



MORAGA HILLSIDES AND RIDGELINES PROJECT

Workshop Goals



The purpose of this workshop is to:

- ❑ Present options to address key Hillsides and Ridgelines project issues
- ❑ Receive community input on preferred options
- ❑ Identify any other options to consider
- ❑ Maintain community engagement in the Hillsides and Ridgelines project

Workshop Agenda



7:00 WELCOME

7:05 PRESENTATION

7:15 Q&A

7:25 GROUP DISCUSSIONS

9:15 RECAP

9:30 ADJOURNMENT

Project Background

- ❑ Project aims to reduce conflict over hillside development caused by disagreements over the meaning of specific development rules and regulations.
- ❑ Will result in targeted amendments to the Town's hillside and ridgeline policies and regulations.
- ❑ Concerns town-wide regulations, not any specific development project or property.

Project Process

1. Background Analysis and Issues Identification (Completed)
2. Hillside Regulation Options (January 2016)
3. Draft Regulations (Early 2016)
4. Review and Adoption (Mid 2016)



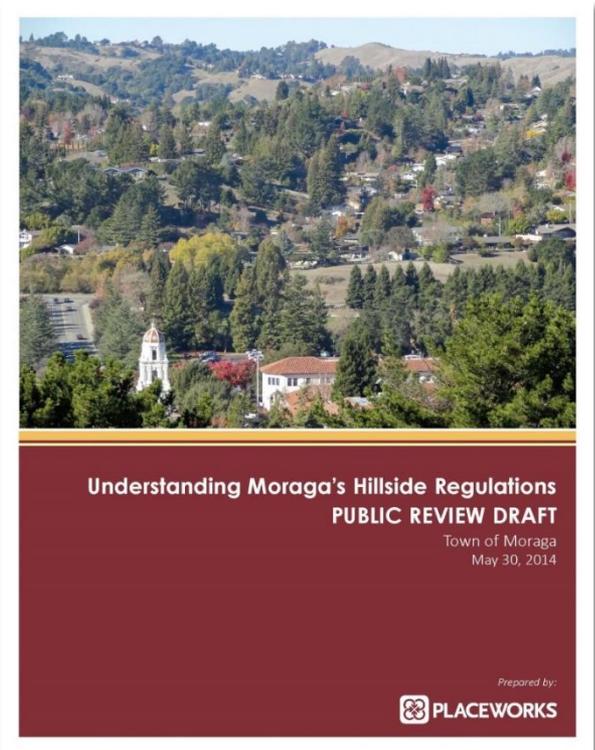
Completed Meeting and Workshops

- ❑ Community Workshops (2) – April and June 2014
- ❑ Stakeholder Meetings – April 2014
- ❑ Steering Committee Meetings (5) – April 2014 to July 2015
- ❑ Planning Commission Meeting – January 2015
- ❑ Town Council Meeting – January 2015



Completed Products

- ❑ Background Report – Understanding Moraga’s Hillside Regulations
- ❑ Draft Landslide Hazard Maps
- ❑ Preliminary List of Key Issues
- ❑ Issues and Options Memorandum



Project Issues

For discussion at tonight's workshop:

- ❑ Non-MOSO Ridgeline Definition and Map
- ❑ Ridgeline Protection
- ❑ High Risk Areas Map
- ❑ Remediation of High Risk Areas
- ❑ Viewshed Protection
- ❑ Steep Slope Limitations in MOSO Open Space
- ❑ Building Size on Large Lots

Project Issues

❑ Issues not discussed tonight:

- MOSO Open Space Map
- MOSO Ridgeline Map
- Definition of Development
- Hillside Development Permits

- ❑ You can provide input on all issues using Open Town Hall, the Town's online community discussion forum, or directly to Town staff

www.moraga.ca.us/hillsides

Small Group Discussions

- ❑ For each issue, we will explain the issue and present the options.
- ❑ You will then discuss the issue and options in your group.
- ❑ After your group discussion, you will:
 - Mark in your workbook your individual preferred option, or identify a new option. For some issues you may select more than one option.
 - Record your preferred option on your group's poster with an adhesive dot.
 - Use Post-It notes to add any other options to the poster.
- ❑ We will repeat this process for each issue.
- ❑ Groups will be “self facilitated.” Town staff and consultants will circulate among groups to answer questions and assist as needed.

Small Group Discussions



- ❑ When we are finished with discussion of options, we will move posters with “results” to front of room.
- ❑ We will summarize areas of consensus and issues with a range of opinions across groups.
- ❑ You will have a chance to make final comments to share important ideas from your group discussion that are not reflected on the poster.



Questions?

Small Group Discussions



Introductions

- ❑ Briefly introduce yourself to your group
- ❑ You may want to share:
 - Where you live
 - How long you've lived in Moraga
 - Why you're attending this workshop

Issues for Discussion



Issue 1: Non-MOSO Ridgeline Definition and Map (p. 3)

Issue 2: Ridgeline Protection (p. 6)

Issue 4: High Risk Areas Map (p. 15)

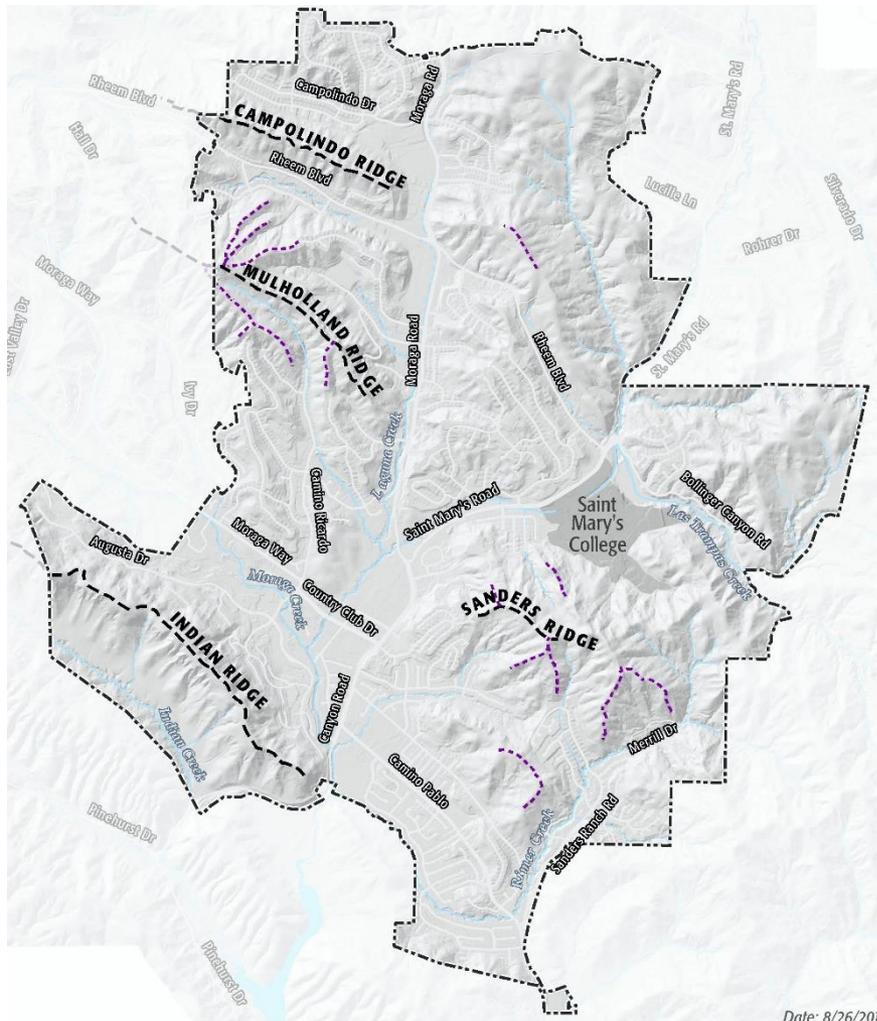
Issue 5: Remediation of High-Risk Areas (p. 19)

Issue 6: Viewshed Protection (p. 20)

Issue 3: Steep Slope Limitations in MOSO Open Space (p. 11)

Issue 7: Building Size on Large Lots (p. 25)

ISSUE 1: NON-MOSO RIDGELINE DEFINITION AND MAP



The General Plan defines Major and Minor Ridgelines in MOSO Open Space and identifies the location of these ridgelines.

-  MOSO Major Ridgelines
-  MOSO Minor Ridgelines
-  Major/Permanent Stream
-  Minor/Intermittent Stream
-  Town Boundary

ISSUE 1: NON-MOSO RIDGELINE DEFINITION AND MAP

- ❑ The General Plan does not contain a general ridgeline definition that applies town-wide.
- ❑ Do Town policies to protect ridgelines apply only to MOSO ridgelines, or apply to non-MOSO ridgelines in different ways?
- ❑ The Town needs to clarify what constitutes a “ridgeline” and the location of these ridgelines.

