



CITY OF OAKLAND **DESIGN GUIDELINES** FOR THE CENTRAL ESTUARY







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1. Introduction



INTENT

The Central Estuary has served as part of Oakland's industrial employment base for over a century. More recent activity has seen another transformation of the area, in which artistic elements have brought in adaptive reuse, encouraged live-work uses and installed novel, decorative public art. This evolution came about specifically as the existing mix of industrial, warehousing, residential, and retail uses made the area relatively inexpensive, and provided vacant buildings with large floor plates where artists could stretch their artistic muscles and have the freedom to insert their own custom manufacturing activities. The area is now seeing another transformation in which artisanal industries have followed the artistic path. The development of several open spaces and the extension of the Bay Trail have made the area more livable, and highlight one of the Central Estuary's defining characteristics, its adjacency to the waterfront.

In an effort to create a cohesive district out of the disparate neighborhoods, the following Central Estuary Design Guidelines (and separate zoning regulations) will be used to direct future development. The general intent of the design guidelines is to retain the eclectic mix of industrial, warehousing, residential, and retail uses that define the character of the area, while encouraging its on-going informal evolution into a unique set of sub-districts that also take advantage of and enhance the area's waterfront, its historic character, and the fine-grained fabric of streets that define much of the Central Estuary. The sub-districts are referred to in the D-CE Zoning District chapter as: *Embarcadero Cove, Mixed Use Triangle, Food Industry Cluster, Jingletown/Elmwood, ConAgra, Owens Brockway, High Street Retail, Warehouse Wedge, Tidewater North,* and *Tidewater South (see Figure 2.1).*

The Central Estuary Design Guidelines embody the Visions, Goals and Objectives of the Estuary Policy Plan and the Central Estuary Area Plan, which aim to retain, encourage and support:

- A diverse and vibrant mix of uses;
- A destination waterfront;
- Complete, safe and clear transportation connections; and
- Infrastructure to support development.

These guidelines define ways to minimize land use incompatibilities and their resulting impacts; guide appropriate employment-intensive and commercial development; and promote the enhancement of frontages along streets and the waterfront.





» Figure 2.1: Central Estuary sub-districts

1.1 Applicability

The Central Estuary Design Guidelines are applicable from 19th Avenue to 54th Avenue and I-880 to the Estuary. The Central Estuary Design Guidelines are part of the Central Estuary Area Plan, which serves as a companion to the City's 1999 Estuary Policy Plan (EPP), and identifies steps to implement the EPP's policies.

The Central Estuary Design Guidelines shall apply to all projects in the applicable area requiring design review, as set forth in Chapter 17.101E of the Oakland Zoning Code.

The Central Estuary Design Guidelines have incorporated many of the existing guidelines contained in the HBX Design Guidelines Manual. These Central Estuary Design Guidelines shall supersede those in the HBX Design Guidelines Manual for the former HBX District located within the Central Estuary plan boundary, which is identified in the D-CE Zoning District chapter as the *Jingletown/Elmwood* sub-district.



1.2 Purpose of the Design Guidelines

These design guidelines supplement the regulations set out in the zoning districts for the Central Estuary, by providing further direction for project designs to meet the goals expressed for the character of new construction and alteration of existing facilities in the area. They highlight general considerations and offer examples, solutions, and techniques to address issues that may arise in the design process. These guidelines are not meant to supersede the regulations in the Municipal or Zoning Code. Conformance with these guidelines, and the design review criteria contained in Chapter 17.101E of the Oakland Zoning Code, is required to receive City approval for projects in the Central Estuary. Applicants may submit design proposals that deviate away from these guidelines, but must offer clear explanations that proposed solutions meet their intent.

1.3 How to Use these Guidelines

The Central Estuary Design Guidelines are intended to give residents, building designers, property owners, and business owners a clear guide to achieving development that improves the area's livability while retaining its diverse character. City staff will utilize these guidelines to determine project conformance in meeting the goals set for the Central Estuary.

1.4 Related Design Guidelines

All projects should review the surveys included in the City of Oakland's Crime Prevention through Environmental Design (CPTED) Security Handbook. Several guidelines reflect the concepts of CPTED, but all projects should review the full survey to ensure design incorporates elements that promote public safety.

For Residential Facilities with one or two primary dwelling units, or the residential portions of Mixed Use Development projects with one or two primary dwelling units, refer to the City of Oakland Small Project design Review Checklist Criteria for facilities with 1-2 Primary Dwelling Units, and the City of Oakland Interim Design Review Manual for One- and Two-Unit Residences.



2. Character-Defining Features



Character-defining natural and architectural features of the Central Estuary are illustrated here to help designers understand the context of the area and to encourage creative design solutions that reinforce the desired waterfront-oriented, creative, contemporary industrial aesthetic. Prominent characteristics of the Plan Area include its waterfront adjacency, access to rail, water and freeway transportation, and mixture of industrial, commercial and residential properties, as well as infrastructure such as bridges and wharves. New development is encouraged to embrace the area's industrial feel and eclectic charm.



And
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Many of the area's 19th and early 20th century factory buildings feature large floor-to-ceiling windows, skylights, and clerestory windows providing maximum access to sunlight. Building materials include brick, concrete, and corrugated metal. Although primarily utilitarian in form, building facades were often articulated by pilasters, decorative brick work and ornamental parapets, reminiscent of the craftsmanship of the time.

Contemporary projects have converted older buildings from their industrial origin to live/work spaces. Specialty food production, custom manufacturing and construction materials producers have replaced historic lumber milling and World War II manufacturing industries. The Jingletown neighborhood is incorporating arts among the industry. Residents have transformed local streetscapes with murals, sculptures and complementary landscaping providing a unique and eclectic aesthetic.

Jingletown Arts

See Section 4 Building Design (4.6 Blank Walls and 4.7 Façade Articulation and Architectural Detailing)

Neighborhood artists have come together to foster and nurture community, to encourage and promote the mutual exchange of ideas, creativity, resources, and expertise in the creation of area art installations such as murals, mosaics and sculpture. A diverse culture has long been at the heart of Jingletown, a burgeoning arts district.



Bridges, Piers and Wharves

See Section 3: Site Planning (3.9 Waterfront Access and Bay Trail)

- The wharf, pier and bridge structures along the estuary help define the character of the area.
- The San Francisco Bay Trail provides a key amenity in the area.













» Figure 2.0.a



∞ Figure 2.0.b



» Figure 2.0.c

Site Layout and Massing

See Section 3: Site Planning and Section 4: Building Design

- Jingletown neighborhood has smaller lot sizes with a mix of single-family homes among larger warehouse buildings. See Figure 2.0.a.
 - Buildings at 400 & 450 Lancaster St. are built around railroad tracks. See inset window in Figure 2.0.a.
- Con Agra, with towering grain silos, is located adjacent to shipping on the estuary. See Figure 2.0.b.
- The Historic California Cotton Mills Plant is bisected by the I-880 Freeway. See Figure 2.0.c.
- Non-uniform parcels—due to the irregular street grid and functional needs including industrial processes, waterfront access, railroads, and freeways—result in varied building shapes. See Figure 2.0.d.



∞ Figure 2.0.d



Structural Shape, Walls and Roofs – Industrial Buildings

See Section 4: Building Design

Industrial buildings are characterized by specific shapes, walls and roofs. Features observed throughout the Central Estuary include:

- Saw-tooth roofs for well-lighted space (see Figure 2.0.e);
- Monitors and roof projections create interesting roof lines (see Figure 2.0.f);
- Barrel vaulted roof and skylights (see Figure 2.0.g);
- Metal sash, roof with partial saw-tooth form; mix of corrugated metal and concrete (see Figure 2.0.h);
- Corrugated metal siding, large plain gabled sheds (see Figure 2.0.i);
- Industrial purpose and activity is exposed (see Figure 2.0.j);
 - Reinforced concrete, cylindrical forms (see inset window in Figure 2.0.j);
- Exposed stacks and elevators (see Figure 2.0.k);



∞ Figure 2.0.g



∞ Figure 2.0.h







» Figure 2.0.e



» Figure 2.0.f



∞ Figure 2.0.j



∞ Figure 2.0.k







Residential Buildings in the Jingletown Neighborhood

See Section 4: Building Design

There is an eclectic variety of residential building types in the Jingletown neighborhood. Dominant typologies are:

- Live/work conversion and expansion of existing warehouses (see Figure 2.0.p);
- New condominium buildings; features include:
 - Barrel roof and siding of corrugated metal and contrasting base material (see Figure 2.0.q)
 - Raised roof projections reflect both residential dormers and industrial monitors; large grid patterned windows reflect the steel sash of nearby early industrial buildings; views and pedestrian paths oriented to waterfront (see Figure 2.0.r)
- Small one-story and raised basement Victorian and early 20th century houses; mostly Queen Anne and Colonial Revival style; (see Figures 2.0.s and 2.0.t). Signature characteristics include:
 - Composition shingle roof with dormer
 - Corner porch with columns
 - Curved or angled bay windows
 - Small setbacks and long front steps to main floor over raised basement
 - Rustic siding, wood sash windows
 - Many blocks contain a mix of warehouse and single-family homes (see Figure 2.0.t)



Figure 2.0.q

63



∞ Figure 2.0.p



∞ Figure 2.0.t

Figure 2.0.s

63



3. Site Planning

Site Planning refers to the placement and relationship of buildings, open spaces, parking, and service areas on a site.

Projects in the Central Estuary will generally fall into one of two categories:

- Infill projects inserted into a recognizable context
- Projects that will set a new precedent

The design of infill projects should consider the discernible and predominant character of the area, which can include block size, lot size, massing, building height, and the context of existing uses. Projects that set a design precedent, which may occur on larger sites or in underutilized areas with few buildings, may deviate from the existing context to shape future development. For these projects, applicants should work closely with the City to ensure that the project appropriately responds to the future vision for the area, as defined in the Estuary Policy Plan, the Central Estuary Area Plan, and as further detailed in these guidelines.

3.1 Site Context

INTENT

Create a more cohesive development pattern.

Infill projects should account for the surrounding context. Smaller scaled lots and buildings dominate the Jingletown/Elmwood Area, which also falls under the D-CE-3 zone and new development should respect the compact feel of this part of the Central Estuary. The remaining land area is characterized by larger properties where new construction can set a precedent.

GUIDELINES

- **3.1.1** An infill project should not be designed in isolation when there is a discernible and predominant neighborhood development pattern along the block or across the street. A new building should respond to the desirable characteristics of the surrounding area based on its location within the Central Estuary. Characteristics may include neighboring block size, lot size, scale of buildings, massing and articulation, setbacks (front, side and rear), building placement, location of yards and windows, and use. See Figure 3.1.a.
- **3.1.2** Infill projects that span one block or more than one block should develop in distinct segments that reflect the scale of the neighboring blocks, lots and buildings. This is particularly important where smaller lot sizes predominate, such as in the Jingletown/Elmwood Area, Embarcadero Cove, the Mixed-Use Triangle, and the Food Industry Cluster, but are encouraged in other locations where a more pedestrian-oriented environment is desirable. See Figure 3.1.b.
 - Projects spanning more than one block should be broken up by streets, pedestrian pass-throughs or open spaces.
 - Projects spanning one or more blocks should orient buildings to address all sides of each block with active frontages.

ENCOURAGE



Figure 3.1.a: Projects on lots that are larger than neighboring lots should break up buildings into units that match the scale of existing neighboring buildings.



Figure 3.1.b: Orient buildings to different streets in order to break up the building into smaller segments as well as address all primary street frontages with the primary facade of the building.







