



5.0 mixed-use design guidelines

5.1 introduction

The mixed-use design guidelines are intended to provide clear and useful recommendations for the design, construction, review, and approval of mixed-use development in the City of Antioch. The mixed-use guidelines in this section refer to residential uses over retail uses. Office uses over retail is covered under the commercial design guidelines in Chapter Three. Mixed-use development plays a vital role in creating neighborhoods where people can walk between home, work, shopping, and recreation. This chapter will help ensure that new projects will be well designed, uphold the City's vision, and contribute to the quality of the public realm.

The primary design issue related to mixed-use projects is the need to successfully balance the requirements of residential uses, such as the need for privacy and security, with the needs of commercial uses for access, visibility, parking, loading, and possibly extended hours of operation. There are two basic types of mixed-use with residential projects. The first type is vertical mixed-use, which is typified by residential use over commercial uses in the same building. The second, called horizontal mixed-use, combines residential and commercial uses on the same site, but in separate buildings.

5.2 design objectives

The following objectives form the basis for the mixed-use design guidelines. The intention of the guidelines is to promote a desired level of development quality that will:

- A. Provide the resident living in upper floors of a mixed-use project with a high quality environment;
- B. Protect the pedestrian and enhance the pedestrian environment and scale;
- C. Protect bicyclists and their environment ensuring the needs of non-motorized travelers are incorporated into the circulation plan;
- D. Design parking that not only provides secure resident parking, but also promotes safe interaction between vehicles and pedestrians;
- E. Ensure that retail/commercial space on the lower floor is appropriately designed to promote uses that serve the community living in a mixed-use development;
- F. Ensure compatibility between adjacent uses, especially residential; and
- G. Encourage high quality mixed-use infill development that is comprised of residential, office, entertainment, and commercial uses.



Figure 5.2.1 Mixed-use projects create a pedestrian-friendly atmosphere where neighbors can socialize and enjoy each other

Ultimately, the goal of these mixed-use design guidelines is to ensure that the new infill mixed-

use properties in Antioch are a source of tremendous pride for City residents and create a comfortable, pedestrian-friendly environment.

5.3 site planning

The design of each mixed-use project site shall contribute to the evolving sense of place and character in the City of Antioch. Site planning guidelines consider the internal organization of a development project and the external relationship with the public right-of-way and other projects.

5.3.1 Building Placement

One of the most important elements of new mixed-use development is the way the project is integrated physically and functionally into the public realm. Properly executed building placement and orientation can enliven adjacent public spaces, encourage pedestrian activity, and strengthen the link between businesses and residences.

A. Buildings shall be constructed near or along the front property line(s). A "zero setback" from the front property line(s) is encouraged.

B. Variations in the zero setback from the property line(s) may be appropriate when the resulting setback provides greater accommodation for pedestrian circulation, sidewalk dining areas, enhanced entries, and improves the pedestrian realm.

C. When a front setback is necessary, a majority of the setback shall be hardscaped with limited landscaping to accommodate uses that keep the public realm active, such as outdoor dining and seating.

D. Create a dynamic, uninterrupted pedestrian zone by avoiding excessive side yard setbacks between buildings. A zero setback from the side property line(s) is encouraged wherever possible.



Figure 5.3.1 Outdoor furniture clearly signals a pedestrian zone

E. At least 30 percent of the linear frontage on a major arterial (excluding driveways and pedestrian connections) shall be designed in order to accommodate pedestrian-oriented, neighborhood serving commercial uses. The minimum interior depth of these commercial spaces shall be 25 feet.



Figure 5.3.2 Incorporation of a full range of services can produce a walkable urban setting where people can live, work, shop and dine



5.3.2 Street Orientation

Mixed-use buildings shall be sited and oriented so that the primary commercial building entry is located along the public sidewalk, which is the main pedestrian route.

A. The main pedestrian access point to the building shall be located along the facade that is oriented to the primary street.

B. Buildings on corner lots shall have the primary entry facing the intersection. Corner entries help create an active public realm and reinforce significant street and sidewalk intersections.



