to the Building Code as amended. Erosion control measures on the development site shall be required to minimize the solids in runoff from disturbed areas.
2. For development other than single-family homes on individual lots, all grading, drainage improvements, or other land disturbances shall only occur from May 1 to October 31. Excavation shall not occur during the remaining wet months of the year. Erosion control measures shall be installed and functional by October 31. Up to 30-day modifications to the October 31 date, and 45-day modification to the May 1 date may be made by the Planning Director, based upon weather conditions and in consultation with the City Engineer and the project geotechnical expert. The modification of dates shall be the minimum necessary, based upon evidence provided by the applicant, to accomplish the necessary project goals.
3. **Retention in natural state.** On all projects on Hillside Lands involving ~~partitions and subdivisions~~ **land divisions**, and existing lots with an area greater than one-half acre, an area equal to **20%** of the total project area shall be retained in a natural state and shall be protected from damage with temporary construction fencing or the functional equivalent. The retention in a natural state of areas greater than the minimum ~~percentage required here~~ is encouraged. For purposes of this Section, "Natural State" shall mean **either land that is not disturbed by grading and/or new development. The "Natural State" definition shall not preclude removal of invasive or non-native plant species from a development site, and replacement with native vegetation.** ~~or land that is disturbed by development but is landscaped and replanted with native vegetation typical of oak savannah hillsides in Southern Oregon, as specified by the development's landscape architect.~~
4. **Grading - cuts.** On all cut slopes on areas classified as Hillside lands, the following standards shall apply:
 - a. Cut slope angles shall be determined in relationship to the type of materials of which they are composed. Where the soil permits, limit the total area exposed to precipitation and erosion. Steep cut slopes shall be retained with stacked rock, retaining walls, or functional equivalent to control erosion and provide slope stability when necessary. Where cut slopes are required to be laid back (1:1 or less steep), the slope shall be protected with erosion control netting or structural equivalent installed per manufacturers specifications, and revegetated.
 - b. Exposed cut slopes, such as those for streets, driveway accesses, or yard areas, greater than seven feet in height shall be terraced. Cut faces on a terraced section shall not exceed a maximum height of five feet. Terrace widths shall be a minimum of three feet to allow for the introduction of vegetation for erosion control. Total cut slopes shall not exceed a maximum vertical height of 15 feet.

The top of cut slopes not utilizing structural retaining walls shall be located a minimum setback of one-half the height of the cut slope from the nearest property line.

Cut slopes for structure foundations encouraging the reduction of effective visual bulk, such as split pad or stepped footings shall be exempted from the height limitations of this section.
 - c. Revegetation of cut slope terraces shall include the provision of a planting plan, introduction of topsoil where necessary, and the use of irrigation if necessary. The vegetation used for these areas shall be native or species similar in resource value that will survive, help reduce the visual impact of the cut slope, and assist in providing long-term slope stabilization. Trees, bush-type plantings, and cascading vine-type plantings may be appropriate.

5. Grading - fills. On all fill slopes on lands classified as Hillside Lands, the following standards shall apply:
 - a. Fill slopes shall not exceed a total vertical height of 20 feet. The toe of the fill slope area not utilizing structural retaining shall be a minimum of six feet from the nearest property line.
 - b. Fill slopes shall be protected with an erosion control netting, blanket, or functional equivalent. Netting or blankets shall only be used in conjunction with an organic mulch such as straw or wood fiber. The blanket must be applied so that it is in complete contact with the soil so that erosion does not occur beneath it. Erosion netting or blankets shall be securely anchored to the slope in accordance with manufacturer's recommendations.
 - c. Utilities. Whenever possible, utilities shall not be located or installed on or in fill slopes. When determined that it necessary to install utilities on fill slopes, all plans shall be designed by a geotechnical expert.
 - d. Revegetation of fill slopes shall utilize native vegetation or vegetation similar in resource value and which will survive and stabilize the surface. Irrigation may be provided to ensure growth if necessary. Evidence shall be required indicating long-term viability of the proposed vegetation for the purposes of erosion control on disturbed areas.
6. Revegetation requirements. Where required by this Chapter, all required revegetation of cut and fill slopes shall be installed prior to the issuance of a certificate of occupancy, signature of a required survey plat, or other time as determined by the Planning Director. Vegetation shall be installed in such a manner as to be substantially established within one year of installation.
7. Maintenance, Security, and Penalties for Erosion Control Measures.
 - a. Maintenance. All measures installed for the purposes of long-term erosion control, including but not limited to vegetative cover, rock walls, and landscaping, shall be maintained in perpetuity on all areas which have been disturbed, including public rights-of-way. The applicant shall provide evidence indicating the mechanisms in place to ensure maintenance of measures.
 - b. Security. After an Erosion Control Plan is approved by the hearing authority and prior to construction, the applicant shall provide a performance bond or other financial guarantees in the amount of 120% of the value of the erosion control measures necessary to stabilize the site. Any financial guarantee instrument proposed other than a performance bond shall be approved by the City Attorney. The financial guarantee instrument shall be in effect for a period of at least one year, and shall be released when the Planning Director and City Engineer determine, jointly, that the site has been stabilized. All or a portion of the security retained by the City may be withheld for a period up to five years beyond the one year maintenance period if it has been determined by the City that the site has not been sufficiently stabilized against erosion.
8. **Grading for Individual Lots or Building Pads.** The grading of an individual lot or building pad on Hillside Lands shall be reviewed considering the following factors, **and subject to prior review and approval of the design from the city Building, Planning and Public Works Departments:**
 - a. ~~No terracing shall be allowed except~~ **should be limited but may be appropriate** for the purposes of ~~such as~~ developing a level building pad and for providing vehicular access to the pad.
 - b. Avoid hazardous or unstable portions of the site.

