

## **CHAPTER 12**

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### **DESIGN STANDARDS AND GUIDELINES**





## Design Standards and Guidelines

### A. Introduction

This chapter provides standards and guidelines for designing new mixed use, residential, commercial and industrial development in the Specific Plan area. Property owners, developers, architects, building designers and contractors should use these standards and guidelines in the early design stages of their projects. These standards and guidelines are intended to support the Specific Plan objectives and to:

- Provide basic design parameters for all development in the Specific Plan area.
- Provide guidance as to the quality and character of individual projects.
- Offer flexibility to accommodate innovative and unique designs.
- Promote design creativity and variation while ensuring consistency in building scale, proportion and pedestrian orientation.
- Create an environment that contributes to a livable and vibrant North City.

A goal of this Specific Plan is to encourage sustainable, energy-efficient developments. The standards and guidelines in this chapter incorporate applicable principles and recommendations established by the *Sustainable Sites Initiative*,<sup>1</sup> which establishes standards for site development that will ultimately be integrated into the Leadership in Energy and Environmental Design (LEED) rating system. In addition, new residential development should follow the City's *Voluntary Green Building Program for Residential Construction* (Ordinance Number 657).

The Specific Plan design standards and guidelines are in addition to those contained in the *City of Cathedral City Design Guidelines*. Refer to Chapters 8-11 of this Plan for specific development standards pertaining to the various zoning districts.

The design standards and guidelines are organized as follows:

- Design Standards and Guidelines for Mixed Use, Commercial and Industrial Uses
- Design Standards and Guidelines for Residential Uses
- General Landscape Design Standards and Guidelines

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<sup>1</sup> The *Sustainable Sites Initiative* is a clearinghouse for research and information on sustainable land practices.



## B. Design Standards and Guidelines for Mixed Use, Commercial and Industrial Uses

The following design standards and guidelines for **mixed use, commercial and industrial uses** are intended to identify appropriate and attractive design solutions to create high quality and visually appealing mixed use and non-residential areas. Development in North City should be sustainable and responsive to harsh climatic considerations, while also being compatible with the surrounding MSHCP Conservation Area. Particular attention should be paid to creating shade and protection from prevailing winds. In addition, new development should be designed to create a comfortable pedestrian environment, particularly in mixed use areas.

### I. “Desert Oasis” Theme

A “desert oasis” theme that mimics the naturally occurring palm oases found in the Coachella Valley and surrounding canyons will visually unify new development with the natural areas within the Specific Plan area. The “oasis” concept relies on a hierarchy of desert characteristics that gradually lead into a lush and protected environment. The following guidelines apply:

- (a) Buildings should be designed to protect people from the hot desert environment. They should be clustered for shade, and incorporate protective courtyards, recessed windows and doors, and insulated walls.
- (b) Buildings should be oriented to shelter public and open spaces from the prevailing winds that generally blow from a westerly direction.
- (c) Arcades, covered walkways, trellises and passages should be incorporated to provide sheltered areas for pedestrian circulation.
- (d) Misting systems and other similar cooling techniques should be used in common areas to provide necessary relief from the desert sun.
- (e) Project designs should concentrate landscape and pedestrian amenities in an “oasis” environment, creating a contrast with the surrounding desert.
- (f) The oases should establish thematic materials and design features that can be extended to the design of the entire development to create continuity and visual unity.
- (g) The landscape compositions in the oases should feature higher densities of landscape material accents of unique color and form, and water features using reclaimed water or captured site drainage.
- (h) Oasis landscape elements should be created in pedestrian promenades and/or plazas located in major commercial and mixed use centers.
- (i) Oasis compositions should be scaled according to surrounding land uses and for intended visual impact. For example, an oasis element created as part of a commercial plaza presents the opportunity for a highly textured, appealing space to be experienced at close proximity.





*Sheltered public spaces with amenities for visitors create an ‘oasis’ – a place of refuge – in the desert climate.*

## 2. Site Layout

- (a) Building siting should take into consideration the context of the development, the location of nearby uses, the location of major traffic generators, as well as the site’s characteristics such as wind, views, sun and topography.
- (b) Whenever possible, buildings should be clustered with one another, either on-site or with those on an adjacent property. This creates opportunities for sheltered plazas and pedestrian areas and prevents long “barrack-like” rows of buildings or simplistic “L”-shaped shopping centers.
- (c) Buildings should be sited and designed to maximize the use of sunlight and shade for energy savings, and respect the solar access of adjacent buildings.
- (d) The primary presence along the street frontage should be the building, not parking or loading areas. New buildings should be sited with the façades facing the public street in a manner that enhances pedestrian connections to outdoor pedestrian spaces such as courtyards, paseos, plazas and porticos.
- (e) Where feasible and permitted, buildings should be located adjacent to the sidewalk at the front setback line or immediately behind a public or semi-public use, such as outdoor dining or forecourt, to define and enliven the street edge, as well as to maximize access from the



public sidewalk. Such siting, together with substantial landscape treatment, reinforces and strengthens the streetscape, and helps to screen off-street parking areas.

- (f) Where a zero-foot front setback is used, a portion of the front building elevation may be set back to allow for outdoor use, such as outdoor patio dining, display, public art, entry forecourts or other amenity appropriate to an urban development.
- (g) The building(s) and main entrance(s) should be oriented toward the primary street frontage. Secondary entrances may be provided from the rear and/or parking areas.

### 3. Site Circulation and Parking

- (a) A clear separation of vehicular and pedestrian circulation systems within a development should be evident in terms of paving, signage, amenities and access points. Appropriate traffic calming measures, such as bollards, should be provided to separate adjacent vehicular and pedestrian pathways.
- (b) Pedestrian linkages between uses should be emphasized, including linkages between adjoining parcels and between buildings in multi-building projects. Pedestrian walkways shall link:
  - Dwelling units with commercial uses in mixed use developments
  - Separate buildings within a commercial or industrial development
  - Buildings with common open space, plazas and courtyards, and public sidewalks
- (c) Shaded pedestrian paths should be provided from parking structures and/or lots to buildings or street, access points, as well as between buildings and on project perimeters. Shade can be provided by planting materials or built structures.
- (d) Pedestrian connections should include design cues to help demarcate the transition between public and private spaces. Design cues may include a change in colors, materials, landscaping or the dimensions of the walkway.
- (e) Building siting and parking design should maximize opportunities for shared parking, access entries and driveways between adjacent sites. Driveway entry locations should be coordinated with existing or planned median openings and driveways on the opposite side of the roadway.
- (f) Parking lots should be designed with a clear hierarchy of circulation: major entry drives with no direct access to parking spaces; major circulation drives with little or no parking; and parking aisles for direct access to parking spaces. Loading and service areas should be provided with separate access and circulation whenever possible. Pedestrian pathways shall be clearly marked.
- (g) Parking shall be designed to effectively reduce the visual impact of parking, and not detract from the building architecture or site views. Where feasible and compatible with the design of the building, subterranean, semi-subterranean, or parking that is tucked under the building structure is encouraged.





*Sheltered walkways, arcades and pergolas provide shade, connections and define usable space.*

#### 4. Massing, Form and Scale

- (a) Buildings within a project should be related in terms of bulk and mass, but not be identical. Repetitive building units that produce monotonous elevations should be avoided by varying building forms, placement, color, materials, and landscaping.
- (b) The scale and mass of a new development should be consistent with neighboring developments and not overwhelm them with disproportionate size or incompatible design. Special care should be taken to achieve compatibility next to small-scale buildings; techniques should include building articulation and limiting size.
- (c) Building articulation and variation in building form should be used to emphasize public entrances and de-emphasize service areas, to define and shelter pedestrian walks and exterior spaces, and to provide a sense of invitation and enclosure. Building form should be varied to emphasize the following:
  - Individual units within a building
  - Commercial and residential components of a mixed use project
  - Larger units and/or anchor stores within retail projects
  - Foyers, lobbies, and reception areas within non-retail commercial projects
- (d) Building design should employ clean, simple geometric forms and coordinated massing to produce an overall sense of unity, scale and interest. Simple, strong massing with varied elements shall be used.



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(e) Buildings should have a “human scale” (i.e., relate to the pedestrian user) by incorporating appropriately scaled design elements and details that generate interest and diversity at the street level, and relate the building to the ground plane. Elements that aid in reducing the appearance of building mass and scale include the following:

- Awnings, canopies, arbors, arcades, colonnades, trellises, and pergolas
- Stepping stories back above the ground level
- Color and material changes
- Architectural elements such as gables and hipped roofs

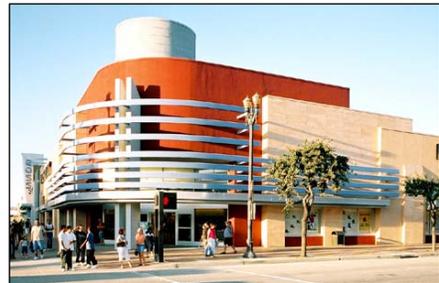
(f) Building design shall avoid large monotonous façades, long straight-line building fronts, plain box shapes and barren exterior treatments. All building elevations visible from a public way or parking area shall be well-articulated and incorporate the chosen design theme in a consistent manner.

(g) Offsets, pop-outs, overhangs and recesses may be used to produce effective shadow interest areas and add articulation to long planar surfaces to allow visual relief and interest. Larger buildings should have more relief than smaller buildings.

