CALIFORNIA
CITY OF BELMONT

Residential Design Guidelines

Draft - 2016

Table of Contents

Introduction _____ 1

Applicablity _____ 2

Design Review -Purpose _____ 3

Design Review Findings _____ 4

Section A – Compatibility & Public Views _____ 8

Section B – Site Planning _____ 15

Section C – Accessory & Support Features _____ 22

Section D – Landscaping _____ 23

Section E – Design Guideline & Criteria Compliance _____ 26

Section F – Technical Review _____ 27

Table of Contents

Appendix A –Glossary of Terms

Appendix B – Access Standards

Appendix C – Grading Plans

Appendix D – Drainage Plan

Appendix E – Geotechnical Reports

INTRODUCTION

When a new home is built or an existing home is expanded in the City of Belmont, the building project must be reviewed and approved. This process is called Single-Family Design Review (SFDR). Belmont has a tier system for Single-Family Design Review, where the level of review is consistent with the scope and complexity of the project (see Table 1 – SFDR Tiers).

Table 1 – SFDR Tiers

Tier	Project Characteristics	Review Authority
1	• Ground floor additions up to 399 sf., cgfa, with top of the addition plate height 12 feet or less, and top of the new roof 18 feet or less, as measured from finished grade. • Enclosure of carports & additions of any size that do not increase the foot print of the home (i.e., underfloor and attic areas that are made habitable).	Community Development Department (CDD)
2	• Ground floor additions not consistent with Tier 1. • Ground floor additions from 400 sf to 899 sf., cgfa • Upper floor additions up to 399 sf., cgfa • Combination of upper and lower floor additions up to 899 sf.	Zoning Administrator (ZA)

Tier	Project Characteristics	Review Authority
3	• New Single Family Homes • Grading more than 500 cubic yards • Disturbance of 6,000 sq. ft. or more of site area • Upper floor additions of 400 sq. ft., cgfa or more • Combination of upper and lower floor additions of 900 sf., cgfa or more • SFDR with other PC level entitlements	Planning Commission (PC)

The review authority relies on the Belmont Zoning Ordinance (BZO) when considering a Design Review application. Certain legal findings must be made by the review authority before a building project can be approved. For convenience, the sections of the Belmont Zoning Ordinance that the review authority must follow can be found on pages four and five of this document.

APPLICABILITY

The Residential Design Guidelines (RDG) include basic design concepts and elements of good design required for all new residential structures, and additions. These guidelines are not intended to constitute *additions* to the existing provisions of the Belmont Zoning Ordinance, but only to be *illustrative* of them. When illustrations of specific homes are provided, they are to be construed as expressing generic architectural concepts rather than specific architectural styles. There are no recommended architectural styles in the Belmont Zoning Ordinance. Creative and original design

concepts are welcome within the general framework of the Ordinance.

The purpose of these Design Guidelines is to help applicants prepare project plans by: 1) providing an overview of the Single Family Design Review Findings that the review authority must make in order to approve a project; and 2) providing relevant examples of designs that are in general agreement with the Single Family Design Review Findings. Technical, non-design issues such as geo-technical review, construction management, etc., are not covered in these Design Review Guidelines.

These guidelines are not intended to replace the services of a design professional. The City strongly encourages applicants to obtain the services of a design professional for all new or extensively renovated projects. Licensed architects are required for new projects on slopes of 18% or more.

REVIEW OF BZO SECTION 13A.1 – SINGLE FAMILY DESIGN REVIEW - PURPOSE

The regulations in Section 13A establish standards that allow residential property owners to develop their property while ensuring that the development is in harmony with and preserves the City's tranquil, safe and desirable neighborhoods.

The regulations in Section 13A are augmented by the Residential Design Guidelines and the residential development criteria in BZO Section 4 (including the Residential Design Criteria) to provide a predictable and consistent framework for review of residential projects.

REVIEW OF BZO SECTION 13A.5 - SINGLE FAMILY DESIGN REVIEW – FINDINGS

The reviewing body may approve or conditionally approve a residential design review if it makes the following findings:

(a) The buildings and structures shown on the site plan will be:

(1) Designed to be compatible with any existing development on the site;

(2) Located and designed to minimize disruptions of existing public views, and to protect the profile of prominent ridgelines.

(b) The overall site and building plans will achieve an acceptable balance of the following factors:

(1) building bulk,

(2) grading, including

(A) disturbed surface area, and

(B) total cubic yards, cut and fill.

(3) The aesthetic impacts of hardscape as viewed from a public vantage point.

(c) All proposed accessory and support features, including driveway and parking surfaces, underfloor areas, retaining walls, utility services and other accessory structures will be integrated into the overall project design.

(d) The proposed landscape plan will incorporate:

(1) Native plants appropriate to the site's environmental setting and microclimate, and

(2) Appropriate landscape screening of proposed accessory and support structures.

(e) The project will be in substantial compliance with the Residential Design Guidelines and Residential Design Criteria as applicable.

(f) City staff and consultants have provided technical review and conditions of approval have been adopted, as applicable, regarding project-related grading, drainage, storm-water runoff, vehicular and pedestrian access, site stability, structural encroachments, and construction impacts.

Design Guidelines Index

The Design Guidelines are categorized into sections, which correspond to the findings section of the Belmont Zoning Ordinance that the review authority relies on when considering a Design Review application. Table 2 (Design Guidelines Index) highlights where Design Guidelines can be found in this document. This Table also highlights the various sections of the Single Family Design Review Findings (Section 13A.5) to which the Design Guidelines pertains.

Table 2 – Design Guidelines Index

RDG Section Design Guideline (page)	Applicable Planning Commission Finding Belmont Zoning Code 13.A.5
Section A – Compatibility & Public Views Guideline A-1 (p9) Guideline A-2 (p10) Guideline A-3 (p11) Guideline A-4 (p12) Guideline A-5 (p13) Guideline A-6 (p14)	The buildings and structures shown on the site plan will be: (1) Designed to be compatible with any existing development on the site; (2) Located and designed to minimize disruptions of existing public views, and to protect the profile of prominent ridgelines.
Section B – Site Planning Guideline B-1 (p16) Guideline B-2 (p17) Guideline B-3 (p18) Guideline B-4 (p19) Guideline B-5 (p20) Guideline B-6 (p21)	The overall site and building plans will achieve an acceptable balance of the following factors: (1) building bulk, (2) grading, including (A) disturbed surface area, and (B) total cubic yards, cut and fill. (3) The aesthetic impacts of hardscape as viewed from a public vantage point.

Table 2 – Design Guidelines Index (continued)

RDG Section Design Guideline (page)	Applicable Planning Commission Finding Belmont Zoning Code 13.A.5
Section C - Accessory/Support Features Guideline C-1 (p22)	All proposed accessory and support features, including driveway and parking surfaces, underfloor areas, retaining walls, utility services and other accessory structures will be integrated into the overall project design.
Section D – Landscaping Guideline D-1 (p23) Guideline D-2 (p24) Guideline D-3 (p25)	The proposed landscape plan will incorporate: (1) Native plants appropriate to the site's environmental setting and microclimate, and (2) Appropriate landscape screening of proposed accessory and support structures.
Section E – RDG & RDC Compliance (p26)	The project will be in substantial compliance with the Residential Design Guidelines and Residential Design Criteria as applicable.

Table 2 – Design Guidelines Index (continued)

RDG Section Design Guideline (page)	Applicable Planning Commission Finding Belmont Zoning Code 13.A.5
Section F – **Technical Review –** No corresponding Design Guidelines. (p27)	City staff and consultants have provided technical review and conditions of approval have been adopted, as applicable, regarding project-related grading, drainage, storm-water runoff, vehicular and pedestrian access, site stability, structural encroachments, and construction impacts.

