Sunnyvale

Single Family Home Design Techniques

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1. Introduction

The design techniques contained in this document are set forth to assist property owners, developers and city staff in working together to retain and enhance the special qualities of Sunnyvale's varied neighborhoods. They have been developed from an examination of the existing conditions within the city, and from recognized sound site planning and design practices.

1.1 APPLICABILITY

The techniques apply to:

- All new single family homes
- One and two story additions to single family homes

They are in addition to and subordinate to the zoning regulations applicable to the parcel on which the home sits.

1.2 PURPOSE

These techniques are intended to accomplish the following:

- provide guidance for property owners and their design professionals in planning and designing new single family homes, or in expanding their existing homes.
- promote increased property values through residential renovations and expansions which are attractive and encourage other neighborhood upgrades.
- protect property owner liveability and investments by discouraging inappropriate and out of scale adjacent homes.
- maintain a sense of neighborhood by encouraging new development that is compatible in scale and character with existing housing.
- encourage thoughtful planning and design that respects the privacy of neighbors.
- streamline the development review and approval process by more clearly communicating community expectations to property owners and developers.

1.3 ORGANIZATION

Section 1: Introduction - discusses the applicability of the design techniques and summarizes their purpose.

Section 2: Community Expectations - provides an overview of typical Sunnyvale neighborhoods, and sets forth basic planning and design principles underlying the techniques. The Basic Design Principles represent an expression of overall intent, and will be used in determining planning and design suitability in the absence of techniques which might address specific conditions. This section also sets forth parameters for application review and approval.

Section 3: Design Techniques - contains techniques that apply to site layout, general building form and other elements that affect the impact of new residential development and additions to existing homes in the adjoining neighborhood.

Sections 4: Examples - addresses common problems, and shows examples of successful infill development.

Sections 5: Glossary - contains narrative and graphic explanations of terms used in this document.

1.4 SUBMITTAL REQUIREMENTS

The submittal of accurate and complete drawings, along with adequate photographs of the site and surrounding neighborhood, is extremely important to the understanding of the applicant's proposal and intent. Inaccurate and incomplete materials will invariably lead to delays in the review and approval process. The minimum submittal requirements are outlined on the following page.

SUBMITTAL REQUIREMENTS

1. Application from property owner
2. Two sets of accurate and scaled architectural drawings to include:
   A. Site Plan - fully dimensioned
   B. Floor Plans - existing, if remodel application
   C. Floor Plans - new
   D. All building elevations
   E. Building sections
   F. Typical building details affecting exterior appearance (e.g., window sills and jambs)
   G. Roof Plan (existing and proposed)
3. Project Data (include on site plan)
   A. Existing floor area, including garage
   B. Proposed new or addition, broken down by first and second floor areas
   C. Total proposed floor area, including covered porches and patios
   D. Existing and proposed lot coverage
   E. Existing and proposed Floor Area Ratio (FAR)
4. Solar analysis drawing for second stories
5. Proposed materials called out on elevations or on a color and materials board
6. **Elevation photographs of all other homes along both sides of the parcel's block face keyed to an Assessor's Parcel Map**
7. **Composite to-scale drawing of proposed front elevation and those of the existing homes on either side.**
8. **Photographs from the parcel taken in the direction of immediately adjacent homes to the side and rear of the parcel.**

Note: Items underlined and in bold are not currently required, but are recommended for addition to allow more informed staff review of proposals.

2. Community Expectations

The review and approval of additions to existing homes and new homes involves a balancing of the concerns and interests of the applicant with those of surrounding neighbors who have invested in their homes over the years and developed understandable attachments to the visual qualities of their surroundings. The review process seeks to accommodate the applicants' unique needs while ensuring that the special qualities of the neighborhood are respected.

Increasingly, larger homes, constructed new or achieved through remodelings and additions, are becoming the norm in Bay Area communities. Many are located in older neighborhoods which were developed at a time when smaller homes were common and styles were more modest in their outward appearance. The City of Sunnyvale believes that larger homes are a natural transition that can be accommodated, but that they should not be allowed to overwhelm their neighbors.

This section seeks to assist applicants in seeing the community with fresh and informed eyes, and in understanding some of the architectural elements that are important in determining the unique character and scale of individual neighborhoods. It sets forth the Basic Design Principles on which the techniques are based, and outlines the criteria that will be emphasized in reviewing individual applications.

In applying the various design techniques described in these guidelines, judgement may be exercised to resolve design challenges to assure that the overall principles are met.

2.1 NEIGHBORHOODS PATTERNS

Neighborhoods are often not uniform in scale and texture, but generally recognizable by a preponderance of a similar architectural style, site plan layout or home size. The City of Sunnyvale has a wide variety of neighborhood patterns and architectural styles developed over many decades - often in relatively large groupings of similar homes developed as a part of subdivisions of their day. Yet, overall there is a sense of small scale and relative informality that is common to most neighborhoods in the city.

When looking at proposals for new homes and significant additions to existing homes, the planning staff and Planning Commission will consider the general scale and character of the neighborhood. The fact that one or more homes of a different scale and character have in the past been constructed in the area does not negate the need and desirability of relating new homes to the majority of homes nearby.

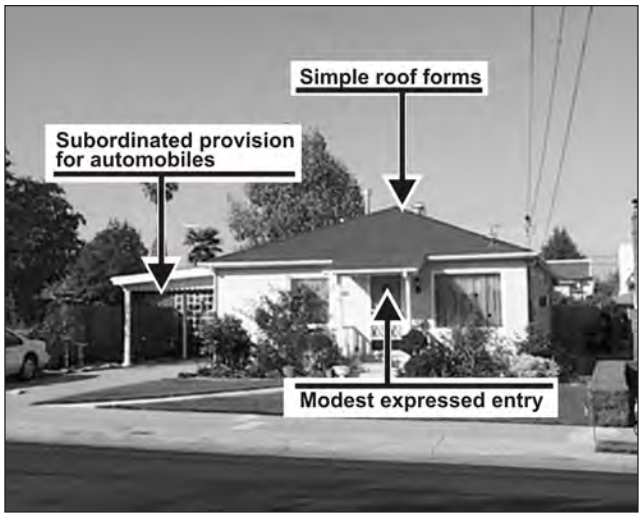
The design principles that are set forth in this section and the design techniques that follow are intended to allow flexibility and diversity in the development of improvements on individual lots while respecting the unique scale and bulk of the surrounding neighborhood. Specifically, the community expects to see new development respect the scale of their neighbors along both sides of their block fronts, and avoid conditions where new development overwhelms nearby homes.

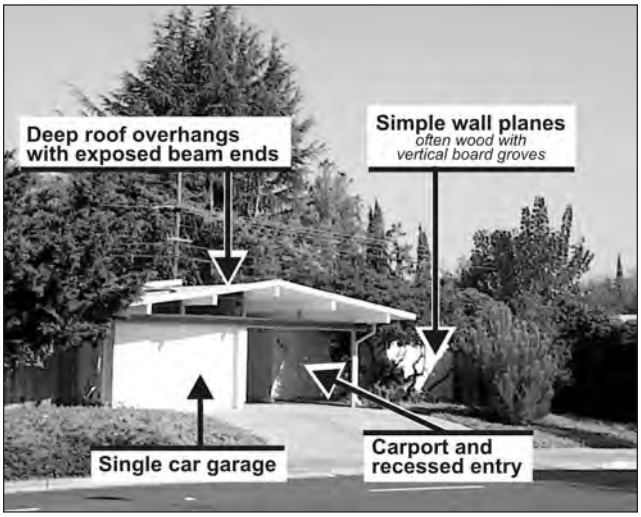
The photographs on the following pages provide examples of Sunnyvale's rich residential diversity and show examples of some of the features that contribute to their scale and architectural character. Applicants should familiarize themselves with these examples and look for similar features in their neighborhoods to guide them in the preparation of site plans and architectural designs.

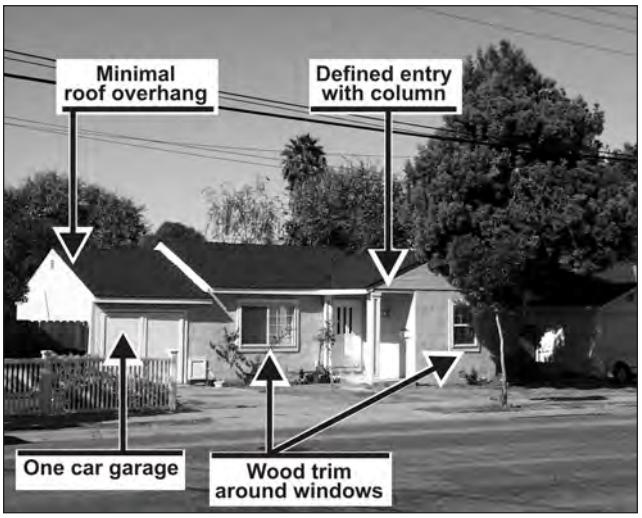
These features need not necessarily be copied in the new home design, but should be respected to avoid new construction that detracts from the neighborhood. Features that are often consistent within a neighborhood include the following:

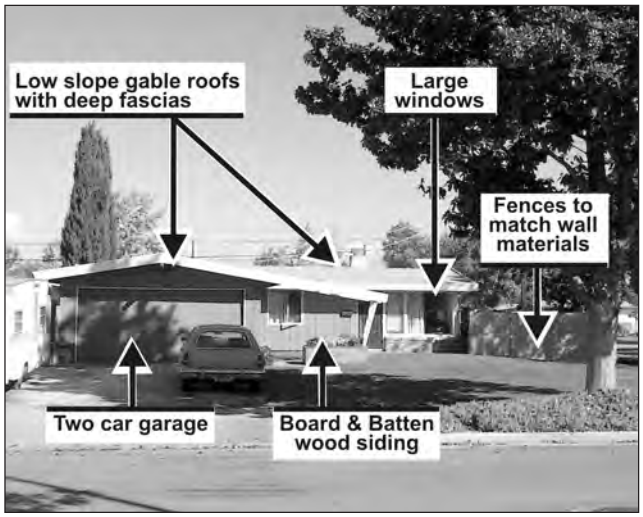
- Front yard setbacks, fencing and landscaping
- Garage location, size and treatment
- Roof types, orientation, slopes, eave heights, and overhangs
- Second floor size and placement
- Entry treatment and scale
- Exterior wall complexity
- Window types, size and proportions
- Exterior building materials
- Decorative elements

