



City of Oakland  
Broadway/Valdez District Specific Plan

# Public Realm Concept

Administrative Draft

November 2009



# TABLE OF CONTENTS

Chapter 1 - Introduction.....	3
Chapter 2 - Open Space .....	7
Chapter 3 - Streetscape .....	21

This page intentionally left blank.

## CHAPTER 1 INTRODUCTION

A key component of all successful downtowns and retail districts is having a vibrant and well-populated street scene. This public life is dependent on creating both the appropriate mix and density of uses that will bring people together, and the outdoor space that is conducive to pedestrian activity—room for walking and strolling; places to sit and linger; activities and objects to observe; places in the sun and in the shade. Generous sidewalk widths are necessary to accommodate the convenient flow of pedestrian traffic, but so are the parks, plazas and other open space amenities that will attract pedestrians and allow them to linger.

The Public Realm design principles and guidelines will direct the design of future public improvements with the intent of transforming the Broadway/Valdez District from its current uncoordinated and underutilized condition into a vibrant commercial mixed-use center and a unique retail destination. In order to realize this goal, the principles and guidelines focus on achieving a series of specific objectives relative to the area's physical form and character. Overall, the design principles and guidelines are intended to promote:

- A safe and attractive system of streets, parks, and civic spaces that provides graciously scaled open spaces that support and promote an active pedestrian environment and the social life of the community;
- Well-designed open spaces that establish a visually and aesthetically distinctive identity that supports a vibrant street-oriented retail shopping district;
- A pattern and scale of spaces that creates a well-defined, human-scale public environment that incorporates uses and pedestrian-oriented amenities and features that animate and enliven the public realm.
- A sustainable landscape that reduces impacts to the environment, including existing storm drain infrastructure and downstream water bodies.