SECTION A – COMPATIBILITY & PUBLIC VIEWS

Applicants proposing to build a new home or modify the exterior of an existing home are encouraged to design the project such that it is compatible with existing development on site, and minimizes impacts to public views.

Guideline A-1 - Design Building with a Compatible Overall Style

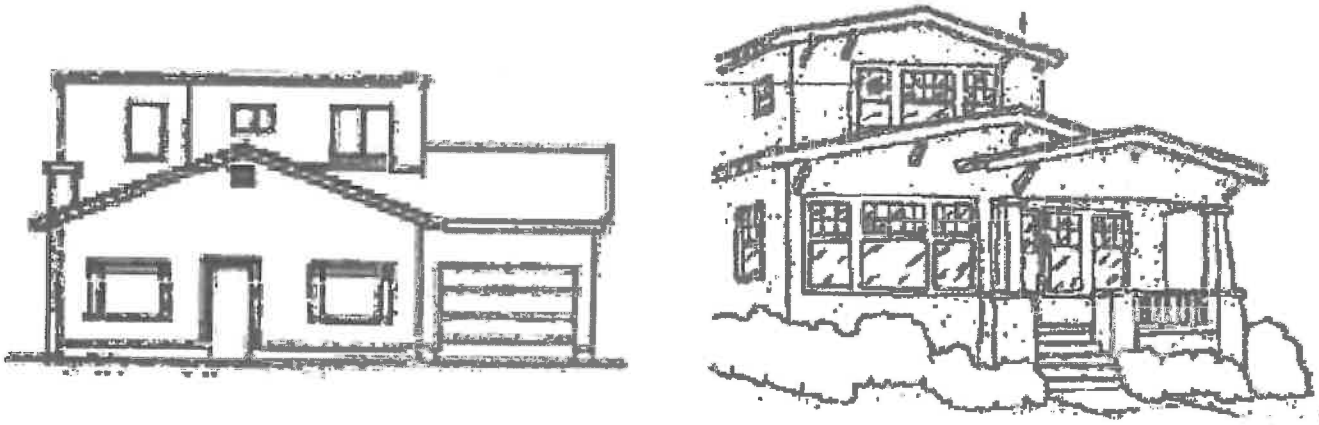
A building's architectural characteristics include its basic style, its form, its placement on the site, and its defining features (i.e., type of roof, exterior materials, windows, porch, etc.). Design projects with a compatible architectural style while also being architecturally appealing.

a. Include features (window, roofing, windows, details, etc.) consistent with the style of the home
b. Do not mix architectural forms from one style to another

Figure 1: The original design includes a confusing mixture of architectural styles and details, creating a chaotic presentation. The revised design unifies the addition by using a consistent style of windows, trim and exterior materials across the entire home.

Guideline A-2 – Ensure Upper Story Additions blend with the Existing Home's Design.

a. Incorporate the same building style
b. Use the same roof pitch
c. Use identical exterior materials, trim details and window treatments



Undesirable Addition **Desirable Addition**

Figure 2: The undesirable second story addition utilizes different window styles and roof forms for the first and second stories of the home. The desirable second story addition becomes compatible with the existing home by incorporating the same building style, roof pitch, exterior materials and window treatments.

Guideline A-3 – Ensure Upper Story Additions have a Balanced Presentation

a. Locate the mass of the addition over the center of the home if possible
b. Upper floors should be proportionately smaller and shorter than the ground floor
c. Avoid cantilevering the addition over the existing foundation of the home

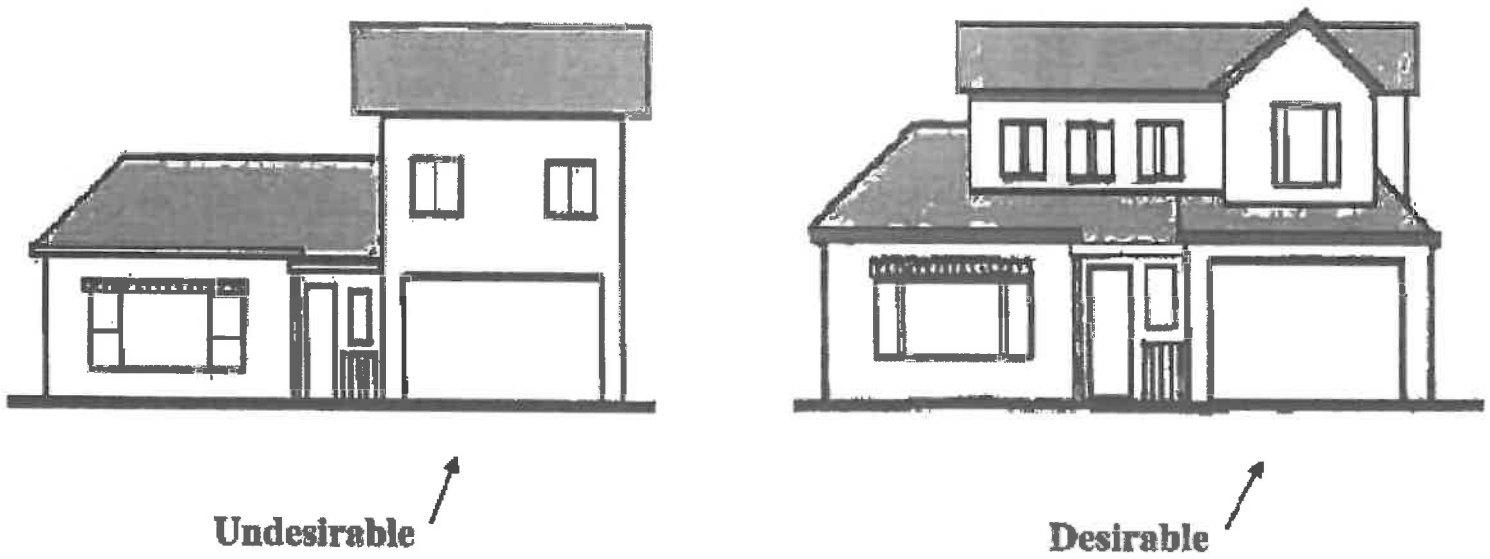
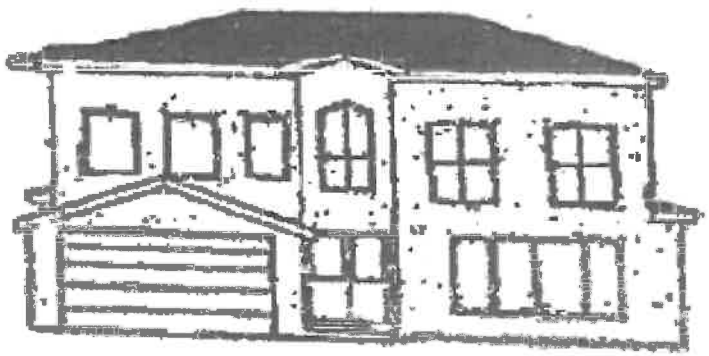


Figure 3: The original design is unbalanced and appears bulky. The revised design appears more balanced and compatible with the existing home.