- c. Building pads should be of minimum size to accommodate the structure and a reasonable amount of yard space. As much of the remaining lot area as possible should be kept in the natural state of the original slope.
9. Inspections and Final Report. Prior to the acceptance of a subdivision by the City, signature of the final survey plat on partitions, or issuance of a certificate of occupancy for individual structures, the project geotechnical expert shall provide a final report indicating that the approved grading, drainage, and erosion control measures were installed as per the approved plans, and that all scheduled inspections were conducted by the project geotechnical expert periodically throughout the project.

D. Surface and Groundwater Drainage. All facilities for the collection of stormwater runoff shall be required to be constructed on the site and according to the following requirements:

1. Stormwater facilities shall include storm drain systems associated with street construction, facilities for accommodating drainage from driveways, parking areas and other impervious surfaces, and roof drainage systems.
2. Stormwater facilities, when part of the overall site improvements, shall be, to the greatest extent feasible, the first improvements constructed on the development site.
3. Stormwater facilities shall be designed to divert surface water away from cut faces or sloping surfaces of a fill.
4. Existing natural drainage systems shall be utilized, as much as possible, in their natural state, recognizing the erosion potential from increased storm drainage.
5. Flow-retarding devices, such as detention ponds and recharge berms, shall be used where practical to minimize increases in runoff volume and peak flow rate due to development. Each facility shall consider the needs for an emergency overflow system to safely carry any overflow water to an acceptable disposal point.
6. Stormwater facilities shall be designed, constructed, and maintained in a manner that will avoid erosion on-site and to adjacent and downstream properties.
7. Alternate stormwater systems, such as dry well systems, detention ponds, and leach fields, shall be designed by a registered engineer or geotechnical expert and approved by the City's Public Works Department, City Engineer, or City Building Official.

E. Tree Conservation, Protection, and Removal

1. Inventory of Existing Trees. A tree survey at the same scale as the project site plan shall be prepared, which locates all significant vegetation, as defined in 3.3.2. In addition, for areas proposed to be disturbed, existing tree base elevations shall be provided. Dead or diseased trees shall be identified. Groups of trees in close proximity (i.e. those within five feet of each other) may be designated as a clump of trees, with the predominant species, estimated number and average diameter indicated. All tree surveys shall have an accuracy of plus or minus two feet. The name, signature, and address of the site surveyor responsible for the accuracy of the survey shall be provided on the tree survey.
Portions of the lot or project area not proposed to be disturbed by development need not be included in the inventory.
2. Evaluation of Suitability for Conservation. All trees indicated on the inventory of existing trees shall also be identified as to their suitability for conservation. When required by the hearing authority, the evaluation shall be conducted by a landscape professional. Factors included in this determination shall include:

- a. Tree health. Healthy trees can better withstand the rigors of development than nonvigorous trees.
 - b. Tree Structure. Trees with severe decay or substantial defects are more likely to result in damage to people and property.
 - c. Species. Species vary in their ability to tolerate impacts and damage to their environment.
 - d. Potential longevity.
 - e. Variety. A variety of native tree species and ages.
 - f. Size. Large trees provide a greater protection for erosion and shade than smaller trees.
3. Tree Conservation in Project Design. Significant trees shall be protected and incorporated into the project design whenever possible.
- a. Streets, driveways, buildings, utilities, parking areas, and other site disturbances shall be located such that the maximum number of existing trees on the site are preserved.
 - b. Building envelopes shall be located and sized to preserve the maximum number of trees on site while recognizing and following the standards for fuel reduction if the development is located in Wildfire Lands.
 - c. Layout of the project site utility and grading plan shall avoid disturbance of tree protection areas.
4. Tree Protection. On all properties where trees are required to be preserved during the course of development, the developer shall follow the following tree protection standards:
- a. All trees designated for conservation shall be clearly marked on the project site. Prior to the start of any clearing, stripping, stockpiling, trenching, grading, compaction, paving or change in ground elevation, the applicant shall install fencing at the drip line of all trees to be preserved adjacent to or in the area to be altered. Temporary fencing shall be established at the perimeter of the drip line. Prior to grading or issuance of any permits, the fences may be inspected and their location approved by the Public Works Director or Planning Director.
 - b. Construction site activities, including but not limited to parking, material storage, soil compaction and concrete washout, shall be arranged to prevent disturbances within tree protection areas.
 - c. No grading, stripping, compaction, or significant change in ground elevation shall be permitted within the drip line of trees designated for conservation unless indicated on the grading plans, as approved by the City, and landscape professional. If grading or construction is approved within the drip line, a landscape professional may be required to be present during grading operations, and shall have authority to require protective measures to protect the roots.
 - d. Changes in soil hydrology and site drainage within tree protection areas shall be minimized. Excessive site run-off shall be directed to appropriate storm drain facilities and away from trees designated for conservation.
 - e. Should encroachment into a tree protection area occur which causes irreparable damage, as determined by a landscape professional, to trees, the trees shall be replaced.
5. Tree Removal. Development shall be designed to preserve the maximum number of trees on a site. When justified by findings of fact submitted by the applicant, the hearing authority may approve the removal of trees for one or more of the following conditions:
- a. The tree is located within the building envelope.
 - b. The tree is located within a proposed street, driveway, or parking area.
 - c. The tree is located within a water, sewer, or other public utility easement.
 - d. The tree is determined by a landscape professional to be dead or diseased, or it constitutes an unacceptable hazard to life or property.

- e. The tree is located within or adjacent to areas of cuts or fills that are deemed threatening to the life of the tree, as determined by a landscape professional.
6. Tree Replacement. Trees approved for removal, with the exception of trees removed because they were determined to be diseased, dead, or a hazard, shall be replaced by the developer or property owner in compliance with the following standards:
 - a. Replacement trees shall be indicated on a tree-replanting plan. The replanting plan shall include all locations for replacement trees, and shall also indicate tree planting details.
 - b. Replacement trees shall be planted such that the trees will in time result in canopy equal to or greater than the tree canopy present prior to development of the property. The canopy shall be designed to mitigate of the impact of paved and developed areas, reduce surface erosion, and increase slope stability. The hearing authority shall have the discretion to adjust the proposed replacement tree canopy based upon site-specific evidence and testimony.
 - c. Maintenance of replacement trees shall be the responsibility of the property owner. Required replacement trees shall be continuously maintained in a healthy manner. Trees that die within the first five years after initial planting must be replaced in kind. Replanting must occur within 30 days of notification unless otherwise noted.
7. Enforcement
 - a. All tree removal shall be done in accord with the approved tree removal and replacement plan. No trees designated for conservation shall be removed without prior approval of the City.
 - b. Should the developer or developer's agent remove or destroy any tree that has been designated for conservation, the developer may be fined up to three times the current appraised value of the replacement trees and cost of replacement or up to three times the current market value, as established by a professional arborist, whichever is greater.
 - c. Should the developer or developer's agent damage any tree that has been designated for protection and conservation, the developer shall be penalized \$50.00 per scar. If necessary, a professional arborist's report, prepared at the developer's expense, may be required to determine the extent of the damage. Should the damage result in loss of appraised value greater than determined above, the higher of the two values shall be used.

F. Building Location and Design Standards

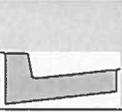
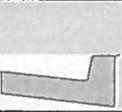
1. Building Envelopes. All newly created lots, either by subdivision or partition, shall contain building envelopes conforming to the following standards:
 - a. The building envelope shall contain a buildable area with a slope of 35% or less.
 - b. Building envelopes and lot design shall address the retention of a percentage of the lot in a natural state.
 - c. Building envelopes shall be designed and located to maximize tree conservation.
 - d. It is recommended that building envelope should be located to avoid ridgeline exposures, and designed such that the roofline of a building within the envelope does not project above the ridgeline.
2. Building Design. To reduce hillside disturbance using slope responsive design techniques, buildings on Hillside Lands shall incorporate the following into the building design and indicate features on required building permits:
 - a. **Hillside Architecture. Hillside Adaptive Architectural features shall be strategically utilized, subject to site specific prior review and approval of the design from the city Building, Planning and Public Works Departments, to reduce grading disturbances in**

areas where standard construction methods would generate major grading disturbances and deviations from standard construction methods would not prevent effective utility and service delivery. Hillside adaptive architectural features include but are not limited to:

- i. multi-level, split pad and stepped foundations
 - ii. reduced building mass by utilizing below grade rooms cut into the natural slope
 - iii. partial/daylight basements
 - iv. height restrictions
 - v. view corridor provisions
 - vi. construction of structures on the existing natural grade
 - vii. use of detached garages
- b. Cut buildings into hillsides to reduce effective visual bulk.
- i. Split pad or stepped footings shall be incorporated into building design to allow the structure to more closely follow the slope.
 - ii. Reduce building mass by utilizing below grade rooms cut into the natural slope.
- c. Hillside Building Height. The height of all structures shall be measured vertically from the natural grade to the uppermost point of the roof edge or peak, wall, parapet, mansard, or other feature perpendicular to that grade. Maximum building height shall be 35 feet.
- d. A building setback shall be required on all downhill building walls greater than 20 feet in height, as measured above natural grade. Setbacks shall be a minimum of six feet. No vertical walls on the downhill elevations of new buildings shall exceed a maximum height of 20 feet above natural grade.
- e. Continuous horizontal building planes shall not exceed a maximum length of 36 feet. Planes longer than 36 feet shall include a minimum offset of six feet.
- f. It is recommended that color selection for new structures be coordinated with the predominant colors of the surrounding landscape to minimize contrast between the structure and the natural environment.
- g. Downhill building walls greater than ten feet in height shall have windows and doors to match the building design.
3. All structures on Hillside Lands shall have foundations that have been designed by an engineer or architect with demonstrable geotechnical design experience. A designer, as defined, shall not complete working drawings without having foundations designed by an engineer.

G. Hillside Lands Street Standards. Development on Hillside Lands shall be allowed to utilize the local street standards in lieu of the standards in Chapter 3.5.2.

1. Right-of-Way and Street Design Standards:

Street Sections for Hillside Development								
							Improved	ROW
curb/gutter	travel	travel	bike	parking	curb/gutter	S/W	TOTAL	
2	10	10	0	0	2	5	29	30
2	10	10	0	8	2	5	37	40

Note: Parking and sidewalk location subject to City review for acceptable design options

2. On-street parking lanes may be omitted from streets when the result is a substantial decrease in cutting and/or filling. Off-street parking areas shall provide one additional space for each dwelling unit that does not front an on-street parking lane.
3. Streets in Hillside Lands can transition back and forth between the above two standards to create “parking bays.”
4. Intersection curb radius shall be a minimum of 15 feet and a maximum of 25 feet.
5. A 2% graded “shoulder” area of 5’ on both sides of the road (uphill or downhill as appropriate) shall be provided (may be outside the ROW), so that the development does not have a 20% slope running downhill directly onto a sidewalk, or an immediate dropoff from the back of a sidewalk to a 20% slope.
6. All other aspects of the roadway geometry must comply with standard local street design requirements.
7. These standards shall not be used when projected ADT at build-out will exceed 500.
8. Notwithstanding any other provision of the Development Code, a variance is not required to apply the street standards in this section.
9. All streets shall include a 10-foot public utility easement (PUE) on abutting private property.

~~H. Hillside Lands Maximum Lot Size: Notwithstanding any other provision of the Phoenix Land Development Code, the maximum lot size of single family development on lands in the Hillside Residential Comprehensive Plan Map Designation shall be 12,000 square feet.~~

- I. **Subdivisions and lot line adjustments in the Hillside Lands.** All newly created lots or lots modified by a lot line adjustment must include a building envelope on all lots that contains a buildable area less than 35% slope of sufficient size to accommodate the uses permitted in the underlying zone, unless the division or lot line adjustment is for open space or conservation purposes.
- J. **Administrative Variance from Development Standards for Hillside Lands.** A Type II variance may be granted with respect to the development standards for Hillside Lands if all of the following circumstances are found to exist:
 1. There is demonstrable difficulty in meeting the specific requirements of this Chapter due to a unique or unusual aspect of the site or proposed use of the site;
 2. The variance will result in equal or greater protection of the resources protected under this Chapter;
 3. The variance is the minimum necessary to alleviate the difficulty.