(h) Planes along an exterior wall elevation should be staggered to create pockets of light and shadows and provide relief from monotonous, uninterrupted expanses of wall. Building façades should be modulated at least every 60 feet by changes in building mass or façade treatment, such as projected entrance windows, roof form or other architectural features.

(i) Building articulation can be accomplished with the use of the following features:

- Building separations
- Building volume changes
- Variations in plane and height
- Variable roof forms and height
- Recesses or recessed openings
- Placement of windows and entries
- Significant color and material changes
- Variable transparency



*Varied building forms, volumetric and planar changes, and variations in roof forms and height, contribute to well-articulated building mass that relates well to pedestrians.*



- Creation of shadow textures through inclusion of elements such as arcades, balconies, trellises, overhangs, porches and architectural projections
- (j) The appropriate use of other architectural details, including reveals, course lines, decorative cornice, columns, etc., is also encouraged as a means of creating interest, variety, and distinctive design. Details should reflect the structural and material integrity of the building; overly gratuitous ornamentation is discouraged.
- (k) Details or elements should be integral to the design, not appear to be added on, and reflect the structural or material integrity of the building.



*Appropriate building modulation and articulation creates interesting façades and makes a positive contribution to the spatial environment.*

## 5. Building Façade and Elevation Design

- (a) Building elements should relate logically to each other, as well as to surrounding buildings to enhance the characteristics of a particular building or area. Buildings should present an “active” building elevation, including entrances and windows to the street, not blank walls or parking.
- (b) When buildings have a direct relationship to both the street and a major pedestrian corridor or parking lot, all facing façades should be designed to assure an attractive appearance and



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- include architectural features such as windows, arcades, canopies, pop-outs, and trim to create visual interest, provide “eyes on the street” and avoid a blank wall appearance.
- (c) Buildings should contain the traditional “three parts of a building”: a base, mid-section and a top. On low-rise buildings, the different parts may be expressed simply through detailing at the building base, eave or cornice line. On taller structures, different treatment of the first, middle and top stories should be used to define the three parts.
  - (d) The base should visually relate to the proportion and scale of the building. Techniques for establishing a base may include richly textured materials (e.g., tile or masonry treatments), darker colored materials, mullions, panels, reveals and/or enriched landscaping.
  - (e) Tops take advantage of the visual prominence of a building's silhouette. Techniques for clearly expressing a top may include cornice treatments, roof overhangs with brackets, richly textured materials (e.g., tile, masonry or fluted concrete), and/or differently colored materials. Colored "stripes" are not acceptable as the only treatment.
  - (f) Façades should reflect the quality and integrity of the underlying structure in a clear and consistent manner.



*Building design and detailing should reflect the underlying structure and give definition to vertical modules.*

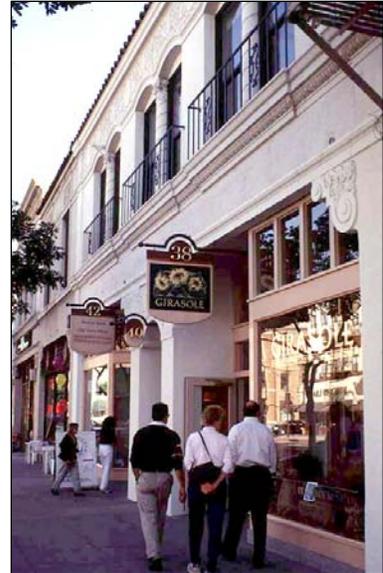
- (g) Architectural elements that define scale and organize space are encouraged; façades should display a sense of order.
- (h) Building façades shall be designed to give individual identity to each vertical module, structural unit or component by using techniques such as:
  - Providing a deep notch between the modules



- Varying architectural elements between units (e.g., window color, roof shape, window shape, stoop detail, railing type, etc.)
- Providing porches and balconies
- Varying color or materials of each individual module within a harmonious palette of colors and materials, etc.

## 6. Building Elements

- Buildings should incorporate architectural details and elements that reduce building scale at the street level, especially along pedestrian walkways. Awnings, canopies, arbors, arcades, colonnades, trellises, etc. are effective in this regard. The appropriate use of other architectural details, including reveals, course lines, decorative cornice, columns, etc., is also encouraged as a means of creating interest, variety, and distinctive design. Details should reflect the structural and material integrity of the building; overly gratuitous ornamentation is discouraged.
- The fenestration (design and pattern of doors, windows, awnings, canopies, etc.) should be proportioned to, and integrated with, the façade modulation of columns and beams and other similar elements. Clear vertical and/or horizontal hierarchy and patterns in the placement of openings (doors, windows, awnings, canopies, etc.) on the façade should be established.
- The project design should improve the reality and perception of pedestrian safety and security with elements such as easily identifiable entrances, retail windows, pedestrian-scaled building massing and unique architectural features.
- Retail storefronts should have large display windows oriented toward the public street or major pedestrian corridors.
- Storefront windows shall not be obscured.
- Mansard and nearly vertical roofs should be avoided.
- Stairs, balconies, porches and patios should be designed such that they are integrated into the overall design of the building.
- Buildings with angled corners, plazas, or other architectural feature are encouraged at corner locations to help anchor the intersection. Building corners may be emphasized through elements such as towers, domes or entries.
- Vertical architectural elements such as towers should be used as focal points.
- Gutters and downspouts shall be concealed, unless designed as a decorative architectural feature.

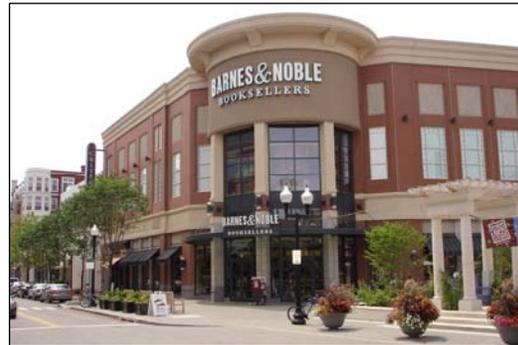


*Pedestrian signage, large display windows and clearly marked entries contribute to a successful pedestrian-oriented retail environment.*



## 7. Building Entries

- (a) Main entries to buildings should be clearly demarcated, and be visible and accessible from the street, pedestrian corridors and/or transit stops. Secondary entries may be from parking areas.
- (b) Building entries should read as such and be integrated with the overall building form. Variation in building height, wall plane, roof treatment, window placement, architectural detailing, etc. should define and emphasize public entries. Variation in material, texture and/or color is also recommended as a means of identifying building entries.
- (c) Entrances to upper story uses shall be clearly distinguishable in form and location from ground floor retail entrances.
- (d) Entries should be open, inviting and highly visible. However, entrances should comprise no more than one-third of the ground floor façade or 15 feet, whichever is less. Retail entrances should not be recessed more than three (3) feet in depth and be located no more than 50 feet apart.
- (e) Corner entrances should be provided in corner buildings.
- (f) Building entrances should be enhanced with:
  - Colored and textured paving
  - Accent plants in pots and planters
  - Awnings and trellises that provide shade and accent architecture



*In large-scale mixed use and commercial developments, locate entrances prominently within the building façade so they are visible from the street.*

## 8. Architectural Style

- (a) Creation of a unique North City can be achieved with varying approaches to stylistic unity:
  - Projects that have a single architectural style or theme should be well designed in relation to the elements of that style.
  - Projects that have varied architectural styles should create a harmonious, but not monotonous, environment through compatible massing, colors, materials and building form. Buildings or building complexes may have differing architectural styles, materials, colors and forms that work together in creating unity with variety.
- (b) Innovation in desert-sensitive architectural design is encouraged.



- (c) The exterior building design, including roof style, color, materials, architectural form and detailing, among all buildings in a complex and on all elevations of each building, should achieve design harmony and continuity within itself and with its surroundings.
- (d) Each new addition or remodel should be stylistically consistent with the original style of the building. For example, “Spanish” details are consistent with stucco buildings and Mission tile roofs, and should not be used on a contemporary building.
- (e) Historic detailing on otherwise contemporary style buildings is strongly discouraged, such as using oversized (too large or out of scale) crown moldings or cornices to make a building appear “Mission” Style.

### 9. Building Materials and Colors

- (a) Building materials should reflect quality and durability as well as consistency, where possible, with the materials used throughout the development. Materials that have no relationship to the architectural style should not be used.
- (b) Backs of buildings should use similar materials as fronts of buildings; however, less expensive and more utilitarian substituted materials are acceptable, provided they are compatible with the overall design.
- (c) Materials provide texture and color and therefore should influence the choice of other colors.
- (d) The colors chosen should accentuate the architectural details of the building and be consistent with the architectural style.
- (e) The Architectural Review Committee shall evaluate color and material selection in their review.