Figure 5.3.3 A corner building facade orients the main entry to the primary street for added visual interest

C. Entries that face the primary street shall be directly connected to the street's sidewalks. Secondary and residential entrances can be connected to interior courtyards and parking lots.

D. The most active ground floor uses such as storefronts, lobbies, and restaurant dining areas shall front the public sidewalk. Private amenities, such as courtyards, that are not accessible to the public shall be located within the project site or on upper floors and not along the street.



Figure 5.3.4 Outdoor dining serves as an active use fronting the public sidewalk stimulating the pedestrian experience

E. For buildings sited on less significant intersections, such as a major arterial and a collector, at least 50% of the side street ground floor elevation shall include storefront design features.

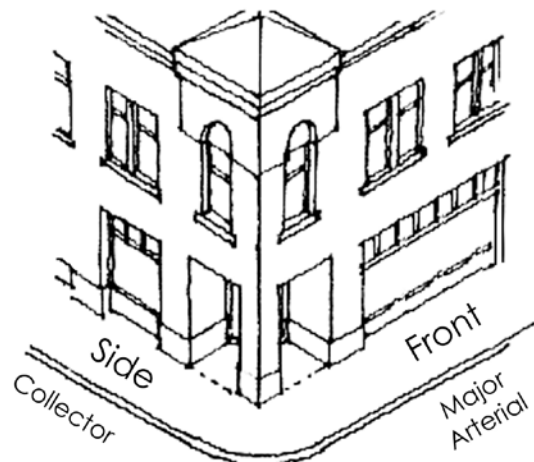


Figure 5.3.5 A smaller window area on the side street creates continuity in design and allows for additional display area

5.3.3 Parking Orientation

A well planned circulation system efficiently moves vehicles in a well-defined manner while avoiding and reducing potential conflicts between pedestrians and vehicles.

A. On-site surface parking between the front property line and the building is strongly discouraged. Instead, parking shall be located to the rear of the site in a parking lot, within the building, or in a separate structure.



Figure 5.3.6 Parking to the rear of the site allows for a strong, highly visible storefront and pleasant urban pedestrian environment

B. Vehicular access shall be provided from side streets, adjacent alleys, and parallel streets whenever possible.

C. The number of curb cuts for vehicular entry into the site shall be minimized so that pedestrian and bicycle areas are safe, secure, and passable.

D. Where possible, rear parking lots shall be designed and located contiguously so vehicles can travel from one private parking lot to another without having to enter the street. This may be achieved with reciprocal access agreements.

E. Consolidation of parking is encouraged to reduce the number of access drives from major roadways. Shared driveway access is encouraged whenever practical to further reduce vehicle/pedestrian interactions and safety concerns.

F. Pedestrians shall have a clear and direct route from on-site parking to the building entry and public sidewalk system. The circulation path shall be direct, continuous, and free of barriers (e.g., site equipment, signage, utility poles, etc.).

G. Any paving pattern, color, and material used to articulate pathways and pedestrian areas shall continue when driveways intersect with these areas. Where pedestrian circulation paths cross vehicular circulation paths, a material change, contrasting color, or slightly raised crossing shall be used to clearly delineate the continuing pedestrian path.



Figure 5.3.7 Articulated paving for the sidewalk and crosswalk direct the circulation flow



5.3.4 Trash, Storage, and Equipment Areas

Truck loading/material handling shall be accommodated on-site in designated areas to minimize noise, odor, and visual blight to adjacent structures, residential properties, and public streets.

A. Loading and service areas shall be concealed from view within the building envelope or shall be located to the rear of the site and designed for minimal visual impact and circulation conflicts.

B. When trash enclosures, loading docks, utility equipment, and similar uses are visible from a side street or a neighboring property, they shall be screened using materials, colors, and landscaping that are harmonious with the site design and building architecture.



Figure 5.3.8 Utility screening can be seamlessly integrated into a building design

C. Rooftop equipment shall be completely screened from view.

D. Trash storage areas shall be covered to reduce unsightly views.

E. Trash enclosures shall provide an area for recycling.

F. Utilities shall be placed underground for improved service reliability and greater public safety. Underground utilities eliminate visual blight and enhance the quality of the public realm.