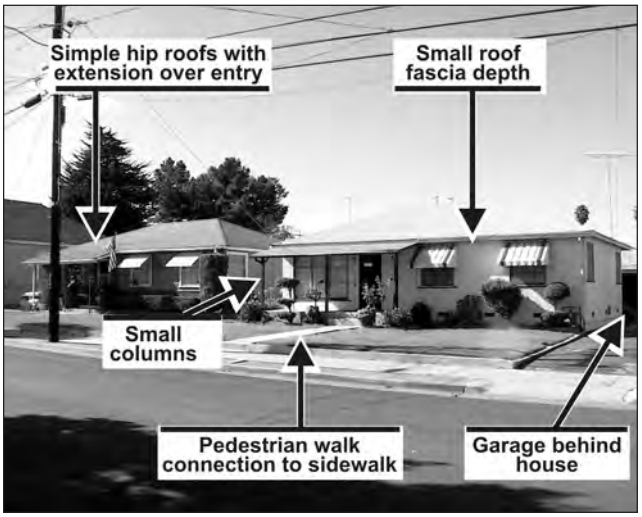
Typical Sunnyvale home styles



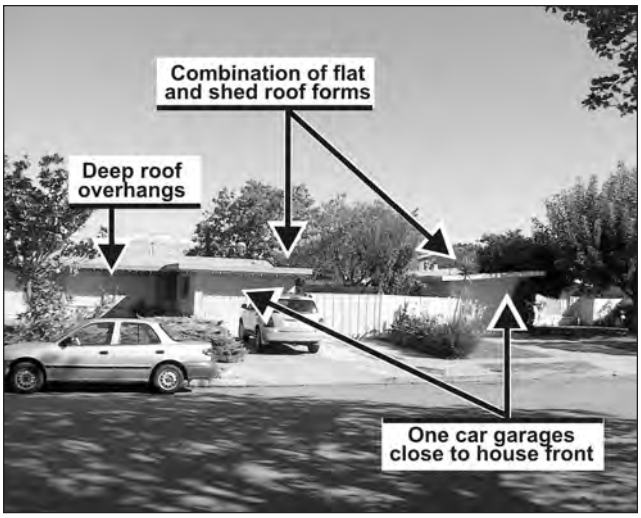


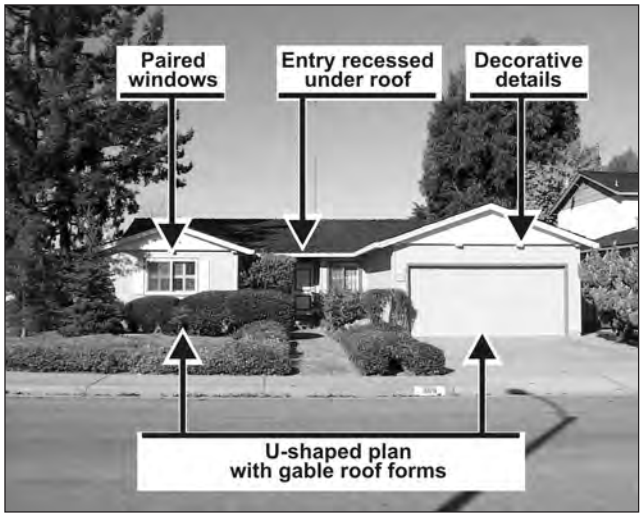


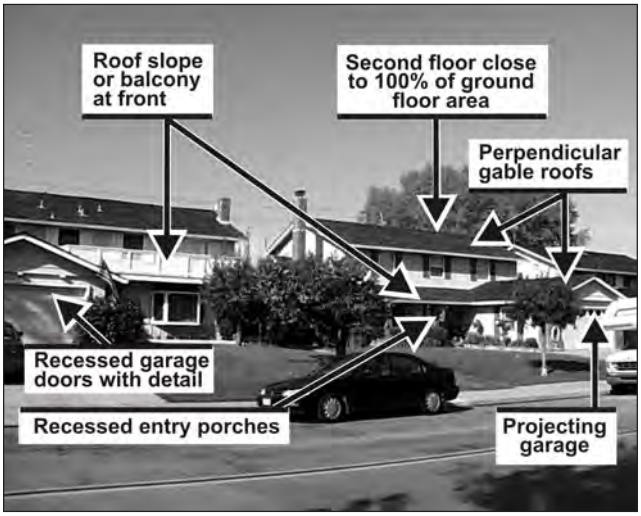


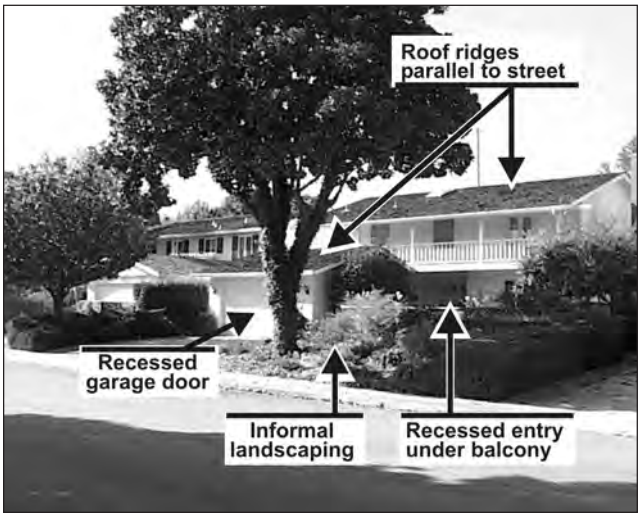


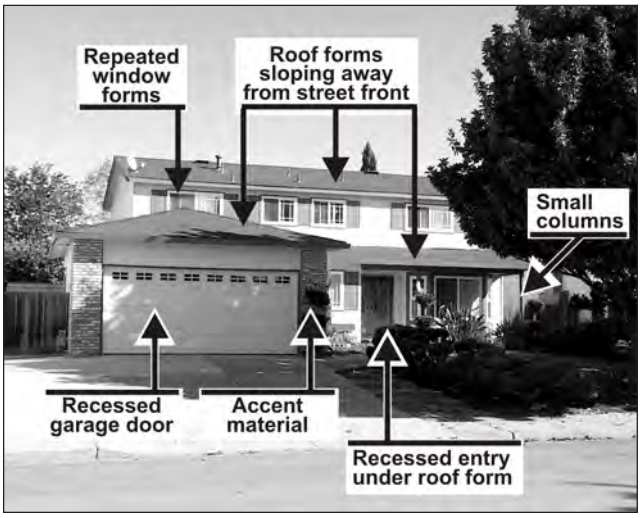
Typical Sunnyvale home styles



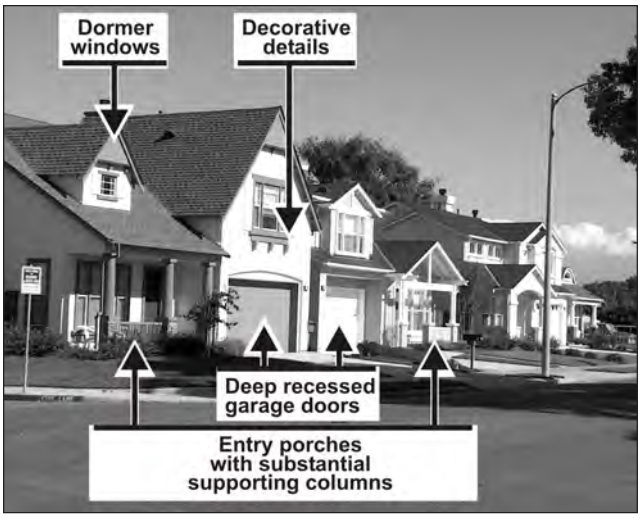


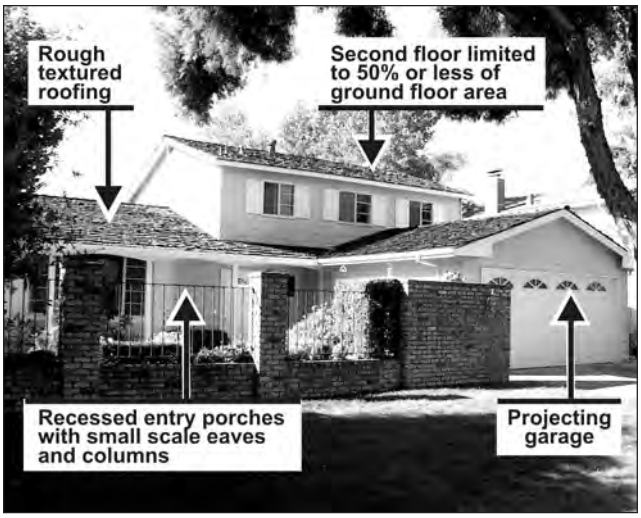


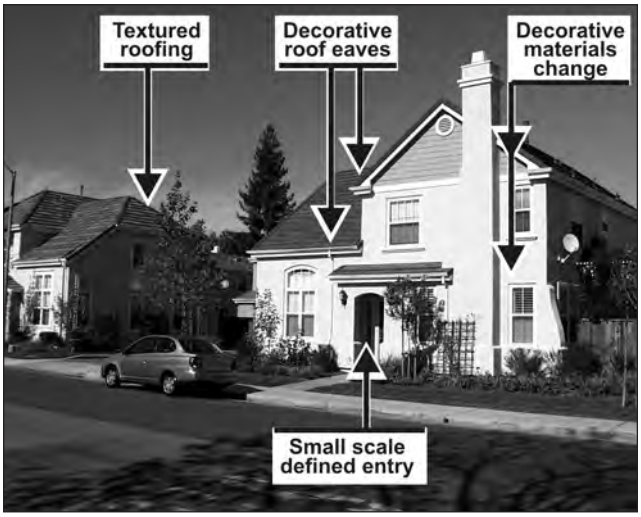




Typical Sunnyvale home styles







2.2 BASIC DESIGN PRINCIPLES

These design principles should be respected in all residential projects. They are the touchstones upon which all of the following design techniques are based, and, since design guidelines cannot anticipate every condition that might occur, they will be used in addressing conditions not specifically covered in the more detailed sections that follow.

1. REINFORCE PREVAILING NEIGHBORHOOD HOME ORIENTATION AND ENTRY PATTERNS

Maintain a sense of neighborhood by facing residences and home entries to primary public or private streets, providing convenient pedestrian access from the street, and including front windows, where common, to provide "eyes on the street" in order to enhance neighborhood safety.

2. RESPECT THE SCALE, BULK AND CHARACTER OF HOMES IN THE ADJACENT NEIGHBORHOOD

Buildings should be sympathetic to the predominant building forms and scale of their neighborhoods, including but not limited to, height, bulk, character, building form, roof form and orientation, window treatments, materials, and colors. Architectural styles, elements, and shapes need not necessarily be the same as those on adjacent and nearby homes, but improvements should avoid unnecessary visual conflicts.

3. DESIGN HOMES TO RESPECT THEIR IMMEDIATE NEIGHBORS

Every project should be respectful of adjacent homes and neighbors. New development should avoid privacy, noise, light and visual conflicts with adjacent uses to the maximum degree possible. Special care should be given to avoid tall blank walls and building volumes immediately adjacent to one story forms on adjacent parcels, and to the placement and treatment of windows and site landscaping to minimize views into neighboring homes' windows and private outdoor spaces.