- Figure 3.1.c: New buildings that are similar in scale and character create a cohesive street frontage in the Jingletown neighborhood.
- **3.1.3** To maintain a unified streetscape and a coherent sense of enclosure along a street with a recognizable positive context, both sides of a street should consist of buildings with complementary or comparable frontages (i.e., building length, height, massing, articulation, etc.). Taller buildings should be designed to step back their upper floors from the street frontage where they significantly exceed the height of buildings next door or across the street in order to harmonize building scales. See Figure 3.1.c and 3.1.d.
- **3.1.4** Projects that set a new precedent should determine the appropriate site plan and design in cooperation with the City to ensure that the envisioned development pattern is compatible with the surrounding area and the vision established for a given location in the Central Estuary.



Figure 3.1.d: Disparate building scales that can result where a land use change occurs at a street can be harmonized by stepping back the facade of taller buildings.

3.2 Building Orientation

INTENT

Define and activate streets and public spaces with active and engaging building frontages.

Building orientation refers to the manner in which buildings and site amenities are sited on a lot and how buildings address adjacent outdoor spaces such as streets, open spaces, parking lots and yards.

Lot Frontage – The Building Orientation guidelines that follow provide guidance for two types of lot frontages, which determine the location and orientation of buildings and site amenities:

- Primary frontages
- Secondary frontages

Primary lot frontages address public spaces that will likely see the most pedestrian activity or serve as important gateways. The primary lot frontage is the most public frontage that is adjacent to the water-front, public open spaces, and streets. The primary frontage should contain the primary building façade and main entrance.

Secondary lot frontages include those that front onto pedestrian passthroughs and secondary streets on corner lot conditions. Secondary frontages are less public spaces that see less activity than primary frontages. They may or may not be addressed by a building, and facades may not be as highly articulated. Corner lots or sites that encompass a block may have more than one primary frontage. Where primary and secondary frontages are unclear, applicants should work closely with the City to make a determination. See Figures 3.2.a and 3.2.b.

Building Frontage Types – These design guidelines also discuss the architectural design of four building frontage types that are appropriate for the Central Estuary. For standards for building frontage types refer to the D-CE zones. For further guidance on building frontage types, see the Building Design section of these design guidelines.





Figures 3.2.a and 3.2.b: Corner buildings should reflect their prominent location by directly addressing both streets they front. The building at top presents a clear primary frontage, but also provides a level of articulation on the secondary frontage. The building at the bottom shows a building that addresses both sides of the block with highly articulated primary frontages.





ENCOURAGE





Figure 3.2.c and 3.2.d: Punctuate corners with prominent building features such as main entries, stair towers or other architectural details.

GUIDELINES

General Guidelines

- **3.2.1** The primary frontage should be maximized by active building walls and addressed by the most active, articulated and public façade of a building.
- **3.2.2** The more active uses in a building should orient to the primary lot frontage. This includes storefronts, dining areas, lobbies, offices, living rooms, and the work portion of live-work and work-live units. More passive uses, such as parking lots and storage, should be relegated to the area of the lot generally away from the primary frontages or along secondary frontages.
- **3.2.3** Corner buildings should reflect their prominent location by directly addressing both streets they front. Where two streets are equally important, both streets should be considered as primary frontages unless a determination is made by the case planner and the Zoning Administrator to choose one as the primary frontage.
- **3.2.4** Sites that have primary lot frontages at opposite ends are encouraged to orient towards both frontages by:
 - Breaking up a project into multiple buildings and orienting their primary frontages to address each lot frontage;
 - Addressing both frontages with primary facades that contain multiple entrances to individual units;
 - Planning and orienting interior uses to allow dual primary facades and entrances where each can address the frontages; or
 - Creating interest on secondary facades with attractive massing and articulation.
- **3.2.5** Massing at street corners should visually define the space of the intersection. Prominent elements that are integral to the building, such as towers, chimneys, stairs, entries, etc.), can be used to create landmark features, which should be of an attractive and notable design. Any such elements should be well proportioned in relation to the average height of the building, other buildings at the intersection and the span of the intersection. See Figures 3.2.c and 3.2.d.
- **3.2.6** If buildings do not come directly up to street corners, buildings must form a comfortable and interesting space for the public to use, such as a plaza, outdoor seating area, or retail or building entrance.



Guidelines for Specific Uses

- **3.2.7** To the greatest extent possible, **buildings containing** warehousing, distribution and similar uses should front the street with a Public or Semi-Public Frontage type by placing more active uses such as offices, lunch rooms, conference rooms, etc. along the street. See Building Design guidelines and the individual zones for standards and guidelines on Frontage Types.
- **3.2.8** Orient **residential buildings** to lessen noise intrusion, with living space and outdoor spaces buffered from noise sources by the building mass.
- **3.2.9** Design units exposed to high noise levels with interior courtyards and patios that open into acoustically protected and shielded areas.
- **3.2.10 Waterfront buildings** should create a public open space along the waterfront and treat it as a primary frontage. See Figure 3.2.e.

ENCOURAGE



Figure 3.2.e: The waterfront should be considered a primary frontage. Buildings should address the waterfront with active interior uses and primary entrances to the maximum extent feasible.



3.3 Setbacks



 Figure 3.3.a: New buildings should avoid breaking an established historic building setback line.

ENCOURAGE



Figure 3.3.b: Consistent setbacks allow space for a semi-public zone of stairs, porches and yards that provide a clear transition between the public space of the street and sidewalk, and the private spaces inside residences.

ID INTENT

Create a predictable rhythm along the street that can impart a sense of harmony, cohesion and enclosure through consistent setbacks.

A setback establishes the distance between buildings at the front, rear, and side property lines. The setback is one tool to protect privacy, buffer impacts and create interest where necessary.

Existing front setbacks in the Central Estuary can vary greatly, from building walls at the property line to deep setbacks to vacant lots; these inconsistencies often create a muddled presence along streets due to their extreme variation.

Front setbacks require careful consideration in all conditions as they are part of the public face of a project and can vary greatly in their purpose and appearance. Front setbacks can accommodate a transition zone for uses that require some privacy and buffer from public spaces. Where privacy is not an issue, setbacks can accommodate activity such as dining, seating, display and gathering space. Rear and side setbacks need careful consideration where adjacent use are incompatible.

GUIDELINES

General Guidelines

- **3.3.1** Where there is a discernible and predominant front or side setback along a street, new buildings should respect the surrounding context. This is particularly important for new development in the Jingletown/Elmwood area. See Figure 3.3.a.
- **3.3.2** Where there is no discernible and predominant front or side setback along a street, new buildings should provide a sufficient setback that allows for the applicable treatments presented below. Refer to the Frontage Types for additional guidelines.
- **3.3.3** Frontage onto streets should include a legible series of transitions from public to private space. Porches, stoops, forecourts, lobbies, awnings and stairs provide opportunities for an inviting transition as well as allow for social interactions and more "eyes on the street" to increase safety. See Figure 3.3.b.



3.3.4 Where **industrial buildings** abut **residential uses**, setbacks should be of a depth that ensures that **industrial buildings** do not overwhelm the residential use and that noise, odors, noxious fumes and other such impacts are of a sufficient distance to minimize their effect.

Guidelines for Specific Uses

- **3.3.5** A front setback should define **residential** frontages to allow for a transition space between the public sidewalk and the private living area. **Residential** setbacks should be generously landscaped to create interest and buffer living spaces. Refer to the Private Frontage Type for additional guidance.
- **3.3.6** Non-residential buildings that are set back from the front property line should create interest along the sidewalk that is appropriate for the context of the street. Architectural elements (e.g., awnings, arcades, etc.), planters, landscaping, outdoor display, active uses such as seating and dining, or other elements can be utilized to create engaging frontages along the street. Refer to the Public and Semi-Public Frontage Types for additional guidance.
- **3.3.7** Extensive blank wall frontage, such as on distribution, manufacturing and warehousing uses, should be set back from the street to allow for accompanying landscaping. Refer to the Façade Articulation Architectural Detailing section and the Service Frontage Type for guidance.



3.4 Building Access Location

ENCOURAGE



Figure 3.4.a: Corners are important meeting points for pedestrians. Corner buildings should take advantage of this by siting main entrances at corners



Figures 3.4.b and 3.4.c: Where parking lots will be a main access point to a building, design parking lots to allow main entrances to also locate at the street or provide a secondary entrance at the parking lot.

INTENT

Locate main pedestrian entrances to directly address adjacent streets, the waterfront, public plazas, and open spaces.

Building entrances should be designed with an appropriate level of amenity and attractiveness for the intended use and user. Main entrances that directly address sidewalks and open spaces emphasize walking and bicycling by making buildings easily accessible to people using these modes of transportation, and even drivers are pedestrians once they leave their car. See the Building Access Design section under Building Design for further guidance. The inclusion of sidewalks, where they currently don't exist or are inadequate, will create a more attractive environment for walking and encourage on-street parking. In such cases, the location of entrances becomes essential in providing direction to persons approaching a building.

GUIDELINES

General Guidelines

- **3.4.1** The primary frontage of a building should contain the primary entrance(s) to the uses within the building. Secondary or more minor entrances may be located on secondary frontages along secondary streets, parking lots, alleys and pedestrian pass-throughs.
- **3.4.2** Primary entrances for multifamily, commercial, retail and industrial buildings are encouraged at important corners, where streets, the waterfront or plazas meet, to create definition at intersections. See Figure 3.4.a.
- **3.4.3** Building entrances should be directly connected (i.e., using the shortest practical path) to sidewalks, courtyards, pedestrian paths, walkways internal to the site from parking lots, pedestrian pass-throughs, transit stops, and public plazas and open spaces in areas of the Central Estuary where pedestrian activity is encouraged or will occur.
- **3.4.4** Increase natural surveillance and "eyes on the street" using Crime Prevention Through Environmental Design (CPTED) strategies such as locating doors/entrances and windows to look out on to streets and parking areas.
- **3.4.5** Where the majority of visitors will access a building from the parking lot, locate building entrances so that they can address both the parking lot and the street. See Figure 3.4.b. and 3.4.c.

3.5 Off-Street Parking



INTENT

Locate and design off-street parking to minimize the presence of inactive frontages along streets and public open spaces.

The Central Estuary's industrial uses typically require a significant amount of surface area for auto and truck circulation and parking. Locating these areas away from public spaces is preferred. Where this is infeasible, vehicular spaces should be designed with attractive and engaging frontages that provide a high level of interest along streets, the waterfront, public plazas, and open spaces.

Pedestrian walkways should be clearly distinguished from vehicular circulation. This is particularly important in areas where these various travel modes intersect, such as at driveway entrances and exits, loading docks, and in parking lots. Design solutions should always be sought that can help the driver see and take responsibility for exercising caution. Installation of a buzzer or horn sound is not an acceptable solution, as this puts the onus on the pedestrian.

GUIDELINES

Parking Location – General Guidelines

- **3.5.1** Minimize parking fronting onto streets, the waterfront, public plazas, and open spaces to the greatest extent feasible. Instead, the majority of the frontage facing a street, public open space and waterfront should be lined with buildings or other elements that activate the street. Options for parking locations, from most to least preferred, are:
 - At the rear of the property, where it may front onto an alley but does not front onto the waterfront, public plazas and open spaces, or pedestrian pass-throughs (See Figure 3.5.a);
 - 2) At the interior of the lot and lined with active uses
 - Within a parking podium partially below grade (See Figure 3.5.b);
 - 4) At the side of the property;
 - 5) Fronting a secondary street; or
 - 6) Parking (exterior and interior) fronting a primary street, but only if options 1 through 5 above are not feasible, due to the proposed use of the building.

ENCOURAGE



Figure 3.5.a: These attractively articulated garage entrances are accessed from an interior driveway, minimizing inactive frontage along the street.