5.3.5 Site Amenities

Similar to site design and building architecture, site amenities such as courtyards, site furniture, and landscaping contribute to the overall tone, image, and style of the mixed-use project.

A. Outdoor spaces play a significant role in the development of the site plan and shall be designed as “outdoor rooms” that can be used for play, recreation, social or cultural activities. Avoid undifferentiated, empty spaces.

B. Outdoor spaces shall be appropriately scaled for the intended use and be designed to include safety and security measures.



Figure 5.3.9 Outdoor space serves as an important component or “third place” for informal social gatherings

C. Useable open space or public gathering places accessible to the community (e.g., a roof garden, expanded waiting area adjacent to a bus stop, etc.) shall be provided on larger projects.

D. Landscaping, shade trees, and benches shall be incorporated into the site design as well as outdoor dining areas to encourage pedestrian activity on the ground floor level of a building.



Figure 5.3.10 Landscaping enhances an outdoor dining area

E. Permeable paving materials (e.g., crushed stone, open paving blocks, permeable paving blocks, etc.) may be used in plazas, courtyards, walkways, and parking areas. Permeable paving materials shall not be used in the public right-of-way.

F. Courtyards and Plazas

1. Both private and semi-private outdoor spaces shall be incorporated in mixed-use developments. Private outdoor courtyard areas for residents only are

strongly encouraged. Semi-private plaza areas for visitors shall also be provided in areas adjacent to the retail/commercial uses.

2. Semi-private areas shall be centrally located and be designed as courtyards or outdoor rooms. Outdoor furnishings, community amenities, public gathering spaces, trees, shrubs, and trellises for shade shall be provided where appropriate.



Figure 5.3.11 A semi-private area for residents and visitors provides a relaxing respite from the activity of the urban streetscape environment



3. Mixed-use projects shall include a minimum 10% of public and private open space in the form of courtyards and plazas. Access shall be provided from both the public right-of-way sidewalk and ground floor commercial spaces.



Figure 5.3.12 A public plaza accessible from the sidewalk and ground floor provides an opportunity for farmers markets and other social amenities

4. All Courtyards and plazas shall be designed and oriented in a way that allows the majority of the space to have direct sunlight for the duration of the day to eliminate damp, dark corridors for the health and safety of the pedestrian. Shade trees or other sun-screening elements shall be incorporated in the design to provide areas of rest and relief from the sun.
5. Focal elements such as sculptures, art, or water features shall be incorporated into courtyard and plaza design.

6. Seating shall be provided in the courtyard/plaza. Where applicable, users shall be provided with a choice between social and quiet seating.



Figure 5.3.13 A shaded courtyard seating area enhances the public realm

F. Site Furniture

1. When plazas are adjacent to the public right-of-way, paving and furniture style shall complement the public streetscape elements and be constructed of durable materials.
2. Site furniture shall be carefully placed to not create pedestrian/vehicular conflicts. There shall be adequate circulation space surrounding site furniture.
3. Graffiti resistant material and/or coating and skateboard deterrents shall be required to retain the furniture's attractiveness.
4. All outdoor seating areas shall leave at least five feet of unobstructed pedestrian space.
5. All outdoor dining furniture and umbrellas in the public right of way shall be removed and stored inside during hours of non-operation.

5.4 architecture

Mixed-use projects generally take their architectural design cues from traditional urban environments, i.e. compact vertical form, higher FAR's, etc. Appropriate building scale, height, and massing, along with high quality detailing, articulation, and materials will engage the pedestrian and will become a positive addition to the public realm. Each project shall possess a distinguishable identity and identifiable design.

5.4.1 Street Environment and Building Frontage

Mixed-use development is compact in design and efficiently uses the site.

A. Building plans, facades, and architectural details shall create visual interest at the street level (e.g., staggering the frontage of the building, recessing doors and windows, providing awnings and canopies for weather protection and scale, and visually extending interior spaces outside through paving and glazing to create the concept of an indoor/outdoor room, etc.).



