



CITY OF MURRIETA

City Council Meeting Agenda Report

11/18/2025
Agenda Item No. WS1.

TO: HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL

FROM: David Chantarangsu, AICP Development Services Director

PREPARED BY: Chris Tracy, AICP Senior Planner, Advanced Planning

SUBJECT: Hillside Updates (DCA-2021-2396) - Workshop 5

RECOMMENDATION

Receive public comments and discuss the proposed ordinance; and

Provide direction related to policy options under the proposed ordinance framework.

PRIOR ACTION/VOTE

On March 29, 2022, the City Council directed staff to review the hillside development standards (Non-Action Item).

On June 28, 2023, the Planning Commission recommended the introduction and first reading of an Ordinance updating the hillside development standards, amending Murrieta Municipal Code (MMC) Chapters 8.20 and 15.52, and updating portions of Title 16 (Vote 4-0-1) (Attachment 1).

On August 15, 2023, the City Council hosted a workshop on this item. The City Council requested additional information, so the workshop was continued to a future meeting date (Attachment 2).

On March 5, 2024, the City Council hosted a second workshop on this item. Due to additional time needed for the discussion and feedback, the workshop was continued for a second time (Attachment 3).

On June 17, 2025, the City Council hosted a third workshop on this item. The direction from Council was that more detailed examples were needed to assist the Council with moving forward, in particular with retaining wall criteria (Attachment 4).

On October 21, 2025, the City Council held its fourth workshop on this item (Attachment 5). The discussion centered on when to apply the standards. The City Council came to consensus on the following topics pertaining to the application of the hillside standards:

- **Applicability of Standards**
 - Hillside Areas shall be limited to those areas shown on the proposed Hillside Overlay Area map,

depicting areas with a slope of 25 percent or greater.

- Hillside Areas will not be applied on a Citywide basis, rather they will be limited to residential and open space areas only.
- The 25 percent slope standard was determined to be the correct standard for a property to be considered in a Hillside Area, and not 20 percent, which is a conflicting standard currently described in the City's Development Code.

- **Specific Plans**

- Specific Plans will not be subject to the updated Ordinance since they were originally adopted with their own standards.
- Specific Plans will be shown on the Hillside Overlay Area map with a footnote to refer to the Specific Plan document.
- Developed and undeveloped parcels will be a layer within the City's Geographic Information System (GIS) data.

- **Use Of Geographic Information Systems (GIS) and Average Slope Formula**

- Applicants can elect to use the City's Hillside Overlay Area map to replace the average slope formula approach but also retain the ability to use the existing average slope formula in the Development Code with a CAD-based program as an alternative if there is a disagreement over a property's average slope.

CITY COUNCIL GOAL

Maintain a high performing organization that values fiscal sustainability, transparency, accountability and organizational efficiency.

BACKGROUND

The City Council directed staff at its annual priority and goal-setting workshop on March 29, 2022, to review the hillside development standards, as there were concerns about how they were being interpreted and implemented at the project level. The City's existing hillside development standards, contained in Chapter 16.24 (Hillside Development) of the Murrieta Development Code (MDC), were added in 1997 to support the City's 1994 General Plan land use goals and policies associated with the City's hillside features. The General Plan continues to contain goals and policies in hillside areas to "maintain the natural character and the environmental and aesthetic values of sloped areas."

For details about the historical context of the hillside development standards and why these updates are being brought forward, please refer to the "Background Section" as provided within Attachments 1, 2, 3, 4, and 5. Staff is bringing forward these updates in a continued workshop format for the City Council to review the proposed standards and provide input ahead of a future public hearing.

DISCUSSION / NEXT STEPS

The primary objective of these updates is to enhance the clarity and precision of the development standards, thereby facilitating their consistent application. Through the refinement of language and improved accuracy, these revisions aim to minimize ambiguity, streamline the review process, and promote greater efficiency in the use of time and resources related to hillside development.