4. MINIMIZE THE VISUAL IMPACTS OF PARKING

Wherever possible, garages and their paved access drives should be subordinate to, rather than dominating, the entry and architecture of the house. In cases where garages are a major part of the street front in a neighborhood, existing patterns may be followed, but steps should be taken to soften the visual impact of the garage fronts. Visual elements might include landscape divider strips in the paving between garage entries, dividing double garage faces into individual doors, adding landscape trellises and lattices to soften garage fronts with landscaping and taking steps to provide special emphasis on the front entry.

5. RESPECT THE PREDOMINANT MATERIALS AND CHARACTER OF FRONT YARD LANDSCAPING

In neighborhoods where there is a discernible landscape character along street fronts, new home landscaping should take that into consideration. Where front landscape areas are primarily composed of living plant materials, that pattern should be repeated.

6. USE HIGH QUALITY MATERIALS and CRAFTSMANSHIP

Quality materials require less maintenance to remain attractive over time, and they convey a sense of pride in one's home.

7. PRESERVE MATURE LANDSCAPING.

Wherever possible, mature trees should be protected during construction and integrated into new landscape plans.

EXCEPTIONS

Design guidelines cannot address every possible condition for every type of neighborhood or architectural style in the City. Although the principles set forth on this page and the guidelines contained in the following sections will be applicable for most cases, there may be unique characteristics of individual neighborhoods or specific sites. Where conflicts between the principles and guidelines in this document are in conflict with the specific characteristics of a neighborhood, reviews and approvals will be based on the most appropriate methods of fitting new construction into the context of existing neighborhoods.

2.3 REVIEW CRITERIA

The intent of the review process is to reinforce the positive qualities of existing neighborhoods and to balance the rights and expectations of applicants and their neighbors.

Applicants are encouraged to meet with neighbors to discuss their construction plans, and seek to mitigate concerns prior to formal application for approval. Doing so at an early date can often resolve problems before substantial sums are expended on the services of design professionals. Also, applicants are encouraged to meet informally with the city planning staff at any early date to determine if there are any immediately apparent problems with the design proposals.

When the city reviews the formal application, all site planning and design factors will be reviewed and evaluated. However, special attention will be given to the following:

- Structure setbacks compared to the neighborhood
- Orientation of building forms and roof ridges compared to the neighborhood
- Location and setback of garage and extent of visible garage doors compared with extent of first floor house facade
- Potential privacy intrusions on neighboring properties
- House height and bulk compared to adjacent homes
- Heights of first and second floor eaves compared to adjacent homes
- Height and setback of second floor walls
- Location, extent and treatment of any two story wall elements
- Roof type, pitch, overhangs, and complexity compared to the neighborhood
- Entry size, scale and treatment compared with the neighborhood
- Window type, proportions and sizes compared to adjacent homes
- Front yard landscape treatment
- Extent of paving in front setback compared to the house facade width
- Solar access intrusions on adjacent homes' windows and active yard space
- Materials
- Exterior details (e.g., trim and other architectural elements such as railings)

3. Design Techniques

New homes constructed in existing single family neighborhoods are likely to be larger in area than neighboring homes unless adjacent homes are of recent vintage. They may also be two stories in height in contrast to many older one story neighborhoods. Care is required in the siting and design of these new homes to avoid overwhelming the neighborhood with structures that are at great odds with the scale and bulk of existing nearby homes, and to minimize their impact on the livability of their immediate neighbors. Likewise, second story additions to existing homes, unless sensitively designed, can substantially change the scale and character of a neighborhood.

Sunnyvale neighborhoods vary from one to the next, but for the most part each has a distinctive character based on home size and style, setbacks, building materials, roof type, and front yard landscaping. These techniques provide assistance in the siting of new homes, in the layout of floor plans and building masses, and in the development of exterior forms and details.

The intent of these guidelines is to allow flexibility in architectural style and character while respecting the scale and texture of the adjoining neighborhood.

3.1 NEIGHBORHOOD PATTERNS

Respect neighborhood home orientation and setback patterns

Most neighborhoods have a fairly uniform pattern of home orientation (i.e., parallel or perpendicular to the fronting street) and setbacks from front and side property lines. These patterns should be respected and repeated unless their are significant constraints to doing so apart from the those created by an applicant's desire for floor area beyond that common for the neighborhood.

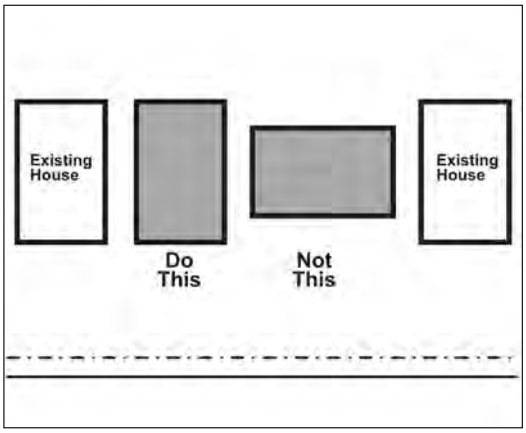
A. If setbacks along a street front are uniform, match that setback.

B. In cases where setbacks and/or orientations are varied in the neighborhood, new homes should match those of adjacent homes.

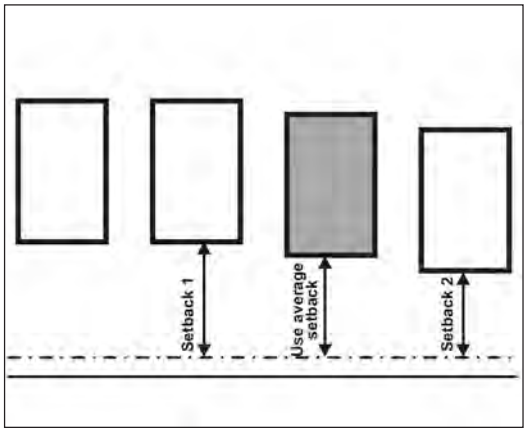
C. Where adjacent homes have differing setbacks, try placing the home such that it uses an average of the two.

SPECIAL TECHNIQUES FOR ADDITIONS:

D. Where significant additions to existing homes are planned, it is generally better to place those additions at the rear of the house or at the side, if side yard setbacks allow.

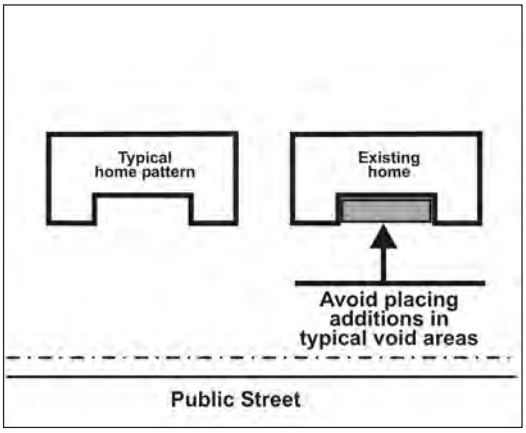


3.1.B Relate building orientation to those of adjacent homes



3.1.C Relate building setbacks to those of adjacent homes

E. Where nearby homes have a distinctive pattern of varied front elevation setbacks (e.g., projecting living room), avoid filling in voids between projecting elements to create a straight wall at the front of the house.



3.1.E Avoid filling in distictive voids

3.2 PARKING

Design garages and driveways to be compatible with the neighborhood

Garages have become larger over the years as families have come to rely on more cars. Special care is needed to fit homes with larger garages into older neighborhoods since the character of those neighborhoods is often strongly determined by the location and size of garages. The following techniques are intended to allow adequate off-street parking without adversely affecting the visual quality of existing streetscapes.

A. Accommodate garages in locations similar to the pattern common in the neighborhood (e.g., toward the rear of the parcel or at the side of the house).

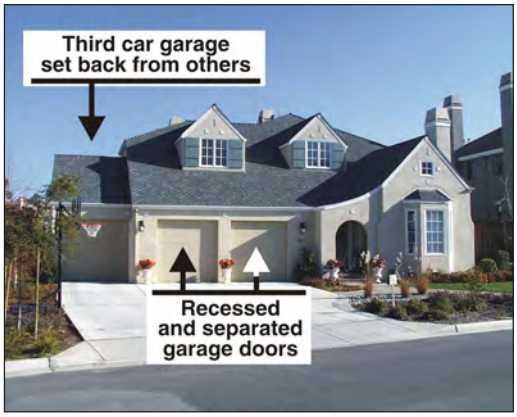
B. In neighborhoods with one car driveways, limit curb cuts to one car in width. Where wider driveways are common, the separation of individual driveways with landscaping is strongly encouraged.

C. Limit paving in front setbacks for vehicles and walkways to a maximum of 50% of the front setback area. Where paving exceeds 25% of the front setback area, the use of modular pavers or other techniques to add scale and texture to the paving are encouraged.

3.2.A Locate garages behind or at the side of homes when this is the common pattern in the neighborhood

D. Do not locate garages forward of other habitable portions of the house unless that is the predominant pattern in the neighborhood.

E. For two car garages, divide the openings to provide one door for each vehicle unless the common condition along the street front is wider doors.



3.2.E 3.2.F Break up the mass of two and three car garages

F. For three car garages, set the third car garage face forward or back of the other garage faces at least two feet.

G. Recess garage doors from the face of walls as much as possible when doors face a public street.

3.2.G Recess garage doors as much as possible

H. Maintain on-street parking by providing a minimum of twenty feet between curb cuts.

I. In neighborhoods where garages are located in front of the homes and where lot width allows, consider the use of *side loaded* garages.

3.2.D DO THIS
Emphasize home entries and minimize garage doors

3.2.D NOT THIS
Unless this is the predominant block front pattern, avoid letting the garage dominate the street frontage

3.2.I Consider side access garages where lot width permits

3.3 ENTRIES

Design entries to be in scale and character with the neighborhood

Often, large new homes built within neighborhoods of smaller homes create visual discord through the use of tall, formal entries which are in stark contrast to the more modest scale of nearby homes. Entries to new homes and major additions should be appropriate to the architectural style of the house as well as designed to blend into the surrounding neighborhood.

A. Locate home entries so that they are visible from the street.

B. Provide an entry porch if that is a common feature of homes in the neighborhood. Match the design to the style of the home.

C. Maintain a first floor elevation similar to other homes in the area. For example, provide a number of steps up to the entry only if adjacent homes have elevated entries.

D. Eave lines at entries should match or be within approximately twenty-four inches of the height of entry eaves in the neighborhood (i.e., close to the first floor eave height). In no case should front entry eaves be substantially higher than the first floor eaves.