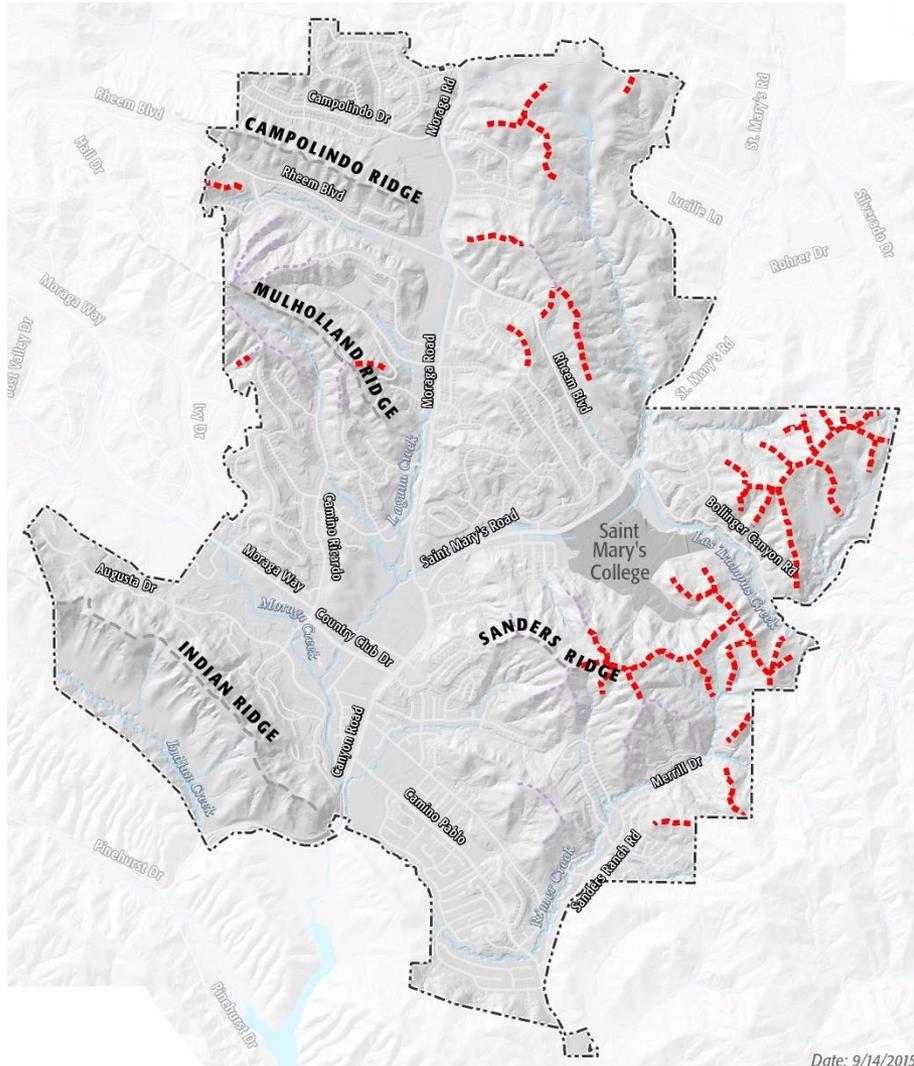


ISSUE 1: NON-MOSO RIDGELINE DEFINITION AND MAP

- **Option 1-A: Add a general ridgeline definition to the General Plan and Municipal Code.**
 - Amend the General Plan and Municipal Code to add a general ridgeline definition that applies throughout town.
 - Suggested definition: “ridgeline means the upper-most portion of a hill that is at or above 800 feet in elevation, is in an undeveloped area, and which rises to a crest.”

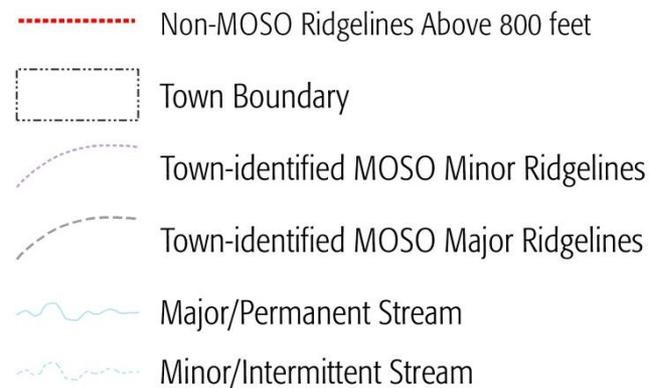


ISSUE 1: NON-MOSO RIDGELINE DEFINITION AND MAP



Option 1-B: Add a map of all ridgelines to the General Plan.

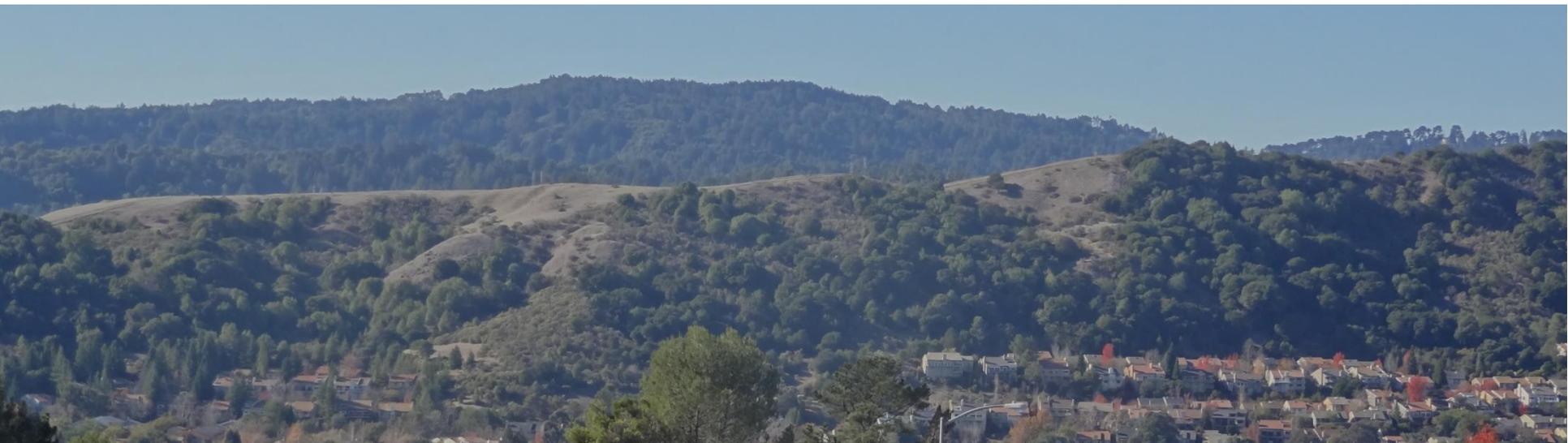
- Map would show the location of all ridgelines, including ridgelines outside of MOSO Open Space.



ISSUE 1: NON-MOSO RIDGELINE DEFINITION AND MAP

Option 1-C: Clarify that “ridgeline” means only MOSO ridgelines.

- ❑ Determine that the term “ridgeline,” when used in the Town’s regulations, means only designated MOSO ridgelines.
- ❑ Landforms with ridgeline-like properties outside of MOSO Open Space would not be subject to the Town’s ridgeline policies and regulations.



ISSUE 1: NON-MOSO RIDGELINE DEFINITION AND MAP

Option 1-A: Add a general ridgeline definition to the General Plan and Municipal Code.

Option 1-B: Add a map of all ridgelines to the General Plan.