### 10. Open Space, Plazas and Courtyards

- (a) **Mixed use and commercial** development shall landscape a minimum of 10% of the site area, not including setbacks. In **industrial** development, this requirement is 5%.
- (b) Open space areas shall be clustered into larger landscaped areas rather than being distributed into areas of low impact, such as at site and building peripheries, behind a structure or in areas of little impact to public view or use.
- (c) Areas intended for public gathering in mixed use and commercial developments and intended for employees in office and industrial developments shall be designed as ‘outdoor ‘rooms’ or ‘oases’ with appropriately scaled thematic furniture and amenities. These spaces shall be designed to protect against the natural elements such as the sun, wind and sand. These spaces should have amenities including:
  - Lush landscaping in pots and planters, and planting areas
  - Outdoor dining areas
  - Durable seating (plastic or petroleum-based resin seating and planters are prohibited)
  - Decorative bollards
  - Enhanced paving and planters
  - Decorative water features



- (d) Fountains in areas of public contact shall use potable water. Decorative water features using reclaimed water may be used in other areas where they function as visual elements, such as in gateways and building frontage design elements.
- (e) Materials with a variety of texture, color and form shall be used to create integrated landscape patterns and themes along street frontages. Plant material in pots, planter boxes and hanging baskets, in combination with ground plane plantings, is encouraged along commercial frontages.



*Decorative pedestrian-oriented site amenities, such as seating, planters and pots, fountains or water features, and tree grates and tree guards are desirable in mixed use and commercial settings.*



*Plazas, courtyards and pedestrian areas function as 'oases' or 'outdoor rooms' in mixed use and commercial developments.*

## **II. Setback Landscaping**

- (a) All setback areas shall be landscaped with softscape and hardscape features.
- (b) In **commercial or mixed developments**, a minimum of 10 feet of the required street yard setback and 5 feet of the interior and rear yard setbacks adjacent to the property line shall be planted with trees and a mix of deciduous and evergreen shrubs, vines, cacti and groundcovers. One evergreen tree shall be planted in the setbacks for every 40 feet of property perimeter.



- (c) In **industrial developments**, a minimum of five (5) feet of the required street yard setback and five (5) feet of the interior and rear yard setbacks adjacent to the property line shall be planted with trees and a mix of deciduous and evergreen shrubs, vines, cacti and groundcovers. One evergreen tree shall be planted in the setbacks for every 50 feet of property perimeter.
- (d) Stone, gravel, cobble or other pervious paving material should be used for the remaining setback areas.
- (e) If the property is adjacent to the MSHCP Conservation Area, it shall be planted with MSHCP-approved materials (per Table 12-1) to prevent invasive species from migrating into the MSHCP Conservation Area.



*Non-vegetative ground cover interspersed with native plantings provides a low maintenance yet attractive setback.*

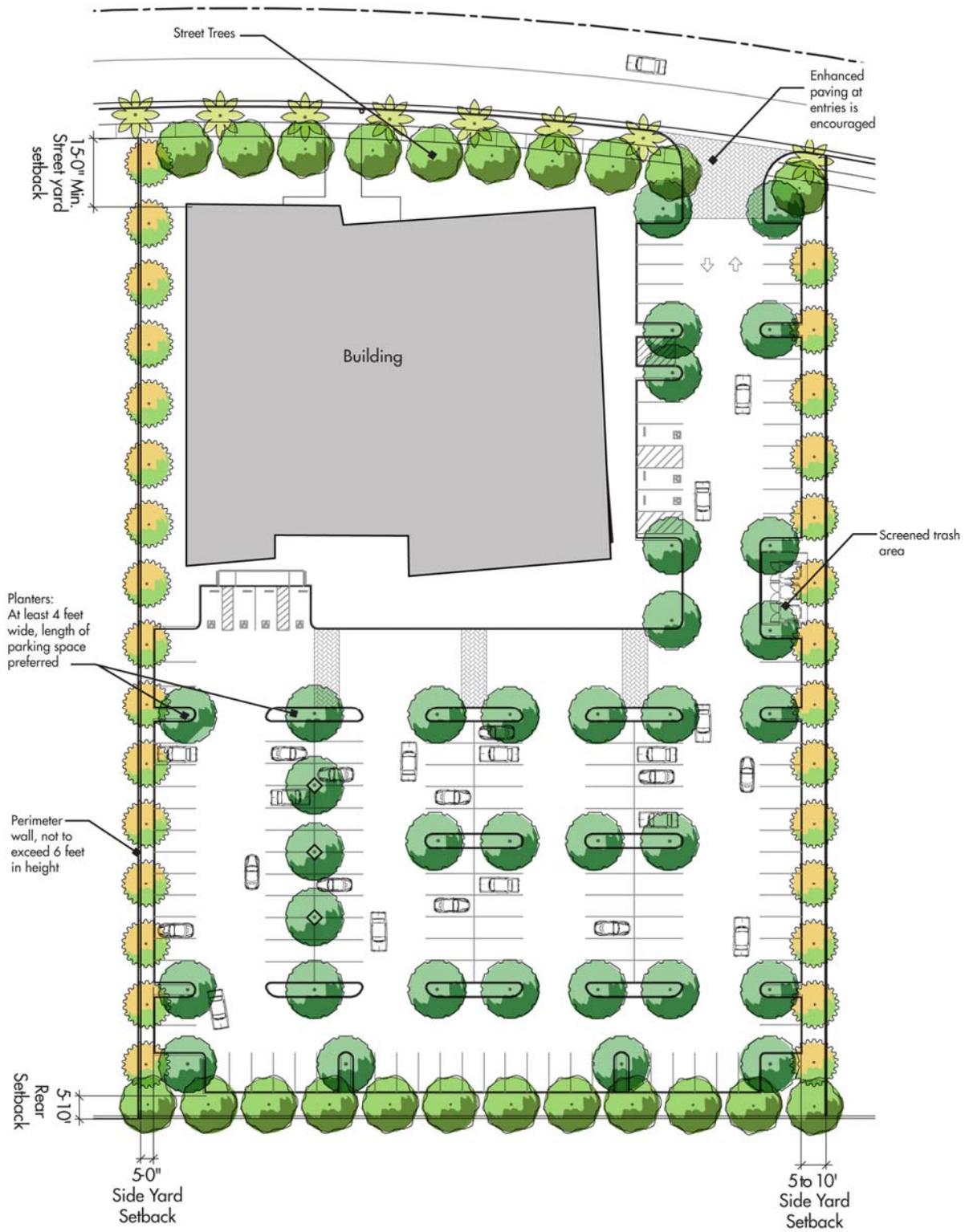
## 12. Parking Lot Landscaping

- (a) Parking areas shall be screened from street and adjacent property view.
- (b) The following minimum number of trees in parking lots shall be provided:
- One tree per six (6) parking spaces in **commercial and mixed use developments**.
  - One tree per 10 parking spaces in **industrial developments**.
- (c) All parking lot trees shall be planted in tree well planters according to the following standards:
- The tree well planters shall be of a size no less than 4 by 4 feet. Wells 4 by 9 feet, or the width of a parking space are preferred.
  - Tree well planters shall be protected by standard curbing and/or stationary wheel stops.
  - Planters should be designed to accept and treat parking lot storm water runoff.
- (d) Selected trees shall provide shade in the summer months. At maturity, the lowest branches shall be a minimum of six (6) feet from the ground.
- (e) Plant material, except for trees, located in parking lots shall not exceed 36 inches in height at full maturity.



*Parking lots should be landscaped to create an attractive environment.*



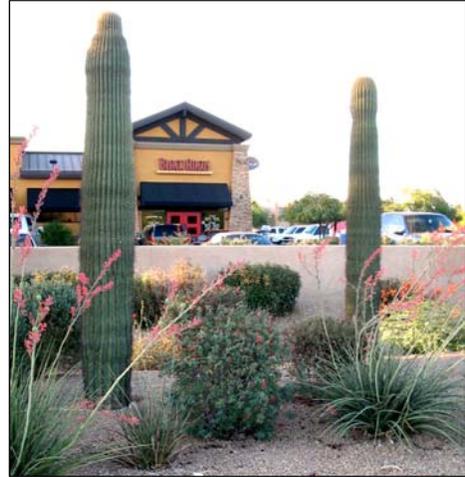


*Illustrative site plan showing parking lot and setback landscaping.*



### 13. Walls and Fences

- (a) **Commercial or mixed use developments** adjacent to any residential district shall provide a 6-foot high wall along the shared property line(s). The maximum height of perimeter walls fronting a street shall be three (3) feet.
- (b) **Industrial developments** adjacent to any residential district shall provide a minimum 8-foot high wall along the shared property line(s). The wall height shall not exceed 12 feet. The maximum height of perimeter walls fronting a street shall be four (4) feet.
- (c) All walls shall be designed with a cap. Both sides of all perimeter walls shall be architecturally treated. Appropriate materials include decorative masonry, concrete, stone and brick.
- (d) Wall and fence materials shall be consistent throughout a project, architecturally compatible with the buildings, streetscape and surrounding neighborhood.
- (e) Shrubs and vines shall be planted along fence lines, perimeter walls and retaining walls.
- (f) Walls and fences shall be designed to minimize graffiti.