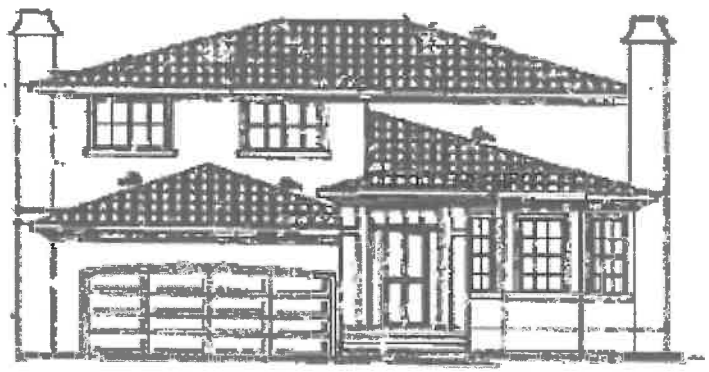
Guideline A-4 – Design façades to create visual interest

Design projects in a way that is visually appealing:

a. Add architectural features to emphasize the front facade (i.e., bay windows, columns, porches, wood doors, substantial window framing and sills, brick or stone veneer, varied roof forms, etc.)..
b. Ensure entry features are proportionate to the building height, and have a human scale so that they are welcoming, not overpowering.
c. Avoid large flat walls by projecting and recessing sections.



Undesirable



Desirable

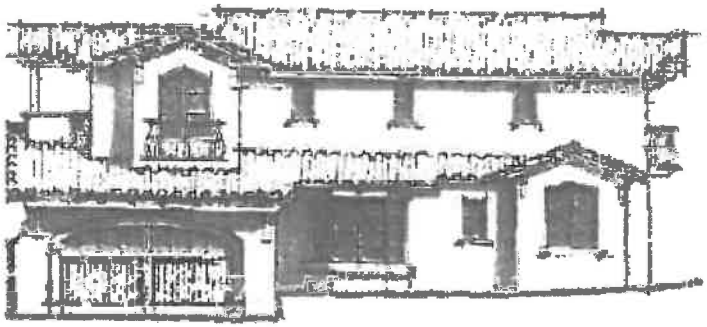
Figure 4: The original design includes large flat wall areas, and a mix of window types. The revised design includes projected and recessed building walls, bay windows, substantial window framing and sills, varied roof forms, a covered porch, sectional wood doors, and consistent use of divided light windows.

Guideline A-5 – Provide greater visual emphasis for buildings on corner lots

a. Design both street facades to be finished (windows, doors, etc.) as "front" facades

b. Design with more complex building features (i.e., projecting façade elements and special building enhancements such as towers, cupolas, wrap-around bay windows, balconies, or other architectural embellishments).

Desirable – Front



Desirable – Street Side

Figure 5: Both the front and the street-side elevations of this Spanish-style home have been emphasized with upper story setbacks, projecting room elements, balconies, bay windows, and substantial window framing.

Guideline A-6 - Minimize Impacts to Public Views / Retain Profile of Existing Ridgelines
Design projects such that public views are not disrupted:

a. Locate the building below or to the side of public views as seen from surrounding public property (streets, sidewalks, etc.).
b. Increase the front yard setbacks on downward sloping lots.
c. Increase step backs of upper-story additions & Lower the height of the dwelling

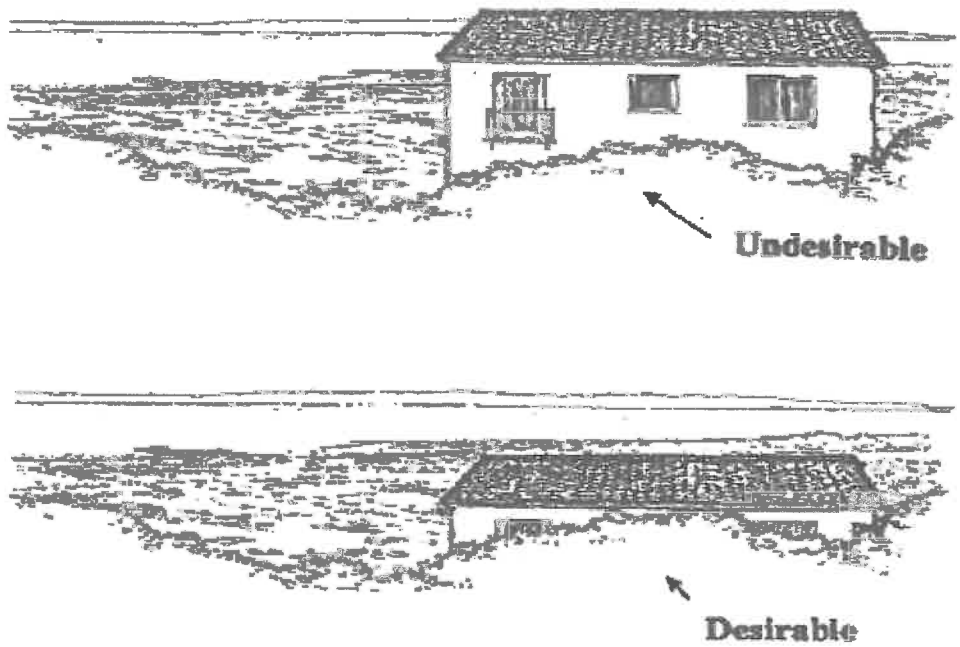


Figure 6: Public views are protected (i.e., views from public streets, parks and open spaces to the Bay and undeveloped hillsides). Buildings should be located and designed to avoid blocking public views of the surrounding hillsides, ridge lines, and/or the Bay. The design should minimize the view impact as seen from the road by reducing the roof plate height and pitch, reducing overall roof height, and stepping back the upper story addition from the front of the home.

SECTION B - SITE PLANNING

Site Planning

Site planning can generally be defined as the art of arranging structures on land and shaping the spaces in between and around structures. The site planning process involves:

1. The identification of a goal or a desired outcome (i.e., a master bedroom addition);
2. The evaluation of site's environmental constraints (i.e., seismic hazards, topography and flooding potential);
3. An analysis of the factors of development, (i.e., building bulk, grading, and hardscape).

Balancing the Factors of Development

Some degree of site disturbance is expected for any new development. However, this disturbance should be minimized and balanced. Specifically, the factors of development including building bulk, grading, and the aesthetics of hardscape should be balanced such that the net impact of all three factors is as minimal as possible.

Applicants are encouraged to design their project such that it minimizes the perceived size of the dwelling (bulk), the use of paving materials (hardscape), and the disturbance of soil (grading).

Guideline B-1 - Reduce Bulk

Use design principles that minimize the perceived size or mass of the dwelling:

a. Avoid two-story, flat building walls
b. Lower eave lines and vary height of roof elements
c. Incorporate portions of upper stories into attic space
d. Increase step backs of upper-story additions & project/recess building walls