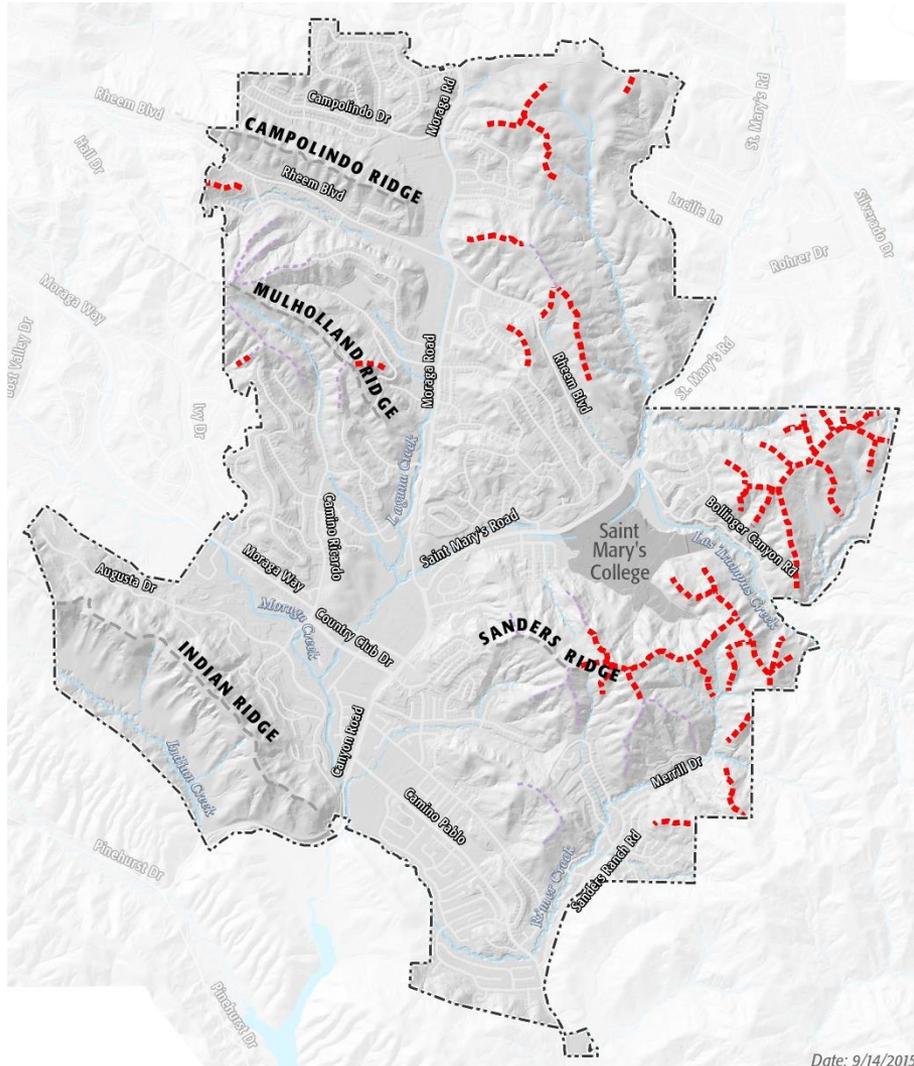
Option 1-C: Clarify that “ridgeline” means only MOSO ridgelines.

ISSUE 2: RIDGELINE PROTECTION

- ❑ General Plan Policy CD1.5 calls for the Town to “protect ridgelines from development.”
- ❑ It is unclear how this policy applies to ridgelines outside of MOSO Open Space, if at all.
 - Should development be allowed on or near ridgelines outside of MOSO Open Space?
 - If so, how should this development be designed so that it complies with Town goals and policies?



ISSUE 2: RIDGELINE PROTECTION



Option 2-A: Allow development on and near non-MOSO ridgelines consistent with improved design guidelines.

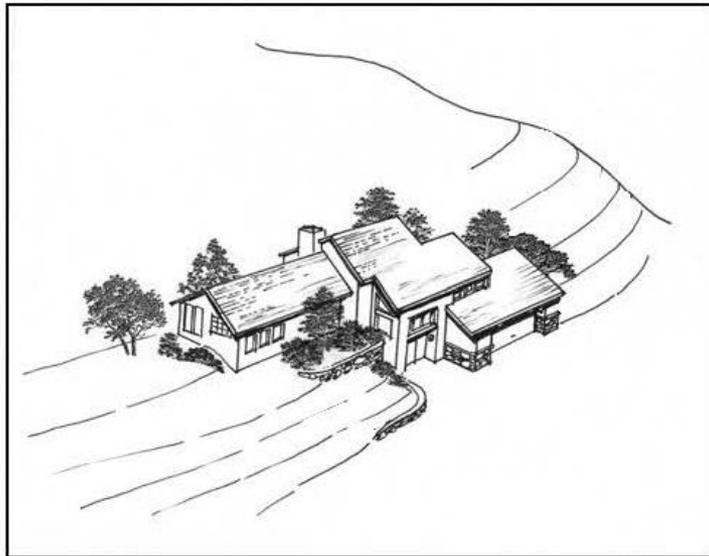
- ❑ Clarify that development is permitted on and adjacent to non-MOSO ridgelines.
- ❑ Add detail to the Town's Design Guidelines to ensure that this development is attractively designed, minimizes visual impacts, and mitigates hazards.

----- Non-MOSO Ridgelines Above 800 feet

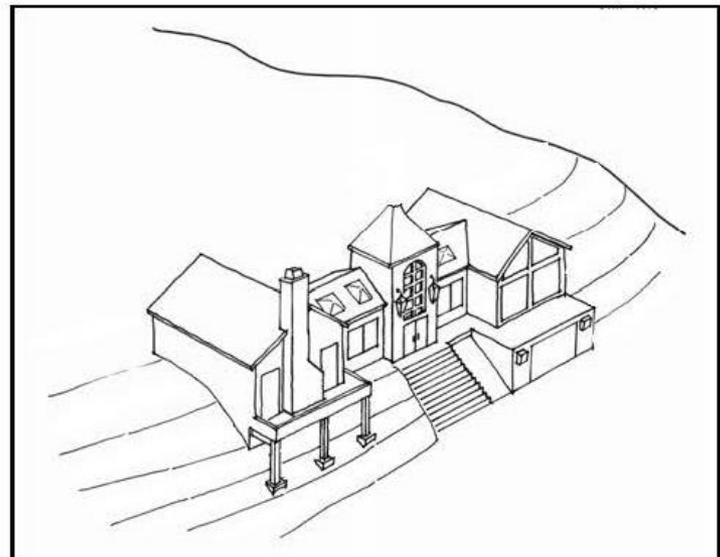
ISSUE 2: RIDGELINE PROTECTION

Example Design Guideline:

Architectural Design: Avoid the use of architectural features that increase visual prominence.



Do this



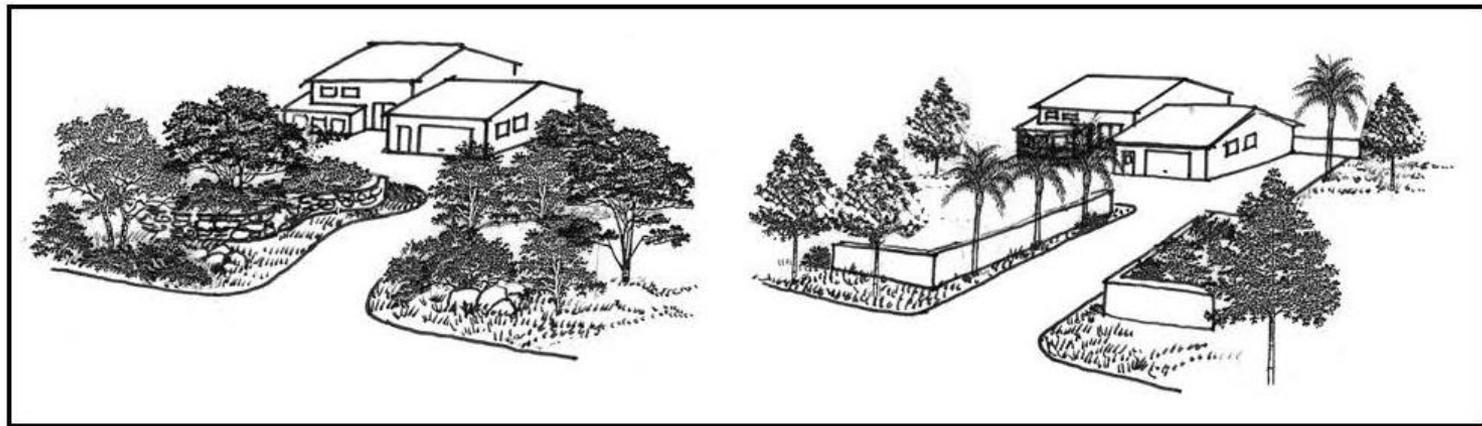
Don't do this

ISSUE 2: RIDGELINE PROTECTION

Example Design Guideline

Landscaping:

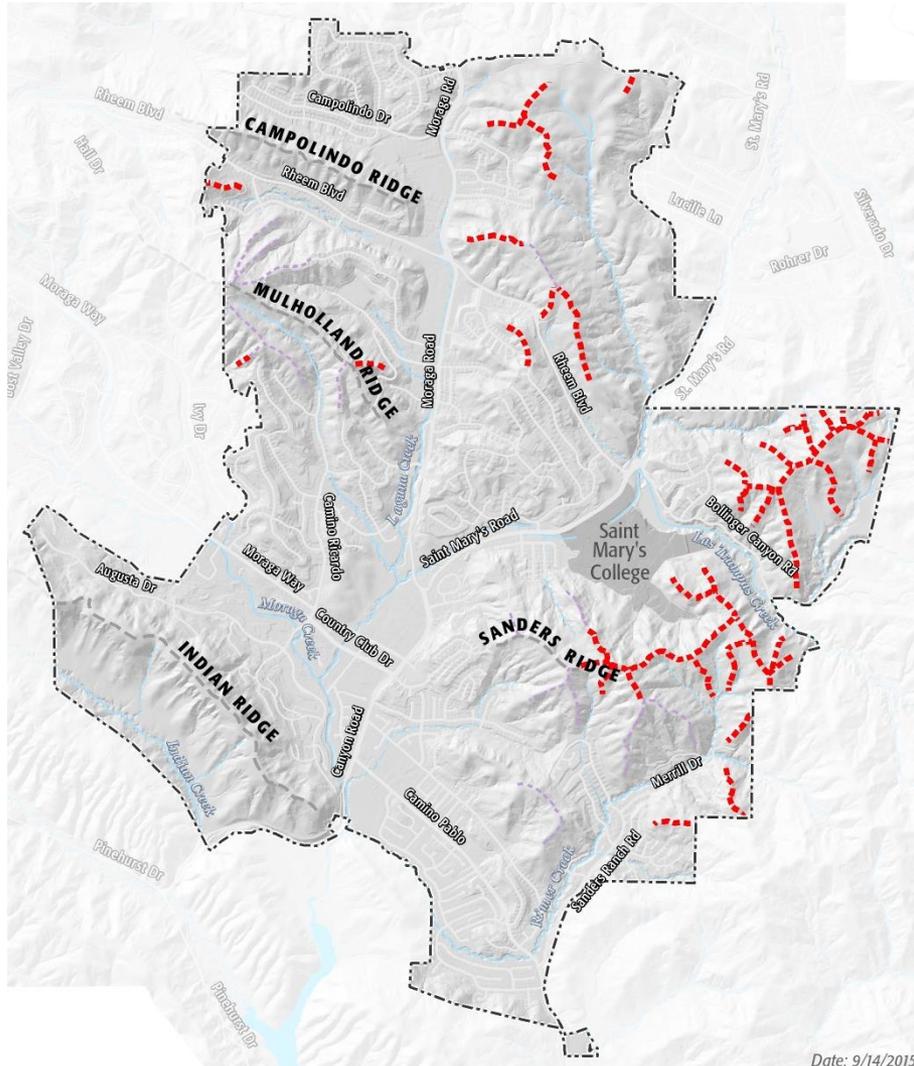
- ❑ Plants visible from a public street shall be clustered informally to blend with the natural vegetation.
- ❑ locate trees in swale areas to more closely reflect natural conditions and gather surface runoff for plant irrigation.



Do this

Don't do this

ISSUE 2: RIDGELINE PROTECTION



Option 2-B: Prohibit development on non-MOSO ridgelines. Allow development near non-MOSO ridgelines consistent with new development standards.

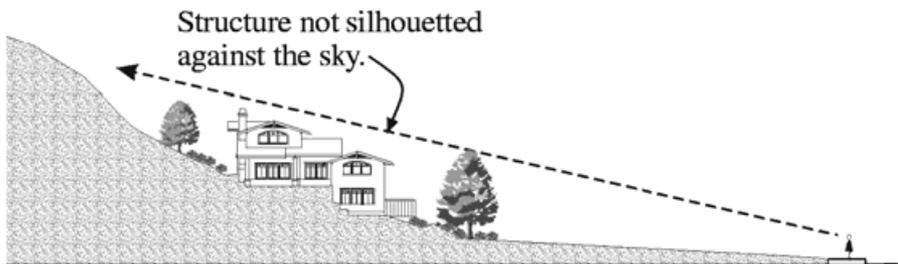
- Clarify that development is prohibited on non-MOSO ridgelines, but allowed near these ridgelines if they comply with new development standards.

----- Non-MOSO Ridgelines Above 800 feet

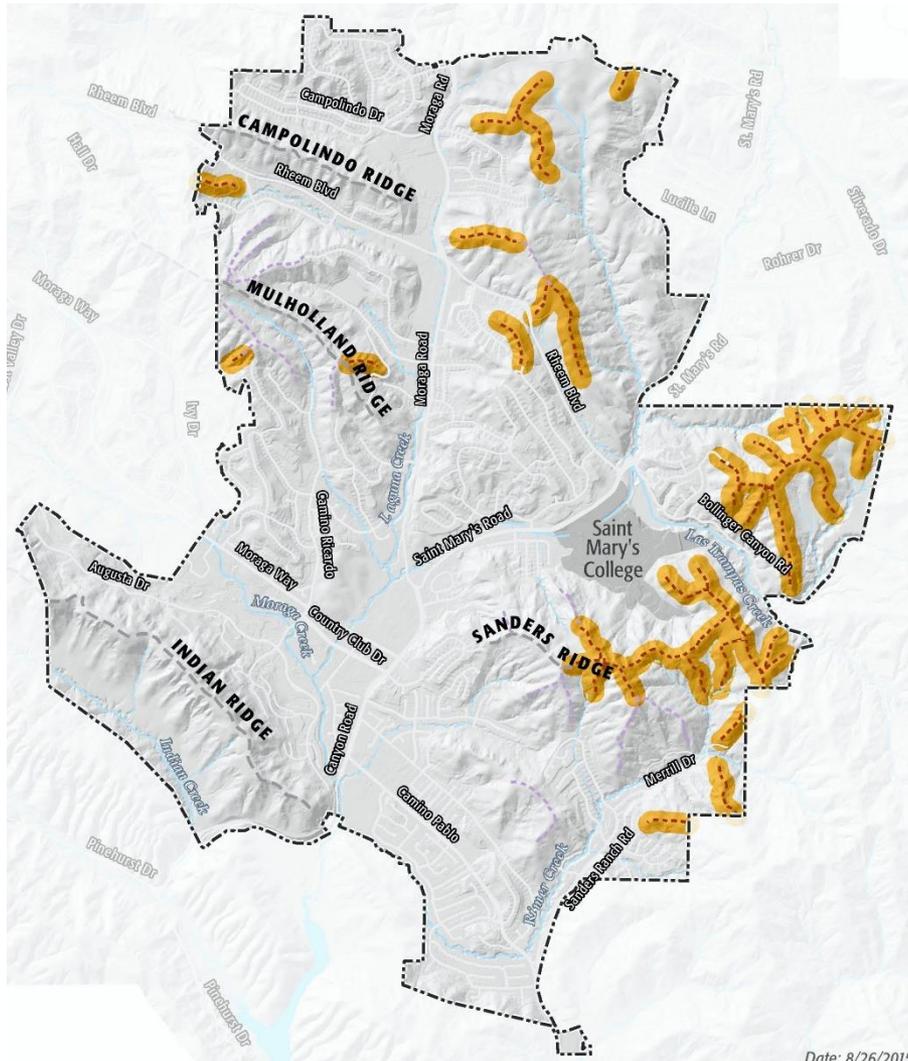
ISSUE 2: RIDGELINE PROTECTION

Example Standards:

- ❑ **Vision Plane.** Structures may not project outside of a plane sloping downward at a 15 degree angle from the horizontal intercept of a ridgeline.
- ❑ **Placement below Ridgeline.** Structures shall be located below the ridgeline so that a vertical separation of at least 25 feet is provided between the top of the structure and the lowest point on the portion of any ridgeline within 100 feet of the proposed structure.