E. Match roof orientation of entries to those predominant in the neighborhood. For example, if entries are normally recessed under an eave line which is parallel to the street, avoid using a bold gable entry.

F. Design entry canopy columns to be consistent with the architectural style of the house, but avoid bulky columns and walls in neighborhoods characterized by small scale porch or roof support columns

G. Provide a walkway from fronting sidewalks to the entry. Unless it is the pattern of the neighborhood, avoid using driveways as the sole pedestrian walkway.

Do This

Or This

Or This

Avoid This

SPECIAL TECHNIQUES FOR ADDITIONS:

H. If the existing home has a porch at the entry, retain that feature. If the home has no entry porch, but other homes in the area do, consider adding an entry porch.

I. Where a particular home entry type is typical of the neighborhood (e.g., roof covering eave parallel to the street), design any new entry form to be consistent with that entry type. Avoid bold, formal entry changes in neighborhoods with modest, recessed entries.

J. Recessed front entries of Eichler homes and other similar flat and shed roof styles should be maintained and not enclosed. Entries should continue to be integrated within and under the roof lines of the house.

3.3.J Maintain distinctive carports and entries on Eichler and similar style homes

3.4 SECOND FLOORS

Design second floors to complement first floor forms and minimize their visual impact

Acceptable designs for second floor areas will depend on the type and scale of adjacent homes and the general scale and character of the neighborhood. Special sensitivity will be needed and expected in neighborhoods with predominantly one story homes or with homes that have relatively small second floor footprints compared to those of the first floor. New homes and second floor additions should be designed to minimize the visual bulk of the structure.

A. The area of the second floor should not exceed the common standard of the neighborhood. For new second stories in predominately one-story neighborhoods, the second floor area should not exceed 35% of the first floor area (including the garage area).

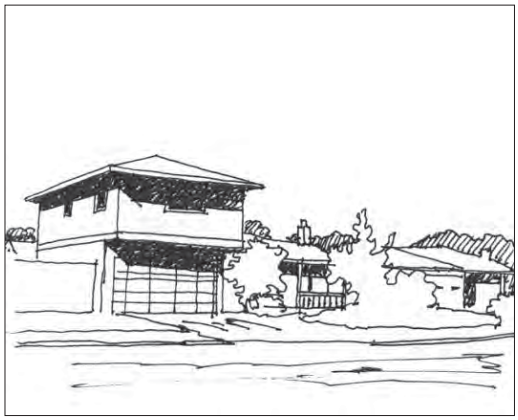
B. In largely one story neighborhoods and for new second floor areas adjacent to existing one story houses, consider integrating second floor space into the roof form.

3.4.B Integrating second floors into a gable roof is one way to minimize two story building bulk

C. If a traditional second floor form is necessary, set the front, rear, and sides of the second floor back from first floor walls. In general, it is best to set second floor areas back as far as possible from the front facade of the home (e.g., five feet or more). Side and rear facade setbacks of three to five feet are generally sufficient. Care should be given to avoiding second story bulk near the front of the home when similar bulk is absent from adjacent homes.

3.4.A Limiting second floor areas and setting walls back from roof edges helps to integrate larger homes into small scale neighborhoods

3.4.C DO THIS
Hold second floor line back from house front



3.4.C NOT THIS
Avoid two story heights at garage fronts

D. For second floors with an area greater than 35% of the ground floor area, setbacks should generally be greater unless the prevailing pattern of second floor setbacks in the neighborhood is less.

E. Unless two story high walls are common in the neighborhood, maintain a roof segment between the first and second floor walls for at least 50% of the building perimeter. Generally, these roof forms should be carried around building corners to provide visual continuity between adjacent house facades. In one story neighborhoods, avoid two story walls without intervening roof eaves on front elevations.

F. New homes and second story additions constructed adjacent to smaller homes should maintain a one story profile adjacent to the one story homes as a transition to any two story building element.

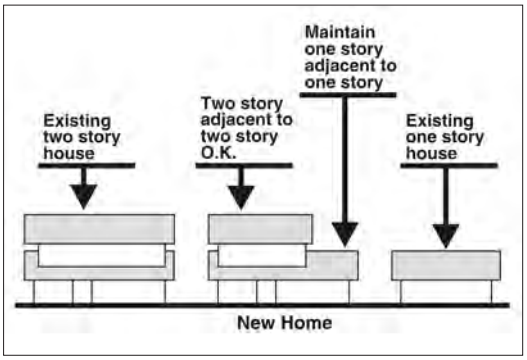
G. Exposed second floor wall heights should generally not exceed six feet for more than fifty percent of their perimeter. The goal is to have first floor roof forms mitigate the height of second floor wall areas.

H. Second floor ceiling heights should be minimized. If interior ceilings heights in excess of eight or nine feet are desired, they should be achieved through the use of cathedral ceilings rather that increased wall height.

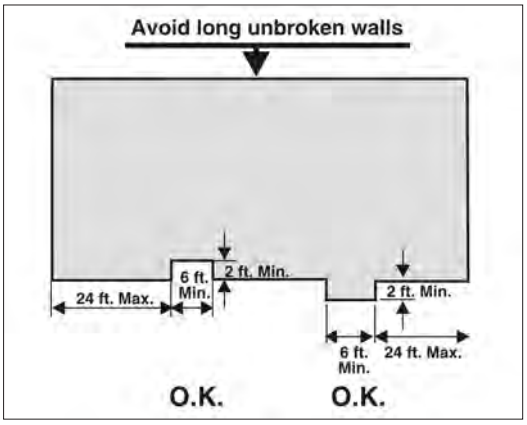
I. Long second story walls should have horizontal offsets at least every twenty-four feet. Offsets should generally be a minimum of two feet deep and six feet wide.

J. When designing homes, be mindful of the exterior appearance as well as the interior functions. Relate the location of windows on second floors to those on the first floor. Alignment is not necessarily required, but placement should not appear haphazard.

3.4.D 3.4.E Seperate second floor walls from the first floor with roofs unless two story high walls are prominant in the immediately adjacent neighborhood



3.4.F Design second floor areas with sensitivity to adjacent homes



3.4.I Break up long walls with horizontal offsets

K. Relate second floor elements to first floor masses. Avoid large projecting forms on the second floor when first floor elements are modest in size and scale.

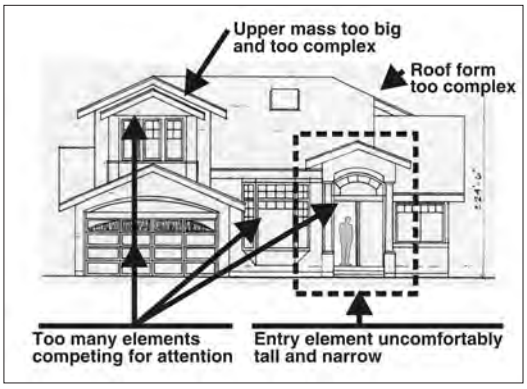
L. Avoid too many visually competing building elements on front facades (e.g., bold entry, projecting garage and living room bay window create an overly complex facade).

M. Floor plans should be kept relatively simple and coordinated with the massing of the first floor volumes. Second floor plans that require complex roof forms should be avoided in neighborhoods with simple roof forms.

N. Second floor decks and balconies should be well integrated into the overall design of the home. They should avoid the appearance of being tacked onto the home. Some ways of achieving this integration include using columns with caps and bases, providing a hierarchy of posts and balusters (larger posts at intervals infilled with smaller balusters), and care in relating balcony and deck edges to other facade elements. Avoid locating decks and balconies along narrow side yards.

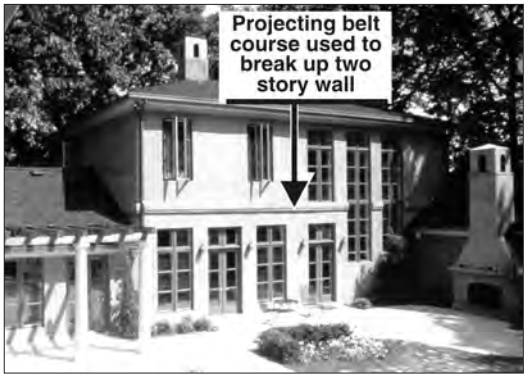
O. Consider the use of more than one wall material to separate first and second floor building elements. Lighter appearing materials should be used on upper floors while heavy materials (e.g., stone) are appropriate for the ground floor. Alternatively, subtle changes of color between ground and second floor areas can reduce the visual bulk of homes so long as color changes are made at trim pieces or other natural dividing lines between the floors.

P. The use of projecting horizontal molding can break up taller wall surfaces and give the home more of a horizontal composition to reduce its apparent visual height.



3.4.K 3.4.L Avoid too many competing elements and large second floor masses

3.4.M Avoid busy and complex roof forms in neighborhoods with simple roofs



3.4.F Projecting belt courses can help to break up tall wall planes

Q. Vertical lattices and horizontal trellises to accommodate flowering vines can be used effectively to break up both blank and tall wall areas.

R. Locate trees to visually break up views of two story building areas.

3.4.Q Projecting trellises and lattices can help to soften the appearance of tall wall areas

SPECIAL TECHNIQUES FOR ADDITIONS:

S. Generally, locate second floor additions over the living portion of existing homes rather than over garages to maintain a visual balance between the first and second floor building masses. Especially avoid placing second floor additions over existing first floor garages that project out in front of the remainder of the home.

T. Second floor additions should be in proportion to first floor areas. In addition to the maximum second floor size defined above, second floor additions should not be too small. Generally, second floors that are less than 20% of the ground floor area will appear awkward.

U. Wall setback and height requirements outlined above are not applicable to second floor additions to Eichler homes or others with similar flat or low roof slopes. In those unique situations, designs should be compatible with the original building forms and utilize similar roof pitches.

3.4.S Place second floors over main portion of the ground floor living area

3.4.S Avoid second floors like this over garages unless stepped back substantially

3.5 ROOFS

Relate roofs to those on nearby homes.

Frequently, an architect will work closely with the applicant to tailor floor plans to a family's unique desires without proper attention to the building form and bulk until the plan is completed. The attempt to adapt building and roof forms to work with the plan generally results in overly complex second story wall and roof forms which are greatly out of character with the simplicity of older nearby houses. In neighborhoods of homes with simple roof shapes, new homes should follow these guidelines.

A. Avoid overly complex floor plans with visually busy walls and roof forms.

B. Develop floor plans that can be covered by simple roof forms.

B. Use roof forms, orientations and ridge heights similar to those in the adjacent neighborhood. For example, where nearby homes along a street front have prominent gables facing the street, include gable elements of a similar scale and pitch facing the street on the new home or addition.