In the context of the General Plan, the statements below guide and encourage responsible stewardship, conservation, and sustainable management of the City's hillside resources. The City's standards have sought

to provide a balance between the protection of community interests with the facilitation of responsible and feasible development in hillside areas.

General Plan Statements - Hillside Development

Land Use Element Goal LU15-1.1: Encourage the preservation of natural and visual resources within Los Alamos Hills, such as rock outcroppings and scenic views of the local hills and valleys, to the greatest degree practicable.

Conservation Element Goal CSV-5: Hills and ridges are protected for their environmental and aesthetic values.

Conservation Element - Policy CSV-5.1: Promote compliance with hillside development standards and guidelines to maintain the natural character and the environmental and aesthetic values of sloped areas.

The focus of this next workshop, Workshop 5, is to discuss retaining wall criteria and desired landscaping standards.

Retaining Wall Use & Design in Hillside Areas

Retaining walls are used in hillside areas to stabilize soil, prevent erosion, and create level surfaces that can safely support buildings, driveways, patios, or landscaping. By holding back (retaining) earth that would otherwise slide or wash away, they reduce the risk of slope failure and can protect downslope structures and infrastructure. The use of retaining walls allows property owners to make practical and attractive use of otherwise unusable terrain, turning steep or uneven ground into functional, accessible space.

Best practices for retaining wall design include the following:

- Choosing materials, colors, and textures that complement nearby buildings and natural features.
- Designing walls as a natural element rather than just a means to manipulate a site's topography.
- Terracing tall walls to create a more human scale, turning a potentially large and unyielding monolithic space into layered garden space.
- Integrating seating, planters, or lighting, to soften a wall's appearance and make it functional as well as attractive.
- Using wall placement and curvature to influence how it reads visually, whether it feels harsh and engineered or relates to the development's end users.

The goal is to blend strength with style to allow retaining walls that support the site while enhancing the overall look of a project. With these approaches in mind, staff has crafted the following **Focus Topics** concerning retaining walls, following the same approach used to direct staff on the issue of the "Applicability of Standards" from the Hillside Workshop of October 21, 2025.

Retaining Wall Focus Topic No. 1 - Identify Desired Retaining Wall Forms in both Hillside and Non-Hillside Areas of the City

The most common retaining walls in the City take the form of a traditional concrete masonry unit (CMU) block or geogrid walls. CMU walls rely on the strength of reinforced concrete blocks, while geogrid walls use synthetic grids embedded in soil to stabilize steeper slopes. Examples are shown below.

CMU Retaining Walls

CMU retaining walls are constructed from concrete masonry units, commonly known as concrete blocks. These walls are typically built in layers, with the hollow cores of the blocks reinforced with steel bars and filled with concrete to increase strength and stability. CMU walls can function as gravity walls, relying on their own

weight to resist lateral soil pressure, or as reinforced walls, which incorporate additional steel to support higher loads.

In general, they are durable, fire-resistant, and generally long-lasting. Properly engineered CMU walls provide both structural support and aesthetic flexibility, as they can be textured with stucco, colored, or veneered to blend in with the surrounding environment.



Image 1 - Example of a Decorative Retaining Wall with Stucco Coating to Match Residence



Image 2 - Example of a Decorative Retaining Wall with Stone Veneer Finish with Tiering and Landscaping (Laguna Niguel, CA)



Image 3 - Example of a Decorative Retaining Wall with Stone Veneer Finish



Image 4 - Example of a Decorative Retaining Wall with Split-Face Finish



Image 5 - Example of a Decorative Keystone Wall with Landscaping

Retaining Wall Use Considerations

Pros

- Aesthetic versatility with various finishes (stucco, stone veneer, keystone, [split-face](#)).
- Quick to install, especially with modular blocks.
- Ideal for smaller to medium-sized projects.

Cons

- Limited height capacity without a significant footing base width.
- May require extensive trenching/excavation for taller walls.
- They are not suitable for areas with unstable soil or high-water tables without additional reinforcement.