Figure 5.4.1 Corner storefront design attracts pedestrian interest through recessed doors, changes in materials, and enhanced lighting

B. Projects located at intersections shall ensure the design treatments are continued around the corner.



Figure 5.4.2 Facade treatments that continue on all sides of the building create a continuity in design and visual interest

C. Development located at signalized intersections of major streets shall include pedestrian-oriented, community serving commercial uses such as a bookstore, coffee shop, or local market.

D. Whenever possible, parcels shall be consolidated along corridors to ensure a mixed-use project is at least 10,000 square feet of ground floor space. This allows for heightened design criteria, more efficient design, and an improved pedestrian experience.



5.4.2 Building Form and Articulation

Successful mixed-use projects utilize human-scaled massing, varied articulation treatments, and traditional facades.

A. Large, mixed-use projects with street frontages greater than 100' shall incorporate traditional massing and facade techniques such as:

1. Dividing the facade into modular bays a minimum of every 25 feet;
2. Creating opportunities for relief and variation in both the vertical and horizontal plane with recessed and/or projected areas; and



Figure 5.4.3 An example of a large mixed-use project that varies the facade

3. Using traditional architectural detailing (i.e. ornamentation, window placement, changes in materials and/or colors) as opportunities to bring a human scale to a larger frontage.

B. Rear walls and elevations visible from the public right-of-way shall be designed to maximize visual appeal by using vertical and horizontal wall plane breaks.

C. Overarticulation that may look forced or unauthentic shall be avoided.

D. The proportion and placement of windows on upper floors shall be designed to look different from the windows on the ground floor.



Figure 5.4.4 Upper floors of this building are distinct from the ground floor

E. The design and positioning of street facing balconies shall be compatible with the design of the building.

F. Facade “base”, “middle”, and “top”

1. Traditionally, vertical mixed-use buildings have been designed with a distinct “base”, “middle”, and “top”. Today, this concept still holds true for both traditional and more modern/contemporary facades. All new projects shall follow this concept to create a human-scaled public realm.
2. The area where the first floor commercial base meets the second floor uses

above shall be clearly defined with a strong cornice, sign band, change in materials or colors, awnings, or canopies.



Figure 5.4.5 A strong cornice treatment separates commercial uses on the ground floor from residential above

3. The building shall have a defined and significant top edge and a perimeter parapet to stylistically define the top of the building.

G. Building entries and access

1. In order to promote active, pedestrian-friendly streets, each individual tenant or business establishment and residential lobbies shall be oriented to and accessible from the major street frontage and directly accessible from the public sidewalk.
2. Where possible, primary entrances shall be located at major intersections.

5.4.3 Building Height

Building height must be sensitive to the context of the site and consider adjacent uses.

A. Three stories are preferred to ensure sufficient bulk at a major intersection. Additional floors may be considered, depending on individual site considerations and overall design.



Figure 5.4.6 A three story building can provide sufficient bulk at a major intersection to anchor the entire block

B. The first floor height to the finished ceiling shall be at least 14 feet to ensure appropriate scale of the base of the building in relation to the upper floors.

C. Building height shall transition from the maximum building height to a lower height when directly adjacent to a single-family residential zoned district.

D. In order to accommodate the desired ceiling heights of ground floor retail/commercial uses, new mixed-use development shall be allowed to exceed the currently allowed building heights by four feet.

E. Heights greater than three stories may be considered for a compact mixed-use project development that includes underground parking, public open space adjacent to



the street, and is sensitively designed to be compatible with adjacent properties.

F. The three-story limit will be strictly adhered to when the mixed-use project is directly adjacent to single-family residences.

G. Variations in building height and massing as well as articulated facades are strongly encouraged as they contribute to community image and improve the pedestrian experience.



Figure 5.4.7 Variation in height and massing contributes to an interesting streetscape and community image

5.4.4 Roof and Upper Story Details

Every effort shall be made to ensure that mixed-use buildings emulate a traditional urban environment. Rooflines on mixed-use structures shall be flat with parapets. However, pitched and full roofs are appropriate architectural design features when dictated by building design.