D. Use roof pitches that are similar to those on older homes in the immediate neighborhood.

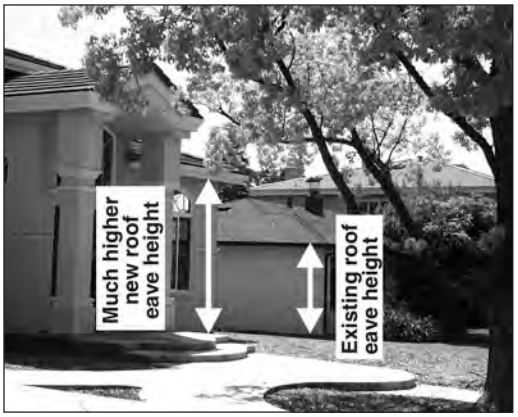
E. Keep first and second floor eave heights at the same general height as adjacent homes to minimize the visual bulk of the new construction. The recent desire for taller interior ceiling heights should be achieved through interior open spaces or cathedral ceilings, rather than taller exterior walls and higher eave heights, unless the taller heights are consistent with adjacent homes.

F. Combinations of forms (e.g., gable roofs with hip roofs) are acceptable, but generally avoid the use of more than two roof forms (e.g., avoid using gables, hips and shed roof forms together).

G. Roof overhangs should be consistent with those in the neighborhood.

3.5.A Avoid complex roof forms like this

Especially if nearby homes have simple roofs like this



3.5.E Avoid large disparities in new roof eave heights compared to adjacent homes

H. In neighborhoods with a large number of Eichler or similar flat and shed roof style homes, special care should be taken to relate new construction to the scale and character of nearby structures. Unless at the edge of such a neighborhood (i.e., Eichler-type homes adjacent on only one side of the proposed home), new homes should utilize roof types and slopes similar to the Eichler homes.

I. Integrate solar energy collector panels and other roof-mounted equipment into the roof forms. Locate them to minimize their visual prominence when viewed from the street and nearby homes.

SPECIAL TECHNIQUES FOR ADDITIONS:

J. Use roof forms for additions that blend comfortably with the roofs of the existing home.

K. In neighborhoods with smaller one story homes, strongly consider the use of simple gable and hip roofs with their ridge line oriented parallel to the fronting street to minimize the visual bulk of second stories. Likewise, for new two story elements immediately adjacent to one story homes, the use of hip roofs on the second floor addition will tend to reduce its visual impact on the smaller home.

L. Second floor additions to Eichler-type homes or other low roof pitch homes should use roof slopes, overhang depths and detailing that are compatible with the home's existing roofs. Generally, roof slopes should not exceed 3:12 (rise to run).

3.5.L Similar roof pitch and eave detailing on this Eichler home assist in unifying the second story addition

3.6 PRIVACY AND SOLAR ACCESS

Design homes to respect the privacy and sun access of neighbors

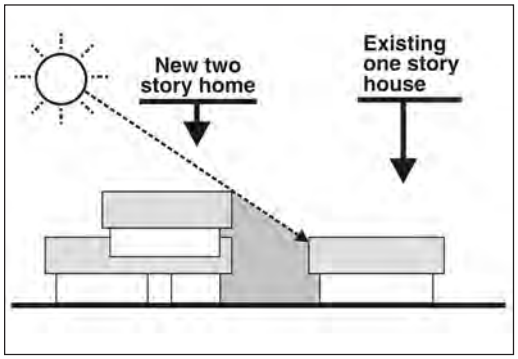
One of the major concerns expressed by existing residents of neighborhoods when new two story homes are constructed is that of privacy intrusion. Neighbors have adjusted to each other over a period of time, and landscaping has often been strategically planted to ensure privacy between homes. New and larger homes raise the prospect of new windows near those of neighboring homes, loss of privacy in outdoor yard spaces and the blockage of sunlight from windows and yard spaces. While the elimination of all potential conflicts may not be possible, privacy intrusions of new construction on existing homes should be mitigated wherever possible.

A. New homes and additions to existing structures should be located to minimize blockage of sun access to living spaces and actively used outdoor areas on adjacent homes.

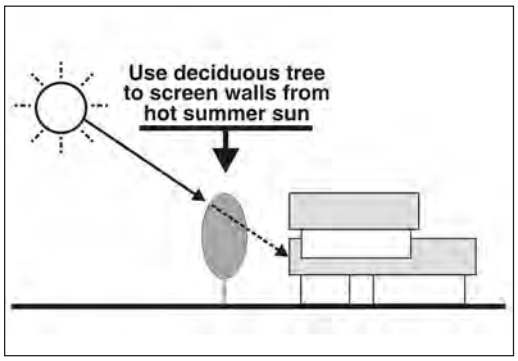
B. Where possible, locate windows and landscaping to minimize energy costs.

C. Windows should be placed to minimize views into the living spaces and yard spaces near neighboring homes. When windows are needed and desired in side building walls, they should be modest in size and not directly opposite windows on adjacent homes. Where possible, second floor windows that might intrude on adjacent property privacy should have sill heights above eye level or have frosted or textured glass to reduce visual exposure. Bay windows should be avoided on side walls where they would intrude on adjacent residents' privacy.

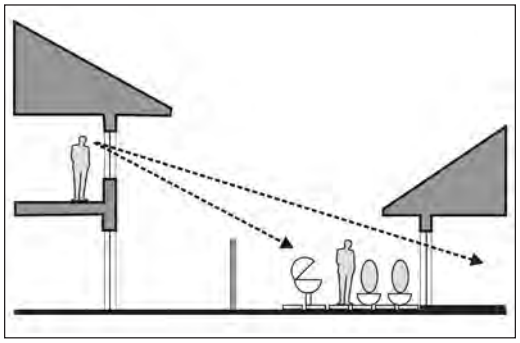
D. Second floor balconies and decks should be used only when they do not intrude on the privacy of adjacent neighbors. As a general rule, balconies and decks that are more than two feet above grade should try to maintain a distance of ten feet from side property lines and twenty feet from rear property lines when the adjacent use is single family residential. When allowed, the design of railings should be tailored to the privacy concerns of neighbors (e.g., balcony or deck sides overlooking adjacent windows or actively used yard space should be solid in form). Open railings should only be used where privacy concerns are minimal.



3.6.A Avoid second floor masses in locations that would block sun access to adjacent homes



3.6.B Use landscaping to minimize energy usage

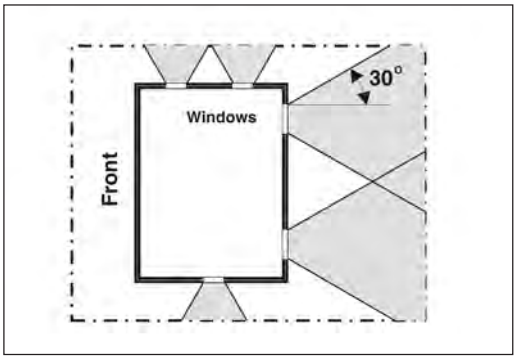


3.6.C Avoid placing windows in locations that would look into adjacent windows or active yard spaces, where possible

E. Landscaping may be used to mitigate privacy concerns so long as the landscaping does not deny solar access to living spaces and actively used yard areas of neighboring homes. If landscaping is used for privacy screening purposes, it should be of sufficient size and of an appropriate species to provide such privacy within a two year time frame. Trees should be twenty-four inch box size and eight feet minimum in height at the time of planting. Shrubs should be fifteen gallon in size and six feet minimum height at planting. As a general rule, privacy landscaping on the applicant's property should be placed with a cone-of-vision defined by a thirty degree angle from the side window jambs of second story windows.

F. Exterior lighting can also create a sense of privacy loss. All exterior light fixtures should utilize shields to ensure that light is directed to the ground surface and does not spill light onto neighboring parcels or produce glare when seen from nearby homes. Decorative residential light fixtures should be chosen rather than strictly utilitarian security lighting fixtures.

G. Finished floor elevations shall be consistent with the neighborhood character to minimize first floor privacy impacts on adjacent properties.



3.6.E Landscaping should be used as needed in the shaded areas to mitigate privacy intrusions on adjacent properties

3.7 MATERIALS

Use materials that are compatible with the neighborhood

Some neighborhoods have an eclectic mix of home styles and building materials. Others more commonly have a predominant style and set of materials as a result of past subdivision development - perhaps wood siding or stucco. Some of the building materials (e.g., wood siding or shingles) add a texture and scale to the homes that are very much a part of the area's character. There have been many recent examples in other Bay Area communities where big new stucco-surfaced homes have been constructed in neighborhoods where wood siding is the most common wall material for the older homes.. The use of stucco in these cases, with its lack of texture, has tended to emphasize the bulkiness of the new homes compared to the smaller existing homes of the neighborhood. While residential variety is allowed and encouraged, applicants should be sensitive to the materials and character of nearby homes in their neighborhood.

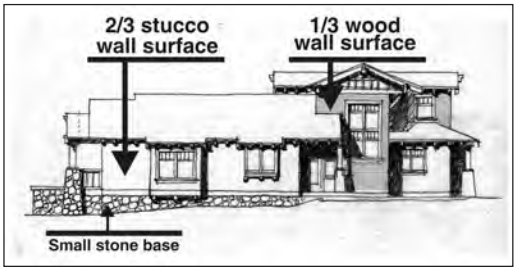
A. Use wall materials that are in common use in the neighborhood. If stucco is strongly desired on a new home in an area where wood is the most common building material, consider a combination of wood and stucco to provide a blend of materials rather than a sharp departure. In general, a combination of two materials is most successful when a ratio of roughly 1/3 to 2/3 is maintained (e.g., 1/3 wood and 2/3 stucco or visa versa).

B. The number of exterior materials should be appropriate to the architectural style of the home. Too many materials or colors can create a chaotic visual appearance. Avoid designs where the front facade materials differ markedly from those on the other sides of the house.

C. Carry materials and trim used on the front facade to all other sides of the house. Avoid designs where only the front of the house is given interesting materials and details.

D. Use roofing materials that are similar in texture to those on nearby existing homes. In neighborhoods where rough textured roofs are common (e.g., wood shakes), new home roofing need not match the material, but shingles or tiles with a similar rough texture should be selected. Conversely, the use of heavy

High quality textured stucco walls used on all walls and slate roofing used on simple gable forms give this home a unified design appearance



3.7.A When using more than one material, organize their application to provide visual balance and use the 1/3 - 2/3 rule

3.7.C Carry materials and details around to all facades of the house

textured curved roof tiles, for example, would be discouraged in neighborhoods with smoother textured composition shingle roofs.