ENCOURAGE



Figure 3.5.b: The stairs, porches and landscaping and the below-grade parking podium create a vertical and horizontal transition for the Private Frontage type, providing privacy for the living units and interest at the sidewalk.



AVOID



Figure 3.5.c: A bank of three, closelyspaced, single-car garages creates too much inactive frontage along the street.



Figure 3.5.d: The articulated frontage and separation of these two onecar garage entries minimize their prominence along the street. ENCOURAGE



Figure 3.5.e: This parking podium is designed as an integral part of the balcony and screened from the sidewalk by landscaping and a decorative grill.

3.5.2 Parking frontage along the waterfront, public plazas and open spaces and pedestrian pass-throughs is strongly discouraged.

3.5.3 Bicycle parking should be provided in accordance with the Planning Code and located adjacent to and visible from the primary building entrance wherever possible.

Parking Location – Guidelines for Specific Uses

- **3.5.4** For warehouse and distribution facilities, provide adequate on-site truck parking to prevent double parking and idling.
- **3.5.5** For parking garage entries serving multi-unit residential (i.e., duplexes, triplexes, etc.) fronting a primary street, apply a combination of the following:
 - Limit parking entries fronting a street where feasible to a maximum of two-car width residential garages per primary frontage (See Figure 3.5.c);
 - Minimize the impact of multiple garages by locating them away from each other and separated by a building with active uses such as living or working space (See Figure 3.5.d);
 - 3) On corner lots, distribute garage entries along multiple sides of the lot, rather than all along one side.

Podium Parking

- **3.5.6** Parking podiums along sidewalk, waterfront, public plazas and open space frontages should be lined with active ground floor uses, porches, stoops, or stairs and a landscaped setback. See Figure 3.5.e.
- **3.5.7** The landscape setback should screen the podium with a high level of detail and a variety of elements such as tall shrubs, landscape structures (e.g., decorative fences, walls, trellises, etc.), trees and ground cover to create a dynamic frontage.
- **3.5.8** Podiums should not extend beyond the main building façade unless they are designed as balconies and meet blank wall standards as defined for the associated frontage type in the zoning regulations.
- **3.5.9** Podiums should be designed as an integral, aesthetic frontage of the building. Openings may use decorative grills or landscape screens to create interested and prevent large, blank voids along the street.



Surface Parking

- **3.5.10** Incorporate safe, accessible, and distinct walkways within surface lots. See Figure 3.5.f.
 - The pedestrian walkway network should be clearly distinguished from vehicular circulation. This is particularly important in areas where these various travel modes intersect, such as at driveway entrances and exits, loading docks, and in parking lots. Design solutions should always be sought that can help the driver see and take responsibility for exercising caution. Installation of a buzzer or horn sound is not an acceptable solution, as this puts the onus on the pedestrian.
 - Walkways within parking lots should be raised to standard sidewalk height of 6 inches and provide a minimum 6-foot clear through-space from car bumpers, utilities, site furnishings, and landscape materials.
 - Where walkways bisect parking lots, travel lane crossings should be clearly delineated by at least one of the following methods: a contrasting color, pattern, material change, and/or a crossing that is raised slightly to form a "speed table." Paving materials should continue the material used for the pedestrian path.
- **3.5.11** Walkways within parking lots should lead directly to meaningful destinations, such as building entrances, sidewalks, plazas, open spaces and the waterfront.
- **3.5.12** Walkways within parking lots should be shaded by trees or landscape structures to provide comfortable pedestrian environments.
- **3.5.13** Parking lots greater than 24 stalls (approximately one quarter acre) should provide a tree canopy that will cover 50% of the lot at the time of the trees' maturity (approximately 10 years). This will affect the spacing of the trees depending upon the species and their growing habits. To effectively achieve this coverage, trees should be planted "orchard style" (i.e., evenly spaced throughout the parking lot).
- **3.5.14** Buffer elements and interior landscaping should be protected from car bumpers with wheel stops or a 6-inch curb. See Figure 3.5.g.
- **3.5.15** Decorative paving materials, such as stamped concrete or faux brickwork, can soften the appearance of driveways and parking areas. Also, the use of light-colored paving materials to help reduce heat islands and porous pavement to facilitate infiltration is also encouraged. See the Stormwater Management section of these guidelines.

ENCOURAGE



Figure 3.5.f: This attractively landscaped and curbed parking lot walkway leads pedestrians from their cars to a plaza, shops and restaurants.

ENCOURAGE



Figure 3.5.g: Ensure the survival of plants by protecting them with wheel stops or curbs.



3.6 Off-Street Loading, Service and Storage



Figure 3.6.a: Storage facilities should be sited away from the waterfront, streets and other public spaces.

Figure 3.6.b: This building on High

Street fronts the street with the active

ENCOURAGE

INTENT

Locate and design off-street loading, service and storage areas to minimize the presence of inactive frontages along streets and public open spaces.

The Central Estuary contains an extensive amount of off-street loading, service, and storage areas. These areas often create dead frontages along streets, the waterfront, public plazas, and open spaces. (See Figure 3.6.a). For new construction, off-street loading, service and storage areas should be minimized along streets, the waterfront, public plazas, and open spaces. Where off-street loading, service and storage areas must front onto streets, the waterfront, public plazas, and open spaces, they should be designed with attractive or engaging frontages that provide a high level of interest, as well as safety for pedestrians.

GUIDELINES

Loading Location

- **3.6.1** To the extent feasible, warehousing and distribution facilities should locate the more active uses of the building (e.g., offices, lobbies, conference rooms, etc.) along streets, especially primary frontages, public open space, and the waterfront with loading areas located along secondary frontages or to the rear of the lot behind the building. See Figure 3.6.b.
- **3.6.2** Ancillary loading and service facilities For loading and service areas that are ancillary to another use, preference for locations, from most to least preferred, should be in the order of:
 - At the rear of the property, where it may front onto an alley but does not front onto the waterfront, public plazas and open spaces, or pedestrian pass-throughs;
 - 2) Within the building envelope (See Figure 3.6.c);
 - 3) Within parking lots;
 - 4) Along secondary frontages; or
 - At the primary curbside street frontage but only if options 1 through 4 above are infeasible (double parking is not permitted by Oakland Municipal Code).



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- **3.6.3** Frontage along the waterfront, public plazas and open spaces, and pedestrian pass-throughs is strongly discouraged.
- **3.6.4** Early in the design of a building and its site, ancillary loading and service area location should also be coordinated with the appropriate service provider and the City's Public Works Agency.

Loading Design

- **3.6.5** Where feasible, one-way or direct-through access for loading and services is encouraged to effectively reduce their presence along street frontages. See Figure 3.6.d.
- **3.6.6** Clear right-of-way and parking restrictions signage should be provided where truck, auto, bicycle and pedestrian conflicts may occur within a parking lot or along the curb of a public street.
- **3.6.7** Loading areas and access lanes should be physically separated from parking via curbs, bollards, walls, raised planters, landscaping, distance and/or elevation changes in order to break up the perceived amount of paving. See Figure 3.6.e.
- **3.6.8** Bumper guards should be considered as part of the design of the building, not as an afterthought.

ENCOURAGE



Figure 3.6.d: Integrated into the building envelope, this one-way loading facility exits on the other side of the building, minimizing its impact on the street.

AVOID



Figure 3.6.e: Although the parking is separated from the loading area by a curb, buffer planting would create a more pleasant environment and the opportunity for stormwater features to mitigate the amount of paving.



3.7 Driveways

ENCOURAGE



Figure 3.7.a: Reducing curb radii where possible minimizes the pedestrian crossing distance across driveway areas, and requires cars and trucks to drive more slowly as they enter.

ENCOURAGE





Figures 3.7.b and 3.7.c: Alternatives for driveway treatments at sidewalks that create even walking surfaces. The alternative at top is preferable.

INTENT

Minimize the number and width of driveways to reduce potential conflict points between cars, pedestrians and bicyclists and create more even and continuous sidewalk surfaces.

Driveways to parking lots, off-street loading, service, and storage areas should be minimized in number and size as much as possible. Wide and frequent driveways take up a larger portion of the sidewalk, so driveway location and design should be addressed to minimize conflicts, ensure pedestrian and bicycle safety, and create more attractive frontages.

- **3.7.1** Locate and design driveways and ramps to minimize conflicts between vehicles, pedestrians and bicyclists, as well as with vehicles on adjacent streets. Minimizing driveways also creates more space for on-street parking, street trees, and street furnishings.
- **3.7.2** Driveway and entry widths should be narrowed in order to minimize their presence along streets. Encourage businesses to narrow driveway widths to reduce potential conflicts and create shorter crossing distances for pedestrians across driveway entrances. See Figure 3.7.a.
- **3.7.3** Uneven sidewalk surfaces should be avoided where driveway slopes cross sidewalks. Allow sidewalks to remain level and continuous to signal to drivers that they are crossing the pedestrian realm and must yield accordingly. See Figure 3.7.b.
- **3.7.4** Similarly, sidewalk paving patterns, color and materials should be continued across driveways to strengthen the understanding that cars are crossing the pedestrian space. See Figure 3.7.c.
- **3.7.5** The number of driveways to a site should be minimized.

3.8 Landscaping and Screening



INTENT

Landscaping, screens, walls and fences should create active, engaging and attractive street frontages and continue to define the enclosure of a street where buildings are not present.

Landscaping, screens, walls and fences can act as an effective buffer from less attractive uses fronting streets, the waterfront, public plazas, and open spaces. Typical cyclone and razor-wire fencing create an oppressive and unsightly barrier. See Figure 3.8.a. Since much of the area is fronted by inactive uses, screens, walls, and fences within the Central Estuary should be designed to engage streets, the waterfront, public plazas, and open spaces with a variety of detail and color, appropriate materials, diverse landscape elements, and ample lighting to improve the character of the Central Estuary. The area's artist and artisan community and the waterfront provide ready themes and inspiration for a higher level of design of these elements.

GUIDELINES

General Guidelines for Landscaping and Screening

- **3.8.1** To the maximum extent feasible, public open spaces, such as the waterfront, plazas and parks should have a perimeter that is unobstructed by fences or walls, to allow the free flow of activity to be seamless with surrounding active uses. See Figure 3.8.b.
- **3.8.2** Where inactive uses such as parking lots and service areas must be located adjacent to streets, the waterfront, public plazas, and open spaces, design landscaping, fences and walls to provide interest and a sense of enclosure. See Figure 3.8.c.
- **3.8.3** Landscaping and screening should provide a buffer, create a more attractive, shaded and comfortable microclimate at the street, and prevent glare from car and truck headlights and security lighting where pedestrian activity is expected.
- **3.8.4** Buffers should also incorporate a combination of elements such as trellises, arbors, art pieces and diverse planting to create variety and interest.
- **3.8.5** The use of drought tolerant and native plants is encouraged. Many California native plant species are adapted to little water during the dry summer, making their selection important for creating water conserving landscapes. Plants from other Mediterranean climates (Chile, South Africa, Australia and the Mediterranean countries) are also well suited for minimizing

AVOID



 Figure 3.8.a: Neglected cyclone fencing along the Estuary frontage.

ENCOURAGE



Figure 3.8.b: An unobstructed interface between the waterfront, Bay Trail, and uses that front them creates an inviting public space.

AVOID



Figure 3.8.c: The lack of a buffer at this parking lot creates an unattractive pedestrian environment along the street.



ENCOURAGE



Figure 3.8.d: Landscaping, a variety of materials and a well-articulated screen create interest along the sidewalk in front of this parking lot.

AVOID



Figure 3.8.e: The side yard fence breaks up the public transition zones of neighbors and creates a more privatized individual front yard that does little for neighborhood cohesion.



Figure 3.8.f: Low fences and open front yards allow the semi-public transition zone to define a more friendly and cohesive frontage along this neighborhood street.

water use. The East Bay Municipal Utility District provides a list of recommended plants suitable for summer dry climates, which is available at http://www.stopwaste.org.