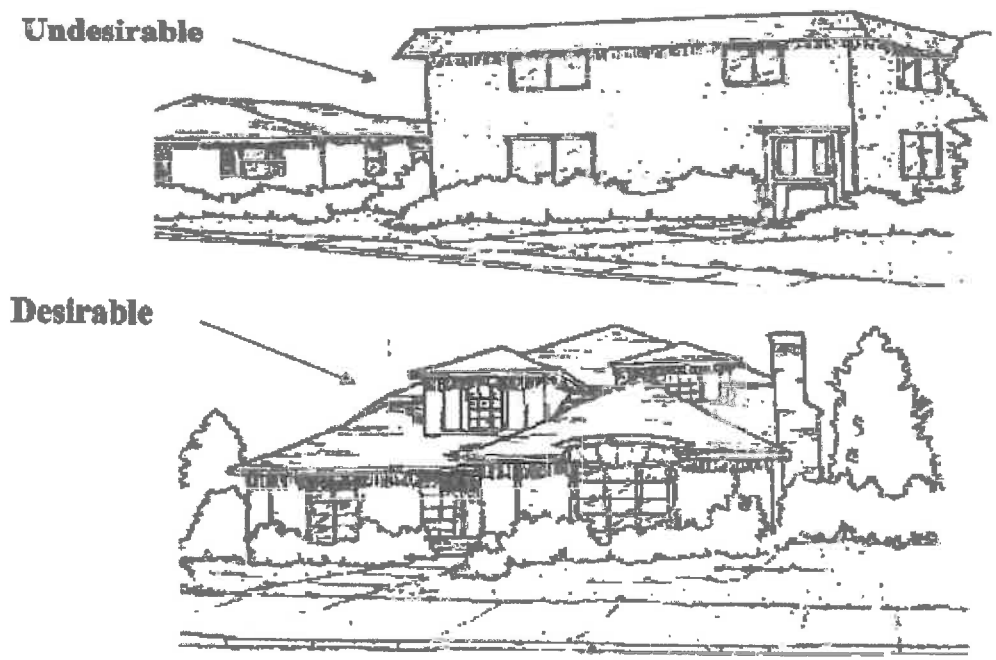


Figure 7: The two-story building walls in the original design appear too massive, and are far too plain and rectangular. The hipped dormers and projecting room elements in the design of the revised home assist in reducing its bulk.

Guideline B-2 - Reduce Perceived Bulk by Using Exterior Finishes and Ornamentation

Utilize exterior design elements that reduce the perceived size or mass of the dwelling:

a. Incorporate a prominent front porch/entry feature and substantial window framing
b. Vary materials and colors and landscaping elements that break-up or obscure building planes
c. Utilize decorative elements such as brackets, belly bands, rafter tails, ironwork, ornamental doors and divided light windows, etc.

Undesirable

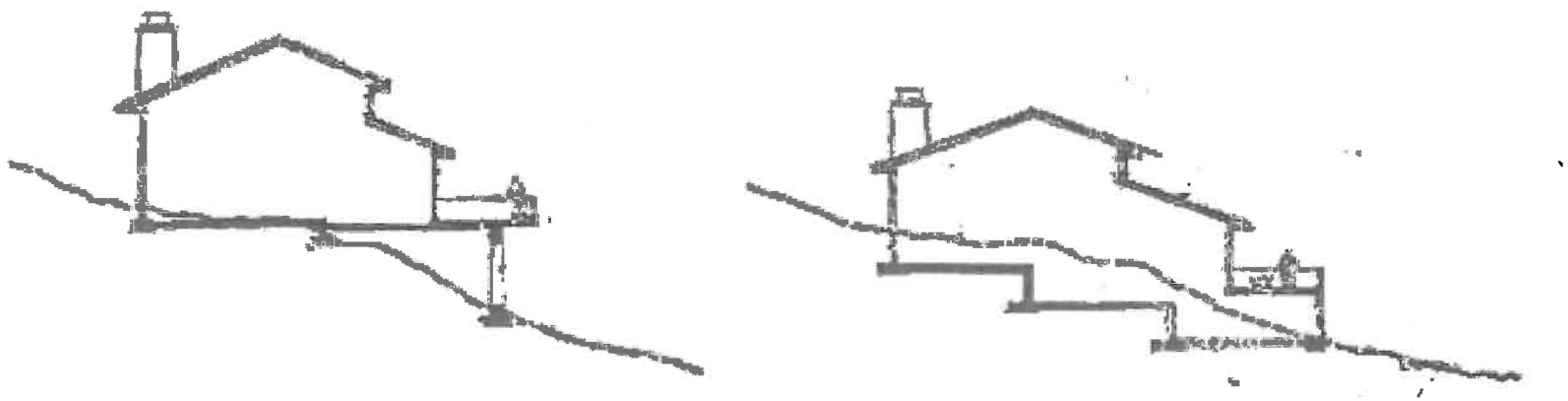
Desirable

Figure 8: While the original design includes articulation on the front façade, it lacks material variation, architectural detailing and a prominent front porch. The perceived bulk of the revised design is reduced through the incorporation of a prominent entry feature and the use of material variation and decorative features and finishes.

Guideline B-3 - Reduce Bulk by Designing Homes to Conform with the Slope of the Lot

Design and situate dwellings such that there is a reduction in the perceived size or mass of the dwelling:

a. Step homes up with the slope of the existing terrain
b. Avoid tall support columns and cantilevers
c. Follow natural slope with roof slopes and retaining walls
d. Break large masses into smaller elements on different levels



Undesirable **Desirable**

Figure 9: The desirable design mitigates bulk by stepping down with the slope and breaking long continuous roof and building walls into smaller elements.

Guideline B-4 - Reduce Grading by Developing the lot to Conform to the Existing Terrain

Minimize the disruption of soil (grading) on the building site to the greatest extent possible:

a. Avoid large flat building pads on sloped properties
b. Step homes with the slope of the existing terrain
c. Keep yard areas with their existing slope to the maximum extent feasible
d. Balance grading on site when possible; use necessary cut as fill where needed

Undesirable **Desirable**

Figure 10: The undesirable design creates a level building pad and yard area on a sloped lot, which results in excess grading (fill), additional tree removal and a bulkier home. The desirable home steps down with the slope of the lot, which reduces grading, tree removal, and bulk.

Guideline B-5 – Minimize the Aesthetic Impacts of Hardscape by Reducing Driveway Width

a. Minimize driveways and curb-cut widths (within Zoning Code requirements)
b. Maintain or include landscaping to soften and screen hardscape

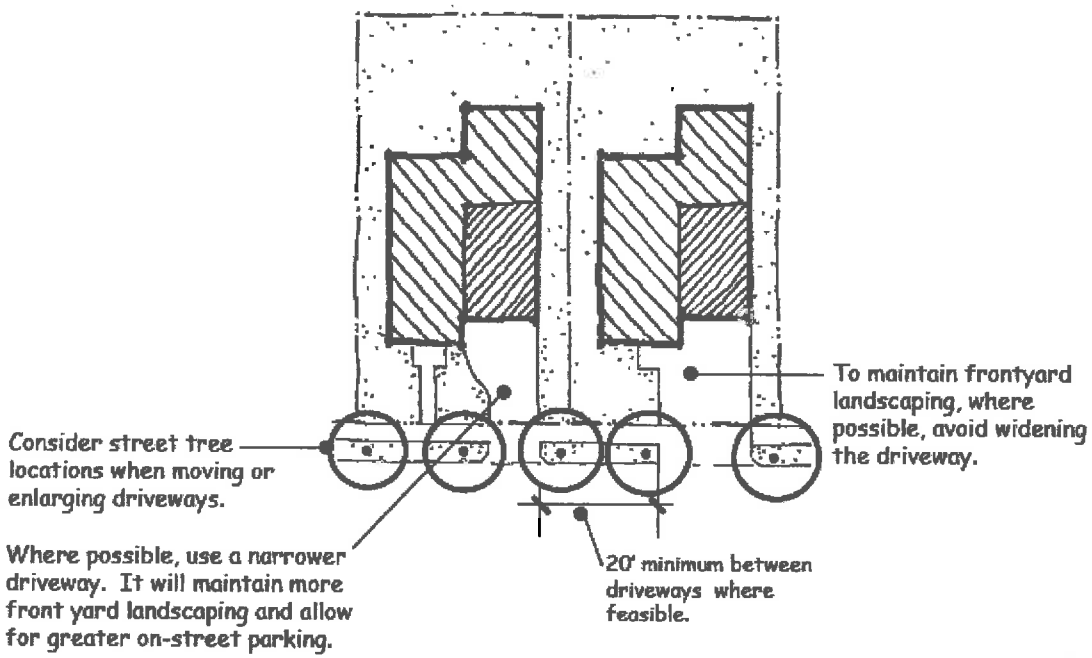


Figure 11: The site on the right includes more hardscape than is necessary leaving less room for landscaping. The site on the left reduces hardscape by including only required parking areas, and using a pathway for pedestrian access.