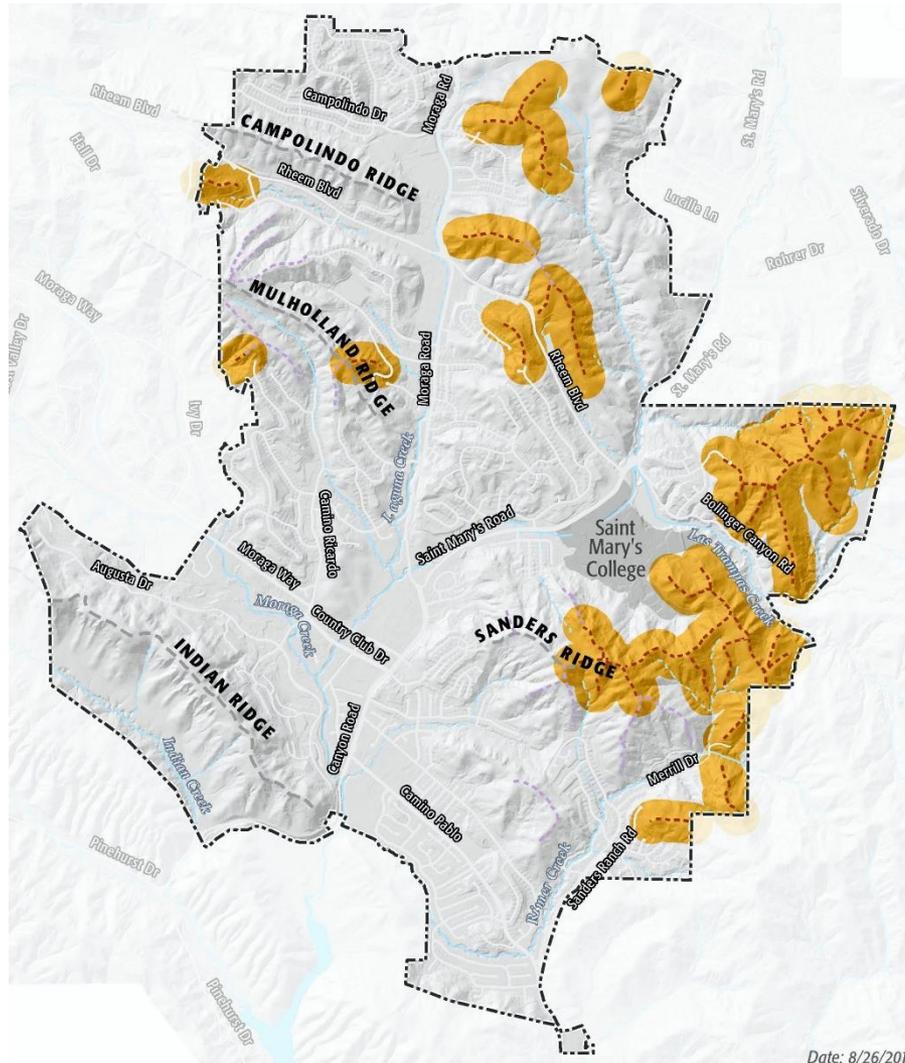
ISSUE 2: RIDGELINE PROTECTION



Option 2-C: Prohibit development within 250 feet of non-MOSO ridgelines.

- Non-MOSO Ridgelines Above 800 feet
- 250-foot buffer of non-MOSO ridgelines
- - - Town Boundary
- - - Town-identified MOSO Minor Ridgelines
- - - Town-identified MOSO Major Ridgelines
- Major/Permanent Stream
- - - Minor/Intermittent Stream

ISSUE 2: RIDGELINE PROTECTION



Option 2-D: Prohibit development within 500 feet of non-MOSO ridgelines.

ISSUE 2: RIDGELINE PROTECTION

Option 2-E: Add an “escape clause” to Options 2-B, 2-C, and 2-D to allow exceptions if regulation would result in an unconstitutional “taking” of property.

- ❑ Language would allow Town Council to approve exceptions to non-MOSO ridgeline development regulations if the enforcement of these regulations would result in a violation of property rights protected by the U.S. Constitution.



ISSUE 2: RIDGELINE PROTECTION

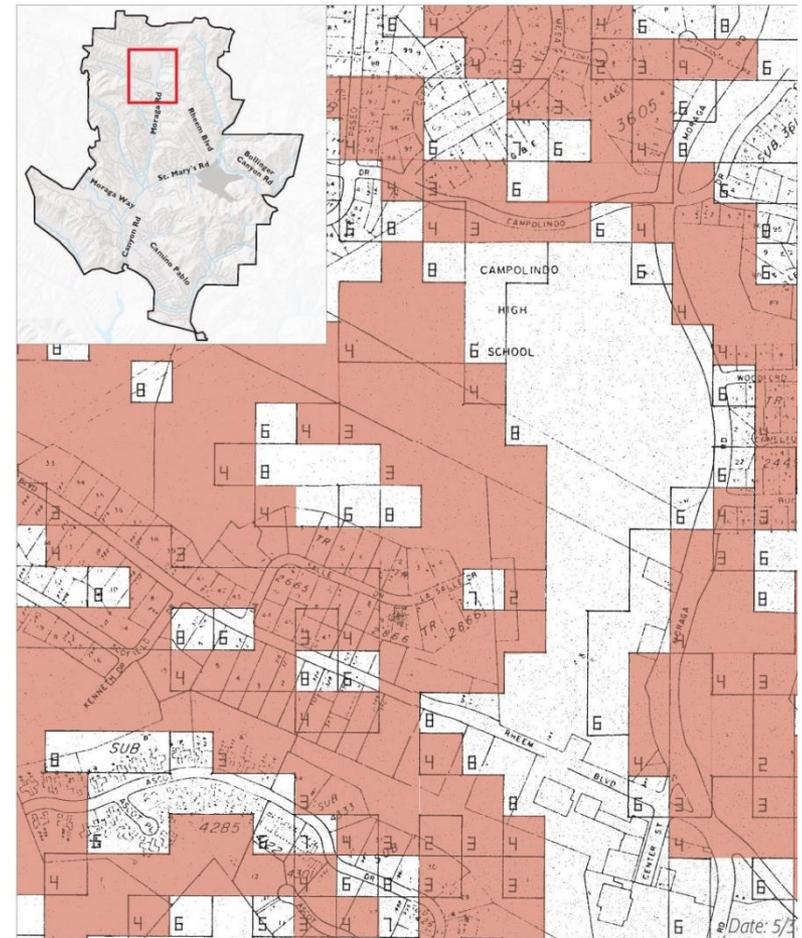
- ❑ **Option 2-A:** Allow development on and near non-MOSO ridgelines consistent with improved design guidelines.
- ❑ **Option 2-B:** Prohibit development on non-MOSO ridgelines. Allow development near non-MOSO ridgelines consistent with new development standards.
- ❑ **Option 2-C:** Prohibit development within 250 feet of non-MOSO ridgelines.
- ❑ **Option 2-D:** Prohibit development within 500 feet of non-MOSO ridgelines.
- ❑ **Option 2-E:** Add an “escape clause” to Options 2-B, 2-C, and 2-D to allow exceptions if regulation would result in an unconstitutional “taking” of property.

ISSUE 4: HIGH RISK AREAS MAP FOR MOSO OPEN SPACE

- ❑ “High risk” areas in MOSO Open Space are limited to a maximum density of 1 unit per 20 acres.
- ❑ MOSO Guidelines Exhibit D (Development Capability Map), adopted in 1989, establishes a preliminary determination of high risk areas.

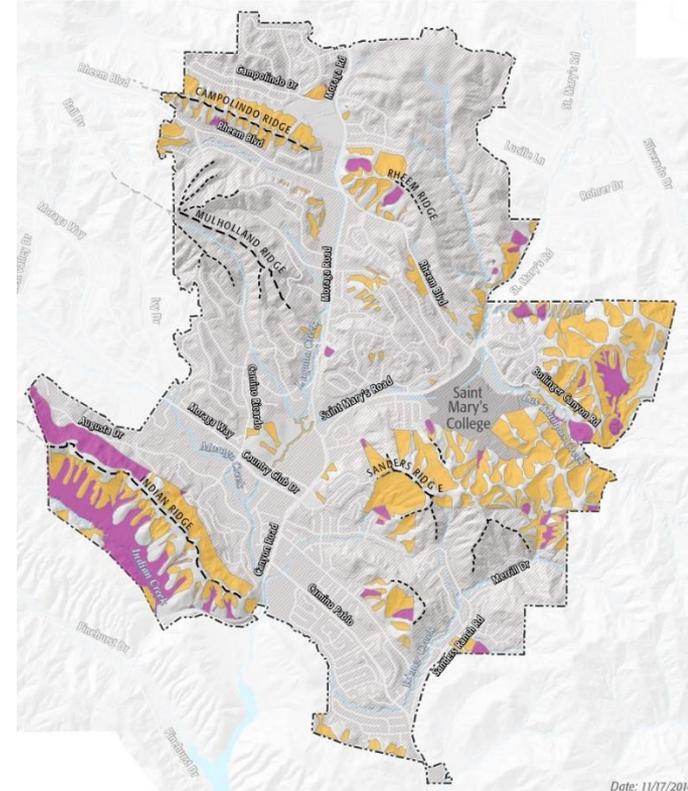


High Risk Area



ISSUE 4: HIGH RISK AREAS MAP FOR MOSO OPEN SPACE

- ❑ Project applicants request a final determination of high risk status on a property based on a site-specific geologic study.
- ❑ The findings of geologic studies frequently differ from the Development Capability Map.
- ❑ Discrepancies also were found between the Development Capability Map and landslide hazard mapping prepared for the Hillside and Ridgelines project.