General Guidelines for Walls and Fences

- **3.8.6** Visible screens, walls, and fences should contain a high level of articulation with a varied palette of elements including color, materials, lighting and changes in plane. See Figure 3.8.d.
- **3.8.7** Encourage artistic creativity in the design of screens, walls and fences throughout the Central Estuary, and maritime-related designs at the waterfront.
- **3.8.8** Screens, walls, and fences should be built out of attractive, longlasting materials, such as wood, masonry, stone and/or metal. Materials to avoid include unfinished concrete block. Chain link and razor-wire fencing should also be avoided, except where the Planning Director determines that trespassing may present a public safety hazard. See Figure 3.8.d.
- **3.8.9** Where walls and fences separate incompatible uses, they should take on the character of the more sensitive use. Walls and fences should be of an adequate height and thickness to buffer but not overwhelm the more sensitive use.
- **3.8.10** Walls greater in length than the blank wall maximums given for the associated Frontage Type in the zoning regulations should be articulated with architectural offsets, landscape pockets, or other similar features.

Guidelines for Specific Uses

Residential Screening and Fencing

- **3.8.11** For residential facilities, walls or fences higher than 3-1/2 feet should be avoided along primary frontages facing pedestrian pass-throughs to allow public surveillance and maintain openness where passages are narrow.
- **3.8.12** Where more consistent residential landscape setbacks occur, side yard fences should not extend past the main façade of the building in order to preserve continuous landscape setbacks where they exist. However, side yard fences may extend beyond the façade to modulate frontages where extreme disparities in setbacks occur. For example, where a residential building that is set back from the front property line is located adjacent to a warehouse built to a zero lot frontage, the fence may be used to average the setbacks in order to relieve this condition. See Figures 3.8.e and 3.8.f.



Screening Surface Parking

- **3.8.13** Parking lots fronting onto streets, public spaces, and the waterfront should be effectively screened to reduce their visual presence and screen vehicle headlights from these spaces. Use the shortest, least sight-limiting fence or wall appropriate for the situation.
- **3.8.14** Parking lot screening should be designed with a varied palette of landscape elements (as opposed to the mass use of a single plant) in order to create an interesting and attractive frontage for pedestrians. Elements can include landscape structures, low planting, trees, and lighting. See Figure 3.8.g and 3.8.h.
- **3.8.15** Screening of parking lots should not rely solely on a wall or landscape structure without vegetation. Shrubs, hedges and low walls should be at least 3 feet in height in order to screen the grill and headlights of vehicles.
- **3.8.16** The minimum width for a landscape buffer should generally not be less than 3 feet on the street, waterfront or open space side of any wall or fence.
- **3.8.17** Landscape structures, such as a trellis or a fence, should generally not be more than 8 feet tall. At a minimum, structures above 4 feet in height should be visually permeable and/or provide interest.

Screening Loading, Service and Storage

- **3.8.18** Sidewalks should be buffered from loading, service and storage areas with a landscaped setback and vertical screening by a wall or fence. Setback depths and screen heights should be sized to adequately buffer the type of truck activity planned for the site, with an encouraged minimum setback depth of 5 feet and minimum screen height of 6 feet. For example, large warehousing facilities serving semi trucks require a deeper setback and a taller screen than smaller scale businesses utilizing single-unit trucks.
- **3.8.19** Buffering should not rely solely on a wall or fence without landscaping along the sidewalk frontage. See Figure 3.8.i.
- **3.8.20** Fences should be articulated with a combination of materials, color, changes in plane, and landscape elements to provide complexity and interest along streets, the waterfront, public plazas, and open spaces.
- **3.8.21** All outside storage and utilities should be screened from view using fencing, walls and/or landscaping.

AVOID



Figure 3.8.g: This condition is an improvement over a parking frontage with no buffer, but a hedge may not create sufficient interest along large stretches of parking.

ENCOURAGE



 Figure 3.8.h: Dynamic planting creates more detail, color and shadow for a more interesting frontage.

AVOID



Figure 3.8.i: A solid metal wall communicates that there is no surveillance of activity on the sidewalk.



3.9 Waterfront Access & Bay Trail

AVOID



Figure 3.9.a: This nondescript and narrow waterfront access hides, rather than announces the connection to the waterfront.

ENCOURAGE



Figure 3.9.b: The ample width and attractive landscaping of this pedestrian pathway in the Jingletown/Elmwood area creates an inviting access point to the waterfront.

INTENT

Take advantage of the Central Estuary's proximity to the waterfront by highlighting and facilitating access to the waterfront and by extending the Bay Trail along the waterfront.

The waterfront is an important visual, recreational and social amenity that new development should promote and take advantage of. Locations adjacent to the waterfront should provide public access along waterfront sidewalks or boardwalks. Locations where streets terminate at the waterfront provide an opportunity to bring attention to these public access points and celebrate them.

- **3.9.1** All development within 100 feet of the shoreline is regulated by the San Francisco Bay Conservation and Development Commission (BCDC) and is required to provide public waterfront access either on-site or in-lieu public access near the site where on-site public access is not possible. See the BCDC website for more information: www.bcdc.ca.gov
- **3.9.2** New waterfront development should minimize impacts (i.e., visual, access and environmental) on the waterfront as well as to adjacent private properties.
- **3.9.3** New development adjacent to the waterfront should be designed to increase opportunities for the public to both view and access the waterfront area.
 - Where new development encompasses more than 300 feet of street frontage, mid-block pedestrian pass-throughs should be provided where feasible, to allow access to the waterfront.
 - Pedestrian pass-throughs should be a straight configuration that allows visibility from streets and the waterfront for safety and to highlight the waterfront access.
 - Pedestrian pass-throughs should be designed as an attractive space, at the very least containing attractive lighting and landscaping, and if possible, art installations. See Figures 3.9.a and 3.9.b. Seating and dining can be incorporated into larger spaces where appropriate for adjacent uses.
 - The minimum width for pedestrian pass-throughs should generally be no less than 15 feet to allow for a minimum clear through space of 10 feet and landscaping on either side.



- **3.9.4** Where access points terminate at the waterfront, special focus should be provided in order to clearly highlight and announce access points. Sculptures and other public art, and artistic elements that reflect the community's artist and artisan population, are encouraged. (See Figure 3.9.c).
- **3.9.5** Waterfront open spaces should provide attractive amenities for residents and visitors, which can include seating, tables, lighting, landscaping, bicycle racks and interpretive signage to activate the waterfront and encourage social cohesion amongst residents and users. Functional artistic and custom elements are encouraged.
- **3.9.6** Uses in the Embarcadero Cove area should create more inviting outdoor spaces by consolidating parking lots and utility areas located adjacent to the water and the street to make space for plazas or pocket parks.
- **3.9.7** Adjacent waterfront developments should link waterfront open spaces and associated pedestrian circulations systems.
- **3.9.8** View corridors to the waterfront area from adjacent public right-of-ways should be provided wherever feasible through the careful organization of building and landscape placement.
- **3.9.9** Guidelines for construction of the Bay Trail should be followed. These can be found below:

BAY TRAIL DEVELOPMENT GUIDELINES

Introduction

The purpose of these Bay Trail Development Guidelines is to establish guidelines for the design of the Oakland Waterfront Trail. Owners and developers of waterfront property are subject to the regulations of the San Francisco Bay Conservation and Development Commission (BCDC).

In April 2005, BCDC published Shoreline Spaces: Public Access Design Guidelines for the San Francisco Bay. This document (and any amendments) provides general design criteria for public access, and includes examples of successful designs that have been built around the Bay. The City of Oakland concurs with the basic design criteria established by BCDC and adopts Shoreline Spaces as a baseline document.

These Bay Trail Development Guidelines are intended to supplement the BCDC guidelines in order to highlight Oakland-specific issues and raise the overall quality of trail design in Oakland. See Figure 3.9.d.

ENCOURAGE

03



Figure 3.9.c: Shelter and interpretive sign at the 66th Avenue Gateway portion of the San Francisco Bay Trail.



Figure 3.9.d: Design the Bay Trail to be Oakland-specific and raise the overall quality of design.





Figure 3.9.e: Provide a wide landscaped buffer for the Bay Trail.



Figure 3.9.f: Asphalt is allowable if contained within flush Portland Cement headers. Provide attractive landscaping along the edges of the Bay Trail pathway wherever practicable.

Figure 3.9.g (at right): The Bay Trail travels through four character areas along the Oakland Estuary, Downtown, Marina, Industrial and Mash. The Bay Trail Development Guidelines include:

- Minimum trail and buffer width
- Minimum trail material quality
- Oakland neighborhood and historical context
- Shoreline bank protection
- Examples of guardrails

Trail Width and Material Guidelines

- **3.9.10** The minimum width of the landscaped buffer should be 100 feet where practicable (measured landward from the mean high tide line). Buildings or parking areas are generally not allowed within this buffer area.
- **3.9.11** The minimum width of the Oakland Waterfront Trail Corridor should have a total minimum width of 40 feet where practicable, and contain separate bike and pedestrian paths with a landscaped median. See Figure 3.9.e. Even in physically constrained areas, the trail width should generally not be less than 12 feet.
- **3.9.12** A durable and attractive trail material is desired. Ordinary asphalt concrete paving is generally not acceptable. Asphalt concrete paving should be contained within flush Portland cement concrete headers. Special plazas or other areas can be made completely of Portland cement concrete. Colored concrete, special score line patterns, and special paving surface textures are preferred. See Figure 3.9.f.
- **3.9.13** An additional minimum three-foot wide path of decomposed granite or other relatively soft running surface should be installed along one side of the hard trail where practicable.

Neighborhood and Historical Context Guidelines

The Oakland Waterfront Trail passes through a variety of neighborhoods. Four general character areas are: Downtown, Marina, Industrial, and Marsh. See Figure 3.9.g. The design of the trail should reflect these character areas.





- **3.9.14** Connections to the existing grid of City streets should be emphasized and enhanced.
- **3.9.15** Connections should be coordinated with the City's Pedestrian and Bicycle Master Plan.
- **3.9.16** Historic elements should be retained and integrated into the Shoreline Protection

Shoreline Protection Guidelines

- **3.9.17** Ordinary riprap shoreline protection is unattractive, doesn't allow access to the water, and doesn't promote establishment of vegetation. Whenever possible, the use of riprap should be minimized along the Oakland Waterfront. See Figure 3.9.h.
- **3.9.18** Consider the use of concrete steps into the water, vertical retaining walls with promenades above, or naturally planted flatter slopes with riprap only at the toe. See Figure 3.9.i.
- **3.9.19** Use vegetated geo-grids, vegetated engineered soil lifts, or other "soft" bank stabilization techniques where practicable design where practicable, and interpretive signage provided. See Figure 3.9.j.

Guardrail Guidelines

- **3.9.20** Guardrails should be strong, durable and low maintenance.
- **3.9.21** Guardrails should be as transparent as possible to allow water views. See Figures 3.9.k. and 3.9.l.
- **3.9.22** Guardrails should be designed to reflect the character of the neighborhood. See Figures 3.9.k. and 3.9.l.



Figure 3.9.h: Riprap is not accessible.



Figure 3.9.i: Steps provide access.



Figure 3.9.j: Attractive planted slope.

03



Figure 3.9.k. and 3.9.l: Guardrails should be as transparent as possible and reflect the character of the neighborhood.



3.10 Open Space



Figure 3.10.a: Rooftop gardens create gathering spaces for visitors and residents. A similar application could be used for multi-family residential and office buildings.



Figure 3.10.b: Stairs lead to an upper level deck that provides communal open space for residents in this multifamily residential project.



