

REQUEST FOR TEXT AMENDMENT

Modernization of Building Height Standards
for Steep Slope Topography

Sec. 21-20-2 · Residential Building Setbacks and Building Heights

Sandy City Planning Commission & City Council

The Problem: Current Height Standards

The current code measures height from average finished grade — designed for flat lots. On steep slopes (30%+), this creates serious unintended consequences.

Excessive Earthwork

Massive grading and retaining walls required to artificially lower the "finished" grade just to comply with height limits — damaging the natural landscape.

Design Inefficiency

Homes are forced to fight the natural terrain instead of responding to it, resulting in awkward massing and compromised architecture.

Visual Massing Issues

The "wall-on-the-hill" effect: downhill façades balloon to 45–50 ft visually, far exceeding the intended 35 ft limit — harming neighbors' views.

This "one-size-fits-all" approach is technically detrimental to modern hillside construction.

Exhibit A: Average Grade Produces Oversized Walls

Under the current averaging method, complying with a 35-ft height limit on a steep lot produces downhill walls reaching 45–50 ft — and eliminates design flexibility.

1. Existing Method: Average Finished Grade

Under current code, height is measured from the average finished grade to the peak of the roof.

- **The Conflict:** On a steep 30% slope, the "average" point sits deep in the middle of the footprint. To stay under 35 feet at that "average" point, the downhill side of the house often ends up appearing 45–50 feet tall relative to the ground.
- Additionally, when designing to an average finished grade, architectural design is reduced with height problems to surrounding neighbors and grading manipulation to maximize height.
- **The Result:** A bulky, "top-heavy" appearance on the downhill side and a perverse incentive to use massive amounts of fill on the uphill side to raise the "average".

EXHIBIT A - AVG HEIGHT PRODUCES WALLS HIGHER THAN 35' AND ARCHITECTURAL DESIGN IS REDUCED.



Proposed Amendment: Sec. 21-20-2(X)

For residential lots with predominant slope $\geq 30\%$, the following alternative height standards shall apply:

1 Measurement Baseline

At the applicant's discretion, height may be measured from existing (natural) grade at any given point of building coverage — not from average finished grade.

2 Maximum Height Envelope

No habitable portion shall exceed 35 feet measured vertically from the existing grade directly below at each point.

3 Downhill Massing Safeguard

No downhill-facing façade may exceed 35 feet from the lowest adjacent existing grade to the highest wall top plate.

4 No Artificial Grade Increases

Existing grade shall not be artificially raised through fill or retaining structures to game the allowable height envelope.

Exhibit C: The Existing Grade Envelope in Practice

How It Works

The Concept

A 35-ft vertical limit line mirrors the natural mountain contours. All habitable space must fit within this terrain-responsive envelope.

Point-by-Point

Height is verified at each point of building coverage using existing topography — not a single averaged measurement.

The Result

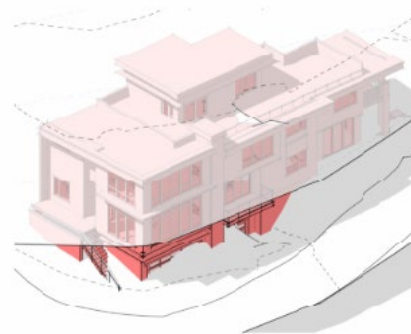
Structures step or terrace down the hillside. Rooflines stay parallel to the mountain — dramatically reducing visual mass for neighbors.

2. Proposed Method: Existing Grade Envelope (for 30%+ Slopes)

The proposed amendment adopts a "Point-by-Point" or "Envelope" approach similar to surrounding jurisdictions.

- **The Concept:** A 35-foot vertical "limit line" is projected upward, mirroring the exact contours of the natural mountain. All habitable space must fit entirely within this terrain-responsive envelope.
- Height is further confirmed using topography and roof height markers.
- **The Result:** The structure is required to "step" or terrace down the hill. This keeps the roofline parallel to the mountain, significantly reducing visual mass for neighbors looking up or down the slope.

EXHIBIT C - 35' VERTICAL ENVELOPE ALLOWS FOR BETTER SITE CARE AND SLOPE CONCIIOUS DESIGN



Consistency with the Sandy City General Plan

The Sandy City General Plan and Sensitive Area Overlay Zone prioritize protection of the city's natural mountain bench. This amendment directly advances those goals.

Sensitive Land Design

Encourages "terrain-responsive" architecture that follows the natural flow of the mountain — minimizing the massive excavation the current code incentivizes.

Reducing Scarring

Minimizes the need for expansive retaining walls and artificial grading, preserving the natural visual character of the Sandy bench that residents value.

Preserving Open Character

Using existing grade as the baseline ensures homes do not appear unnaturally "lofted" above native terrain, maintaining the visual integrity of hillside neighborhoods.

Why This Benefits the General Public

Updating the height methodology for steep slopes provides tangible community benefits.

View Protection

Buildings are incentivized to step down the hillside — preventing the "wall-on-the-hill" effect that blocks neighbors' views up and down the slope.

Infrastructure Sustainability

Reduced grading means less soil erosion and lower impacts on city storm-drainage systems from large-scale site disturbances.

Predictability & Transparency

Clear, objective rules for slopes over 30% give neighbors and developers a defensible standard — reducing contentious variance requests and appeals.

Neighboring jurisdictions already use this approach: Park City · Cottonwood Heights · Salt Lake City

Safeguards & Implementation

The amendment includes built-in protections to prevent any circumvention of density or massing intentions.

01 Anti-Manipulation Clause

Existing natural grade cannot be artificially raised through fill or debris for the purpose of gaining additional height.

02 Static Zoning Protections

This amendment does NOT increase allowed density, lot coverage, or unit counts. It only adjusts the vertical envelope relative to native topography.

03 Standard Setbacks Remain

All existing residential setbacks and usable land requirements stay in effect, ensuring adequate separation between structures.

04 Administrative Review Required

Any project using this calculation must undergo formal review to verify slope percentages and existing grade benchmarks.

What Slope-Conscious Architecture Looks Like

These homes — built in neighboring jurisdictions under point-by-point grade standards — demonstrate the design quality Sandy City's hillside lots can achieve.



Example homes currently on the market in Utah's hillside communities

Summary & Request

- Sandy City's current average-grade method creates unintended massing problems and incentivizes harmful earthwork on steep lots.
- The proposed point-by-point Existing Grade Envelope approach resolves these issues — matching standards already used by Park City, Cottonwood Heights, and Salt Lake City.
- Built-in safeguards prevent manipulation: no density increases, no artificial grade raises, formal administrative review required.
- The result is better architecture, healthier hillsides, protected viewsheds, and clearer rules for everyone.

We respectfully request adoption of the proposed amendment to Sec. 21-20-2