*Low walls in combination with landscaping can shield parking areas and neighboring developments.*

### 14. Site and Architectural Lighting

- (a) Lighting should be designed to satisfy both functional and decorative needs.
- (b) Lighting shall be used to provide illumination for the security and safety of on-site areas such as parking, loading, shipping and receiving, building entrances and pedestrian parkways. Consider *Crime Prevention Through Environmental Design* (CPTED) principles in light fixture placement. Security lighting should be placed and directed strategically to limit light pollution and glare.
- (c) Light fixtures should be compatible with the architectural character of the development. Landscape lighting shall be designed to complement and enhance architecture and landscape design. While some nondescript fixtures may be appropriate, significant use should be made of fixtures that have architectural value and accent the building and site.
- (d) Both building-mounted and freestanding fixtures may be used. Freestanding above-grade light fixtures should be mounted on concrete bases for stability and ease of maintenance.
- (e) All light fixtures shall be in compliance with CCMC Chapter 9.89 (Outdoor Lighting Standards) and be:
  - Hooded and directed downward to minimize light and direct glare impacts on neighboring properties and reduce impact upon dark skies
  - Directed to illuminate only the areas and elements intended, such as paths, entryways and focal elements



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- Shielded to avoid direct views to any unshielded light source from pedestrian or vehicular sight lines (light sources include freestanding and façade lighting, as well as interior light within ten feet of the structure's windows)
  - Shielded to direct light spillover away from the MSHCP Conservation Area. Lighting adjacent to the MSHCP Conservation Area shall have 100% cut-off capability
  - Equipped with an appropriate level of fixture dimming and cut-off capability (fixtures certified by the *International Dark Sky Association*)
- (f) Energy-efficient ENERGY STAR® certified lighting fixtures and equipment should be used. Energy-efficient means of lighting, including light sensors, low voltage lighting, fiber optics and solar lighting should be used where applicable. Timers or other controls should be used to assure that lights are on only when needed. Use light-colored surface material where additional light is needed to take advantage of higher reflectance values.
- (g) Non-decorative landscape light fixtures should be screened in and located behind landscape features when possible.
- (h) Light fixtures shall be at a maximum height of eight (8) feet when adjacent to residential areas. Floodlights are not permitted in areas adjacent to residential areas.

**15. Outdoor Displays and Storage, Equipment and Work Areas**

- (a) No retail sales, merchandise displays or work areas shall occur outside of building(s), except as approved by a Precise Plan of Design (PPD), design review, conditional use permit, or special use permit.
- (b) There shall be no outside storage of vehicles, trailers, airplanes, boats, recreational vehicles, or their composite parts; loose rubbish, garbage, junk, or their receptacles; tents, equipment or building materials in any portion of the lot. Building materials for use on the same premises may be stored on the parcel during the time that a valid building permit is in effect for construction.

**16. Trash Collection Areas**

- (a) At least one trash/recyclable materials collection area shall be provided for commercial projects. These trash/recyclable materials collection enclosure areas shall be easily accessible to retail and office tenants, including easy access for the disposal of materials and collection by refuse vehicles. In mixed use projects, separate trash/recyclable materials collection areas shall be provided for the residents and tenants.
- (b) All such required areas shall be enclosed and screened pursuant to the requirements of this section and in accordance with City standards.
- (c) Collection area(s) shall be enclosed on three sides by a 6-foot tall, decorative, capped, masonry wall. The wall materials shall be complementary in color and style to architectural components of the development they serve. The fourth side of the enclosure shall be enclosed with an opaque, self-latching gate.



### **17. Mechanical Equipment Screening**

- (a) All exterior mechanical equipment, except solar collectors, whether on a roof, side of a structure, or on the ground, shall be appropriately screened from public view. Equipment requiring screening includes, but is not limited to, heating, air conditioning and refrigeration equipment, plumbing lines, ductwork, and transformers.
- (b) Mechanical equipment shall not be permitted on any exposed portion of a pitched roof.
- (c) The method of screening shall be architecturally integrated with the primary structure in terms of materials, color, shape and size. Where individual equipment is provided, a continuous screen is desirable. For rooftop equipment, the screening materials shall be at least as high as the equipment being screened.
- (d) Ground-mounted utility equipment such as, but not limited to, cable television boxes, electric power transformers and distribution facilities, water pumps, and telecommunications facilities (not including pole-mounted equipment) shall be screened from view on all sides with landscaping, or solid masonry wall or similar permanent structure. Such masonry wall or structure shall be of a color and material that compliments the primary structure. Screening with wood, chain-link or similar fencing materials is not permitted.
- (e) Electric and other metering equipment and panels shall be enclosed and the enclosure painted to match adjacent building and wall surfaces.
- (f) Ladders for roof access shall be hidden and integrated into the building design.

### **18. Interface between Non-Residential and Residential Uses**

In the mixed use districts where non-residential uses abut residential uses, issues of privacy, safety and noise should be addressed using the following standards and guidelines:

- (a) To provide privacy for, and avoid significant shading of, adjacent residential properties, building massing of non-residential buildings shall be set away from residential uses. At residential edges, non-residential buildings should maintain low profiles with building heights stepped down to the height of adjacent residential uses incorporating architectural elements, such as gables or hip roofs, to reduce building mass.
- (b) Buildings shall be oriented to promote privacy for residential uses to the greatest extent possible. Windows in non-residential buildings should be oriented to avoid a direct line of sight into adjacent residential buildings or property.
- (c) In mixed use developments, residential windows, balconies or similar openings should face away from loading areas and docks.
- (d) Windows, balconies or similar openings should be offset so as not to have a direct line-of-sight into adjacent units within the development. In addition, units above the first story should be designed so that they do not look directly onto private patios or backyards of adjoining residential property or units.
- (e) Whenever adjacent residential and commercial uses can mutually benefit from connection rather than separation, appropriate connective elements such as walkways,



common landscaped areas, building orientation, gates and/or unfenced property lines should be employed.

- (f) Landscaping may be used to aid in privacy screening and as a buffer for residential development. Screening may consist of one, or more, of the following:
  - “Vertical” trees closely spaced
  - “Green” (vine-covered) solid or fenced walls
  - Hedges

Eighty percent of the screen (wall, hedge, fence, etc.) at the property line shall be opaque.

- (g) Noise or odor generating activities in general, and loading areas, trash and storage areas, and rooftop equipment in particular, should be located as far as possible from adjacent residential uses and not be located next to residential properties without fully mitigating their negative effects.

### 19. Vertical Mixed Use Buildings – Additional Standards and Guidelines

- (a) Vertical mixed-use buildings shall be designed with retail storefronts on the ground floor and residential uses above.
- (b) Separate site access, parking facilities, and building entrances shall be provided for residential and commercial uses.



*Residential and commercial components of vertical mixed use buildings should be clearly demarcated.*

- (c) Main entries to ground-floor retail uses shall be clearly demarcated, visible and accessible from the street and/or pedestrian walkways, and be clearly distinguishable in form and location from retail entrances. Secondary entries may be from parking areas.
- (d) Security gates should be considered for access to residential uses and residential parking areas.
- (e) A ground floor retail use shall have a minimum floor-to-ceiling height of 12 feet.
- (f) The architectural style and use of materials should be consistent throughout the entire mixed use development. Differences in use of architectural details may occur where the intent is to differentiate between the residential and commercial scale and character of the structure(s).

## 20. Industrial Uses – Additional Standards and Guidelines

Because of the size and scale of industrial buildings, it is especially important to consider design to ensure compatibility with other parts of the community. As a category of structure types, industrial buildings can present unattractive and monotonous façades with large blank wall surfaces, untreated or false fronts, or highly reflective and glaring surfaces.



*Use building articulation, change of wall planes, door and window treatments and other appropriate architectural detailing to create an interesting and individual design and diminish the massing of large industrial structures.*



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To promote site development that is pedestrian-friendly, properly buffered from surrounding uses, sufficiently landscaped, and surrounded by unsightly fencing, and to direct development into a cohesive design statement that is both functional and aesthetically appealing, the following design techniques can be used:

- (a) Industrial development should include a variety of building types and designs in addition to the concrete tilt-up type construction that is often used. Visual interest should be created with a variety of architectural styles and individual building details to avoid monotonous industrial neighborhoods and enliven the public's experience of the area.
- (b) Unbroken façades having lengths in excess of 100 feet without changes in wall planes are prohibited. Buildings should be designed with elements that relate to the human scale, and provide interest by adding shade and shadow patterns by incorporating the following components:
  - A defined building façade that delineates the base, middle and top of the building and incorporates structural or design elements to break wall expanses into smaller parts of the building
  - Windows, doors and other openings incorporated into the rhythm
  - Changes in building massing (e.g. change in wall planes or varying height)
  - Changes in building materials and colors
- (c) Emphasis should be placed on the design of the main building entry and its landscaping.
- (d) Pedestrian walkways and connections between plazas and landscaped open space areas for employees should be provided.
- (e) Convenient and controlled access for employees and visitors to parking areas should be provided.



## C. Design Standards and Guidelines for Residential Uses

The design standards and guidelines for residential uses are intended to identify appropriate and attractive design solutions to create high quality and visually appealing livable neighborhoods. Residential areas should be thoughtfully designed to create and frame outdoor spaces and enhance the architecture, street and neighborhood quality. The following design standards and guidelines apply to **single family** and **multi-family residential development** in North City.

### I. Preservation of Natural Site Features

- (a) North City has varied topography and a spectacular natural setting. The siting of residential structures shall be sensitive to this natural context and be compatible with the natural slope of the land. The location and design of residential units should maximize views from the units.
- (b) In hillside or sloping areas, street and building placement should follow contours rather than being placed at right angles to the prevailing slope.