 Areas not included in landslide mapping

Areas with Significant Potential for Landsliding

 Shallow unstable, unconsolidated material on gentle to steep slopes, commonly less than 10 feet in thickness, subject to shallow landsliding (includes identified shallow landslides and potentially unstable colluvium).

 Deep unstable, unconsolidated or detached materials on moderate to steep slopes, commonly more than 10 feet in thickness, subject to more significant landsliding (includes identified deep landslides and earth materials susceptible to deep failure).

ISSUE 4: HIGH RISK AREAS MAP FOR MOSO OPEN SPACE

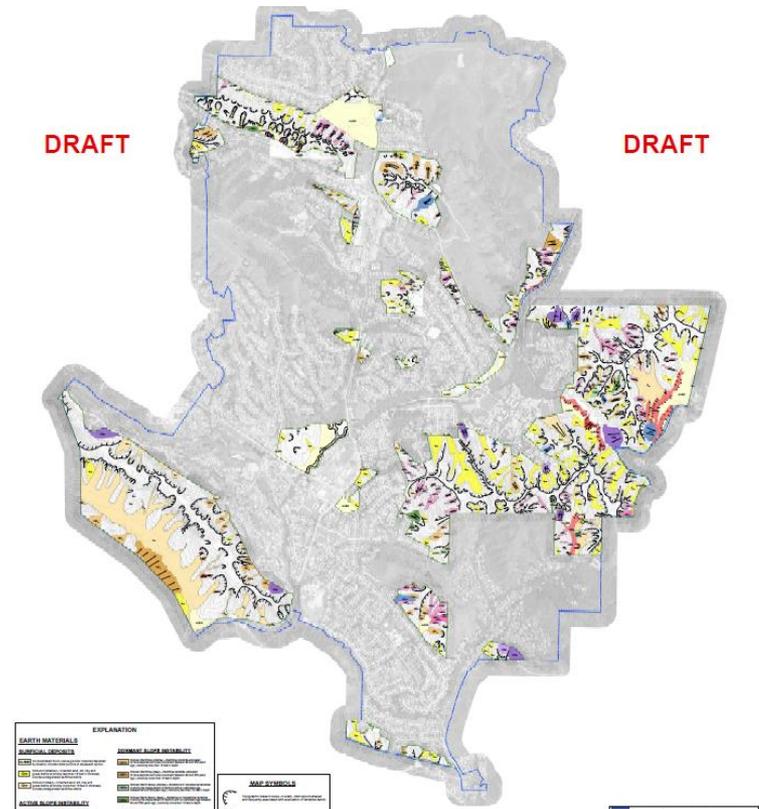
Option 4-A: Continue to use the existing Development Capability Map and acknowledge its limitations.

- Notes would be added to the Development Capability Map, MOSO Guidelines, and General Plan emphasizing that the high risk determination may not reflect actual conditions on the ground.

ISSUE 4: HIGH RISK AREAS MAP FOR MOSO OPEN SPACE

Option 4-B: Develop a new and improved Development Capability Map.

- ❑ New map would be based on landslide hazards mapping already begun for the Hillsides and Ridgelines project.
- ❑ Map must take into account soil stability, history of soil slippage, slope grade, accessibility, and drainage conditions as required by the MOSO Initiative.



ISSUE 4: HIGH RISK AREAS MAP FOR MOSO OPEN SPACE

Option 4-C: Discontinue use of the Development Capability Map and eliminate the preliminary risk determination.

- ❑ Add information to the General Plan that generally describes the characteristics of high risk areas consistent with the MOSO Initiative, but do not map these areas.
- ❑ Determine the location of high risk areas as part of a development application based on site-specific geological studies.

ISSUE 4: HIGH RISK AREAS MAP FOR MOSO OPEN SPACE

- ❑ **Option 4-A:** Continue to use the existing Development Capability Map and acknowledge its limitations.
- ❑ **Option 4-B:** Develop a new and improved Development Capability Map.
- ❑ **Option 4-C:** Discontinue use of the Development Capability Map and eliminate the preliminary risk determination.

ISSUE 5: REMEDIATION OF HIGH RISK AREAS

- ❑ Geologic hazards, such as landslides, on a hillside site can often be remediated through earthmoving, excavation, and the installation of engineering structures.
- ❑ The MOSO guidelines allow for reclassification of high risk areas as a result of remediation.
- ❑ Reclassification allows for increased residential density (either 1 unit per 10 acres or 1 unit per 5 acres).
- ❑ Should this practice of allowing increased density as a result of remediation continue?

ISSUE 5: REMEDIATION OF HIGH RISK AREAS

Option 5-A: Conditionally allow increases to residential density as a result of remediation.

Option 5-B: Prohibit remediation for the sole purpose of increasing residential density.

Option 5-C: Prohibit any increase in residential density in high risk areas.

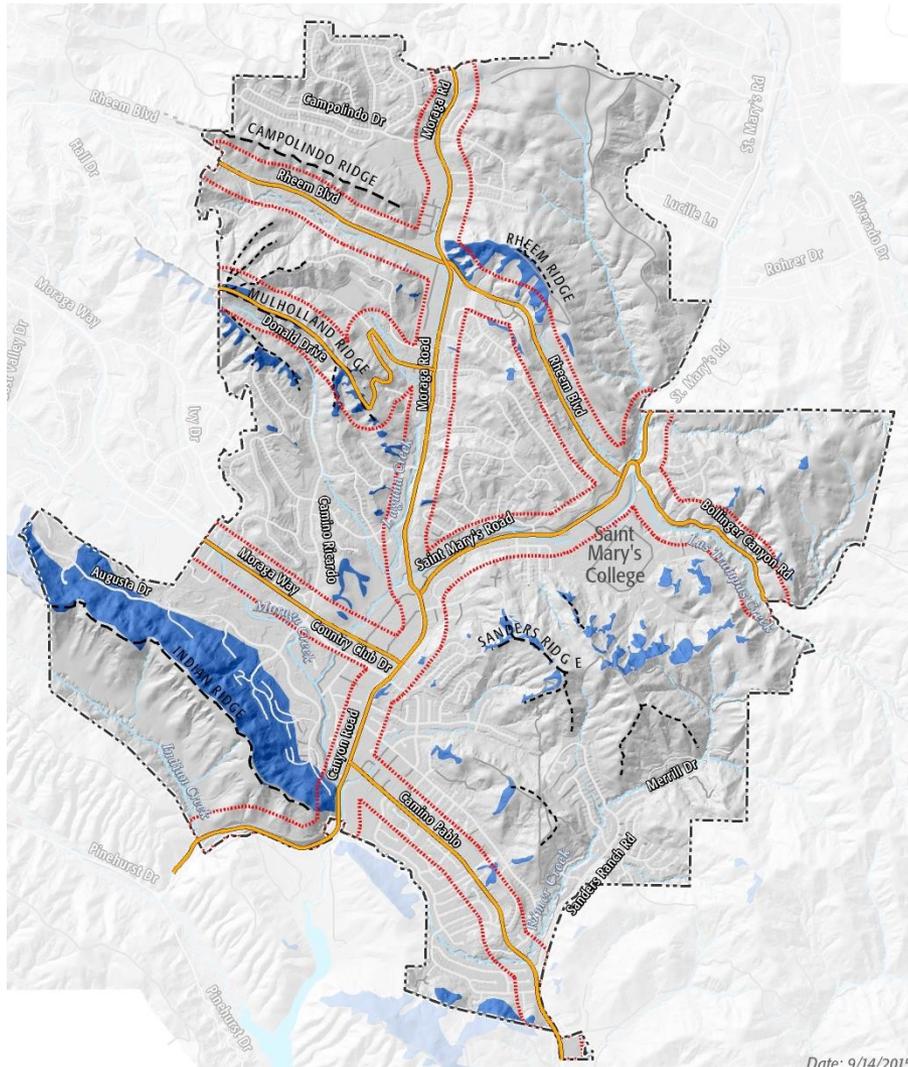


ISSUE 6: VIEWSHED PROTECTION

- ❑ Moraga's General Plan and Zoning Code identify several roadways in Moraga as scenic corridors.
- ❑ General Plan Policy CD1.3 calls for the Town to “protect” viewsheds along these scenic corridors.
- ❑ It is unclear what “protect” means in the context of proposed projects located in visually prominent hillside areas as viewed from scenic corridors.



ISSUE 6: VIEWSHED PROTECTION



Date: 9/14/2015

Option 6-A: Prohibit development in visually prominent hillside areas as viewed from the Town's scenic corridors.