Guideline B-6 – Minimize the Aesthetic Impacts of Hardscape by Using Different Driveway Surface Treatments

a. Use pavers and decorative concrete for driveways whenever feasible
b. Use stepping stones, pavers, or decomposed granite for pathways and patios

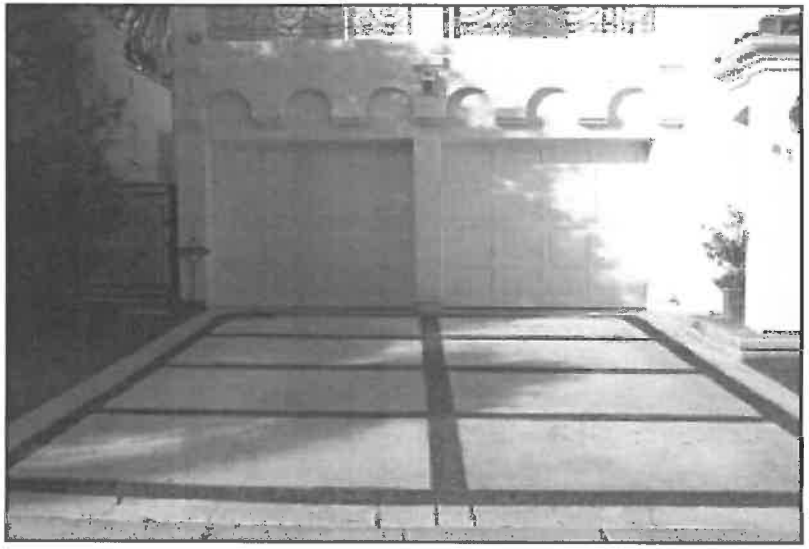


Figure 12: A decorative concrete border is used to break up the driveway area. Pavers, scored and stamped concrete surfaces are also are very effective at breaking up driveway areas, as they can provide color and texture.

SECTION C - ACCESSORY/ SUPPORT FEATURES

Guideline C-1 – Integrate Accessory and Support Features into Project Design and Landscaping

a. Incorporate the same colors/materials for walls/fences/carports that were used for the home.
b. Break retaining walls into several smaller segments, and provide plantings between the segments
c. Vary retaining walls heights/setbacks - add plants in front of the wall or in planters
d. Use earth tone colors and natural materials with a rough texture for retaining walls (i.e., natural stone, brick veneer, wood, etc.)
e. Match the colors and design elements of sheds and other non-habitable structures to the home whenever possible.

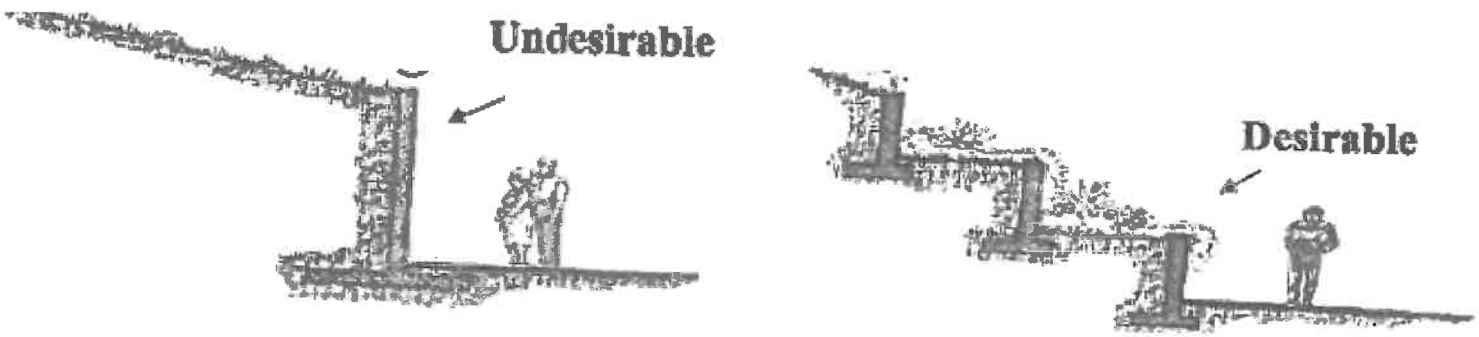


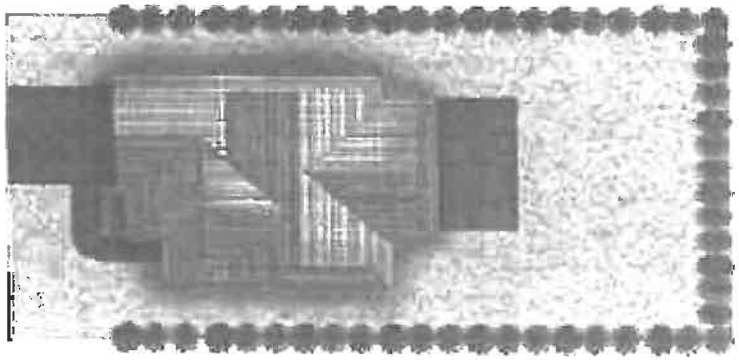
Figure 13: Breaking retaining walls up into low segments brings them into human scale, and provides an opportunity to add plantings. Undulating retaining walls provides an opportunity to add plantings, both in front of the wall and within planters.

SECTION D - LANDSCAPING

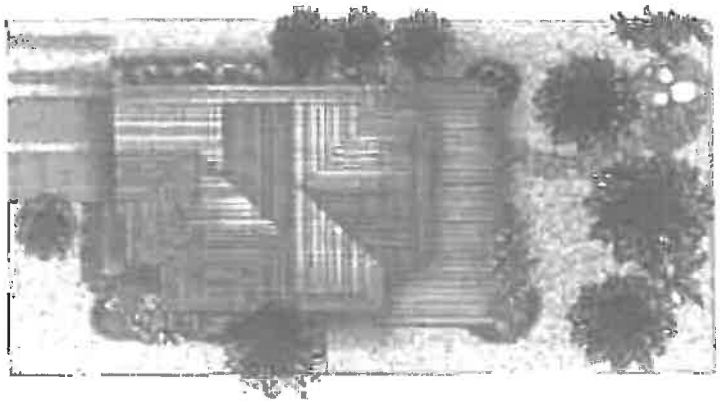
Guideline D-1 – Use Landscaping to Blend the Building with the Natural Environment.

Develop a landscape plan that maximizes the natural beauty of the site.

a. Use drought-tolerant, native and/or locally acclimated plants that will succeed in the site's microclimate (i.e., deer-resistant, plants which are suitable to the site's soil type, moisture, and wind and sun exposure).
b. Arrange plants to have a natural appearance and a clear relationship to the buildings on site.
c. Provide an efficient watering system for all landscaping (i.e., drip irrigation plan).



Undesirable



Desirable

Figure 14: The perimeter landscaping on the left appears uniform and unnatural. The landscaping on the right has a diverse natural

appearance, and includes foundation shrubs as well as native trees.