Image 6 - Conventional Retaining Wall Installation

Geogrid Walls

Geogrid retaining walls are structures that stabilize soil by incorporating layers of geogrid, a synthetic, grid-like material, within the backfill behind the wall. These walls rely on the tensile strength of the geogrid to interlock with the soil, creating a reinforced mass that resists lateral earth pressure. The wall face can be constructed from concrete panels, masonry blocks, or other materials, but the structural stability comes primarily from the geogrid-reinforced soil.

Geogrid walls are flexible, allowing them to adapt to minor soil movements without cracking, and are commonly used for tall walls, steep slopes, and hillside developments. They offer advantages such as efficient use of materials, cost-effectiveness, and provide relatively fast construction, though proper engineering, quality backfill, and attention to facing durability are essential for long-term performance.



Image 7 - Example of a Decorative Geogrid Wall with Tiering and Landscaping (Lake Forest, CA)



Image 8 - Example of a Decorative Geogrid Wall with Tiering and Landscaping (Vista, CA)



Image 9 - Example of a Decorative Geogrid Wall with Tiering and Landscaping (San Marcos, CA)



Image 10 - Example of a Geogrid Wall with Tiering - Prior to Landscaping (Temecula, CA)



Image 11 - Example of a Geogrid Wall with Landscaping - Santa Rosa Highlands (Murrieta, CA)

Geogrid Wall Use Considerations

Pros

- Suitable for taller walls with reduced footprint
- Enhanced stability in areas with poor soil conditions
- Improved drainage properties, reducing hydrostatic pressure.
- Cost-effective for large-scale projects

Cons

- Requires significant excavation to install geogrid layers.
- Installation complexity increases with wall height.
- Aesthetic options may be more limited (can't stucco over to match nearby structures) compared to CMU walls.
- May limit the future installation of pools as the geo-fabric cannot be disturbed



Image 12 - Geogrid Wall Installation

Image 13 - Geogrid Wall Installation

Key Policy Questions Regarding Retaining Wall Type

With the descriptions above, the key policy questions concerning retaining walls are as follows:

- a) Should the City establish a preference between geogrid and standard (e.g., CMU) retaining walls, or permit both options based on site-specific conditions?

- b) Should specific finish materials, such as stucco, split-face block, or stone veneer, be identified as preferred or required treatments?
- c) Should geogrid wall systems incorporate decorative color combinations, muted tones, or provide flexibility to allow either approach?
- d) Should these retaining wall design standards be implemented citywide, or limited to designated hillside areas?

Retaining Wall Focus Topic No. 2 - Identify Desirable Hillside Retaining Wall Development Standards

Standards for the height and appearance of retaining walls are essential in hillside areas because they balance safety while addressing a hillside's natural character. Height limits help prevent oversized or visually dominant walls. At the same time, aesthetic requirements ensure that walls blend with the surrounding landform, use materials and colors that fit the environment, and consider the scenic quality that hillsides add to a community.

Current Requirements - Hillside Retaining Walls:

The following standards apply to retaining walls in hillside areas and are summarized from MDC Section 16.24.060. The standards address height as well as design:

- **Hillside walls cannot be too tall at once** - Walls can be up to six (6) feet tall. The use of multiple walls requires a terraced approach with six (6) feet of landscaping between them. No more than two walls can be used together. The standards do not explain the ability to use this approach more than once. It is implied that a series of walls could be used if there is more than a six foot horizontal separation without limit, such as a design that spaces retaining walls every 6.5 feet.
- **Front yards have extra limits** - In front yards, each wall can only be three (3) feet tall, and terraced walls need three (3) feet of space between them for landscaping.
- **Some walls can be higher if part of a building** - If the wall is built into the house structure, it can be taller but must fit land contours and landscaped.
- **Special "crib walls" could be allowed** - These are approved case-by-case.
- **Walls should match adjacent buildings** - Materials and colors should look similar to what's next to them. Natural stone is encouraged.
- **Walls seen from the street must have visual interest** - Designs should incorporate planters, differing materials, and plane variation.
- **Walls must follow the shape of the land** - Walls should follow land contours.