-  Town-designated Scenic Corridors
-  500-foot Buffer of Scenic Corridors
-  Example Draft High-Visibility Area
-  Town Boundary
-  MOSO Minor Ridgelines
-  MOSO Major Ridgelines
-  Major/Permanent Stream
-  Minor/Intermittent Stream

ISSUE 6: VIEWSHED PROTECTION

Option 6-B: Strengthen development standards to limit development in visually prominent hillside areas as viewed from the Town's scenic corridors.

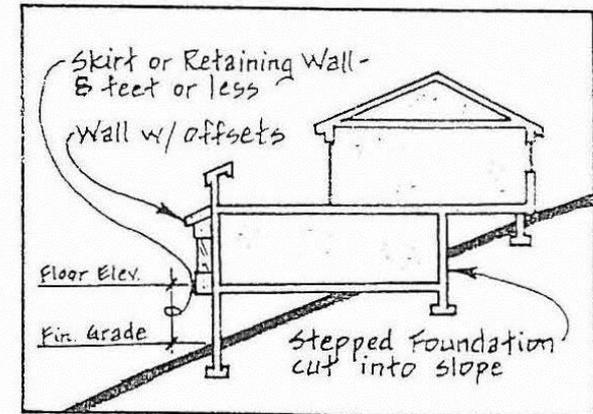
- Allow new development in high visibility areas shown only if they comply with new development standards.



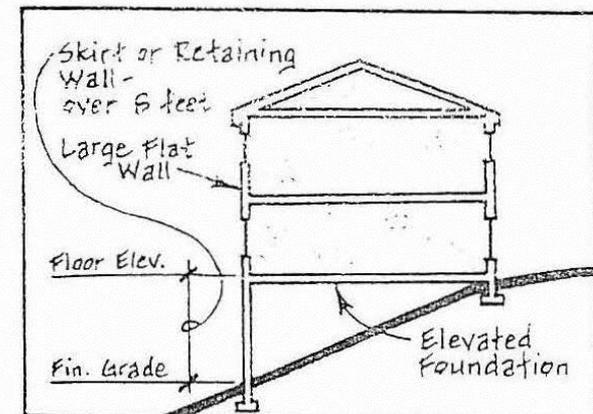
ISSUE 6: VIEWSHED PROTECTION

Example Design Standard:

- ❑ On steeper sites, require a stepped building design that follows the natural terrain.
- ❑ On flatter sites, allow single-level padded lots only if the vertical height of graded slopes and retaining walls do not exceed 10 feet.



YES



NO

ISSUE 6: VIEWSHED PROTECTION

Option 6-C: Expand and improve design guidelines that apply to visually prominent hillside areas as viewed from the Town's scenic corridors.

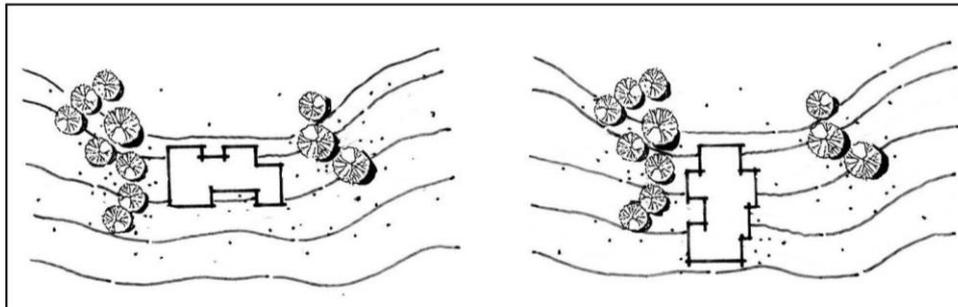
- Prepare new design guidelines to minimize visual impacts from development in visually prominent hillside areas as viewed from the Town's scenic corridors.



ISSUE 6: VIEWSHED PROTECTION

Example Design Guidelines

- ❑ Match building placement with the natural topography of the site and with the contours.
- ❑ Vary and stagger front building setbacks within subdivisions to reflect the natural hillside character and reduce the monotony of repetitive setbacks.

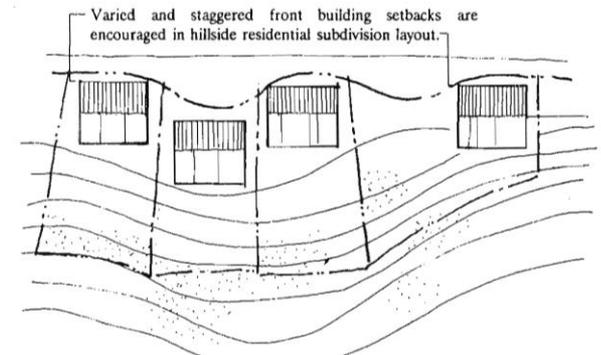


Do this

Building is parallel with the contours.

Don't do this

Building is perpendicular to the contours



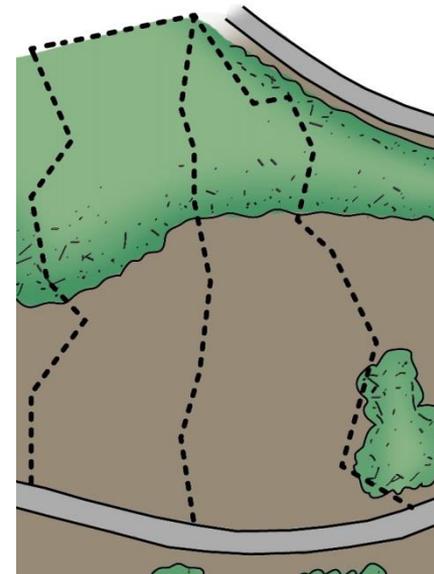
ISSUE 6: VIEWSHED PROTECTION

- ❑ **Option 6-A:** Prohibit development in visually prominent hillside areas as viewed from the Town's scenic corridors.
- ❑ **Option 6-B:** Strengthen development standards to limit development in visually prominent hillside areas as viewed from the Town's scenic corridors.
- ❑ **Option 6-C:** Expand and improve design guidelines that apply to visually prominent hillside areas as viewed from the Town's scenic corridors.

ISSUE 3: STEEP SLOPE LIMITATIONS IN MOSO OPEN SPACE

- ❑ In MOSO Open Space, development is prohibited in areas with an average existing slope of 20 percent or more.
- ❑ MOSO Guidelines require a development "Cell" to be defined with an average grade of less than 20 percent
- ❑ Some applicants have calculated average slope for a very large or irregularly shaped area (a "contorted cell").
- ❑ Also, is development allowed in particularly high-slope areas in a cell if the average slope is less than 20 percent?

Contorted Cell



ISSUE 3: STEEP SLOPE LIMITATIONS IN MOSO OPEN SPACE

Option 3-A: Create general policy statement for cell boundaries.

- ❑ Maintain the use of cells to calculate average slope in MOSO areas, but add a general statement that clarifies the desired shape and location of cells.
- ❑ Example statement: **“a cell shall feature regular boundaries and generally contain the expected area of disturbance.”**

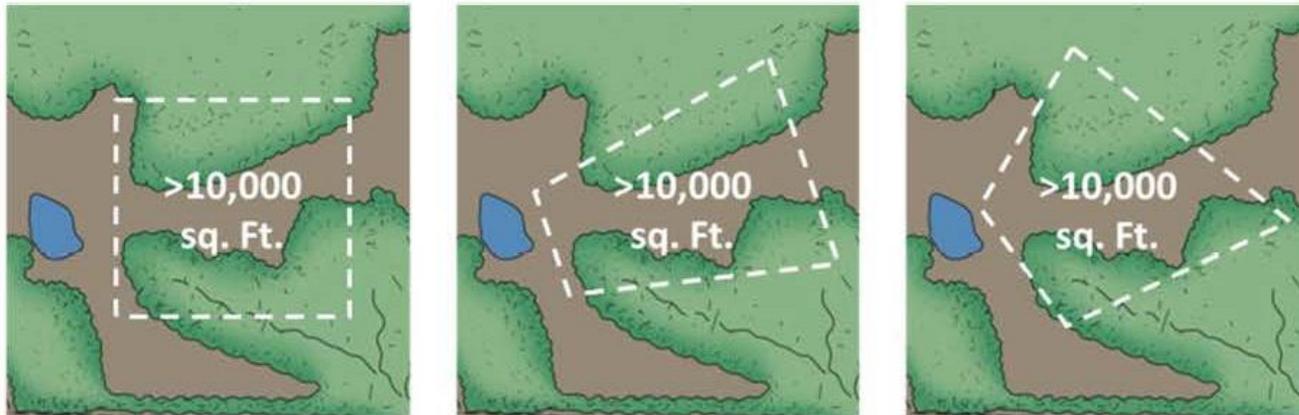


ISSUE 3: STEEP SLOPE LIMITATIONS IN MOSO OPEN SPACE

Option 3-B: Create objective standards for cell boundaries.