Figure 3.10.c: This outdoor office open space is directly accessible from the street and provides employees with an outdoor gathering and lunch area.

INTENT

Integrate safe and inviting open space into projects that is accessible to all users and that responds to a variety of needs.

Integrating public and private open space into development increases a sense of community by providing appealing and comfortable spaces for social interaction, civic engagement, and recreation. Urban open spaces can be created on roof gardens, on upper story stepbacks, within rear yard setbacks, as internal common courtyards and play areas, and as entry and forecourts.

GUIDELINES

General Guidelines

- **3.10.1** Integrate functional and active open space into the design of the site in the form of public plazas, entry courts, courtyards, roof gardens and terraces, and rear and side yards. See Figures 3.10.a through 3.10.c.
- **3.10.2** For safety, open spaces should be visible from adjacent streets, the waterfront, public plazas, and/or other open spaces; or in the case of internal courtyards, visible from commonly occupied living or working areas within the building.
- **3.10.3** Locate open spaces within access of all users to encourage social cohesion. Make at least one space a communal space that all users can access. Consolidate open space into one larger area rather than dispersing into smaller pieces, if possible.
- **3.10.4** Private open space should be located at the interior of the site. Except for balconies and other above-ground spaces, avoid locating private open space adjacent to a street as it unnecessarily breaks the building wall.
- **3.10.5** Design open spaces to create a variety of climate environments to facilitate activity in different seasons and weather conditions.
- **3.10.6** Provide lights on plazas, courtyards, walkways and active play areas to extend opportunities for physical activity into the evening.



Guidelines for Specific Uses

Residential

- **3.10.7** Design open spaces and recreational facilities to complement the cultural preferences of the local population, and to accommodate a range of age groups, including both children and the elderly, in addition to other users.
- **3.10.8** Open spaces should promote a variety of activities, both passive and active, and provide supportive amenities, such as landscaping that can be both attractive and sheltering, seating (both fixed and movable such as benches, seat walls and chairs), tables, drinking fountains, and outdoor fireplaces.
- **3.10.9** When designing playgrounds, include ground markings indicating dedicated areas for sports and varied use.
- **3.10.10** Preserve or create changes in elevation to make children's outdoor play areas more dynamic.

Non-Residential

- **3.10.11** Plazas associated with restaurants and shops should accommodate dining and seating as well as gathering space, as appropriate, to promote a high level of activity in these spaces.
- **3.10.12** Entry plazas are encouraged for office buildings.



3.11 Stormwater Management

INTENT



Figure 3.11.a: Integrate stormwater facilities that create amenities for users and residents and enhance the urban environment.



Figure 3.11.b: This facility gathers rooftop runoff and funnels it to a ground level water feature before it reaches the storm drain system, slowing and filtering the flow. Integrate urban stormwater management facilities into projects to minimize pollutant runoff while creating attractive landscape features that add to the aesthetic environment of the Central Estuary.

The systems presented below have the capabilities to fulfill the EPA's National Pollutant Discharge Elimination System (NPDES) requirements for stormwater management, while at the same time providing ways to insert facilities into projects that will enhance the aesthetics and livability of an urban environment. See Figures 3.11.a and 3.11.b. The main objectives of stormwater management facilities are to hold water, convey and slow its movement, remove sediments and impurities, and allow it to infiltrate. Implementation must address concerns over mosquito borne illnesses, such as West Nile Virus, and other vector control and public health issues associated with standing water. The stormwater facilities presented here should be properly designed in accordance with the guidelines of the Alameda County Clean Water Program.

Reduction of impervious surfaces is the most direct way to reduce stormwater flows. Concerted efforts to reduce parking and make the impervious surfaces used for service and storage more efficient are equally important.

GUIDELINES

Tree Planting and Preservation

Tree planting and preservation should be encouraged along streets and within private property for new developments to enhance livability. Trees perform several important functions, including reducing runoff, improving water and air quality, mitigating the heat island effect, reducing noise, and elevating the character of a place.

- **3.11.1** Along with street trees, tree planting within properties should be encouraged particularly along parking lots. Planting within parking lots should follow guidelines provided in the Off-Street Parking section. Tree planting should also be encouraged within setbacks, buffers, courtyards and other spaces within private property.
- **3.11.2** During the design phase, work with project applicants to preserve significant on-site trees. During construction, ensure that remaining trees are protected from damage and that soil and other conditions are improved.



Structural Soils

Structural soils may be utilized to provide spaces more conducive to tree and root growth while also increasing stormwater-holding capacity. Structural soils create a load-bearing medium that has a greater ability to maintain necessary voids for root growth, air circulation and stormwater containment in more urban conditions. See Figure 3.11.c.

3.11.3 Where planting space available for trees is constrained, consider using engineered products such as root barriers and structural soils to greatly increase the success rate and life span of new and existing trees or using large containerized bio-retention gardens that receive and treat stormwater.

Green Roofs

Green roofs can provide multiple benefits to the Central Estuary, where an extensive percentage of the area is impervious. These include stormwater benefits and reduced heating and cooling costs, as well as open space for users.

3.11.4 Incorporate intensive green roofs with usable open space and extensive green roofs wherever practicable. See Figures 3.11.d and 3.11.e.



Figure 3.11.c: Structural soils provide a load bearing medium that also has the ability to maintain necessary voids for root growth.



 Figure 3.11.d: The Kaiser Center roof garden is an example of an intensive green roof.



Figure 3.11.e: This office building in San Bruno is an example of an extensive green roof.





Figure 3.11.f: This stormwater channel serves a dual purpose of containing runoff and providing visual interest at the street level.



Figure 3.11.g: The flow-through planter provides seating along the sidewalk and a planting buffer next to the building.



3.11.h: This vegetated swale collects runoff from the adjacent parking lot and sidewalk and slows and treats the stormwater prior to release into the storm drain system.

Bio-Retention

Bio-retention facilities slow and treat stormwater by temporarily retaining it using soil, vegetation, hardscape elements and other materials to support and enhance the infiltration and bioremediation processes. Bio-retention facilities include artificial wetlands, swales, rain gardens, and flow-through planters. See Figure 3.11.f and 3.11.g.

- **3.11.4** Incorporate bio-retention facilities in projects and particularly in communal open spaces where they can provide habitat and aesthetic value.
- **3.11.5** To prevent clogging by construction debris, these facilities should be built last or runoff should be diverted around them until two months after construction is completed.

Bio-Filtration

Bio-filtration facilities filter runoff through soils and plant material to remove suspended sediments. The design solutions in this category differ from bio-retention facilities in that their primary purpose is usually to convey stormwater rather than to retain or store it. Often, bio-filtration facilities can be used to pre-treat runoff before it enters bio-retention facilities or infiltration basins/trenches, which require low sediment loads to prevent clogging. Bio-filtration facilities include grass filter strips and vegetated swales. See Figure 3.11.h.

3.11.6 Incorporate bio-filtration facilities into surface parking lots and other large, paved circulation, service and storage areas.

Infiltration

Infiltration facilities slow and filter runoff, improving the water quality and reducing the volume of runoff leaving the site. Infiltration trenches and basins can be designed with larger reservoirs and some degree of exfiltration to compensate for compacted soils. Infiltration facilities include infiltration basins, trenches, sand filters, and French drains.

3.11.7 Review the potential to incorporate infiltration capacity into the design of street tree trenches.



Permeable Paving

Permeable paving is used to reduce runoff and imitate the natural process of stormwater infiltration into the soil.

- **3.11.8** The use of permeable paving to reduce surface run-off is encouraged wherever feasible for parking stalls, plazas and courtyards. See Figure 3.11.i.
- **3.11.9** Where possible, drainage should be directed to planting areas to maximize percolation.



Figure 3.11.i: This multi-family project utilizes gravel driveways and concrete slabs in its adjacent parking lot that allow stormwater to infiltrate.



4. Building Design

The eclectic character of the Central Estuary provides a challenge to the design of buildings. Designs must respect the area's informal setting, yet at the same time create a sense of cohesion. Regardless of the form, scale or character of new development, projects should respect the public realm: streets, the waterfront, and open spaces such as pocket parks or plazas.

This section provides guidelines for the design of buildings without strictly defining a style or set of styles. However, cues should be taken from the surrounding context of a project, particularly where a defined character is presented, such as the fine-grained qualities of the Jingletown/Elmwood area, or the maritime- and food-oriented uses in the Embarcadero Cove/Food Industry Cluster area. Where the character of a district is less defined, projects may set new precedence within the context of the Central Estuary's overall goals.

4.1 Frontage Types



INTENT

Create cohesive and engaging frontages along streets, the waterfront, public plazas, and open spaces by providing consistency in the massing and articulation of building facades, and creating interest in the spaces that front them.

The four Frontage Types defined in the zoning regulations section 17.101E provide standards for developing appropriate street level frontages relative to a project's context and the intended character of adjacent streets:

- Public Frontage
- Semi-Public Frontage
- Private Frontage
- Service Frontage

Architectural features and entry and site elements help define each Frontage Type. Setbacks can accommodate frontage treatments as well as utilities and active uses such as seating, dining, display, and plazas. The Frontage Types should be considered along with the accompanying overall Building Design guidelines in this section.

GUIDELINES

In addition to the building frontage standards contained in the zoning regulations, the following discussion provides additional guidance on the design of the four frontage types. Figure 4.1.a on the following spread shows locations where particular frontage types are recommended based on the character of the street and surrounding existing development.

Public Frontage

The Public Frontage type accommodates very public uses, where interaction between ground floor uses and the street and open spaces is desirable and welcomed, requiring little or no transition between the two. This frontage type is often associated with shopfronts and dining establishments. See Figure 4.1.b to 4.1.d.

- **4.1.1** The Public Frontage type should be built up to the property line or allow active uses such as seating, dining, display of goods and/or gathering space where there is a setback.
- **4.1.2** Frontage treatments such as awnings, canopies, arcades and galleries are encouraged to increase articulation and provide sheltering elements for customers and pedestrians.



seating at facade _____ no setback ______ high transparency ______ high level of articulation _____

ENCOURAGE



transparent doors and windows

ENCOURAGE



Figures 4.1.b to 4.1.d: The top and middle examples above demonstrated some elements of a public frontage type. The bottom example shows a warehouse adapted for retail.



AVOID



Figure 4.1.e: Smoked glass compensates for the lack of separation and privacy from the sidewalk. Along with minimal articulation, this building creates an unengaging frontage.

ENCOURAGE



sun shades on windows ——— high transparency ——— raised interior floor

ENCOURAGE



Figures 4.1.f to 4.1.g: The top example shows vertical and horizontal separation from the sidewalk. This adaptive reuse of a warehouse (bottom) compensates for the lack of setback with higher sills and window shades. Landscaping, large windows and interesting garage doors provide a high level of articulation.

- **4.1.3** Frequent entries are encouraged to create a high level of activity between the public and private realm.
- **4.1.4** The Public Frontage type is most appropriate along highly traveled non-residential streets where commercial uses rely on pass-by traffic, along the gateways into the Central Estuary, and fronting the waterfront.
- **4.1.5** The Public Frontage type is encouraged along streets and open spaces as shown in Figure 4.1.a, but is appropriate anywhere within the Central Estuary where a more dynamic, pedestrian-friendly and inviting frontage is desired.

Semi-Public Frontage

The Semi-Public Frontage type balances privacy with interaction. It is defined by a moderate amount of visual and physical permeability. This frontage type requires some transition from streets and is most often associated with employment uses, but also accommodates work/live, warehousing, distribution and manufacturing.