### 2. Site Layout

- (a) New residential development should provide variety in the City's overall residential character. Elements that can contribute to the creation of a distinct image include the architecture, street layout and design, landscaping, integration of open space and entry treatment.
- (b) Views of surrounding open space and hillsides from common open space areas within a development should be preserved. This will expand the sense of openness, enhance the visual character and facilitate greater use of these common areas.
- (c) Varied placement of **single family residences** should be used to create visually interesting neighborhoods.



*Variation in massing, architectural detailing, and setbacks provides visual interest and an attractive street scene in small lot single-family developments.*



## Chapter 12: Design Standards and Guidelines

- (d) Individual buildings of **multi-family residential** and **clustered single-family housing** should be oriented toward open space areas, recreational facilities and enhanced landscape edges.
- (e) Rear alleys should be provided for accessing garages, off-street parking, utilities and trash facilities to facilitate development of **small-lot single family developments**.
- (f) In **multi-family developments**, ancillary structures and trash enclosures should be integral to the project design, and be placed appropriately and conveniently.

### 3. Building Design

- (a) Residential structures shall be designed to make the best use of available sun, light and shade. This can be accomplished in the following ways:

- Windows for natural light, create through airflow and promote natural cooling
- Trees, roofs with large overhangs, or other methods to shade structure(s), particularly over south-facing windows
- Covered patios and porches to buffer the building from heat gain
- Attic turbines for ventilation and energy-efficient heating and air conditioning systems



*Façade articulation, a second floor balcony, and landscaping lessen the visual impact of this two-story house.*

- (b) Building massing should be used to shelter courtyards, patios and other private and common open space areas from prevailing desert winds.
- (c) A multitude of building volumes, masses, setbacks as well as a variety of roof forms, including hips, gables and clipped gables should be included to vary the streetscape and reduce monotony.
- (d) All residential structures should possess articulated façades to provide depth and contrast and to avoid flat building façades, including
  - Recesses and recessed openings
  - Variations in plane and height



*Residential façades should be articulated to add visual interest.*



- Courtyards, balconies, porches, arcades, external stairs, architectural projections and other similar elements
  - Exterior architectural treatments, such as trim relief around windows, doors and garage doors
- (e) In **single-family development projects**, an assortment of unit designs should be included to create variety and interest.
- (f) The massing of larger **multi-family residential buildings** shall be broken down to give individuality to each unit within and convey a sense of “home.”
- (g) Each vertical module of units in **multi-family and attached housing** projects shall incorporate architectural features such as wall breaks, projections, distinct color schemes and individual roof treatments that help to distinguish the vertical modules.

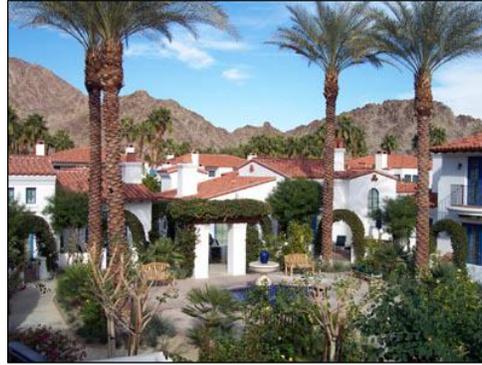
#### 4. Common Open Space Areas

- (a) Common open space areas shall:
- Be sited to take advantage of views and preserve views to significant architectural and landscape features within the site and in the surrounding area. The location of all open space areas should take into account climatic factors such as sun orientation and prevailing winds in a manner that maximizes use of sun and shade patterns, natural drainage and wind protection.
  - Where feasible, provide connections to open space systems, including public parks, multi-use trails and bicycle and pedestrian pathways.
  - Be used to visually unify a development, link development clusters, and provide enhanced pedestrian circulation within the development.
- (b) Direct access should be provided from as many individual units as possible to common open space, sidewalks and recreational facilities.
- (c) Trees and shrubs shall be located to delineate gathering spaces into ‘outdoor rooms’ and to provide shade in open space and recreation areas.
- (d) Enhanced paving, such as colored and/or textured concrete, that complements the architecture and landscape palette should be used in common areas.
- (e) Common areas, including open gathering areas and pedestrian walkways, shall be well lit within the requirements established in CCMC Chapter 9.89 (Outdoor Lighting Standards).



*Well-designed landscaping, lighting and architectural detailing in common and private spaces create a welcoming feel for multi-family units.*





*Building layout, landscaping, fountains contribute to the 'oasis' feel of common open space areas.*

## 5. Single Family Garage Placement and Design

- (a) Varied driveway locations and garage location and orientations should be used to break up repetitive curb cuts and yard patterns. No more than three consecutive homes shall have the same garage style.
- (b) The garage placement (in front half of lot or in rear half of lot) and orientation (front entry or side entry or other alternatives) should be varied to create visual interest and avoid monotony.
- (c) All garages facing a public street shall be set back a minimum of five (5) feet behind the front wall plane of the residence.



*A side entry garage reduces its visual impact on the street.*



- (d) Detached garages should be located at the rear of the parcel. When garage access is provided from the front of the parcel, porte-cochères should be used to shield the view of detached garages from the street. When rear alleys are provided, garage access should be from the alley to minimize driveway lengths.
- (e) In addition to the typically used overhead garage doors, swinging (side-hung) garage doors should be utilized to provide variety in the street environment.



*Porte cocheres provide a gracious sense of entry as well as screen garages from view.*

## 6. Multi-family Parking Lot Landscaping

- (a) Parking areas shall be screened from street and adjacent property views.
- (b) A minimum of one tree per six (6) parking spaces shall be provided.
- (c) All parking lot trees shall be planted in tree well planters according to the following standards:
  - The tree well planters shall be of a size no less than 4 by 4 feet. Wells 4 by 9 feet, or the width of a parking space are preferred.
  - Tree well planters shall be protected by standard curbing and/or stationary wheel stops.
  - Planters should be designed to accept and treat parking lot stormwater runoff.
- (d) Selected trees shall provide shade in the summer months, and at maturity, the lowest branches shall be a minimum of six (6) feet from the ground.
- (e) Plant material, except for trees, located in parking lots shall not exceed 36 inches in height at full maturity.



*Parking lot landscaping should shield parking from public view.*

## 7. Setback Landscaping

- (a) All setback areas shall be landscaped with softscape and hardscape features.
- (b) Two evergreen trees shall be planted per **single family residential lot**.
- (c) A minimum of 10 feet of the required street yard setback adjacent to the property line on a **single family residential lot** shall be planted with evergreen trees and a mix of deciduous and evergreen shrubs, cacti, vines and groundcovers.
- (d) One evergreen tree shall be planted for every 25 feet of property perimeter for **multi-family residential development**.



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- (e) A minimum of 10 feet of the required street yard setback and 5 feet of the interior and rear yard setbacks adjacent to the property line in **multi-family developments** shall be planted with evergreen trees and a mix of deciduous and evergreen shrubs, cacti, vines and groundcovers.
- (f) Stone, gravel, cobble or other pervious paving material should be used for the remaining setback areas.
- (g) If the property is adjacent to the MSHCP Conservation Area, it shall be planted with MSHCP-approved materials (per Table 12-1) to prevent invasive species from migrating into the MSHCP Conservation Area.



*Front yard landscaping should be compatible with the primary structure.*



*Use landscaping in multi-family developments to visually soften the development and enhance the streetscape environment.*



## 8. Walls, Fences and Hedges

- (a) In the street yard setback, a solid wall, fence or hedge shall not exceed three (3) feet in height above grade. Walls constructed of natural-looking materials such as stone or stone veneer are preferred. Taller decorative fences, up to a maximum height of six (6) feet, may be constructed in the street yard setback if they are non-view-obscuring.
- (b) The solid wall or fence height shall not exceed six (6) feet in the rear and interior side yard setbacks. When adjacent to the MSHCP Conservation Area, open ornamental metal fences are required.
- (c) Both sides of all perimeter walls should be architecturally treated and be graffiti-resistant. Appropriate materials include ornamental metal grillwork, decorative masonry, stone and brick. Chain link is not considered a decorative material and shall not be used.
- (d) Wall and fence materials shall be architecturally compatible with the buildings, streetscape and surrounding neighborhood.
- (e) Shrubs and vines shall be planted along exterior fence lines, perimeter walls and retaining walls.



## 9. Site and Architectural Lighting

- (a) Lighting should be designed to satisfy both functional and decorative needs.
- (b) Lighting shall be used to provide illumination for the security and safety of on-site areas such as parking, loading, shipping and receiving, building entrances, common recreation areas and pedestrian parkways. Consider *CPTED* principles in light fixture placement. Security lighting should be placed and directed strategically to limit light pollution and glare.
- (c) Light fixtures should be compatible with the architectural character of the development. Landscape lighting shall be designed to complement and enhance architecture and landscape design. While some nondescript fixtures may be appropriate, significant use should be made of fixtures that have architectural value and accent the building and site.
- (d) Both building-mounted and freestanding fixtures may be used. Freestanding above-grade light fixtures should be mounted on concrete bases for stability and ease of maintenance.
- (e) All light fixtures shall comply with CCMC Chapter 9.89 (Outdoor Lighting Standards) and be:
  - Hooded and directed downward to minimize light and direct glare impacts on neighboring properties and reduce impact upon dark skies
  - Directed to illuminate only the areas and elements intended, such as paths, entryways and focal elements
  - Shielded to avoid direct views to any unshielded light source from pedestrian or vehicular sight lines (light sources include freestanding and façade lighting as well as interior light within ten feet of the structure's windows)
  - Shielded to direct light spillover away from the MSHCP Conservation Area. Lighting adjacent to the MSHCP Conservation Area shall have 100 percent cut-off capability
  - Equipped with an appropriate level of fixture dimming and cut-off capability (fixtures certified by the International Dark Sky Association).
- (f) Energy-efficient ENERGY STAR® certified lighting fixtures and equipment should be used. Energy-efficient means of lighting, including light sensors, low voltage lighting, fiber optics and solar lighting should be used where applicable. Timers or other controls should be used to assure that lights are on only when needed. Use light colored surface material where additional light is needed to take advantage of higher reflective values.
- (g) Non-decorative landscape light fixtures should be screened in and located behind landscape features when possible.
- (h) Light fixtures shall be at a maximum height of eight (8) feet. Floodlights are not permitted.