Guideline D-2 – Use Landscaping to Compliment Building Architecture and Mitigate for Bulk. Use landscaping and trees to minimize the perceived size or mass of their project.

a. Use ground cover and small shrubs along walkways, borders and property frontages
b. Use larger shrubs, vines and trellis features along building foundations
c. Plant trees to screen the home and to break up the appearance of large/tall walls

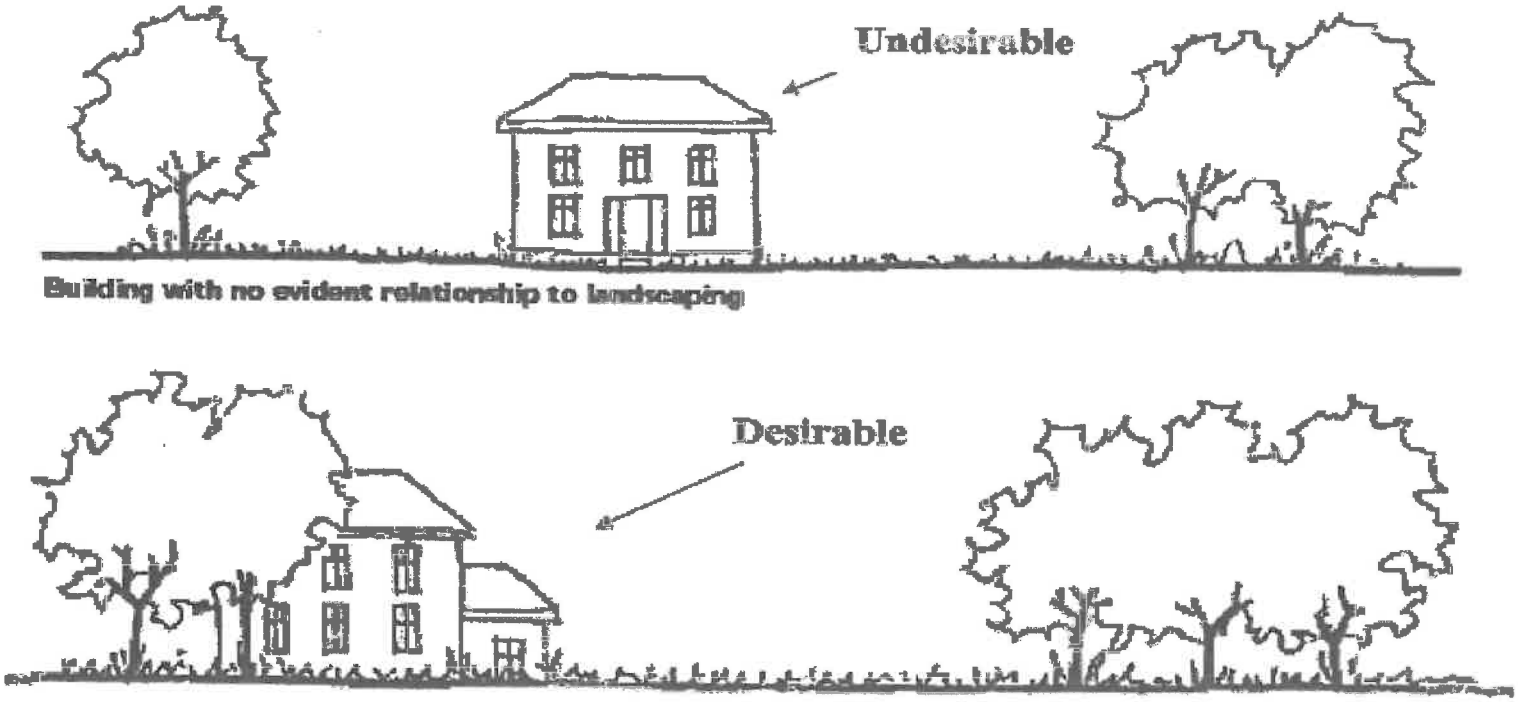


Figure 15: The landscaping at the top does little to mitigate for the bulk of the home. The landscaping at the bottom is sited in conjunction with the building, which gives a more natural appearance, mitigates for second story bulk, and provides shade for the

home.

Guideline D-3 – Retain Mature Trees for Use in the Landscape Plan

Design projects such that the number of trees removed and/or damaged is minimized:

a. When possible, homes should be located on site to avoid removing trees
b. Consider tree root locations when designing building foundations, retaining walls and other soil disturbing features such as trenches for utilities and drainage
c. Avoid disturbing the natural grade within the drip line of mature trees
d. Plant new trees to replace tree removals & landscape with California native, and/or locally acclimated, drought-tolerant species (see Appendix A for additional resource materials).

Figure 16: The home on the left is located to minimize the removal of mature trees; its location also reduces bulk (steps into the hill), and preserves the view of the ridgeline.

Section E - Residential Design Guidelines & Residential Design Criteria - Compliance

The regulations in Section 13A are augmented by the Residential Design Guidelines and the residential development criteria in BZO Section 4 (including the Residential Design Criteria). Single Family Design Review Finding (f) requires projects to be in substantial compliance with the Residential Design Guidelines (RDG) and the Residential Design Criteria (RDC), as applicable.

Residential Design Guidelines (RDG)

The RDG is subject to interpretation. The review authority has some discretion when interpreting and weighing competing guidelines. However, the evaluation for substantial compliance with the RDG shall be based upon the whole of the record, and the scope of the project. The review authority shall apply the RDG only to the features of the project site being modified, and to new construction.

Residential Design Criteria (RDC)

Residential Design Criteria (RDC) is a companion regulation to the Zoning Ordinance, which provides additional, objective, measurable, or quantifiable review criteria required for new construction. The RDC includes relevant criteria for the regulation of building bulk (such as second story step backs, prescribed articulation, and daylight planes), which are specified based upon the scope of the project, site conditions, and the architectural style of the home.

New homes and additions must comply with the Residential Design Criteria if the new construction:

(a) ground floor plate height exceeds 12 feet and roof height exceeds 18 feet (as measured from finished grade), or

(b) creates or expands an upper floor.

Projects within the scope of the RDC must employ one or more RDC Standards to address building bulk on all affected building elevations.

Section F – Technical Review

Section 13A.5 (*Standards for Approval)* of the BZO includes both technical and design-related standards (findings) for approval of SFDR. Design-related standards include direct involvement by the review authority (i.e., review of the project plans in consideration of a particular standard or finding). Technical standards are not intended for direct review by the review authority, as they involve review by qualified technical staff and consultants.

Technical standards have no corresponding Design Guidelines. In reviewing a project for conformance with a technical standard, the review authority must ensure that the required review procedure has been followed. The review procedures for project-related grading, drainage, storm-water runoff, vehicular and pedestrian access, site stability, structural encroachments, and construction impacts are summarized below.

Access

The City of Belmont requires that safe vehicular and pedestrian access be provided to all buildings and structures. The City's Planning Division and Public Works Department review proposed driveways to ensure that there is sufficient back-up space and adequate sight distance for vehicles entering/exiting the property. Pedestrian access is also reviewed to ensure that there are clear unobstructed walkways from the driveway or sidewalk/public right-of-way to the living areas of the

home. See Appendix B for access standards, and driveway plan and profile submittal requirements.

Grading/Drainage/Geotechnical

The City of Belmont requires preliminary grading and drainage plans, and geotechnical reports for all new homes and substantial additions. The City's Building Division and Public Works Department review and condition project grading plans to address site stability, ground movement hazards, erosion, flooding potential, and habitat and stream degradation. As appropriate, the City requires the submittal of a site specific geotechnical analysis, independent peer review of the investigation, and incorporation of the findings of the independent peer review into project design. See Appendixes C, D, and E for grading plan, drainage plan, and geotechnical report submittal requirements.

Construction Impacts

The City of Belmont routinely requires the submittal of construction management plans for new homes and substantial remodels, in order to minimize potential noise, dust, and construction traffic impacts on surrounding property owners. The plans are typically reviewed and approved by the Community Development Department in consultation with the Department of Public Works and the Police Department, prior to issuance of grading/building permits.