A. Roofline ridges and parapets shall not run unbroken for more than 75 feet. Vertical or horizontal articulation is required.

B. The visible portion of sloped roofs shall be sheathed with a roofing material

complementary to the architectural style of the building.

C. Radical roof pitches that create overly prominent or out-of-character buildings (e.g., A-frames, geodesic domes, or chalet-style buildings) are not allowed.

D. The following roof types are inconsistent with the desired mixed-use development in Antioch: sloped roofs, gable-end roofs, single pitch (shed) roofs, false mansard roofs, and curving roofs.

E. Rooftops can provide usable outdoor space in both residential and commercial developments.

F. Roof-mounted utility and communication equipment shall be screened from view by structural features that are an integral part of the building's architectural design.



Figure 5.4.8 Useable rooftop space produces an inviting garden setting for urban relaxation

5.4.5 Building Materials and Finishes

A. A well-defined building “base” (i.e., ground floor) provides scale and articulation at the pedestrian level. The “base” shall consist of traditional thicker walls along with high quality, durable, and easy to clean materials and finishes. Special materials (e.g., granite, marble, polished stone, and other metal panels) shall be utilized as accent materials on the building’s “base.”



Figure 5.4.9 This building has a well-defined building base with durable materials

B. Upper floors that are less prone to vandalism shall utilize high quality finish materials of traditional mixed-use projects (e.g., brick veneer, smooth troweled stucco, etc.).

C. High-quality materials convey a sense of permanence and concern. Materials and colors shall be selected to unify the building appearance and fit into the pedestrian context. Avoid overly vibrant colors and/or monochromatic color palettes.

D. The following materials are inappropriate because they do not uphold the quality or lifespan that is desirable for new development.

1. Mirrored glass, reflective glass, or heavily tinted glass;
2. Vinyl siding;
3. Utility, decorative scored or split-faced block (split face block might be considered at the base up to no more than 2 feet above the sidewalk);
4. Vertical wood sheathing such as T-II.

5.4.6 Compatibility with Adjacent Properties

Site designing mixed-use projects must respect and complement adjacent buildings through consideration of mass, rhythm, scale, setbacks, height, building materials, texture, and related design elements.

A. To ensure and protect the privacy of residents in adjacent single-family homes, windows in mixed-use projects facing single-family residences within 15 feet of the property line, shall be carefully arranged. Examples of privacy options include translucent or louvered windows, offset window patterns, and locating windows five-feet above the floor level.

B. Upper floors of mixed-use buildings shall be stepped back when adjacent to single-family residences.

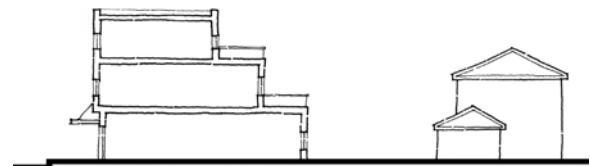


Figure 5.4.10 Proper mixed-use project design incorporates stepped back upper stories next to single family residential



C. Mixed-use projects shall be designed to minimize vehicular circulation on streets through local single-family neighborhoods.

D. Guest parking areas shall be located and designed to be convenient to minimize spillover to adjacent residential neighborhoods. Parking for residents, visitors, and/or employees shall be accommodated onsite or on adjacent public streets that are not serving single-family residences.

E. Parking and loading/unloading areas shall not create stacking/queuing issues at ingress/egress points. Site design must ensure that vehicles entering and exiting the site do not adversely impact adjacent streets and neighborhoods.

F. Facades and garages that face existing single-family homes shall be designed to be compatible with the setbacks and scale of the existing development.

G. The design shall clearly delineate between public space and private space.



Figure 5.4.11 Stoops are a design technique used to separate public and private spaces

H. In order to integrate new buildings with the existing urban fabric, new buildings are encouraged to incorporate passageways and attractive plaza areas between buildings that allow light to reach adjacent buildings.