### **10. Trash Collection Areas**

- (a) Centralized trash/recyclable materials collection areas shall be provided for all **multi-family residential** development projects.
- (b) All trash/recyclable materials collection enclosure areas shall be easily accessible to residents and tenants, including easy access for the disposal of materials and collection by refuse vehicles.
- (c) All such required areas shall be enclosed and screened pursuant to the requirements of this section and in accordance with City standards. The collection area(s) shall be enclosed on three sides by a 6-foot tall, decorative, capped, masonry wall. The wall materials shall be complementary in color and style to architectural components of the development they serve. The fourth side of the enclosure shall be enclosed with an opaque, self-latching gate.
- (d) Shrubs and vines should be planted along the wall perimeter to screen the trash enclosures.

### **11. Mechanical Equipment Screening**

- (a) All exterior mechanical equipment, except solar collectors, whether on a roof, side of a structure, or on the ground, shall be appropriately screened from public view. Equipment requiring screening includes, but is not limited to, heating, air conditioning and refrigeration equipment, plumbing lines, ductwork, and transformers.
- (b) Mechanical equipment shall not be permitted on any exposed portion of a pitched roof.
- (c) The method of screening shall be architecturally integrated with the primary structure in terms of materials, color, shape and size. Where individual equipment is provided, a continuous screen is desirable. For rooftop equipment, the screening materials shall be at least as high as the equipment being screened.
- (d) Ground-mounted utility equipment such as, but not limited to, cable television boxes, electric power transformers and distribution facilities, water pumps, and telecommunications facilities (not including pole-mounted equipment) shall be screened from view on all sides with landscaping, solid masonry wall or similar permanent structure. Such masonry wall or structure shall be of a color and material that compliments the primary structure. Screening with wood, chain-link or similar fencing materials shall not be permitted.
- (e) Electric and other metering equipment and panels shall be enclosed and the enclosure painted to match adjacent building and wall surfaces.
- (f) Ladders for roof access shall be hidden and integrated into the building design.



## D. General Landscape Design Standards and Guidelines

Landscape design in North City should be sensitive to its natural setting. New development should be integrated into the natural environment by respecting the existing native habitat and unique natural systems. This is achieved by preserving a network of open natural areas and creating recreation spaces, urban streetscapes, parks and plazas that are designed and planted with an ecologically appropriate palette of materials. Landscape design guidelines and standards are set forth in this section to achieve this landscape concept.

### I. Landscape Design Intent

(a) Landscape design shall be used to:

- Enhance development by contributing to a pedestrian-friendly environment
- Provide a backdrop and visual setting for architecture and highlight important architectural elements
- Create focal points with color, scale and visual interest
- Provide shading and climate control
- Protect sensitive uses from excessive solar exposure, glare, wind, noise, dust, and odors
- Provide a unified appearance along street frontages and reinforce the street hierarchy
- Direct vehicular and pedestrian traffic
- Define building and parking area entrances
- Identify and shelter pedestrian walkways
- Provide respite from the built environment; soften and visually enhance blank walls
- Provide a buffer between neighboring properties
- Screen undesirable views and uses, including service structures and loading areas



*A mix of landscape and hardscape materials appropriate for the desert environment provide visual interest.*

(b) Landscape design plans shall be prepared by a landscape architect registered to practice in the state of California.

(c) Landscape shall be designed to encourage the use of drip irrigation and other low-flow irrigation methods, with no water overflow onto pavement, and such that wind does not blow irrigation water onto people, cars and pavement.



## 2. Plant Materials

- (a) Wherever possible, mature native trees should be preserved or relocated on site. Mature trees are defined as individual trees with a trunk diameter of greater than four (4) inches when measured four (4) feet above the finished grade.
- (b) Selected landscape materials shall be drought-tolerant and low maintenance.
- (c) Plant materials listed in the plant material palette (Table 12-1) shall be used, as well as approved plants listed in the Coachella Valley Water District's (CVWD's) *Lush and Efficient Landscape Gardening* book and in the MSHCP are also appropriate.
- (d) Vegetative turf shall only be used in parks and recreation areas or as an accent material in limited quantities. Artificial turf may also be used as an accent material.
- (e) Both deciduous and evergreen trees shall be planted to provide seasonal interest and a variety of texture, color and form. In general, deciduous trees should be placed on the south and west sides of structures and outdoor gathering areas to provide summer shade and winter sun.
- (f) Woody plants shall be appropriately sized and placed on site to allow them to reach their natural size and to reduce the need for pruning and trimming.
- (g) Plants selected as windscreens to provide protection from wind should have dense, low, non-brittle branching material.
- (h) Plant species with seasonal fruit and excessive leaf drop and sap shall not be planted in public areas.
- (i) Plants with similar soil, water and sun exposure needs should be grouped to conserve water and encourage optimal growth.
- (j) All required trees shall be a minimum of 24-inch box size. Specimen trees used to emphasize major focal points and project entries shall be 36-inch box or larger.
- (k) A root barrier shall be used around all trees planted within seven (7) feet of a property line or public sidewalk.
- (l) Planting in landscaped setback areas shall not obstruct views into retail display windows. In these areas, the height of plant material, other than trees, shall not exceed 36 inches for security and safety.
- (m) Plant material shall not interfere with site lighting or restrict access to utility equipment or emergency apparatus, such as fire hydrants or fire alarm boxes.
- (n) Locally grown landscape material should be selected to promote plant health after installation.
- (o) All landscaped areas shall be kept free of invasive weeds.



**Table 12-1: Plant Material Palette**

	Characteristics								Growth Rate			Location										
	Evergreen	Deciduous	Sun	Partial Shade	Shade	Height	Width	Flower Color	MSHCP Approved	Fast	Moderate	Slow	Parking Lot	Landscape Setback	Street Tree	Median	Open Space/Park Area	Wind Break	Freeway Parkway	Gateway/Specimen	Residential	
<b>Trees</b>																						
Acacia greggii (Catclaw Acacia)						20'	15'	Y														
Acacia baileyana (Bailey Acacia)						30'	40'	Y														
Acacia salicina (Willow Acacia)						25'	15'	W														
Acacia saligna (Blue Leaf Wattle)						20'	20'	W														
Albizia julibrissin (Silk Tree)						40'	50'	V														
Arbutus Unedo (Strawberry Tree)						20'	30'	W														
Brahea armata (Mexican Blue Palm)						25'	10'	W														
Butia capitata (Pindo Palm)						15'	15'	-														
Caesalpinia cacalaco (Cascalote Tree)						20'	20'	Y														
Chamaerops humilis (Mediterranean Fan Palm)						15'	15'	-														
Chilopsis linearis (Desert Willow)						25'	15'	P														
Chitalpa X tashkentensis (Chitalpa)						25'	25'	W, P														
Cotinus coggygria purpureus (Smoke Tree)						25'	25'	P														
Cupressus arizonica (Arizona Cypress)						30'	15'	-														
Cupressus sempervirens (Italian Cypress)						60'	8'	-														
Dalea spinosa (Desert Smoke Tree)						20'	15'	V														
Dalbergia sissoo (Indian Rosewood)						40'	40'	W														
Elaeagnus augustifolia (Russian Olive)						20'	15'	Y														
Eucalyptus microtheca (Coolibah)						30'	25'	-														
Fraxinus uhdei "Majestic Beauty" (Evergreen Ash)						30'	30'	-														
Koelreuteria paniculata (Goldenrain Tree)						40'	25'	W														
Lagerstroemia indica (Crape Myrtle)						25'	25'	P, V														
Lysiloma watsonii var. thornberi (Feather Tree)						20'	15'	W														
Olea europaea (Fruitless Olive)						25'	25'	W														
Olneya tesota (Ironwood Tree)						25'	30'	L														
Parkinsonia aculeata (Mexican Palo Verde)						30'	20'	Y														
Parkinsonia floridum (Blue Palo Verde)						30'	20'	Y														
Parkinsonia microphylla (Yellow Palo Verde)						20'	20'	Y														
Parkinsonia x. Desert Museum (Desert Museum Palo Verde)						30'	30'	Y														
Phoenix dactylifera (Date Palm)						70'-80'	20'	-														
Pinus edularica (Afghan Pine)						35'	25'	-														
Pinus pinea (Italian Stone Pine)						40'	25'	-														
Pistacia chinensis (Chinese Pistache)						35'	30'	-														
Pithecellobium mexicanum (Mexican Ebony)						30'	30'	W														
Prosopis chilensis (Chilean Mesquite)						40'	30'	-														
Punica granatum (Pomegranate)						20'	15'	R														
Quercus ilex (Holly Oak)						25'	30'	-														
Quercus suber (Cork Oak)						35'	35'	-														