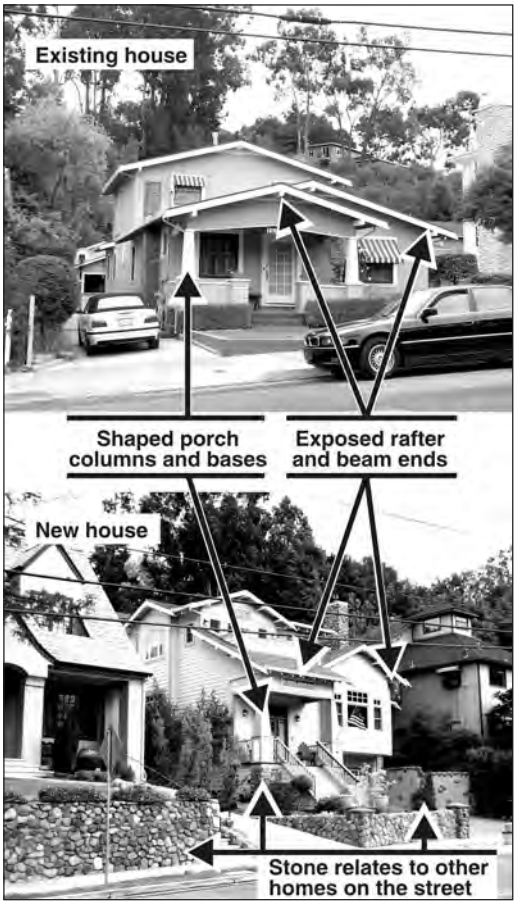
E. Consider using other wall materials as accents to tie the house to the neighborhood (e.g., gable ends, wainscotting, window trim).

F. All materials should be of high quality to present a positive image to the neighborhood and to minimize maintenance problems and costs.

SPECIAL TECHNIQUES FOR ADDITIONS:

G. Wall materials for additions should generally match those of the existing building. On additions to Eichler homes, exterior walls facing public streets should match the vertical grove wood siding on the existing home unless that original material no longer exists on the home's street-facing facades.

H. On homes with wood trim, heads and sills at windows and doors, use similar trim for all new windows and doors.



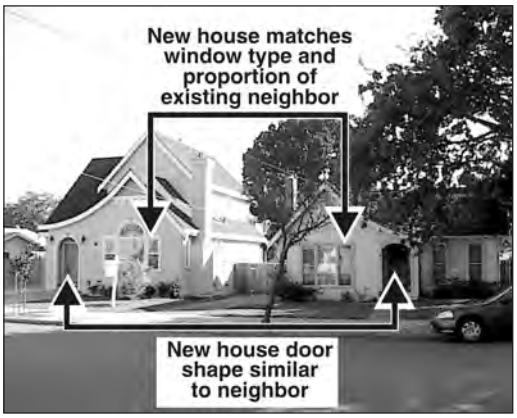
3.7.E Materials and details drawn from the neighborhood can help in relating new homes into their surroundings

3.8 WINDOWS AND DOORS

Match window types and proportions to those in the neighborhood

Many older neighborhoods, especially those constructed by a single developer over a short period of time, have distinctive window sizes, shapes and types. For example, older homes near Downtown Sunnyvale often have vertically proportioned, double hung windows. New homes that ignore their neighbors and use radically different windows often stand out in an unpleasant way.

A. Use window sizes and proportions that are similar to those on nearby homes. For example, if windows on adjacent homes are double hung vertical windows, new home windows do not necessarily need to be double hung, but they should match the vertical orientation, general size and proportions of the adjacent homes' windows.



3.8.A Matching window and door types and proportions assist in relating new homes to the neighborhood

B. Avoid windows that are set very close to the exterior wall surface when other homes in the area have deeper recessed windows.

C. When homes in the immediate neighborhood have projecting window trim and/or sills, repeat that character. Include trim on all windows, not just those on the front facade.

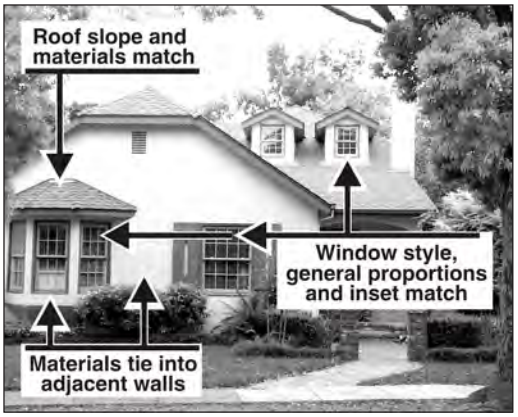
D. The use of bay windows is generally acceptable. However, large and overly formal bay windows can dominate the front facade of a home and seem out of scale with nearby homes. Keep bay windows modest in size, carefully integrate them with building roofs and bases, and provide detailing similar to other windows (e.g., wood trim and window recess depth).

E. In neighborhoods with divided light windows, use similar window forms. Where the cost of true divided light windows may be too great, use other widows which provide a similar physical depth between the muntins and the glass face. In these locations, avoid the use of snap-in window grids that mimic the divided light windows without their actual depth and texture.

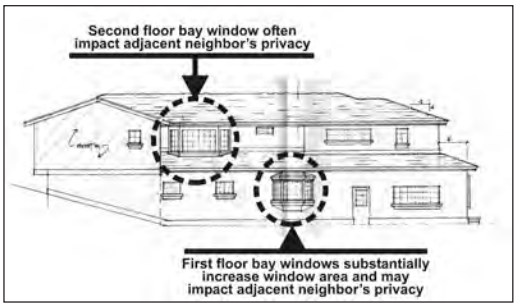
F. Bay windows integrated into second floor living spaces should only be used when they do not intrude on the privacy of neighboring homes. Where they are used, they need to be carefully integrated with the second floor roof forms, first floor roofs and any wall areas immediately below them. When used on second floors, their placement and size should relate to design elements and masses on the first floor.

Special considerations for additions to existing homes:

G. Match window type, size, proportions and detailing in all home additions to those that currently exist on the home.



3.8.D This example shows some successful ways to integrate bay windows into the overall design



3.8.F Second floor bay windows on side elevations can create intrusions into neighbors' privacy

3.8.F Dormer type bay windows are often best in second floor locations to allow light while minimizing intrusions on adjoining neighbors' privacy

3.9 DECORATIVE ELEMENTS

Include decorative elements in the design

The contrast between large new houses and their more modest neighbors is often emphasized by larger wall surfaces and the lack of small scale detail elements common to nearby homes. Attention to design detail to blend the new home into the scale of the neighborhood is expected.

A. Avoid long blank walls on street-facing facades. Walls in excess of twenty feet in length should be broken up with entry elements, windows or wall offsets at least two feet deep.

B. Larger wall areas can be made more visually interesting with the addition of lattices and trellises for climbing vines, decorative metal grill work and projecting moldings and trims.

C. The use of building bases is encouraged for homes constructed largely of stucco. Bases may be composed of projected wall planes at the building base, special materials such as stone, and projected mouldings.

D. Special design elements such as building bases, unique materials (e.g., stone), and projecting moldings and trims should be carried around to all facades of the structure to provide a four-sided design. In some cases, such as a stone building base, the use of the material may be terminated after it wraps around on the sides of the home if a low fence or other compatible means is provided to terminate the use of the base material.

E. The use of wood trellises above garage door openings is encouraged, especially where garage doors are prominent features of the home's front facade (see example on page 17).

F. The use of exposed roof rafter and beam ends are encouraged when they are consistent with the home's design style.

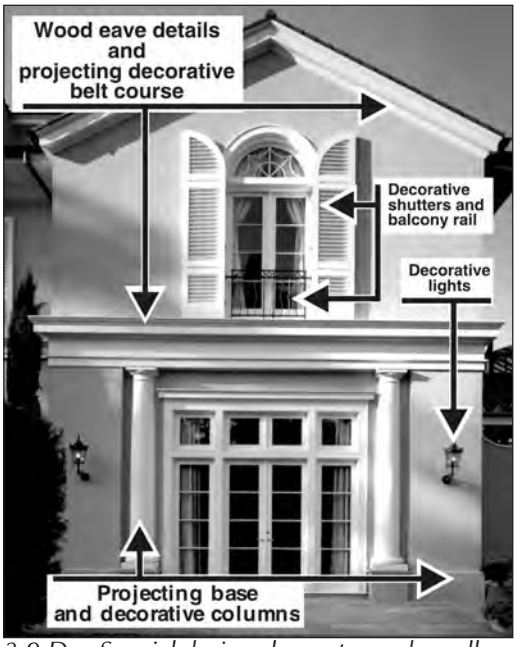
G. If porches are a part of the design, special attention should be given to gable, column and railing details.

H. Care should be taken with the design of the tops and bottoms of columns. Usually, some type of column cap and base is desirable.

I. Decorative lights, appropriate to the architectural style of the home, are encouraged.

3.9.A Long flat walls should be broken up with recesses, windows and detail elements to add visual interest

3.9.B Landscaped trellises can be used to add visual interest and integrate long elevations



3.9.D Special design elements used on all facades can also add unity to a design

J. In some home styles and neighborhoods, special treatment of chimneys and chimney tops can reinforce the special character of the home.

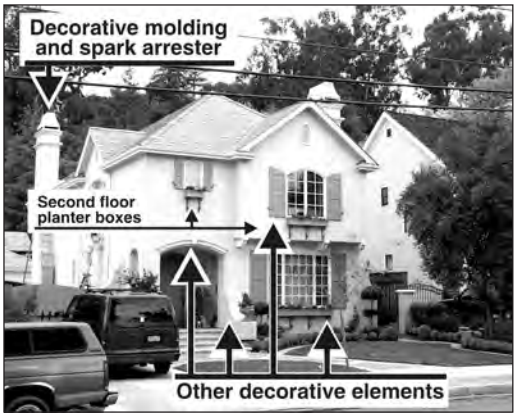
K. Some architectural styles (e.g., Craftsman) lend themselves to the use of decorative attic vents.

L. Utilize decorative elements that are in keeping with the style of the house. For example, do not put classical columns in a Mission Style home and do not add Victorian Style decorative elements to other style structures.

SPECIAL TECHNIQUES FOR ADDITIONS:

M. The use of window planter boxes at second floor windows should be considered to add visual interest and to break up larger wall areas.

N. In cases where the original home has special decorative elements (e.g., exposed rafter ends or projecting window sills), the additions should incorporate the same decorative features.



3.9.J 3.9.L Chimney details and other decorative elements add richness and scale to this home design

Decorative details add visual interest and value

3.10 ACCESSORY STRUCTURES

Relate the design of accessory structures to those of the main structure

Detached garages, second living units, and other accessory structures often occupy parcels with larger homes. Their design can enhance the overall visual quality of the home, or they can substantially detract from neighborhood scale and character if thoughtlessly designed without regard to the main structure and the surrounding neighborhood.

A. Detached garages and other accessory structures should incorporate roof pitches and overhangs that match the main house.