I. Parking shall be separated from adjacent residences and buildings by no less than five feet.

5.4.7 Construction Details Between Floors

Appropriate construction methods can mitigate the impact of ground floor commercial uses on adjoining residential units.

A. Common walls between residential and non-residential uses shall be constructed to minimize the transmission of noise and vibration.

B. Where practical, mechanical equipment and other sources of noise shall be located away from building areas and exterior spaces designed for use by residents.

C. Non-residential spaces (e.g., dining establishments) shall be adequately ventilated to prevent odors from spreading to residential uses.

5.5 storefront design

Storefront design shall be reflective of the building's overall architectural style, yet highlight the individual character and personality of the use. A successful storefront with inviting display windows will attract passersby and contribute to the overall quality of the streetscape.

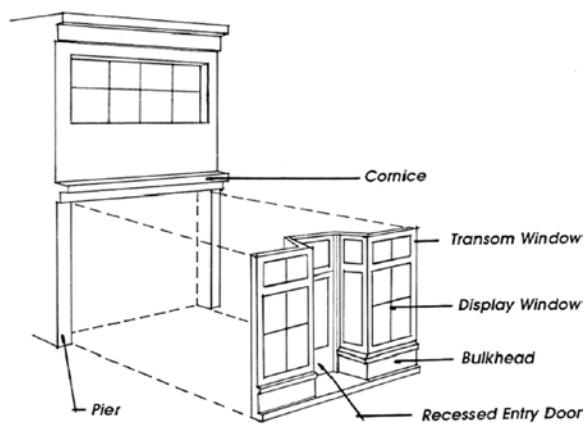


Figure 5.5.1 The storefront is the most important architectural feature of a mixed-use building

A. A well-designed storefront facade is comprised of:

1. An inviting recessed entry door;
2. Transparent display and transom windows and/or doors that allow shoppers to look into the retail or commercial space;
3. Bulkheads beneath the windows to mirror traditional development;
4. Piers that frame the windows and/or door openings; and
5. A decorative cornice treatment.

B. At least 70 percent of the ground floor facade of a commercial/retail use shall be devoted to transparent windows and/or doors.



Figure 5.5.2 A ground floor facade with transparent windows and doors entices the passerby

C. Windows shall be large glazed panels, possibly with small upper transoms. Window patterns shall have a slight inset and not appear flat. Glass shall be clear (88% light transmission) and not heavily tinted.

D. Generally, the most appropriate storefront design shall be comprised of a lower bulkhead not exceeding two feet above sidewalk grade.

E. Intersections provide great opportunities to showcase unique and interesting storefront facades.



5.6 parking and circulation

Parking and circulation patterns for mixed-use projects shall be sensitively designed to ensure that adjacent properties are not impacted by new mixed-use development. Parking structures, tuck under parking, parking in the rear of the structure, and other creative solutions to providing parking are recommended (i.e., access to parking areas by alleys and side streets is encouraged).

- A.** Parking shall be provided on-site, on-street parking is not allowed.
- B.** Customer and tenant parking shall be provided at the rear of buildings, within the building, in off-street parking lots or adjacent parking lots. Whenever possible, parking structures shall be placed behind the mixed-use project.

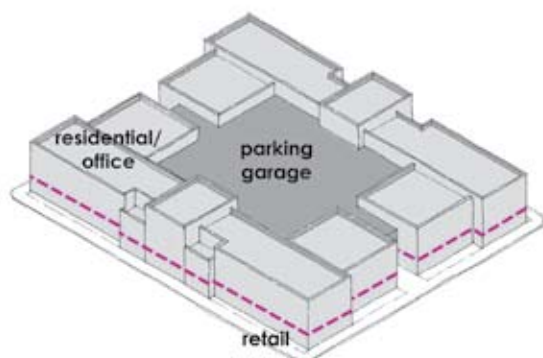


Figure 5.6.1 An illustration of a project that incorporates a parking garage within the site design

- C.** Mixed-use projects that accommodate parking in parking structures must provide secure separate parking spaces for the residential units. The secure residential spaces shall be accessed via a gate code or other security mechanism.
- D.** Larger parking structures shall provide non-parking uses, such as retail storefronts, fronting on the street level.