The plans usually include notice to surrounding property owners/properties prior to grading, and identification of a staging areas and haul routes for the project. Review of staging areas, recycling and disposal procedures and adequacy of erosion control measures are also be reviewed by the Building Division as part of the structural plan check.

Encroachments

The Belmont Municipal Code requires encroachment permits for nearly all right-of-way improvements. Permanent encroachments associated with a Design Review application (i.e., driveway bridge, retaining walls, fences, etc.) require recommendations by the Director of Public Works and the Planning Commission, prior to consideration by the City Council. A key provision within the Municipal Code requires that there is some public benefit to the encroachment. See Section 22, Article 1 (Encroachments) of the Belmont Municipal Code.

Appendix A

GLOSSARY OF TERMS

Addition: New construction added to an existing building or structure.

Alteration: Work which impacts any exterior architectural feature including construction, reconstruction, repair, or removal of any building element.

Appropriate: Especially suitable or compatible.

Attic: The upper level of a building, not of full ceiling height, directly beneath the roof.

Baluster: One of a series of short, vertical, often vase-shaped members used to support a stair or porch handrail, forming a balustrade.

Balustrade: An entire rail system with top rail and balusters.

Bay window: A projecting window that forms an extension to the floor space of the internal rooms; usually extends to the ground level.

Belly Band: A horizontal band usually marking the floor levels on the exterior facade of a building.

Board and batten: Siding fashioned of boards set vertically and covered where their edges join by narrow strips called battens.

Bracket: A projecting element of wood, stone or metal which spans between horizontal and vertical surfaces (eaves, shelves, overhangs) as decorative support.

Building: A structure used to house human activity such as a dwelling or garage.

Casement window: A window with one or two sashes which are hinged at the sides and usually open outward.

Character: The qualities and attributes of any structure, site, street or district.

Column: A circular or square vertical structural member.

Compatible: In harmony with location and surroundings

Configuration: The arrangement of elements and details on a building or structure which help to define its character.

Contemporary: Reflecting characteristics of the current period. Contemporary denotes characteristics which illustrate that a building, structure, or detail was constructed in the present or recent past rather than being imitative or reflective of a historic design.

Context: The setting in which a historic element, site, structure, street, or district exists.

Corbel: In masonry, a projection, or one of a series of projections, each stepped progressively farther forward with height and articulating a cornice or supporting an overhanging member.

Cornice: The uppermost, projecting part of an entablature, or feature resembling it. Any projecting ornamental molding along the top of a wall, building, etc.

Cross-gable: A secondary gable roof which meets the primary roof at right angles.

Demolition: Any act which destroys in whole or in part a building or structure.

Element: A material part or detail of a site, structure, street, or district.

Elevation: Any one of the external faces or facades of a building.

Eave: The edge of a roof that projects beyond the face of a wall.

Facade: Any one of the external faces or elevations of a building.

Fascia: A projecting flat horizontal member or molding; forms the trim of a flat roof or a pitched roof; also part of a classical entablature.

Gable: The triangular section of a wall to cany a pitched roof.

Gable roof: A pitched roof with one downward slope on either side of a central, horizontal ridge.

Gambrel roof: A ridged roof with two slopes on either side.

Harmony. Pleasing or congruent arrangement.

Hipped roof: A roof with unifonn slopes on all sides.

Historic District: A geographically definable area with a significant concentration of buildings, structures, sites, spaces, or objects unified by past events, physical development, design, setting, materials, workmanship, sense of cohesiveness or related historical and aesthetic associations. The significance of a district may be recognized through listing in a local, state, or national landmarks register and may be protected legally through enactment of a local historic district ordinance administered by a historic district board or commission.

Landmark: A building, structure, object or site which is identified as a historic resource of particular significance.

Landscape: The totality of the built or human-influenced habitat experienced at any one place. Dominant features are topography, plant cover, buildings, or other structures and their patterns.

Maintain: To keep in an existing state of preservation or repair.

Mullion: A heavy vertical divider between windows or doors.

Multi-light window: A window sash composed of more than one pane of glass.

New construction: Construction which is characterized by the introduction of new elements, sites, buildings, or structures or additions to existing buildings and structures.

Obscured: Covered, concealed, or hidden from view.

Preservation: Generally, saving from destruction or deterioration old and historic buildings, sites, structures, and objects and providing for their continued use by means of restoration, rehabilitation, or adaptive use.

Proportion: Harmonious relation of parts to one another or to the whole.

Reconstruction: The act or process of reproducing by new construction the exact form and detail of a vanished building, structure, or object, or a part thereof, as is appeared at a specific period of time.

Rehabilitation: The act or process of returning a property or building to usable condition through repair, alteration, and/or preservation of its features which are significant to its historical, architectural, and cultural values.

Restoration: The act or process of accurately taking a building's appearance back to a specific period of time by removing later work and by replacing missing earlier features to match the original.

Retain: To keep secure and intact. In the guidelines, "retain" and "maintain" describe the act of keeping an element, detail, or structure and continuing the same level of repair to aid in the preservation of elements, sites and structures.

Re-use: To use again. An element, detail, or structure might be reused in historic districts.

Scale: Proportional elements that demonstrate the size, materials, and style of buildings.

Setting: The sum of attributes of a locality, neighborhood, or property that defines its character.

Significant: Having particularly important associations within the contexts of architecture, history, and culture.

Streetscape: The distinguishing character of a particular street as created by its width, degree of curvature, paving materials, design of the street furniture, and forms of surrounding buildings.

Style: A type of architecture distinguished by special characteristics of structure and ornament and often related in time; also a general quality of a distinctive character.

Transom: A horizontal opening (or bar) over a door or window.

Trim: The decorative framing of openings and other features on a facade.

Turret: A small slender tower.

Appendix B

DRIVEWAY PLAN AND PROFILE SUBMITTAL REQUIREMENTS

Submittal shall include:

1. Plan
    a. Drawn to scale no smaller than one (1) inch equals twenty (20) feet.
    b. Show alignment (stationing, curve data, etc.) with dimensions and grade and directions of cross slopes.
2. Profile
    a. Drawn to scale no smaller than one (1) inch equals four (4) feet.
    b. Provide right edge profile and left edge profile if proposed cross slopes vary.
    c. Show existing grade and proposed finished grade on each profile
    d. Indicate proposed elevations, gradients and vertical curve data.
3. Typical sections of proposed driveway drawn to scale or no scale.
4. Data to support structural sections shown.

Appendix C

GRADING PLAN SUBMITTAL REQUIREMENTS

A grading plan, prepared and signed by a California registered civil engineer, shall be submitted showing:

1. North arrow, equivalent horizontal and vertical scales (no smaller than one (1) inch equals twenty (20) feet), elevations referenced to an established point, date and name of preparer.
2. Location of existing and proposed buildings on site and within 100 feet of site boundaries and location of existing and proposed streets, driveways and easements on site.
3. Boundaries of the site to be graded.
4. Limits of the area(s) to be graded and the locations, dimensions, and slopes of cuts and fills.
5. Present (existing grade) and proposed (finished grade) contours at one-foot intervals where slopes under 5%, two-foot intervals where the slopes are over 5% but under 25%, and 5 foot intervals where slopes are 25% or more with an accuracy of at least 90% within 2 feet.
6. Calculations of cubic yards of excavations and fills.
7. Profiles and cross-sections sufficient to show the relationship of existing and proposed structures to existing and proposed contours.
8. Locations, size and varieties of all trees onsite indicating those to be removed and any tree on adjacent property within 25 feet of any grading operations.
9. Existing and proposed drainage and detailed plans for any proposed drainage structures.
10. Plans for erosion control during and after grading including planting, cribbing, terraces, sediment retention structures, and other such means of control.