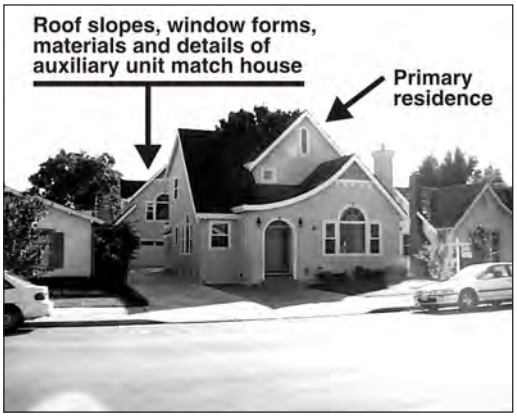
B. Accessory structures should use the same wall, roof and trim materials as the main structure.

C. Doors and windows should be detailed to match the main house.

D. Decorative details similar to the main structure are strongly encouraged. For example, windows on accessory structures might incorporate window boxes to allow the planting of flowers.

SPECIAL TECHNIQUES FOR ADDITIONS:

G. Deck covers, car ports and other accessory structures added to homes should use the same materials as the existing structure. New accessory structures should appear as though designed and constructed with the original home.



3.10 Relate auxiliary structures to primary buildings

3.11 LANDSCAPING

Plan landscaping to complement the neighborhood

While home landscaping is as varied and individual as the families that live in them, most neighborhoods have some common front yard landscaping characteristics. Some areas may have flowering plants and picket fences at front and side property lines while others may have simple open lawn areas with shrubbery. Nothing in these guidelines is intended to dictate individual homeowner's landscape plans. Rather, the following techniques are intended to sensitize applicants to the landscape character of their neighborhoods and provide some ways to enhance the overall feeling of neighborhood.

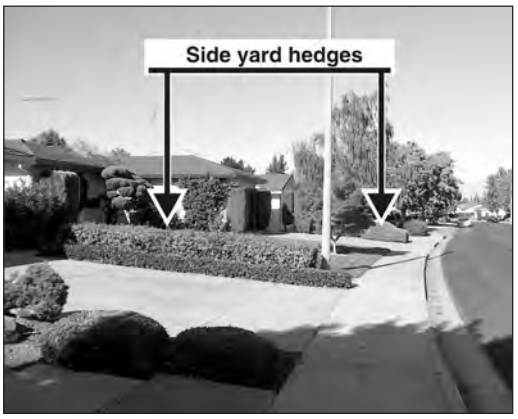
A. Locate buildings and paved areas to preserve mature trees whenever possible. Mature trees are considered as those with a trunk circumference in excess of thirty-eight inches. In cases where mature trees may be jeopardized by construction within their drip line, the City may require a report and recommendations from a certified arborist at the expense of the applicant.

B. Landscaping plans for front setbacks should be compatible with the neighborhood. For example, where low shrubbery is common at side property lines as shown in the neighborhood example to the left, applicants should reinforce that pattern whenever possible.

C. Front yard landscaping can be used effectively to emphasize home entries.

D. In cases where predominant front yard and side yards on corner lots are planted in grass and other water-intensive landscaping, applicants may consider more water conserving landscaping, but the utilization of living plant materials and a green character is strongly encouraged. The use of highly contrasting stone, rock or other hardscape materials in such situations is discouraged.

3.11.A Locate structures to save mature trees



3.11.B Design front yard landscaping in keeping with neighborhood patterns

3.11.C Creative front yard landscaping is a good way to emphasize home entries

E. Up to fifty percent of the required front yard is allowed to be hardscape paving. However, it is best to minimize this paving to reduce water runoff and soften the visual appearance of the street frontage. Unless there are strong reasons for doing otherwise, limit front and side setback paving to garage access and pedestrian walkways to home entries. Additional paving in front and side yard setbacks, other than the aprons immediately in front of garage doors, will not be allowed for the parking of vehicles.

F. Newer homes constructed in older neighborhoods often display a formality which is foreign to the area around them. Where the predominant pattern of front yard landscaping is informal in character, a similar approach should be taken to new home landscaping.

G. Fencing along front property lines and along side property lines within front yard setback areas should not exceed three feet in height. Open wood fencing is the preferred solution along front property lines. Side fencing may be solid wood boards, but open lattice work segments at the top of the wall are softer in appearance and encouraged. For side property lines abutting a public street, low fencing is encouraged. However, when privacy is at issue, fences should be constructed of wood up to a maximum height of six feet with at least the top twelve inches constructed of wood lattice to soften the visual appearance of the fence top. Chain link fencing is strongly discouraged.

H. Avoid hardscape paving within the drip line of mature trees unless approved by a certified arborist.

3.11.G Low fencing and shrubs are a good way to define yard areas on corner lots without creating unfriendly visual barriers

3.11.G Front yard fencing should be kept low and open in character

4. Examples

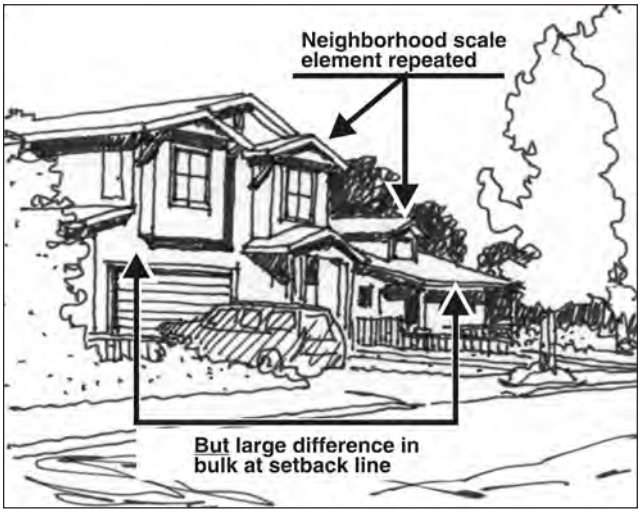
Common Problems

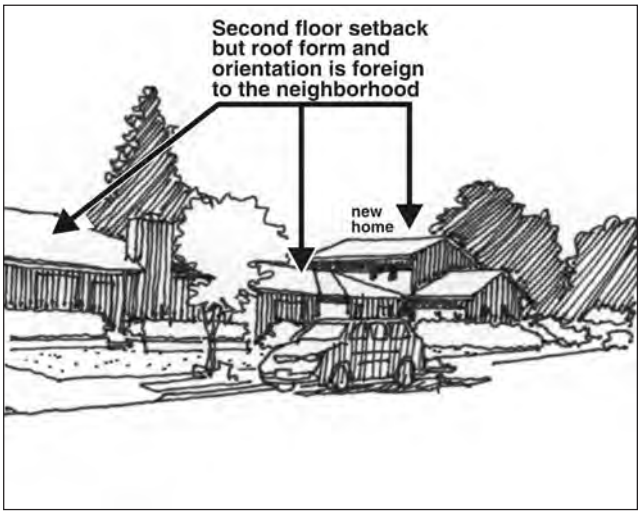
Successful infill development is usually the result of a careful sensitivity to and consideration of neighborhood patterns and scale. Problems and conflicts, on the other hand, are often the result of ignoring the surroundings or inherent conflicts in floor plan layouts or internal space volumes (e.g., extra high floor to ceiling heights) which produce building forms and sizes that are greatly at variance with the neighborhood. The examples of common problems and sensitive infill development included in this section are intended to assist applicants in anticipating some of the problems and emulating some of the principles of successful infill.

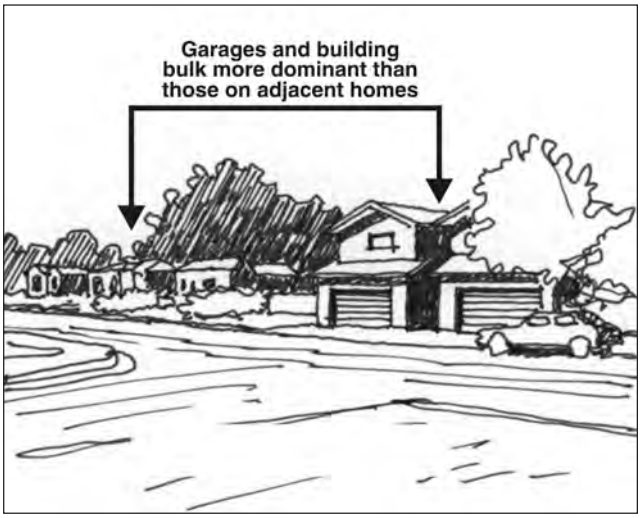
4.1 COMMON PROBLEMS

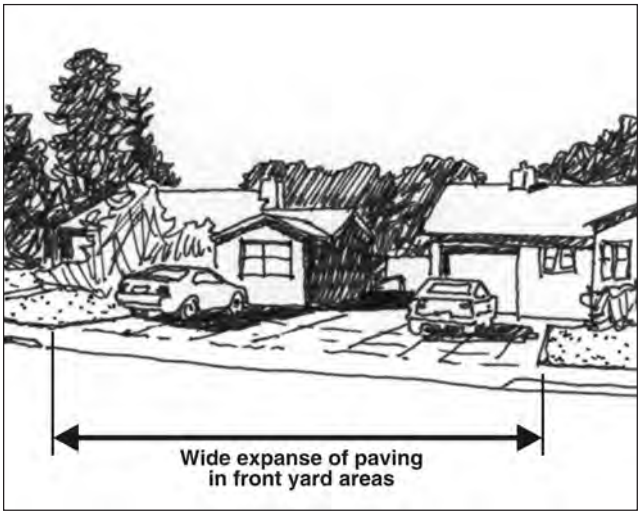
Fitting new homes and second story additions into established neighborhoods, especially one story home neighborhoods, requires thoughtful consideration of many factors such as relative building size and scale, mutual privacy between neighbors, and general design character. When seeking to develop home plans that are suitable for the unique circumstances of one's family, it is often easy to forget how the changes may affect the neighborhood.

The illustrations and text on this and the facing page show some of the conditions that should be avoided.