- **4.1.6** Semi-public frontage types may contain a higher amount of blank wall area than Public Frontages because there is typically less interaction with streets, the waterfront, public plazas, and open spaces. However, ensure that frontages do not create long stretches of inactive space along the public realm. See Figures 4.1.e through 4.1.g.
- **4.1.7** The Semi-Public Frontage type can be built up to the property line or allow a shift in floor elevations (i.e., raise interior floors above sidewalk grade) or a setback to increase privacy.
- **4.1.8** Setbacks should be landscaped, but can also accommodate stairs, seating, gathering space, and/or utilities.
- **4.1.9** Building access may be less frequent than the Public Frontage or defined by a singular entry lobby. Entry types may include stoops or lobbies, which should be sheltered from the elements with an awning or arcade. Residential awnings should be structural rather than fabric.
- **4.1.10** The Semi-Public frontage is appropriate throughout the Central Estuary, but is highly encouraged in areas as shown in Figure 4.1.a.



DESIGN GUIDELINES FOR THE CENTRAL ESTUARY

4-1



AVOID



Figure 4.1.h: This development fronts the street with dull concrete walls that provide little transparency or interest.

ENCOURAGE



Figure 4.1.i: Residential uses require a separation from public spaces. Here planters and entryways with elevated porches buffer these residences.

Private Frontage

This frontage requires the most privacy and buffering between interior uses and adjacent streets, the waterfront, public plazas, and open spaces. A transition zone is necessary to provide a clear distinction between public and private space. This frontage type is closely associated with residential and live/work uses. See Figures 4.1.h through 4.1.j.

- **4.1.11** Increased privacy for the Private Frontage can be addressed by a shift in floor elevations (i.e., raise interior floors above sidewalk grade) and/or a setback.
- **4.1.12** Setbacks should be sufficient to allow a sense of separation between private living spaces and public spaces, accommodate landscape elements to provide a buffer and increase security for first-floor units, utilities, as well as entry features and sheltering elements.
- **4.1.13** Entry types for Private Frontages may include porches, stoops or lobbies, which should be sheltered from the elements with an awning or other overhead structure. Residential awnings should be structural.
- **4.1.14** This frontage type is most appropriate and encouraged in the D-CE-3 districts, particularly along frontages as shown in Figure 4.1.a.



ENCOURAGE



Figure 4.1.j: Fronting streets with a variety of architectural elements such as stoops, windows, balconies, and landscaping creates proper transitions between the public and private realm.







ENCOURAGE





Figures 4.1.1 to 4.1.m: Service frontages should incorporate a variety of techniques to articulate the facade. The example above scales facade elements to the size of the building. Smaller-scale changes, such as complex materials and color help create to break up the facade of the building at bottom.

D Service Frontage

Service Frontages are typically defined by large expanses of blank walls with few doors and windows, mostly interrupted by garage doors and truck bays. Building entries are minimal with few pedestrian amenities and are not elaborately detailed (See Figure 4.1.k). This frontage is associated with warehousing, distribution, and sometimes manufacturing businesses. Large-format, warehouse style retailers such as Costco and Home Depot also utilize this frontage. This frontage is commonly found in the Central Estuary area, but should be avoided or used sparingly along public spaces. As stated in the Building Orientation section of these guidelines, the more active uses of the business should front streets and other publicly accessible spaces.

- **4.1.15** Service frontages along streets should be minimized to the greatest extent possible by fronting streets and other publicly accessible spaces with the more active uses of the business, essentially maximizing the frontage along streets with a Public or Semi-Public frontage.
- **4.1.16** This frontage should be avoided along the waterfront, pedestrian pass-throughs and publicly accessible plazas and open spaces.
- **4.1.17** Service Frontages should be highly articulated, particularly along primary lot frontages and for buildings greater than 50 feet in length. See the Blank Wall and Façade Articulation Architectural Detailing sections for further guidance.
- **4.1.18** Articulation should include a combination of entries, windows, awnings, arbors, trellises, screens, varying and highly tactile materials, changes in plane and color, landscaping, and other features (such as art and sculptures) to avoid uninteresting and monotonous streetscapes and open spaces. See Figures 4.1.l and 4.1.m.
- **4.1.19** Whether the Service Frontage type is built up to the property line or provides a setback, landscape elements, including "green screens" should be used to articulate and soften extensive blank walls.
- **4.1.20** Entry types may include a stoop or lobby, which should be sheltered from the elements with an awning or other overhead structure. Awnings should be structural, rather than fabric alone.

4.2 Building Height



INTENT

Avoid abrupt transitions in height between neighboring buildings so as not to overwhelm adjacent uses.

New buildings should consider the heights of existing surrounding buildings in order to respect the context created by neighboring properties. See Figure 4.2.a. This is particularly critical in areas where infill development will occur, which is largely, but not exclusively, pertinent in the Jingletown/Elmwood area where sensitive residential uses exist.

GUIDELINES

- **4.2.1** New buildings should respect and be compatible with the scale of buildings within their immediate context and avoid abrupt and disparate changes in the building line. Heights should transition smoothly and not create extreme disparities that can break the silhouette of the streetscape and overwhelm an adjacent use. See Figures 4.2.b and 4.2.c.
- **4.2.2** New buildings should step down in height to closely relate to the height of existing adjacent buildings. This is particularly important in the Jingletown/ Elmwood area where there is a predominance of small-scale single-family homes along Chapman Street, E. 7th Street, Elmwood Avenue, 36th Avenue, and E. 8th Street. Appropriate transitions can be achieved by:
- **4.2.3** Allowing the more compatible, lower-storied building in a multi-structure development to transition to the taller buildings by locating it near the existing building;
- **4.2.4** Stepping building heights down such that they are no taller than half to one-story above the lower-storied, existing building; or
- **4.2.5** Providing a landscaped separation between buildings that allows landscape elements to transition heights. This is preferred over utilizing these separations as parking lots, which only accentuate the differences in building heights.

AVOID

80)



Figure 4.2.a: The siting, massing, articulation and height of the office building on the right disregards the existing character of the adjacent residential neighborhood.

ENCOURAGE





Figures 4.2.b and 4.2.c: The new residential building (top) is scalled to match the surrounding single-family homes, and is composed of varied scales and articulation of height and massing; another residential building (bottom) transitions in height and setback to match the existing singlefamily home next door.



4.3 Massing



Figure 4.3.a: The blocky massing of the commercial building is discordant with the massing established by the adjacent single family houses.



Figure 4.3.b: Example of a building with simple and rhythmic volumes that impart a sense of order.



Figure 4.3.c: The wood fence, landscaping and trees used here transition the building's massing from three stories to a human scale at the sidewalk level.

INTENT

Massing should be simple in form and respond to the existing context by anchoring the building to the site and imparting a human scale.

GUIDELINES

- **4.3.1** Building massing should not be overly complicated. Simple volumes in a well-organized, clear hierarchy should define the main building form. See Figures 4.3.a and 4.3.b.
- **4.3.2** Buildings should reflect any positive context along and across the street by breaking up massing into volumes that reflect the volumetric scale of surrounding buildings.
- **4.3.3** In general, building form should provide a "base" and a "top" that are human-scaled both in terms of form and articulation. The base may include thicker walls, richly textured or special materials such as ceramic tile, granite, marble and/or darker colored materials and/or panels. A recognizable top may utilize roof overhangs, simple parapets and/or differently colored materials to distinguish from the base.
- **4.3.4** Providing articulation through human-scale elements (e.g., architectural elements and detailing, fenestration, materials, and/or variation in materials) is highly recommended on large, continuous building masses to provide visual interest. See blank wall standards for Frontage Types in the zoning regulations and guidelines in the Blank Wall section of these guidelines. See Figure 4.3.c.
- **4.3.5** Exterior building massing should reflect and make visible the use or activity within the building. For example, the use of bays and vertical elements should reflect an interior change of use or function, such as a stairwell, lobby, or more public rooms.
- **4.3.6** Ground floor levels for non-residential buildings and multi-family lobbies should be proportionally higher and distinguished from upper façades to create generous and inviting ground floor spaces and to distinguish uses in mixed-use buildings.

Guidelines for Specific Uses

- **4.3.7** Building walls of **industrial buildings visible from adjacent streets, the waterfront, public plaza and open spaces** should contain changes in massing, height, colors and/or materials.
- **4.3.8 Tilt-up buildings** should incorporate decorative trim, recessed/projecting panels, recessed windows and doors, accent materials, and/or varied roof heights to increase visual interest.

4.4 Building Access Design



INTENT

Provide a clear hierarchy of entrances that are delineated by distinct transitions between public and private space.

A prominent main entrance that features articulation and is appropriately scaled to the building can facilitate user access to interiors by clearly differentiating it from service or rear entrances. Providing a readable series of zones that use semi-public space and frontage treatments to transition from the public to the private space can create a sense of welcome by providing shelter and a place for waiting and social interaction outside of interior spaces.

GUIDELINES

- **4.4.1** Entrances should include a legible series of zones that utilize entry spaces and architectural features to transition from public to private spaces. Semi-public transitions include porches, stoops, arcades, forecourts, lobbies, awnings, canopies and stairs, even garage doors.
- **4.4.2** A clear, hierarchical distinction should be made between primary entrances and secondary entrances. Primary entrances should be located on the primary façade of a building and should be clearly expressed to impart a sense of prominence through scale, detailing and ornamentation that clearly denotes their stature as the main access to a building.
- **4.4.3** Primary entries should be framed by sheltering elements such as awnings, arcades, porches or stoops. This creates a protected space for visitors to pause as they enter or leave the building.
- **4.4.4** The design of entrances, entrance elements and garage doors should complement the architectural style and scale of the building and its architectural elements.
- **4.4.5** Porches and stoops should be designed as integral architectural features of the main structure rather than as afterthoughts, which can create architectural elements that look "tacked-on." Posts and rail should be substantial in appearance to match the architectural character of the main facade. Railings should be visually permeable, which creates a more inviting appearance. See Figures 4.4.b through 4.4.e.
- **4.4.6** De-emphasize garage doors and entrances and/or make them a decorative element to increase the perception of active frontages. See Figure 4.4.f. Single-car width garage

ENCOURAGE



Figure 4.4.a: The stair and portico act as the semi-public transition zone into the building.

AVOID



Figure 4.4.b: The porches on this building look tacked on because they have little relationship to its architecture and scale.

ENCOURAGE



Figure 4.4.c: Open railings on these entry stairs preserve the sight line along the building setback creating an open, inviting transition by creating a continuous semi-public space.



ENCOURAGE



Figure 4.4.d: The stair and portico act as the semi-public transition zone into the building.

doors and entrances are preferred, particularly for residential uses. Garage doors should be recessed from the front façade to create shadow lines. See the Off-Street Parking section of these guidelines. Other techniques may include the following:

- Include windows on the garage door;
- Recess the bottom floor façade containing the garage door from the upper stories;
- Place living space above the garage;
- Embellish garages with landscape structures such as arbors and trellises;
- Use materials that provide visual interest.





Figure 4.4.e: The project features of the building help to delineate access points.

ENCOURAGE



Figure 4.4.f: A recessed, single-car garage door contributes to the street frontage with a high level of articulation and transparency.

4.5 Windows and Transparency



INTENT

Create attractive building facades and encourage appropriate levels of interaction between persons inside and outside of buildings.

Windows allow indoor activity to be seen or perceived from the outside, offering a presence or "eyes on a street" and imparting a sense of safety.