B – Blue  
O – Orange

P – Pink  
R – Red

V – Violet  
W – White

Y – Yellow  
M – Multi-colored



Chapter 12: Design Standards and Guidelines

**Table 12-1: Plant Material Palette (Cont'd.)**

	Characteristics								Growth Rate			Location										
	Evergreen	Deciduous	Sun	Partial Shade	Shade	Height	Width	Flower Color	MSHCP Approved	Fast	Moderate	Slow	Parking Lot	Landscape Setback	Street Tree	Median	Open Space/Park Area	Wind Break	Freeway Parkway	Gateway/Specimen	Residential	
<b>Trees (Cont'd.)</b>																						
Quercus virginiana (Southern Live Oak)						40'	60'	-														
Rhus Lancea (African Sumac)						20'	25'	-														
Sophora secundiflora (Texas Mountain Laurel)						15'	15'	V														
Trachycarpus fortunei (Windmill Palm)						30'	10'	-														
Vitex agnus-castus (Chaste Tree)						25'	25'	V														
Washingtonia filifera (California Fan Palm)						60'	20'	-														
Washingtonia robusta (Mexican Fan Palm)						50'	10'	-														

**Shrubs and Cacti**

Abutilon palmerii (Desert Abutilon/Indian Mallow)						5'	5'	P														
Agave spp.						3'-10'	3'-10'	O														
Agave murpheyi (Murphey's Agave)						2'-4'	2'-4'	-														
Agave parryi (Parry's Agave)						2'	2'	-														
Arctostaphylos densiflora 'Howard McMinn' (Manzanita)						5'-6'	5'	W														
Artemisia spp. (Sage)						2'-3'	2'-4'	M														
Atriplex hymenelytra and A. canescens (Desert Holly, Saltbush)						2'	3'	Y														
Baileya multiradiata (Desert Marigold)						2'	1'	Y														
Buddleia marrabifolia (Woolly Butterfly Bush)						5'	5'	Y, O														
Bulbine frutescens (Bulbine)						2'	2'	P, V														
Caesalpinia gilliesii (Yellow Bird of Paradise Bush)						8'	6'	Y														
Calliandra californica (Baja Feather Duster)						6'	4'-5'	R														
Cassia artemisioides (Feathery Cassia)						5'	4'	Y														
Cercocarpus betuloides (Mountain Mahogany)						8'	8'	-														
Cistus species (Rockrose)						3'	8'	W														
Chrysactinia mexicana 'Gray' (Damianita)						2'	2'	Y														
Convolvulus cneorum (Silver Bush Morning Glory)						4'	4'	W														
Cotoneaster species (Cotoneaster)						1'-4'	2'-5'	M														
Dalea psoraleum schottii (Indigo Bush)						4'	3'	P														
Dasylium wheeleri (Desert Spoon)						4'	4'	W														
Dicliptera resupinata (Dicliptera)						2'	2'	P, R														
Echinocereus engelmannii (Hedgehog Cactus)						2'	3'	P, R														
Elaeagnus pungens (Silverberry)						10'	10'	Y														
Encelia farinosa (Brittlebush)						2'-3'	3'-4'	Y														
Ephedra aspera (Mormon Tea)						3'	3'	Y														
Eriogonum fasciculatum (California Buckwheat)						3'	3'	W														
Eriogonum ubellatum (Sulfur Flower)						18"	3'	Y														
Euphorbia rigidis and Euphorbia characias (Gopher Purge)						3'-6'	4'	Y														
Fallugia paradoxa (Apache Plume)						3'-6'	5'	W,P														

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**Table 12-1: Plant Material Palette (Cont'd.)**

	Characteristics								Growth Rate			Location										
	Evergreen	Deciduous	Sun	Partial Shade	Shade	Height	Width	Flower Color	MSHCP Approved	Fast	Moderate	Slow	Parking Lot	Landscape Setback	Street Tree	Median	Open Space/Park Area	Wind Break	Freeway Parkway	Gateway/Specimen	Residential	
<b>Shrubs and Cacti (Cont'd.)</b>																						
Ferocactus (Barrel Cactus)						2'	3'	O														
Forestiera neomexicana (New Mexican Privet)						8'	8'	-														
Fouquieria splendens (Ocotillo)						15'	8'	R														
Genista (Sweet Broom)						3'	10'	Y														
Hesperaloe parviflora (Red Yucca)						3'	3'	R														
Hibiscus denudatus (Desert Hibiscus)						3'	6'	P														
Hyptis emoryi (Desert Lavender)						5'-8'	8'	V														
Juniperus spp.						1'-15'	6'	-														
Larrea tridentate (Creosote Bush)						4'-8'	4'-8'	Y														
Lavandula stoechas (Spanish Lavender)						3'	3'	V														
Leucophyllum candidum 'Thunder Cloud' (Texas Ranger)						3'	3'	P														
Leucophyllum frutescens (Texas Ranger)						4'-10'	4'-8'	P														
Lotus rigidus (Desert Rock Pea)						3'	1'	Y														
Lysiloma microphylla thornberi (Feather Bush)						12'	12'	W														
Muhlenbergia rigens (Deer Grass)						4'	4'	-														
Oenothera caespitosa (White Evening Primrose)						1'-6"	3'	W														
Opuntia spp. (Cacti)						2'-6"	1'-5"	P, R														
Petalonyx thurberi (Sandpiper Plant)						3'-6"	6'	W														
Potentilla cinquefoil (Shrubby Cinquefoil)						1'-4"	2'-4"	Y														
Psilostrophe tagetina (Texas Paperflower)						1'-2"	3'	Y														
Pyracantha species (Pyracantha)						5'-12"	5'-12"	W														
Rhus ovata (Sugar Bush)						6'	8'	W														
Rhus virens (Desert Sumac)						10'	12'	W														
Ribes aureum (Golden Current)						3'-6"	4'-6"	Y														
Rosa banksia (Banks Rose)						6'	6'	Y, W														
Rosa damascena (Damask Rose)						3'-6"	6'	P														
Rosmarinus officinalis (Rosemary)						2'	4'	V														
Rosmarinus officinalis 'prostratus' (Prostrate Rosemary)						2'	6'	V														
Ruellia spp.						3'-4"	3'	P, V														
Salvia spp. (Sage)						3'	4'	V														
Salvia apiana (California White Sage)						5'	5'	W														
Salvia farinacea (Mealycup Sage)						4'	2'	B														
Senna spp.						6'	6'	Y														
Simmondsia chinensis (Jojoba)						3'-6"	3'-6"	Y														
Santolina chamaecyparissus (Lavender Cotton)						2'	3'	Y														
Sphaeralcea ambigua rosacea (Apricot Mallow)						4'	3'	O														
Sphaeralcea ambigua (Globe Mallow/ Fuschia Red flower)						3'	3'	R														
Thymus spp.						2'	3'	B, V														

B – Blue  
O – Orange

P – Pink  
R – Red

V – Violet  
W – White

Y – Yellow  
M – Multi-colored



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**Table 12-1: Plant Material Palette (Cont'd.)**

	Characteristics								Growth Rate			Location										
	Evergreen	Deciduous	Sun	Partial Shade	Shade	Height	Width	Flower Color	MSHCP Approved	Fast	Moderate	Slow	Parking Lot	Landscape Setback	Street Tree	Median	Open Space/Park Area	Wind Break	Freeway Parkway	Gateway/Specimen	Residential	
<b>Shrubs and Cacti (Cont'd.)</b>																						
Vauquelinia californica (arizona rosewood)						10'-15'	10'	W														
Yucca spp.						2'	3'	W														
Yucca schidigera (Spanish Dagger)						3-12'	3'	W														
Zauschneria californica (California Fuschia)						3'	3'	R														
Zinnia acerosa (Desert Zinnia)						2'	3'	R, Y														

**Groundcover**

Acacia redolens (Prostrate Acacia)						1'-2'	15'	Y														
Achillea species (Yarrow)						1'	18"	Y/W														
Baccharis pilularis (Dwarf Coyote Bush)						18"	6'	-														
Centaurea cineraria (Dusty Miller)						1'	1'	Y														
Cerastium tomentosum (Snow in Summer)						8"	3'	W														
Convolvulus cneorum (Bush Morning Glory)						4'	4'	P, V														
Cosmos (Cosmos)						3'	1'	P														
Coreopsis grandiflora (Coreopsis)						4"	1'	Y														
Dalea capitata 'Sierra Gold' (Lemon Dalea)						2'	4'	Y														
Dalea greggii (Trailing Indigo Bush)						18"	6'	V														
Dalea parryi (Parry Dalea)						2'	3'	V														
Dudleya Spp. (Hen and Chicks, Rock Dudleya)						1'	2'-6'	R														
Gazania rigens (Sun Gold)						8"	2'	Y														
Helianthemum nummularium (Sunrose)						1'	3'	M														
Lantana montevidensis (Trailing Lantana)						1'-5'	6'	M														
Myoporum parvifolium 'Putah Creek' (Creeping Myoporum)						3"-6"	9'	W														
Mirabilis bigelovii (Wishbone Bush)						1'	4'	R, P														
Oenothera speciosa (Mexican Evening Primrose)						1'	3'	P														
Rosmarinus o. 'Prostratus' (Prostrate Rosemary)						2'	4'	B														
Santolina chamaecyparissus 'nana' (Lavender Cotton)						1'	3'	Y														
Sedum acre (Goldmoss sedum)						4"	1'	W														
Teucrium chamaedrys 'Prostratum' (Creeping Germander)						8"-10"	5'	L														
Thymus serpyllum (Creeping Thyme)						1'	1'	B														
Verbena goodingii (Mojave Verbena)						1'	4'	M														