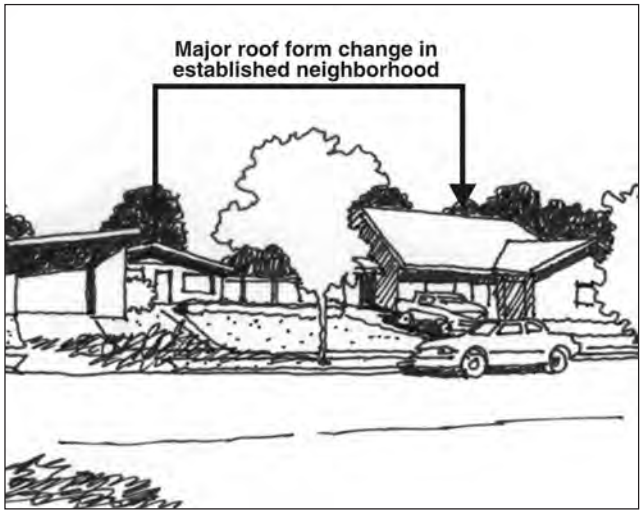


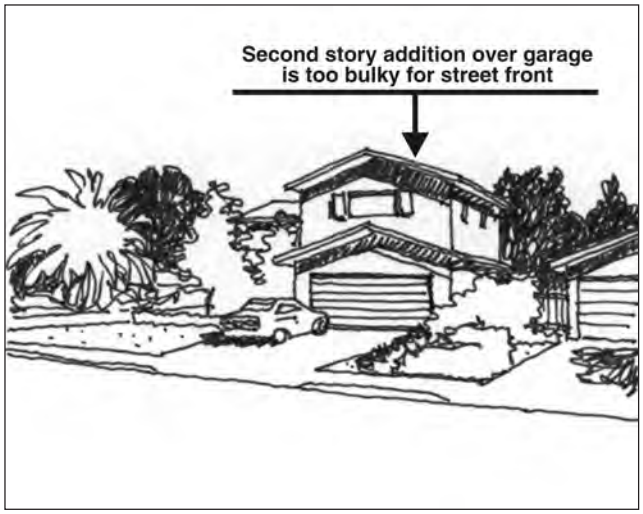


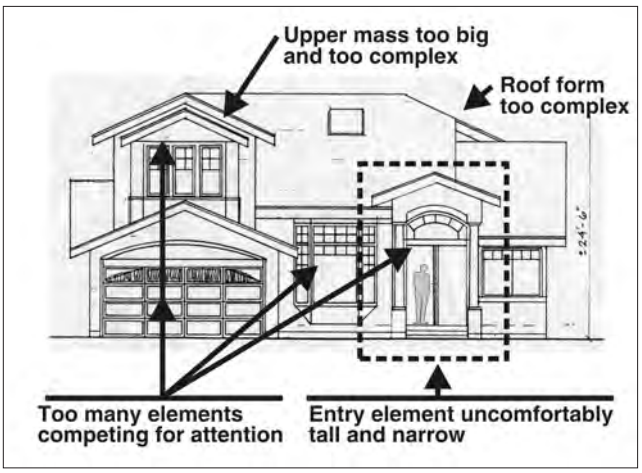




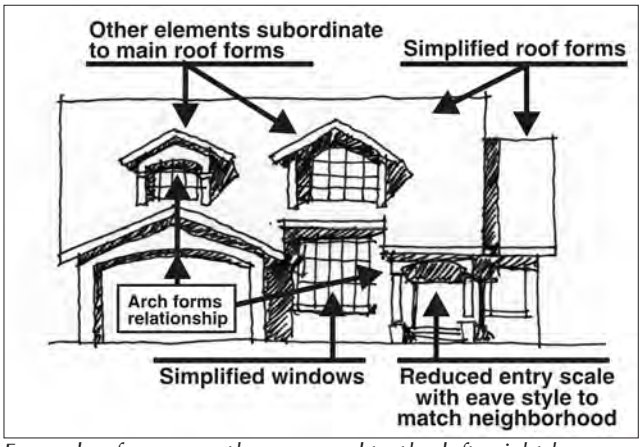
Common Problems







An example of design elements out of scale with both the house and the neighborhood



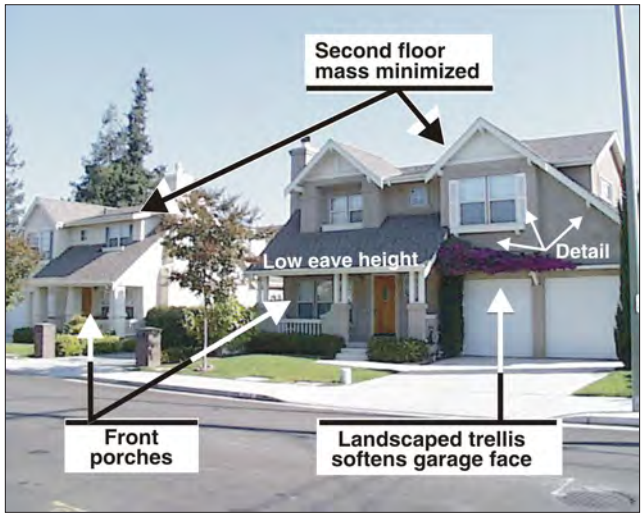
Example of one way the proposal to the left might be improved

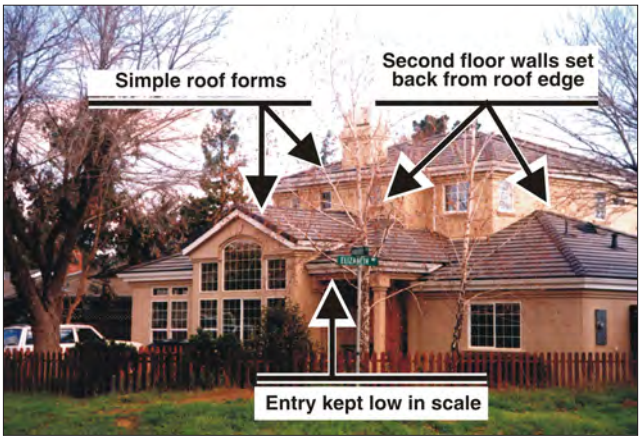
4.2 SUCCESSFUL INFILL EXAMPLES

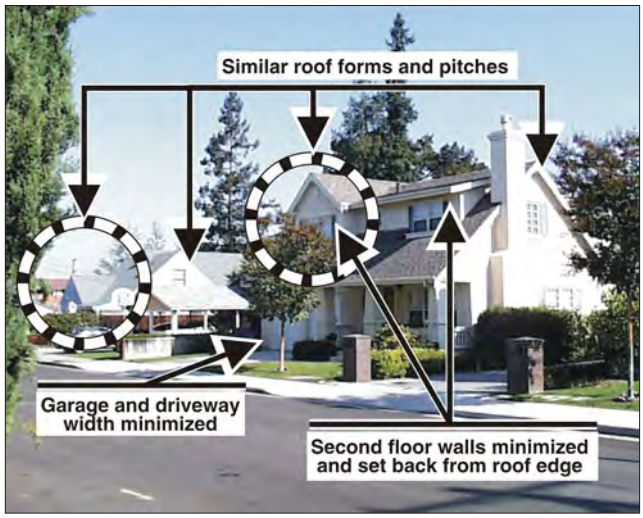
When sensitively designed to respect the scale and bulk of adjacent homes, infill development can fit comfortably into older, established neighborhoods even when it is substantially larger than other homes. Factors often found on these successful infill projects are shown on the illustrations on this page.

Techniques that have been used to achieve this compatibility often include some of the following:

- Utilization of similar roof forms and pitches
- Use of similar scale entries
- Keeping first floor eave heights similar to neighboring homes
- Using first floor roof elements to break up two story walls
- Limiting second floor area and volume
- Setting back second floor walls substantially from first floor walls below
- Using window shapes, types and sizes similar to those in the neighborhood
- Placing larger garages to the rear of lots or using side-loaded garages to limit garage door presence on the street facade
- Using modular pavers and/or separating larger driveways into smaller segments





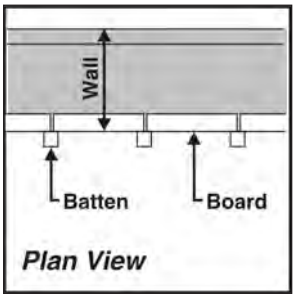


5. Glossary

Balusters
One of a series of vertical elements supporting a hand rail cap on a stair or balcony railing.

Bay Window
A window or windows in a wall that project from the wall at an angle.

Board and Batten Siding
Wood wall siding with a vertical wood strip (batten) placed over the seams of larger vertical siding boards.

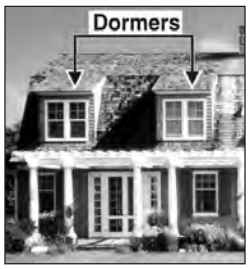


Bulk
Building mass, especially in regard to the size of existing building elements or those nearby in the neighborhood.

This second floor has a relatively small bulk

While this one has a much greater bulk

Dormer
A window projecting from the slope of a roof, usually with a roof of its own.



Eaves
The portion of a roof that projects beyond the wall-often supported by rafters or serving as a support for gutters.

Eichler Home

A style of mass produced home constructed in many parts of the Bay Area from the late 1940s to the 1960s by a builder named Joseph Eichler. The homes are architect-designed and are frequently characterized by in-turning floor plans, interior atria, low sloped roofs with large overhangs and exposed beam ends, simple wall planes and single car garages combined with a car port.

Facade

The whole wall of a building face including windows, recesses and projections, and other architectural features.

Floor Area Ratio (FAR)

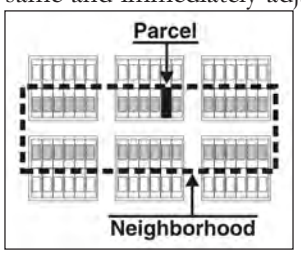
A measure of development intensity defined by dividing the gross building area of the structure by the area of the parcel (e.g., a 2,100 square foot home on a 6,000 square foot lot would have an F.A.R. of 0.35). Living space, garages, and basements are all included in the gross building area calculation.

Moulding

A continuous decorative band usually projecting from the face of the wall.

Neighborhood

For the purposes of assessing neighborhood character and scale for implementation of these design techniques, a neighborhood is defined as both block faces within the same and immediately adjacent block.



Roof - Gable

A sloping roof with ridge that terminates in a triangular form.

Roof - Hip

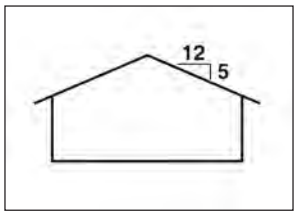
A roof formed by two sloping roof surfaces.

Roof - Shed

A roof made up of one sloping plane. Pitch may be very shallow or relatively steep.

Roof Pitch

The slope of a roof plane stated as the amount of rise in the roof plane, in inches, for every twelve inches of run (e.g., 5 in 12).

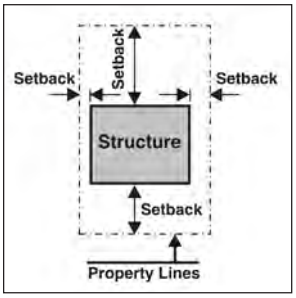


Scale

The comparative relationship between elements of a building or between a new home and others in the neighborhood. For example, large two-story entries in a neighborhood characterized by entries under low roof eave lines would be "out of scale" with the neighborhood.

Setbacks

The relative distance of elements from a set point. Most often used to define the distance between the face of a structure and its adjacent property line.



Solar Access

The planning and design of structures to avoid casting shadows on active outdoor spaces and on roof slopes that might be used for solar energy panels.

Streetscape

The overall character of a street frontage established by all elements visible from the street including, but not limited to, building architectural style and size, gargage location and size, building orientation, roof forms, front yard landscaping, street trees and street lighting.