Retaining Wall Height and Design Considerations

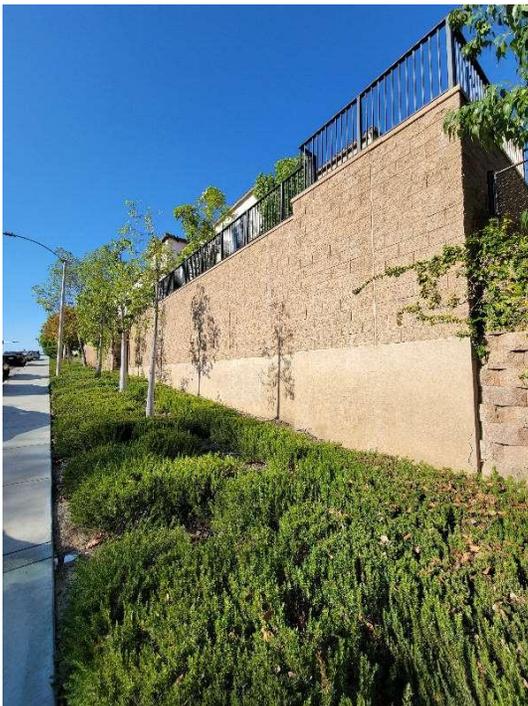
Pros

- Multiple levels prevent wall failure and soil slippage, especially in steep or expansive soil conditions.
- A stepped design allows better water infiltration and drainage between wall levels, reducing hydrostatic pressure behind the wall.
- Step-backs soften the visual impact of a tall retaining wall by breaking it into smaller, landscaped tiers.
- Allows for integration of plants, shrubs, or decorative rock features, enhancing curb appeal and blending into natural surroundings.
- Terraced walls can promote vegetation growth, reduce erosion, and create opportunities for stormwater absorption.
- Smaller, segmented wall sections are easier to repair or replace than one large, continuous structure.

Cons

- Step-back wall designs require more horizontal space on the slope, which can reduce usable lot area - particularly with smaller properties.
- Allowing an unlimited number of stepped retaining walls reduces the natural appearance of hillside areas.
- Terraces with vegetation may require ongoing irrigation and upkeep to remain attractive and functional.
- Not practical in locations where setbacks, property lines, or existing structures limit available space for the step-back.

Retaining Wall Focus Topic No. 3 - Identifying Desired Retaining Wall Forms in Both Hillside and Non-Hillside Areas of the City



Current Requirements - Non-Hillside Retaining Walls:

The following information summarizes the Municipal Development Code (MDC) requirements for retaining walls, including standards for height, setbacks, materials, and landscaping to ensure safety and compatibility with surrounding development.

Sections 16.18.140 and Chapter 16.22 applies to all walls built in non-hillside areas of the City:

- **Small walls do not have many rules** - Retaining walls up to four (4) feet can be built in a setback.

Image 14 - Non-Hillside, Tall Retaining Wall without a Step-back

(Murrieta, CA)

- **Walls up to six (6) feet have simple rules** - They can be within a setback as long as the exposed side faces into the property.
- **Walls over six (6) feet follow building setback rules** - These walls must follow the same setback rules as a house, even if they are not as tall as the building.
- **Fence Height Limits**
 - i. Fences can be up to three (3) feet tall in the front setback and up to six (6) feet everywhere else. Two additional feet are allowed if the top uses wrought iron or other see-through material.
 - ii. Fences can go up to 10 feet tall using the setback requirements for the zone.
 - iii. A fence taller than 10 feet might be allowed subject to Director approval.

Recommendation

Non-Hillside Areas

In the absence of landscaping with a proposed retaining wall design, staff recommends a minimum step-back of six feet for retaining walls at a wall elevation of twelve feet in height. Currently, a retaining wall could be installed as high as 10 feet or more if approved by the Director provided it is outside of a given setback. Having a maximum height limit is preferred.