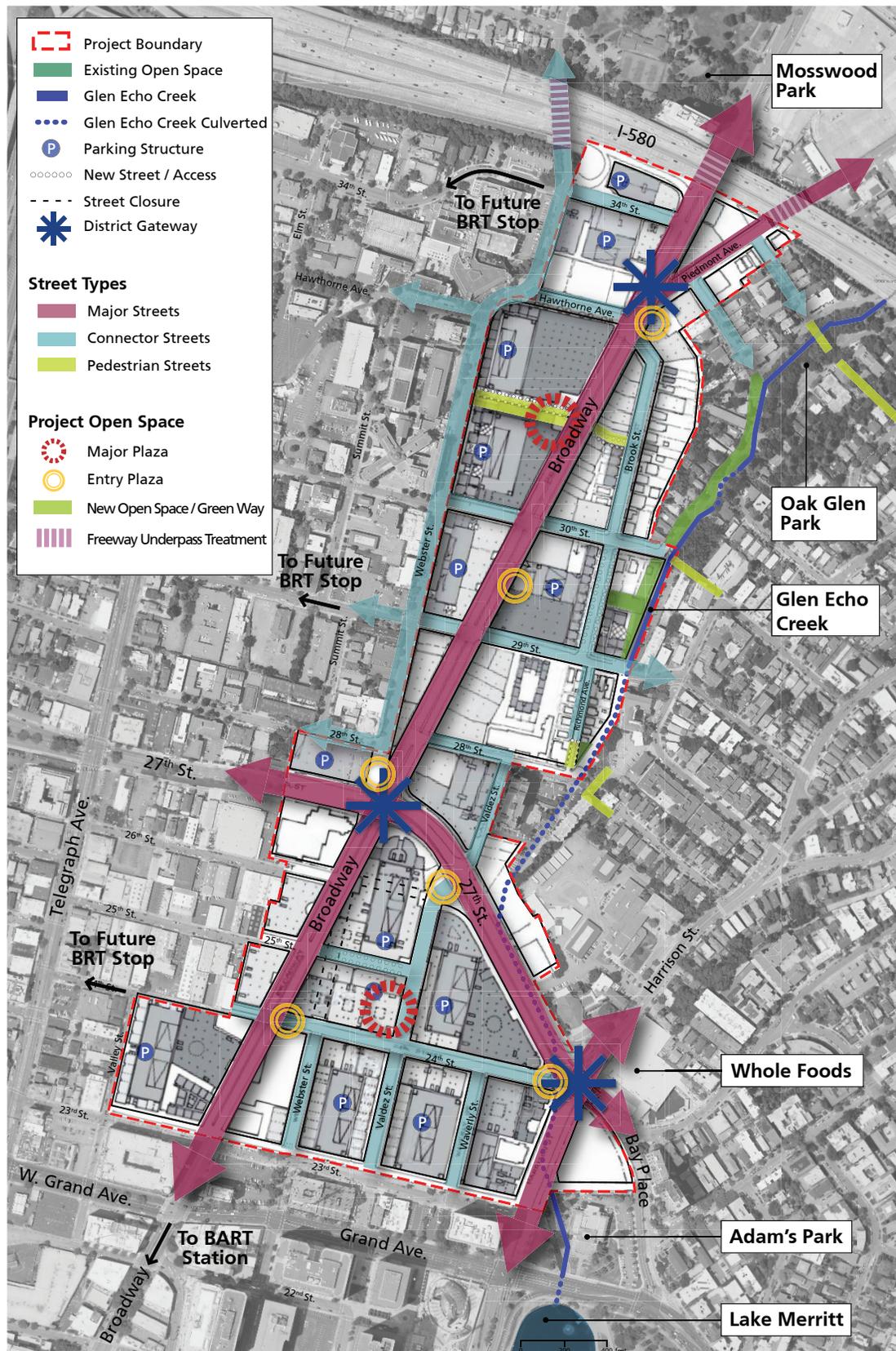


Santa Barbara, CA



Berkeley, CA

Public Realm Framework (Land Use Alternative 3)



Source: Alameda County Office of the Assessor, City of Oakland, WRT. **DRAFT**

November 16, 2009

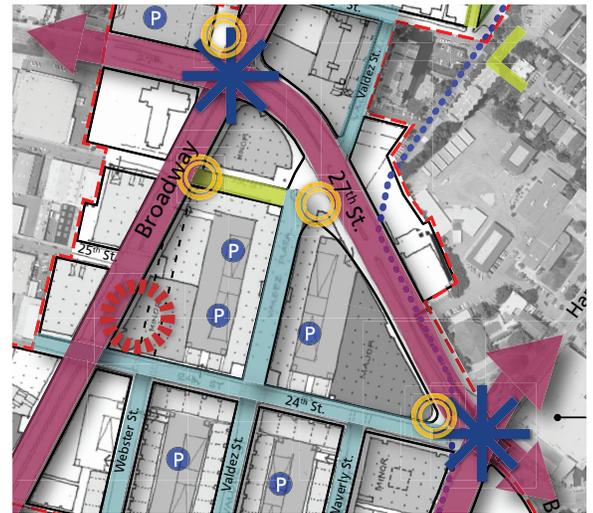
Given that the District is likely to build out over many years and under many different developers, the design of the public realm is especially important. The network of public streets, paseos, parks, and plazas that comprise the public realm is the unifying element that will establish a consistent design character and quality for the entire district. The publicly-owned and controlled land that comprises the system of public realm improvements should provide an attractive, well-designed physical framework that can graciously accommodate and connect the diverse array of privately developed buildings that are likely to be introduced to the District over time. In addition, since streetscape improvements frequently precede private development, they also present the opportunity to establish a design standard that sets the tone for subsequent private development.

At this point, in recognition that these objectives address public as well as private property and will be implemented by both the City and private developers, the design guidelines address the design of improvements within both public right-of-ways and on privately-owned parcels. The public realm principles and guidelines recognize that the challenge of creating a distinctive identity and sense of place for the District will be equally dependent on the design of both the public and private realms. As the plan progresses the specific responsibilities for public and private realm improvements will be more clearly defined. The Preliminary diagram on the facing page illustrates the Public Realm Framework concept for the Broadway/Valdez District. The three enlargements of the Valdez District to the right, illustrate alternative approaches to public realm in the area bounded by Broadway, 27th Street, and 24th Street.

In particular, the Specific Plan will recommend strategies for both the private and public realm that address stormwater management. The main goals of stormwater management include:

- Reduce stormwater runoff;
- Encourage treatment of stormwater runoff using infiltration and landscape based treatment measures to reduce the pollutant load on the storm drain and downstream receiving water bodies;
- Potentially store and reuse stormwater for irrigation.

### Variations of Public Realm Framework for Valdez Triangle Land Use Alternatives



Land Use Alternative 1



Land Use Alternative 2



Land Use Alternative 3



Greent Street, Portland, OR

Integrating infiltration and landscape-based stormwater management techniques into the design of parks and public streets will yield multiple benefits, including reducing the stormwater runoff, improving water quality, and educating the public through the revelation of ecological systems. These strategies will include a number of “best management practices,” such as vegetated swales, rain gardens, bioretention zones, etc. These public realm strategies, combined with private realm strategies, will create a comprehensive stormwater management system that will yield myriad benefits.