GUIDELINES

- **4.5.1** Window materials, placement, configuration and proportions should fit with the chosen architectural style of the overall building.
- **4.5.2** Windows should be set in a logical, rhythmic pattern with a clear relationship between ground floor and upper floor windows. See Figure 4.5.a.
- **4.5.3** Ground floor windows should be maximized to allow greater interaction between the public and activity within a building. See Frontage Types regulations for appropriate minimum areas for transparency of ground floor frontages. See Figure 4.5.b.
- **4.5.4** Upper floor uses should orient the more public spaces along the primary frontage and frontages that face streets, the waterfront, public plazas, and open spaces. Windows should reflect this relationship through appropriate sizing, thus also maximizing the amount of glazing on upper floors.
- **4.5.5** Window design should maximize interior daylighting while reducing glare through the use of passive shading devices to maintain visibility between the exterior and interior of the building.
- **4.5.6** Mirrored or smoked glass is strongly discouraged. Other products, such as special 'Low-E' films, can be used to maintain transparency while awnings and overhangs can provide solar protection and heat reduction for building interiors. See Figures 4.5.c and 4.5.d.
- **4.5.7** Windows and window frames should be set to provide a reveal (i.e., they should generally not be flush with the exterior face of the wall) to form a visible shadow line that creates visual interest along the facades of buildings.

ENCOURAGE



Figure 4.5.a: Example of window placement that shows a clear pattern and relationship between upper and lower windows.

ENCOURAGE

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Figure 4.5.a: Example of maximizing ground floor windows to create interest at along the street.

AVOID



Figure 4.5.c: The smoked glass frontage of the building's street level facade provides privacy for interior offices, but does little to create a visibly active frontage along the sidewalk. It essentially creates a blank wall condition.



ENCOURAGE



Figure 4.5.d: Integral upper story awnings shade windows without reducing visibility.

- **4.5.8.** Window and door signage, and interior displays should be carefully considered along public frontages such that windows meant for public viewing are not significantly diminished by these elements, which can create a haphazard sense of the frontage. See Figure 4.5.e.
- **4.5.9** Garage doors are encouraged to incorporate transparency elements such as clear or frosted glass windows.



Figure 4.5.e: Excessive signage reduces the level of transparency along this storefront.

4.6 Blank Walls



INTENT

Engage streets, the waterfront, and open spaces with active building frontages or provide highly articulated walls, murals, or artistic elements, particularly where long stretches of wall are unavoidable along these frontages.

Blank walls are a prevalent feature in the Central Estuary. The issue of blank walls is particularly important along the waterfront, public open space, and streets that will see pedestrian activity, although attention should be given to all streets, in order to improve the overall appeal of the Central Estuary.

GUIDELINES

- **4.6.1** Minimize large segments of blank building facades and freestanding walls fronting streets, the waterfront, public plazas, and open spaces.
- **4.6.2** Murals and other public art used to relieve blank walls should be reflective of the character of the surrounding uses, districts and neighborhoods, should be scaled to the perspective of a pedestrian, and should incorporate themes, artistic elements and materials reflective of their context and the area's history and industrial heritage. See Figure 4.6.a.

Examples could include maritime elements for areas adjacent to the waterfront; food-related murals in the Food Industry Cluster; mosaic tile or artisan metal- or woodwork in the Jingletown/ Elmwood area; and glass elements for the public frontages of the Owens Brockway plant.

- **4.6.3** Blank wall sections should not exceed the maximum lengths defined in the zoning regulations for each frontage type without relief through changes in massing and articulation. Relief should include a combination of building entries, windows, stairs, porches, awnings, architectural detailing, landscaping, murals, a change in material, color and/or plane, artistic elements, or other feature that gives the wall complex texture, depth and interest. See Figures 4.6.a, 4.6.b and 4.6.c.
- **4.6.4** Where the total length of a freestanding wall or building exceeds 50 feet, walls should be broken up into modules no longer than 50 feet or module lengths that reflect the massing of surrounding buildings, whichever is less, by a shift in vertical plane of at least 12 inches.

ENCOURAGE



Figure 4.6.a: Students from Arise High School contributed to this mural project with artist Jill McLennan and teacher Nils Heymann.

AVOID



Figure 4.6.b: The articulation on this long stretch of blank wall is too repetitive in form, color and material to create an engaging façade along the sidewalk.

ENCOURAGE



Figure 4.6.c: The articulation on this wall is appropriately scaled to the amount of wall surface on this warehouse. Varied materials, changes in plane and color, a variety of architectural elements, and landscaping crate texture and shadow.



AVOID

4.6.5



Figure 4.6.d: The scale of the trellis and the architectural detail on this facade are too insubstantial to provide relief for such a large amount of blank wall. Avoid repetitive articulation. Excessive blank wall lengths should be accompanied by stronger and more varied architectural articulation and landscaping to intensify the level of complexity and texture to overcome such vast expanses and avoid a sense of "flatness" and monotony. See Figure 4.6.d.

4.7 Façade Articulation and Architectural Detailing



INTENT

Articulate building facades and provide artistic elements and architectural details to create engaging and dynamic humanscaled frontages to enhance the streets, the waterfront, public plazas, and open spaces of the Central Estuary.

In combination with scale and massing, articulation (i.e., architectural detailing and materials) is key to creating buildings that provide interest and engage the streets, waterfront, public plazas, and open spaces at an appropriate level.

GUIDELINES

- **4.7.1** Consider opportunities to "brand" buildings with architectural details and facade treatments that reference the Central Estuary's artistic nature. See Figure 4.7.a.
- **4.7.2** Articulation should be distinct and provide enough contrast to create a dynamic façade.
- **4.7.3** Façade articulation and detail should be in harmony with that of other uses along the street. Careful consideration should be given to the design of facades (i.e., scale and level of architectural detail) in order to attune both sides of a street with building walls that are compatible with each other.
- **4.7.4** All visible sides of a building should have a consistent style and use of articulation. "False" fronts are strongly discouraged. For example, the primary exterior finish should be used on all façades of a building visible from a street, waterfront, pedestrian pass-through, or publicly accessible plaza. See Figure 4.7.b.
- **4.7.5** Façade elements (e.g., windows, doors, bays, joints, balconies, etc.) should display a logical rhythm and order.
- **4.7.6** Color change alone does not convey a sense of permanence, real variety or interest, as facades tend to be flat without complex shadows and textures. Murals excepted, articulation and detailing should not consist solely of color changes without changes in material or planes. Color changes should create enough contrast to have a clear visual distinction. See Figure 4.7.c.
- **4.7.7** Materials should complement the architectural character of adjacent buildings and convey a sense of durability.

ENCOURAGE



Figure 4.7.a: Artistic elements could be used to "brand" the funky artistic nature of the Central Estuary area.

AVOID



Figure 4.7.b: False fronts are typically tacked on to the front facades of buildings with little attention paid to secondary, yet visible frontages.

AVOID



Figure 4.7.c: A change in materials, recessed windows and/or a higher level of architectural detail could reduce the "flatness" of this building, which relies solely on large blocks of color to create interest.



ENCOURAGE



Figure 4.7.d: Changes in color, material, planes and texture break this facade into a human scale and create interest along the street.



Figure 4.7.e: Awnings provide protection from the sun and create a sense of enclosure, creating a comfortable walking environment for pedestrians.

- **4.7.8** Material changes should impart an authentic appearance, as opposed to a veneer-like quality, and correspond with the overall architectural design. See Figure 4.7.d.
- **4.7.9** To the greatest extent feasible, avoid the following materials:
 - Reflective building materials that may create glare along the ground level;
 - Materials that do not age well;
 - Materials that impart a sense of impermanence, such as scored plywood (i.e., T-111) siding, vinyl siding, thin brick materials, lower quality 'Drivit' type systems, and foam details;
 - Excessive stucco as the primary material.
- **4.7.10** Articulation of building facades should provide visual interest and shade, and create a sense of enclosure along streets, the waterfront, public plazas, and open spaces with features such as awnings, canopies and/or overhangs. See Figure 4.7.e and Section 4.8.
- **4.7.11** Balconies and entry porticos should avoid heavy walls and small openings. Visually permeable railings create a more inviting appearance and allow light into spaces.

4.8 Awnings



INTENT

Building awnings are important architectural details that create engaging and dynamic human-scaled frontages to enhance the streets, the waterfront, public plazas, and open spaces of the Central Estuary.

Awning materials, form, and scale take cues from a building's architectural scale, massing, and articulation. Awnings that reflect the character of the building, support its use, and are compatible with the general character of the Central Estuary area are key to creating buildings that provide interest and engage the streets, waterfront, public plazas, and open spaces.

GUIDELINES

- **4.8.1** Relate awning placement to the major architectural elements of the building. See Figure 4.8.a.
 - Place awnings above storefront windows (but below any transom windows) and/or above solid wall areas that would be suitable for windows.
 - Avoid covering transom windows or architectural elements such as belt courses, decorative trim and similar features.
 - Use separate awnings over individual storefront bays (separated by piers) rather than continuous awnings across the building frontage.
 - For buildings with plain or undistinguished ground floor facades, consider placing awnings above upper floors windows.
- **4.8.2** Relate awning shape to the architecture of the building. See Figure 4.8.b.
 - Use traditional slanted awnings for older building styles or when in doubt as to the best awning shape.
 - Limit concave awnings to modern style buildings.
 - Limit convex awnings to Art Deco buildings or other very refined or formal styles.
 - Use domed awnings or no awnings on arched windows.

ENCOURAGE



Figure 4.8.a: Awnings relate differently to building entry and windows. Window awnings are placed below transom. The style of the awnings complements the architectural style of the building.

ENCOURAGE



Figure 4.8.b: Awnings align with the massing of the four bays of this residential building and relate to the modern style of the architecture.



ENCOURAGE



Figure 4.8.c: Awning on neighboring buildings are placed at similar heights to maintain a continuous rhythm along the building facades.



Figure 4.8.d: Design awnings to conform to these building code requirements.

- **4.8.3** Relate awning shapes and placement to others on the building and in the same block face. See Figure 4.8.c.
 - Use the same awning alignment and shape on the same level of any single building if consistent with other guidelines.
 - Match the shape, slope and projection of other awnings on nearby buildings.
 - Mount awnings so that their lower edge will match those of adjacent buildings.
- **4.8.4** Limit awning surfaces to non-glossy fabrics, galvanized corrugated metal, non-glossy factory paint-finished sheet metal or glass.
 - Use metal awnings only on Post Modern, utilitarian, or pre-Art Deco "commercial" style buildings. Use one metal sheet per awning.
 - Avoid metal awnings composed of multiple seams and with metal valances.
- **4.8.5** Design awnings to conform with the building code.
 - Do not extend awnings more than seven feet from the face of building, nor closer than two feet to curb, nor more than two-thirds of the distance from the property line to the curb face.
 - Provide eight feet minimum vertical clearance over sidewalk for framed or rigid portion of awning, and seven feet minimum vertical clearance for any unframed valance. Note: 6'-8" vertical clearance is permitted upon approval of an Alternative Methods and Materials Request from the City's Building Department.

4.9 Roofs

INTENT

Respond with roof designs that are compatible with the area's simple roof forms.

Buildings in the Central Estuary are defined by simple roof forms that follow the buildings' simple massing. Roofs do not exhibit excessive jogs or setbacks, but are occasionally broken by gabled or hipped dormers. See Figures 4.8.a through 4.8.c.

GUIDELINES

- **4.9.1** Encourage roof forms that reflect the character of existing buildings, such as those roof forms listed in the intent. Roofs such as mansards and gambrels are discouraged.
- **4.9.2** The roof forms should demonstrate a simple composition that is defined by a clear rhythm and order with few breaks and changes in height and plane. See Figure 4.8.d.
- **4.9.3** Roof configurations should reflect a building's floor plan and massing.
- **4.9.4** The roofs of buildings on corner lots should give emphasis to the building corner.
- **4.9.5** Roof materials should be comparable to what is typically found in the neighborhood, which can include concrete and asphalt shingle.

Guidelines for Specific Uses

4.9.6 The tops of **industrial and commercial** buildings may be defined by distinct roof forms and parapet designs.







∞ Figures 4.8.a to 4.8.c: Simple forms define the Central Estuary's rooflines.