- E.** Parking shall be conveniently located near non-residential uses. Parking lots visible from the street and pedestrian areas shall incorporate landscaping treatments (e.g., trees, shrubs, groundcover, etc.). Larger parking lots that are not parking structures shall also incorporate landscaped medians where appropriate.
- F.** Parking access shall be taken directly from an alley where possible.
- G.** Adjacent properties shall be adequately screened from the parking structures and lots.
- H.** Parking provided to the general public (visitors to commercial or residential uses) shall be clearly marked and separate from private resident parking spaces.
- I.** Secure, covered bicycle parking in residential mixed-use projects shall be provided.
- J.** Commercial bicycle racks shall be in public view, close to building entrances, with high visibility and sufficient lighting.



Figure 5.6.2 Bicycle parking areas that are integrated into the site design. These facilities are secure, close to the entry and sheltered.

- K.** The design of surface parking lot lighting fixtures shall be compatible with the architecture

used in the development and not be on poles over 25 feet high.

L. In public parking lots, a higher foot-candle level shall be provided at vehicle driveways, entry throats, pedestrian paths, plaza areas, and other activity areas.

M. Parking and security lights will not be obtrusive to neighboring residential properties.

5.7 landscaping

Private mixed-use project landscaping is typically different from the landscape treatments and methods used in suburban commercial and residential settings as detailed below.



Figure 5.7.1 Proper landscaping complements the architecture of a mixed-use project

A. Landscape design shall consider the scale and mass of a building and its relationship to the street and neighboring properties.

B. Emphasis shall be placed on California or Mediterranean style landscaping, particularly indigenous plants, ornamental vines, and flowers in either container pots or as part of an arbor/trellis. Landscaping must be well maintained with drip irrigation systems for trees/garden beds and pots that does not drain across the pavement.

C. All landscaping shall employ features and techniques that reduce the demand for and consumption of water, including appropriate low-water plants, a high degree of paving permeability and water conserving irrigation techniques and systems.

D. Expansive surfaces can be visually screened with vines or foliage. Vines can be used to make a building's architecture more dramatic or soften hard materials.

E. Courtyards, gardens, and fountains are very desirable in mixed-use projects. Landscaping within courtyards shall include a balance of hardscape and softscape materials.

F. Ceramic, terra cotta, wood, or stucco decorative planters shall be used to enhance private areas accessible by the public. Large freestanding planters in seating areas shall provide an internal irrigation system.

G. Trees in paved areas shall be provided with "deep root" barriers, deep root automatic irrigation, and expandable metal tree grates of adequate size. Root barriers shall be of a material specifically designed for containing tree roots. Irrigation shall be adapted for deep watering.



Figure 5.7.x Well maintained planters appropriately placed, soften the buildings intrusion on the public realm



5.8 lighting

The basic requirement of lighting is to make the pedestrian environment safe and secure. However, lighting design can enhance a building's architecture and highlight important design features (e.g., entrances, towers, etc).



Figure 5.8.1 Examples of lighting that are appropriately scaled for a pedestrian environment

A. Specialized lighting effects that enhance the attractiveness of commercial streets, restaurants, and entertainment venues for pedestrian traffic are encouraged.

B. Lighting fixtures shall be attractively designed to complement the architecture of the project, signify building entry locations, and improve visual identification of residences and businesses.

C. On each project site, all lighting fixtures shall be architecturally compatible with the buildings and from the same "family" with respect to design, materials, color, style, and color of light.

D. Wall mounted lights shall be used to the greatest extent possible to minimize the total number of freestanding light fixtures.

E. The lighting of building elements and garden walls is an effective and attractive lighting technique. However, light sources for wall washing and tree lighting shall be hidden.

F. Lighting shall be shielded to minimize glare and not spill over onto adjacent properties.

G. Exterior doors, aisles, passageways, and recesses shall have a minimum level of light of one foot-candle during evening hours. These lights shall be equipped with vandal resistant covers.

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