**Vines**

Campsis radicans (Trumpet Vine)						20'	12'	R														
Hardenbergia violacea (Lilac vine)						10"	10'	V														
Verbena peruviana (Verbena)						1'	5'	M														
Vitis girdiana (Desert Grape)						1'	4'	W														

B – Blue  
O – Orange

P – Pink  
R – Red

V – Violet  
W – White

Y – Yellow  
M – Multi-colored



### 3. Hardscape Materials

- (a) Materials found on site should be reused in the landscape design to enhance the natural appearance and conserve resources.
- (b) Boulders and stones should be used to stabilize slopes and to provide visual interest. Boulders and stones from local sources are preferred, as they would more closely blend with the natural environment.
- (c) Non-vegetative groundcover such as stone, gravel, cobble and other pervious paving materials that allow air and water transfer should be used for paths, walkways and setbacks. Pervious paving materials may be used in driveways and parking lots when appropriate pollution mitigation measures, such as the installation of grease traps and bio-filters, are incorporated.
- (d) Groundcover color should compliment the building architecture and overall site design.
- (e) Compliance with ADA accessibility is required for all pedestrian areas.
- (f) Light colored materials should be used for paving to reduce heat absorption and limit heat gain in paved areas.
- (g) Recycled content materials, salvaged materials and sustainably harvested forest products should be used.
- (h) Non-vegetative groundcovers shall be installed at 2-inch minimum depth and 2 inches below adjacent paving, and maintained to provide complete ground coverage.

### 4. Landscape Irrigation and Maintenance

- (a) An approved efficient irrigation system shall be installed at the time of construction for all planted areas as follows:
  - Water-efficient irrigation systems such as low flow and drip equipment shall be used.
  - Rain sensors are required on all irrigation systems.
  - Reclaimed water irrigation systems are encouraged for development project sites that are 10 acres or more in size.
  - Rainwater harvesting and reuse strategies should be used.
  - It is recommended that City-maintained landscape areas and large-scale developments managed by homeowner's associations and development companies utilize centrally controlled, highly efficient irrigation systems.
- (b) Pollutants, chemicals or soil amendments that can harm human and ecological health shall not be used.
- (c) Compost and mulch (recovered from landscape trimmings when available) shall be used as a soil amendment to increase organic matter and retain soil moisture.
- (d) Mulch shall be added to all tree and plant beds.



## 5. Storm Water Management

- (a) Rainwater runoff from all on-site project surfaces, including parking lots, roofs and sidewalks, shall be treated and retained on-site. In addition, the amount of impervious surfaces shall be minimized to limit the quantity of water runoff for on-site retention. Extensive impervious paving in setbacks and other open space areas is strongly discouraged. Pervious ground cover shall be maximized to absorb rainwater, provide drainage to large trees on the site and reduce runoff.
- (b) Natural drainage systems shall be protected and maintained.
- (c) Grading and plan layout shall be designed to capture and slow water runoff.
- (d) Landscape-based water treatment methods instead of curb and gutter systems should be used. Examples include dry wells, vegetated swales and bio-retention basins.
- (e) All storm water management systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes.

## 6. Grading Standards and Guidelines

- (a) Grading should be limited to building pads and access roads in order to preserve environmentally sensitive habitat lands, to discourage scarring of hillside areas and to encourage the maximum retention of natural topographic features, such as natural drainage swales, slopes, rock outcroppings, vistas, and natural plant assemblages. Said grading limitation shall be required as a condition of approval for all discretionary approvals within the Hillside Overlay in the Specific Plan area.
- (b) The maximum surface area of undisturbed grade should be preserved.
- (c) Access road design shall respect the natural contours of the land to minimize grading requirements and the percentage of land devoted to streets.
- (d) Grading shall be designed to limit the height of retaining walls and perimeter walls to meet City's requirements.
- (e) Large manufactured slopes should be avoided in favor of several smaller slopes integrated throughout the project. Smaller slopes are less obtrusive, more easily maintained and can be used to add visual interest, preserve views and provide visual buffers where necessary.
- (f) Graded slopes and/or building pads should provide a variety of both slope percentages and slope direction in a pattern that is similar to existing or naturally occurring terrain, in contrast to sharp angles and constant direction of the contours.
- (g) Developments comprised of uniformly sized lots on rigidly manufactured slopes shall not be permitted.
- (h) Soils shall be retained on site and the quantity of cut-and-fill balanced when possible.
- (i) During construction, best practices shall be employed to prevent erosion, protect exposed areas and stabilize the soil as quickly as practical.



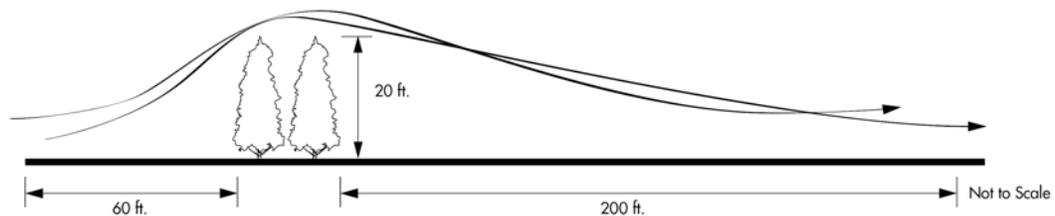
- (j) Disturbed slopes shall be stabilized and softened with planting and naturalistic stone groupings on 80% of the affected area at time of occupancy. Use a combination of small, medium and large-scale trees, shrubs, cacti, groundcovers and /or hydroseed.
- (k) Changes in grade shall not extend into the MSHCP Conservation Area.

## 7. Screening of Wind Turbines and Utility Transmission Towers and Lines

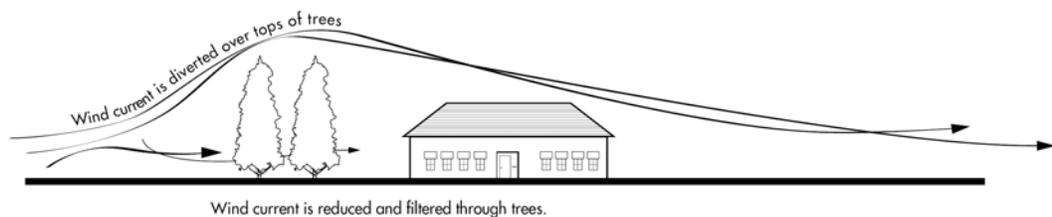
- (a) Walls that fence off the transmission corridor from public access and close-distance visibility should be built per the standards and guidelines in Section B.13 in this chapter.
- (b) To minimize the visual impact of off-site utility structures (transmission towers or wind turbines) on a development site, strategically plant tall trees on the development site to block or reduce their view.

## 8. Windscreens and Blow Sand Protection

- (a) Creating appropriate windscreens may be necessary to allow for successful development in North City. In general, a windscreen can protect an area ten times greater than the height of the windscreen. For example, if the height of a wall or the mature height of a hedge is four (4) feet, it will protect the area 40 feet out from its base. Windscreens shall be designed to protect only the specific development for which they are intended. The potential impacts of any large-scale interruptions in wind flow and sand transport on the surrounding fragile environment shall be minimized.



A 20 ft. high tree mass affects wind speed for 60 ft. on the windward side of the trees and 200 ft. on the leeward side.



*Trees and other planting can be effectively used as wind buffer for public areas.*



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- (b) Methods for providing effective protection from prevailing winds include:
  - Walls and fences
  - Shrubs and trees in tight rows and masses. Two rows of trees or shrubs spaced 15 feet apart offer a superior wind screen. The second row reduces wind forces by an additional 75 percent.
  - Earthen berms with stones and planted with indigenous shrubs are suitable for use in sandy soils.
- (c) Walls and fences shall be constructed of durable materials that will not deteriorate in strong wind and blowing sand conditions.
- (d) Ideal plant characteristics for planted wind screens are:
  - Close-knit branching pattern
  - Small leaves
  - Deep and/or tightly knit root systems
  - Flexible branching (non-brittle)
- (e) Deciduous trees should be regularly pruned to prevent high winds from damaging their branches. Removing small branches (“lacing”) throughout the interior of the trees will allow wind gusts to pass through without causing breakage.
- (f) Trees should be planted in narrow spaces created by building placement to break up or reduce wind tunneling between buildings.

**9. MSHCP Area Landscape Guidelines**

- (a) All properties within the MSHCP Conservation Area are subject to regulations and guidelines set forth by the MSHCP.
- (b) Any disturbance in the MSHCP Area will be mitigated through reserve management activities that will return the natural area to its existing condition, as feasible.
- (c) Plant material for soil stability shall be selected from the MSHCP approved plant material list.
- (d) Planting shall not be irrigated after becoming established.