Implementing a terraced step-back feature to help counteract a tall wall interface would facilitate vegetation establishment, mitigate erosion, and enhance opportunities for stormwater infiltration. Conversely, when landscaping is incorporated into the retaining wall design, staff's recommended approach is that a potentially greater wall height may be permitted, as the additional vegetation serves to reduce visual impacts and soften the edges of the wall face.

Hillside Areas

Currently, terraced retaining walls in Hillside Areas are limited to six feet in height, must be separated by a minimum of six feet, and no more than two walls may be placed together. Walls within front yard setbacks are limited to three feet in height, must be separated by at least three feet, and require landscaping for screening.

Staff recommends there be greater flexibility by potentially removing the three-foot front step-back and increasing the two-wall limitation while maintaining step-backs equal to the wall height with a maximum height of six (6) feet. Consistent with the approach in Non-Hillside Areas, incorporating landscaping into the retaining

wall design may allow for greater wall heights, as the vegetation helps reduce visual impacts and soften slope edges.

Key Policy Questions To Resolve Concerning Retaining Wall Form

- a) Should a minimum six-foot horizontal step-back be implemented at twelve feet in Non-Hillside Areas?
- b) Should more than two walls be allowed in a stepped fashion, and should the maximum wall height and landscaped setback remain at six (6) feet?
- c) Should wider landscaped areas between walls allow for increased wall heights, and what standards should define “acceptable” height increases in both Hillside and Non-Hillside Areas?
- d) Should the current restrictions on front-yard retaining wall criteria in Hillside Areas, specifically the three-foot step-back at three feet in elevation, be removed to allow greater design flexibility?

HILLSIDE LANDSCAPING

Time permitting at the workshop, staff has included the Landscape Focus Topic for discussion.

Landscaping Focus Topic No. 1 - Use of Landscaping to help screen structures on Hillside Areas

Screening Techniques at Hillside Areas

During the City Council workshop on June 17, 2025, several members expressed interest in re-examining the applicability screening techniques for Hillside Areas. While this topic has been discussed at various points in previous workshops, staff is seeking guidance to establish a definitive approach for moving forward.



Image 15 - Example of Landscape Screening on a Hillside

Current Requirements:

The following summarizes the Municipal Development Code (MDC) requirements from Section 16.24.060(E):

- **Use plants that naturally belong in the area.**

Native and naturalized plants help the hillsides look like they have always been there, rather than looking artificially planted.

- **Help development blend into the landscape.**

Landscaping should soften or screen man-made features such as walls, graded slopes, and building edges so they do not visually dominate the hillside.

• **Restore natural planting patterns.**

New landscaping should follow the way plants naturally grow in local canyons and valleys, using irregular groupings instead of uniform rows.

• **Replace what was removed.**

If trees or other major vegetation are taken out, new plantings should re-create a “green backdrop” and preserve the natural look of the skyline.

• **Stabilize slopes and control erosion.**

Slopes that have been graded or disturbed must be replanted with deep-rooted groundcover, and taller slopes should also include shrubs and trees to help keep soil in place.

• **Use erosion-control materials when needed.**

On steeper or freshly graded slopes, or during certain seasons, materials like jute mesh may be required to hold the soil until plants become established.

• **Keep natural areas intact where possible.**

In canyons or along natural drainage areas, existing native vegetation should be kept and supplemented unless safety or fire rules require otherwise.

• **Landscape visible and shared areas well.**

Front yards, edges along streets, and common open spaces should be planted and irrigated so they fit comfortably into the hillside setting.

• **Use smart, efficient irrigation.**

Irrigation should support slope stability without overwatering, rely on efficient methods like drip systems, and be designed so plants eventually need little to no extra water.

• **Provide defensible space in fire-prone areas.**

Where development borders high fire-risk zones, a maintained buffer area is required to reduce fire danger and protect homes. Defensible space continues to evolve given recent fire regulations adopted by the state, such as “zone zero”, where no flammable material can be located near a structure.