Appendix D

DRAINAGE PLAN SUBMITTAL REQUIREMENTS

A drainage plan, prepared and signed by a California registered civil engineer, shall be submitted showing:

1. North arrow, equivalent horizontal and vertical scales (no smaller than one (1) inch equals twenty (20) feet), elevations referenced to an established point, date and name of preparer.
2. Location of existing and proposed buildings on site and within 100 feet of site boundaries and location of existing and proposed streets, driveways and easements on site.
3. Present (existing grade) and proposed (finished grade) contours at one-foot intervals where slopes under 5%, two-foot intervals where the slopes are over 5% but under 25%, and 5 foot intervals where slopes are 25% or more with an accuracy of at least 90% within 2 feet.
4. Profiles and cross-sections sufficient to show the relationship of existing and proposed drainage improvements to existing and proposed contours.
5. Locations, size and varieties of all trees and their drip lines where drainage improvements are proposed.
6. Existing and proposed drainage and detailed plans for any proposed drainage structures.

All of the foregoing information must be submitted unless the Director of Public Works finds any item or items unnecessary or may be submitted subsequently at the time of the building permit application.

The drainage plan must be submitted as part of the grading plan unless submittal of a grading plan is not required.

Appendix E

STANDARDS FOR GEOTECHNICAL AND ENGINEERING GEOLOGY REPORTS

When required, as indicated in Chapters 7 and 9 of Municipal City Code, a geotechnical engineering report shall be prepared by a professional engineering firm under the direction of a geotechnical engineer. Likewise, an engineering geology report, prepared under the direction of an engineering geologist, may be required. Both requirements may be met by a single report.

A. Engineering geology reports shall include the following:

1. Maps depicting regional geologic setting and site-specific geologic formations and structure.
2. Review of generally accepted previously published geologic reports pertaining to the area.
3. An adequate description of the geology of the site, including description of bedrock lithology, structure, and physical characteristics (strength, jointing, weathering, hardness, special physical or chemical features), and discussion of how the geologic structure affects the site.
4. Identification of active and dormant landslides based on both site analysis and published geologic maps. Geologic cross-sections where appropriate to convey information on geologic relationships.
5. Discussion of geomorphology and relevant hillslope and stream processes. Identification and evaluation of any faults on or adjacent to the site, including their degree of activity and their possible engineering significance.
6. Description and evaluation of offsite geologic hazards that may affect the graded site.
7. Conclusions and recommendations regarding the effect of geologic conditions on the proposed development.

Appendix E (cont.)

STANDARDS FOR GEOTECHNICAL AND ENGINEERING GEOLOGY REPORTS

8. These studies shall be performed for the entire parcel, and shall not be limited only to those portions to be graded.
9. Reports shall contain a statement that "proposed project as designed will be reasonably safe from geologic hazards" and "proposed project will not significantly endanger the stability of the site or any other property".

B. Geotechnical reports shall include the following:

1. Subsurface exploration and testing sufficient to represent conditions of the entire parcel. At a minimum all reports should address the following:
   a. Description of the soil or bedrock encountered.
   b. The in situ dry density and moisture content of each soil or bedrock unit.
   c. Presence and depth of groundwater encountered.
   d. Analysis and recommendations appropriate to the project, consistent with these guidelines.
2. Laboratory tests, which should include the following, as appropriate:
   a. *Classification tests*, using the Unified Soil Classification System. These consist of sieve analysis and plasticity testing.

STANDARDS FOR GEOTECHNICAL AND ENGINEERING GEOLOGY REPORTS

b. *Strength tests*. Either triaxial or direct shear tests may be used. Saturated, drained tests should be used for evaluating long-term problems, such as slope stability.
c. *Consolidation tests*, if loads are to be placed upon clay soils.
d. Expansion tests, such as UBC Standard 29-2, when clays are expected to be within 5 feet of finished grade.
e. *Compaction tests*, performed in accordance with ASTM D1557, for soils to be used in engineered fills or backfills of retaining walls.
f. Permeability testing, when criteria to prevent piping into subsurface drains are required.
g. *Stabilometer tests* (R-value), performed in accordance with California Test Method 301, for areas to be paved.
h. *Resistivity and pH testing* for buried metal pipes or piles.

3. Analysis of areas to be graded.
   a. Field and laboratory tests of the land to be covered with fill, to determine bearing value of the land and consolidation potential.
   b. Field and laboratory soil analysis of the material proposed for the fill, including its source and expansive quality and statement as to its suitability. The analysis shall also specify the maximum density and optimum moisture content in accordance with ASTM D-1557 or an approved equal test.

STANDARDS FOR GEOTECHNICAL AND ENGINEERING GEOLOGY REPORTS

c. Field and laboratory soil analysis of existing soil conditions in proposed cut locations, including saturated strength, expansive qualities and bearing values. Sampling and testing shall be sufficient to evaluate the stability of cut slopes, and should include strength testing of saturated soil materials and evaluation of bedrock jointing and weathering processes. Quantitative stability analyses generally should be performed for any proposed slopes steeper than 3:1.

d. Field and laboratory analysis of all identified active and dormant landslides as well as significant bodies of colluvium on and immediately adjacent to the parcel. Sampling and testing shall be sufficient to evaluate saturated strength of materials, depth to slide surface, potential for future movement, and risks to proposed structures or roadways. The evaluation should include a numerical slope stability analysis.

4. Groundwater levels and evaluation of any potential ground water condition that may affect soil strength, consolidation, or slope stability.

5. Appropriate laboratory analyses and associated data to support any proposals to replace, rework, or blend or to stabilize or modify with additives either the natural site soils or the proposed fill materials.

6. The location of and effects of active faults which may affect the proposed development. This analysis would normally include a tabulation of active faults, their distance from the site, their expected seismicity (magnitude and recurrence interval), and expected level of groundshaking

STANDARDS FOR GEOTECHNICAL AND ENGINEERING GEOLOGY REPORTS

(peak accelerations) at the site. Hazards of groundshaking, surface fault rupture, liquefaction, and seismically induced landsliding shall be considered and addressed as applicable. Reports for public occupancy buildings should analyze site period and ground response and should provide design parameters. Critical facilities may require a dynamic site response analysis. Recommendations shall be made regarding building setback distances from nearby active faults and foundation and grading design required due to expected seismic activity.

7. Professional conclusions and recommendations for grading and foundations as appropriate to the site, including:
    a. Foundation type and capacity.
    b. Short and long-term settlement potential, including expected magnitude of settlement and time variation.
    c. Mitigation measures for expansive soils.
    d. Lateral loads (passive, active, at rest) for current and proposed site conditions.
    e. Slope stability. This should include site-specific specifications for any proposed repairs.
    f. Shrinkage or settlement of engineered fills.
    g. The maximum acceptable stable slope inclinations for proposed cut and fill slopes, assuming adequate terracing, drainage, and erosion control planting.

Appendix E (cont.)

STANDARDS FOR GEOTECHNICAL AND ENGINEERING GEOLOGY REPORTS

h. Surface and subsurface drainage necessary to ensure long-term stability of cut slopes and bodies of fill.

8. A complete and detailed specification for clearing, grubbing, and all aspects of grading, including utility trench backfill and retaining wall backfill, with special emphasis on the depth of fill layers, benching into native materials, preparation of areas to receive fill, compaction methods, moisture content, frequency of field density tests, and minimum density to be obtained in the field as related to laboratory tests.