Figure 4.8.d: The massing of this building's roofs is overly complex.



4.10 Utilities

AVOID



- mage Credit: Flickr user Richa
 - Figure 4.10.a: Avoid placing utilities within the pedestrian through zone on sidewalks or other pedestrian and bicycle access ways.

ENCOURAGE





Figures 4.10.b and 4.10.c: An attractive utility screen creates an element that engages the eye.

INTENT

Ensure that service elements and utilities are appropriately addressed and integrated into the site and building design so they do not detract from the aesthetics of the project or block bicycle or pedestrian access.

Inappropriately placed or improperly designed utilities can create conflicts with other building features and landscaping, and present accessibility issues for pedestrians. Service elements and their design should be coordinated during site and building design to prevent these unwanted consequences. Depending on the amount of pedestrian activity anticipated, sidewalks should allow for clear passages of 6, 8 or 10 feet, free of utility boxes, lighting standards or other structural blockages. See Figure 4.10.a.

- **4.9.1** Loading and service areas, outdoor equipment, and refuse enclosures should be oriented away from street view to the maximum extent feasible, and screen from public view with a combination of landscaping and walls.
- **4.9.2** Rooftop equipment should be grouped to minimize its impact and should be screened from public view.
- **4.9.3** Consider the proper location of utilities during the design process of the site and building. To the greatest extent possible, these facilities should be accommodated within the building envelope or within parking areas away from streets, the waterfront, pedestrian pass-throughs and publicly accessible plazas. They should not be an afterthought.
- **4.9.4** Where utilities cannot be accommodated within the building envelope, they should be screened from view by an enclosure. Enclosures should be designed as an integral part of the building architecture and be made of finished materials to match the primary building. See the Landscaping and Screening section for further guidance. See Figures 4.10.b and 4.10.c.

5. Lighting

INTENT

Create safe and comfortable environments for all users through the use of an appropriate scale, location and level of lighting.

For areas that expect any amount of pedestrian traffic, a standard "cobra head" street light fixture does not provide appropriate illumination for pedestrians, who require more focused lighting. Good lighting discourages unwanted activity and attracts desirable activity to gathering places and along streets, promoting vibrant, safe places into the evening.

- **5.0.1** Ample, attractive lighting should be incorporated into spaces where people will gather, linger or walk, including open spaces, play areas, courtyards, parking lots, transit stops, walkways and the landscaping that surrounds them.
- **5.0.2** Parking lots, and in particular walkways, should be well lit for the safety and comfort of users.
- **5.0.3** Parking lot lighting should be sized appropriately for the type of use. Light standards for parking lots catering to the automobile should include pedestrian-scaled lights throughout, but in particular along walkways. Lighting standards for industrial and warehousing lots should, at a minimum, provide pedestrian-scaled lighting along walkways and at entrances.
- **5.0.4** Decorative fixtures are encouraged for pedestrian-scaled lighting.
- **5.0.5** It is preferable for fixtures to be spaced close together with lower light levels than further apart with more intense light levels.
- **5.0.6** Lamps should provide "natural" whiter light, which increases comfort and safety.
- **5.0.7** LED lighting is strongly encouraged. Low-pressure sodium lights are strongly discouraged as they create an unnatural cast.
- **5.0.8** All exterior building and landscape lighting should be shielded, and directed downward on the site so as not to produce glare onto pedestrian spaces and adjacent uses.
- **5.0.9** All exterior building lighting should be an integral part of a building's architectural design. See Figures 5.a and 5.b.
- **5.0.10** Where appropriate, consider accent lighting to highlight interesting architectural features, signs, and storefront displays.





Figures 5.a and 5.b: Integrated exterior building lighting design complements the architectural design of the building.





ENCOURAGE



Figures 6.a and 6.b: Unique signage should be encouraged in the Central Estuary to take advantage of the many artisan businesses in the area.

6. Signage

INTENT

Creativity rooted in influence from the industrial and artisan character of the area is encouraged in signage.

- **6.0.1** Signage should follow a hierarchy that clearly indicates the importance and/or size of the associated use, building, or place.
- **6.0.2** Signage should be coordinated and aligned with adjacent and surrounding buildings in order to achieve a unified appearance rather than visual confusion.
- **6.0.3** Creative and highly individualized signs, with a high level of detail and craftsmanship are encouraged. See Figure 6.a.
- **6.0.4** Within the parameters of the sign ordinance, flexibility should be allowed for artisans and craftspeople that wish to create unique signage that may contribute to the sense of place. See Figure 6.b.
- **6.0.5** Signage should reflect the character of the building and should be integrated within its architecture.
- **6.0.6** Signs should not obscure architectural elements such as transom windows or columns, nor should they appear cluttered.
- **6.0.7** Internally illuminated signs, with the exception of neon, are strongly discouraged.
- **6.0.8** Signs should be constructed of high-quality and durable materials.
- **6.0.9** Externally illuminated signs should be designed and installed so that their lighting elements are directed at the sign without spillover onto streets and adjacent properties, to minimize glare.
- **6.0.10** Civic and landmark signage (e.g., district signs, waterfront signage, etc.) should be used to announce an important place, gateway, or feature and should be more prominent in scale.

7. Green Building Design



INTENT

Comply with City of Oakland Green Building Ordinances to advance city goals towards a more sustainable environment. In 1998, the City of Oakland adopted the Sustainable Community Development Initiative, effectively advancing city policies and programs closer to its goal for a more sustainable future. Since then, the City Council has adopted various policies in support the initiative. Since 2001, the city has been ranked among the 10 greenest cities in the U.S. and has won awards for its efforts.

APPLICABLE REGULATIONS

Below is a summary of current ordinances that affect new building construction, adaptive reuse, and certain additions and alterations that will affect projects within the city, including the Central Estuary.

City of Oakland Green Building Ordinance

In October of 2010, the city adopted the Green Building Ordinance for Private Development Projects. The ordinance affects a wide range of projects, including:

- Residential and non-residential new construction, additions and alterations;
- Removal of a historic resource and new construction;
- Historic residential and non-residential additions and alterations;
- Mixed use construction; and
- Construction requiring a landscape plan

Certain types of projects are required to receive certification through a non-governmental green rating agency, including:

- All new residential construction and residential additions and alterations over 1,000 square feet certified through Build It Green's GreenPoint Rated program.
- All new non-residential construction and non-residential additions and alterations.

City resources are abundant and easily accessible to assist developers and property owners in complying with the ordinances and many are provided at no cost. Further information and downloadable documents can be accessed from the city's website at http://www2.oaklandnet.com/GreenBuilding/index.htm.



CALGreen

As of January 2011, new construction projects are required to comply with the California Green Building Standards Code also known as CALGreen. CALGreen requires all new buildings in the state to be more energy efficient and environmentally responsible through comprehensive regulations that include a mix of prescriptive and performance based standards. Like California's existing building code provisions, which regulate all construction projects throughout the state, the mandatory CALGreen provisions will be inspected and verified by local and state building departments, thereby not adding certification costs to builders.

In addition, starting July 1, 2012, existing non-residential additions over 2,000 square feet and alterations with a construction cost of greater than \$500,000 will require compliance with CALGreen. Further information is available through the California Building Standards Commission website: www.bsc.ca.gov/home/calgreen/aspx.

Construction and Demolition Ordinance

In July 2000, the City adopted the Construction and Demolition Ordinance to encourage development and redevelopment at higher intensities and in hopes of supporting its efforts towards a more sustainable future. The ordinance promotes reusing, salvaging, and recycling of construction and demolition debris to conserve natural resources and reduce the need for landfill space as well as to stimulate markets for recycled materials, which may reduce construction costs related to debris disposal.

Projects affected meet one or more of the following criteria:

- New construction;
- Non-residential or apartment house (3+ units) demolition; and
- Non-residential or apartment house (3+ units) addition or alteration valued at or greater than \$50,000 adjusted to year 2000 dollar values.

Documentation must be submitted calculating itemized and total volumes or weights of the material that is proposed for reuse or salvage, and that which is proposed for landfill by type of material, showing that at least 50 percent of the volume will be diverted. The proposal must be approved prior to obtaining a demolition and building permit. Follow up monitoring is performed through inspections and audits.



Recycling Space Allocation Ordinance

This ordinance is a result of another State Assembly Bill (AB 1327), which added Chapter 18, known as the California Solid Waste Reuse and Recycling Access Act of 1991, to the State's Public Resources Code. In June 1995, the city adopted the Recycling Space Allocation Requirements ordinance, which requires certain developments to provide space for the collection and loading of recyclable materials in conformance with the standards established by the Integrated Waste Management Board.

Projects affected are required to provide adequate, accessible and convenient areas for collecting and loading recyclable materials. Depending on certain permit application submittal(s) criteria, projects affected may include:

- New construction of public facilities where solid waste is collected and loaded and improvements to existing areas where solid waste is collected and loaded;
- New construction of residential (5+ units) where solid waste is collected and loaded for five or more living units, and additions to existing residential (5+ units) adding 30 percent or more to the gross floor area;
- New construction of marinas, commercial and industrial uses and additions to existing commercial and industrial adding 30 percent or more to the gross floor area;
- Multi-tenanted residential, commercial and industrial uses where applications are submitted for the entire project or by a single tenant, which singly or collectively add 30 percent or more to the gross floor area.





Figure 8.a: Creating an easily accessible staircase that serves as an attractive, central design feature can help encourage active use of a building.

8. Active Design

INTENT

Promote active lifestyles through the design of landscape and building environments to facilitate daily physical activity.

The goal of Active Design is to address the ways that architecture, landscape architecture and urban design can create spaces that encourage stair climbing, walking, bicycling, transit use, active recreation, and healthy eating. Many of the above guidelines encourage pedestrian activity and the following guidelines provide additional steps to create building interiors that promote a more active lifestyle.

GUIDELINES

Building Circulation

- **8.0.1** Design and locate stairs as a feature for everyday use rather than a utilitarian building system by locating stairs in direct sight of the building's entrance and integrating them as the building's principal path of travel, such as a grand staircase that serves as a central feature of the building's architecture.
- **8.0.2** Design the staircase as a sculptural and artistic element of the building. Showcase stairways with natural and/or artificial light; vary materials to create texture and modulation; use color as an effect, integrate sound and natural ventilation; and offer views to the inside and outside. Include corridors and landings as an integral part of the architectural character of the stairs.
- **8.0.3** Design stairs with ample room to accommodate travel in both directions, for different speeds, and for small and large groups of people.
- **8.0.4** Design stairs to facilitate maintenance by using durable, highquality materials that are easy to clean and maintain, resist wear and tear, and discourage graffiti and vandalism.
- **8.0.5** Plan the spaces within the building to encourage walking by considering frequent origins and destinations. Design walking routes as attractive spaces with ample amenities such as natural light, drinking fountains, seating, and signage.



Building Program

- **8.0.6** Incorporate building facilities that support exercise. Provide spaces for secure bicycle parking, showers and locker rooms, and workout rooms. Make these spaces attractive, central, easily accessible, and provide clear signage and information to facilitate their use.
- **8.0.7** Locate common areas that have access or views to attractive outdoor spaces.
- **8.0.8** Locate commonly used community spaces at a distance that is also comfortably close, to increase walking distances when using these spaces. For example, locate kitchens, lunchrooms, copy rooms, and other such spaces at a distantly comfortable extent from personal office spaces.
- **8.0.9** Provide spaces that encourage personal communication, faceto-face, rather than digital communication, by incorporating spaces where people can gather and engage in productive, pleasant, and safe social interaction.
- **8.0.10** Incorporate space in building design that could be used for community meetings, after school programming, tutoring/ mentoring, senior activities or other social programs.

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