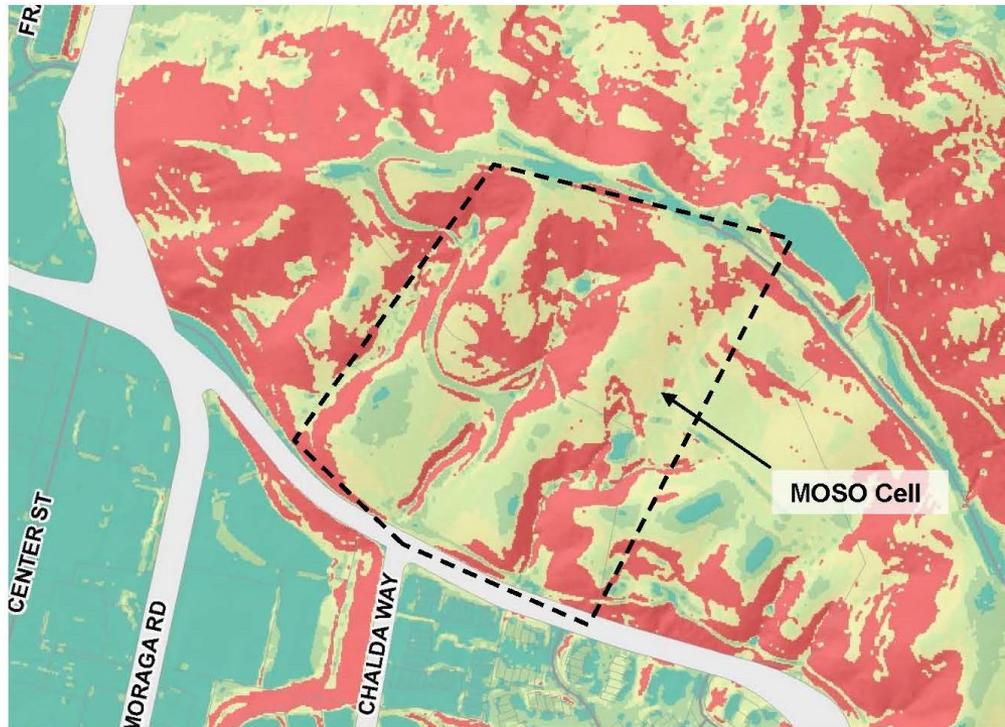
- Maintain the use of cells to calculate average slope in MOSO areas, but add new requirements for drawing cell boundaries.

Objective Standard Example 1: A cell is a four-sided polygon of at least 10,000 sq. ft.



Acceptable cell configurations.

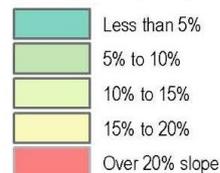
ISSUE 3: STEEP SLOPE LIMITATIONS IN MOSO OPEN SPACE



Option 3-C: Prohibit development in areas of a cell with a slope of 20 percent or greater when the cell overall has an average slope of less than 20 percent.

In **Option 3-C**, development is prohibited in areas of a cell with a slope of 20 percent or greater (pink and red on map).

Draft Slope Categories (For Illustration Only)



ISSUE 3: STEEP SLOPE LIMITATIONS IN MOSO OPEN SPACE

Option 3-D: Eliminate use of cell to calculate average slope

- ❑ Eliminate the cell concept from MOSO regulations.
- ❑ Require project applicants to prepare a map showing areas with slopes of 20 percent or more.
- ❑ Prohibit development in all areas with a mapped slope of 20 percent or more, regardless of the average slope of the site.
- ❑ As part of this option, the Town could allow the Town Council to approve exceptions to steep slope restrictions if the enforcement of these regulations would result in a violation of property rights protected by the U.S. Constitution.

ISSUE 3: STEEP SLOPE LIMITATIONS IN MOSO OPEN SPACE



In **Option 3-D**, the concept of average cell slope is eliminated. Instead, development is prohibited anywhere on a property or site in areas with a slope of 20 percent or more. Development is allowed elsewhere on the property if it complies with other regulations (e.g., development prohibited within 500 feet of a major ridgeline)

Option 3-D: Eliminate use of cell to calculate average slope.

- ❑ Prohibit development in all areas with a mapped slope of 20 percent or more, regardless of the average slope of the site.

Draft Slope Categories (For Illustration Only)

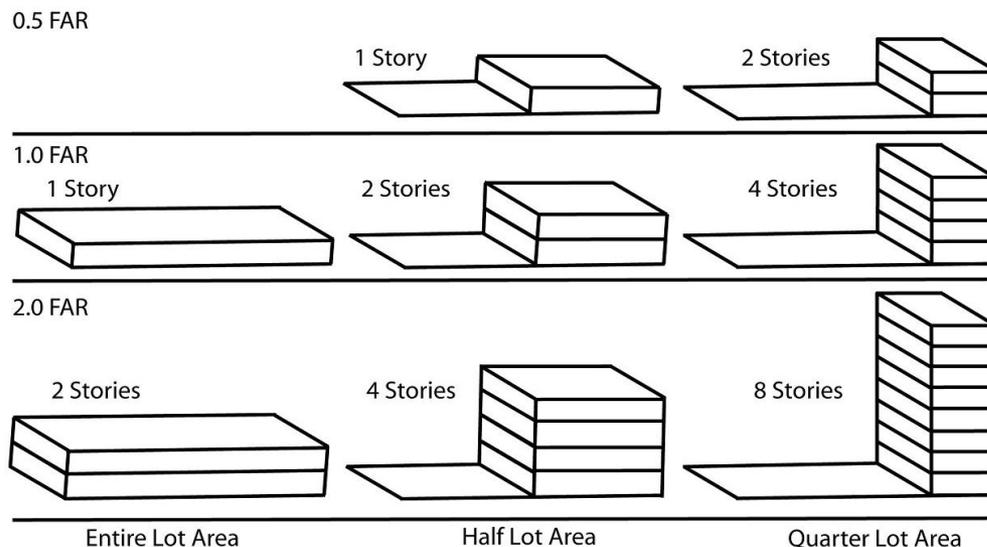


ISSUE 3: STEEP SLOPE LIMITATIONS IN MOSO OPEN SPACE

- ❑ **Option 3-A:** Create general policy statement for cell boundaries.
- ❑ **Option 3-B:** Create objective standards for cell boundaries.
- ❑ **Option 3-C:** Prohibit development in areas of a cell with a slope of 20 percent or greater when the cell overall has an average slope of less than 20 percent.
- ❑ **Option 3-D:** Eliminate use of cell to calculate average slope.

ISSUE 7: BUILDING SIZE ON LARGE LOTS

- ❑ Floor area ratio (FAR) is a measurement of the size of a building relative to its lot size.
- ❑ Design Guidelines establish a maximum FAR for single-family homes up to a maximum lot size of 20,000 sq. ft.
- ❑ Design Guidelines do not address maximum FAR for lots greater than 20,000 sq. ft.



ISSUE 7: BUILDING SIZE ON LARGE LOTS

Option 7-A: Establish a maximum FAR for lots greater than 20,000 square feet.

- ❑ Amend the Design Guidelines to establish a maximum FAR for lots greater than 20,000 sq. ft.
- ❑ For lots greater than 40,000 sq. ft., establish a maximum floor area regardless of the lot size.

Parcel Area (sq. ft.)	Maximum FAR	Maximum Floor Area (sq. ft.)
20,000	0.230	4,600
22,000	0.227	4,994
24,000	0.224	5,376
26,000	0.221	5,746
28,000	0.218	6,104
30,000	0.215	6,450
32,000	0.212	6,784
34,000	0.209	7,106
36,000	0.206	7,416
38,000	0.203	7,714
40,000	0.200	8,000
Greater than 40,000	N/A	8,000

ISSUE 7: BUILDING SIZE ON LARGE LOTS

Option 7-B: Establish a maximum square-footage for any single-family home regardless of lot size.

- ❑ Add to the Municipal Code the requirement that no home may exceed a specified floor area (e.g., 5,000 sq. ft.).
- ❑ Maintain the existing FAR limitations in the Design Guidelines for lots 20,000 sq. ft. or less.

Option 7-C: Make no changes to existing regulations.

ISSUE 7: BUILDING SIZE ON LARGE LOTS

Option 7-A: Establish a maximum FAR for lots greater than 20,000 square feet.

Option 7-B: Establish a maximum square-footage for any single-family home regardless of lot size.

Option 7-C: Make no changes to existing regulations.



MORAGA HILLSIDES AND RIDGELINES PROJECT