Hillside Landscaping Considerations

Pros

- Landscaping helps new development blend into the natural terrain, reducing the visual impact of structures, retaining walls, or other engineered features.
- Vegetation stabilizes soil on slopes, reducing the risk of landslides or erosion.
- Plantings can improve water absorption and reduce runoff, helping mitigate localized flooding and water pollution.
- Trees, shrubs, and groundcover can visually soften retaining walls, graded slopes, and other structural elements.

Hillside Landscaping Considerations

Cons

- In fire-prone areas, certain types of vegetation may increase wildfire hazards if not properly managed.
- Plants require ongoing care, including irrigation, pruning, and replacement of dead or diseased vegetation.
- New plantings can take several years to fully mature, delaying the visual effectiveness of the screening.
- Taller structures may not be fully hidden by landscaping, particularly in the early years before plants mature.

Alternatives Previously Discussed:

At prior City Council workshops addressing this topic, a variety of aesthetic options were considered to ensure that new development would be visually compatible with the surrounding environment. Among the options discussed were the use of muted earth-tone colors for building facades and for areas of landform depressions at ridgelines (e.g. berms). These concepts were intended to minimize visual contrast and help structures blend more naturally into the landscape.

After reviewing these alternatives, the City Council did not express interest in requiring use of muted earth-tone colors or berms, but did express a clear preference for employing landscaping as a primary screening method. This approach emphasizes the strategic use of vegetation and natural plantings to soften visual impacts, enhance site integration, and provide a more sustainable and aesthetically pleasing solution for both buildings and graded areas. Moving forward, staff intends to prioritize these landscaping techniques as the recommended method for achieving visual compatibility in applicable areas.

Recommendation

Staff agrees that landscaping should be utilized as the primary screening technique in hillside areas due to its ability to enhance visual integration, mitigate environmental impacts, and improve site sustainability. By strategically incorporating native vegetation, trees, and shrubs in concert with working with Murrieta Fire and Rescue, projects in Hillside Areas can blend more seamlessly into the natural terrain, reducing the visual prominence of structures, retaining walls, and graded slopes.

Key Policy Question To Resolve Concerning Landscaping for Screening

- a) Does the Council agree with the proposed approach to incorporate landscaping techniques for the screening of structures at Hillside Areas?

Conclusion

In conclusion, by revisiting the original intent of these updates and carefully assessing the best path forward, staff remains committed to developing clear, balanced, and practical standards for a future draft ordinance. These refinements are intended to support responsible hillside development that aligns with the City's General Plan goals, reflects community input, and promotes a more efficient and transparent review process for all stakeholders.

The primary focus is on revising development standards to make them clearer, more precise, and easier to apply for homeowners, project applicants, and staff. Simplified language and improved accuracy will reduce confusion, streamline reviews, and save time and resources, creating a more transparent and efficient system that benefits everyone.

At the same time, staff recognizes the need to avoid placing undue burdens on homeowners and applicants. The standards aim to strike a careful balance between protecting hillside areas and allowing development. This approach fosters responsible growth that respects environmental conditions while supporting the community's long-term vision for hillside management.

If there is City Council consensus on all questions from the preceding focus topics, the next step will be to introduce an Ordinance for first reading with the proposed modifications. However, the draft ordinance may need to go back to the Planning Commission for a recommendation based on the scope of the proposed modifications compared to what was originally presented. Staff will solicit input from the City Attorney's office on a path forward.

FISCAL IMPACT

None.

ATTACHMENTS

1. Planning Commission Ordinance Introduction Staff Report, June 28, 2023
2. City Council Workshop 1 Staff Report, August 15, 2023
3. City Council Workshop 2 Staff Report, March 5, 2024
4. City Council Workshop 3 Staff Report, June 17, 2025
5. City Council Workshop 4 Staff Report, October 21, 2025
6. Citywide - Hillside Overlay Map Exhibit - With Specific Plans
7. Draft Ordinance - Title 16 - Strikeout-Underline
8. Correspondence - Prior to Workshop 3