Design will draw upon the Bay-Friendly Landscape Guidelines (2008), Alameda Countywide Clean Water Program (ACCWP) C.3 Stormwater Technical Guidance (August 31, 2006) handbook, recently adopted “California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater NPDES Permit Final Tentative Order R2-2009-0074 NPDES Permit No. CAS612008 October 14, 2009”, the City of Oakland Storm Drainage Design Guidelines (2006) and resources from other municipalities, including the San Mateo County Sustainable Green Streets and Parking Lots Design Guidebook (2009), and the Portland Metro’s Green Streets (2002). Future design should consider a combination of retention as well as detention facilities.

## CHAPTER 2 OPEN SPACE

### Introduction

The redevelopment strategy for the Broadway/Valdez District calls for significant intensification of uses, and for the creation of a unique and distinctive retail destination that can compete with other regional shopping districts. Both of these strategic directions generate a demand for providing well designed and strategically located open space. In the first instance, the intensification of development and the creation of a more urban environment require the introduction of open space to ensure a suitable quality of life for future residents. In the second instance, retailing has very much become a form of entertainment, and shoppers have come to expect high quality environments that include an attractive and well-appointed public realm that complements the shopping experience. In order to be competitive with shopping districts in Emeryville, Walnut Creek, and San Francisco, the Broadway/Valdez District will need to improve the design quality of its public realm, take advantage of its existing open space assets, and introduce new open space features and amenities. The following discussion sets forth the basic principles and elements of the open space program for the Broadway/Valdez District for consideration.



Paseo Colorado, Pasadena, CA



Santana Row, San Jose, CA



Santana Row, San Jose, CA



City Place, West Palm Beach, CA

## Preliminary Open Space Design Principles

The following general design principles have informed the creation of the preliminary open space concepts:

- A variety of publicly accessible outdoor spaces such as plazas, patios, courtyards, pedestrian passages, terraces and parks should be created to support pedestrian activity, community interaction, and a vibrant retail environment.
- Open space features should be strategically located throughout the District to enhance the area's aesthetic quality, maximize visitor comfort, and encourage pedestrian movement throughout the District.
- Plazas, paseos, and streetscapes should be designed to complement and enhance the function and character of adjacent commercial uses by providing a transition from the public streetscape to the private business, and providing outdoor areas that can accommodate commercial activity (e.g., outdoor dining, display areas, etc.).
- Publicly accessible plazas and paseos should be framed by active storefronts and building frontages with building entrances and storefront windows that face onto the open space.
- Parks and plazas should be designed to be accessible to all users. They should have clearly defined visual and physical connections that provide a comfortable transition from the public to the private realm and be inviting to the public.
- Paseos (i.e., pedestrian passages) are an important element of the District's urban open space system and are strongly encouraged as connective elements and open space features. They promote pedestrian activity by creating spaces scaled to pedestrian use, reducing conflicts with automobile traffic, and improving pedestrian connectivity. They also provide the benefit of increasing the amount of potential retail frontage.
- To promote user comfort, plazas and courtyards should be well-defined by buildings and landscaping, comfortably scaled, appropriately oriented for solar access, landscaped for shade and ornament, furnished with areas for sitting, and lighted for evening use.
- Landscaping should be used to activate building façades, soften building contours, highlight important architectural features, screen less attractive elements, provide shade, and add color, texture, and visual interest.

- Landscape materials should be of high quality and suitable for the Northern California climate. Given the general lack of precipitation, especially during summer months, native and low-water-use plant species are preferred.
- Open space areas should be designed to ensure public safety by maximizing visibility into the space, and incorporating elements and activities that foster positive social interaction and a sense of community ownership among community members.
- Given the urban context and limited availability of land, there is no minimum size for plazas or parks.
- The design of parks, plazas and other open space areas should explore opportunities to recognize and reinforce the District's and Oakland's rich history.
- Open space areas should incorporate and express sustainable design strategies including:
  - capturing and treating stormwater in planted filtration areas, bioretention areas, and structural soil cells,
  - using recycled materials,
  - using high efficiency and dark sky compliant lighting
  - planting to promote biodiversity and a healthy urban forest,
  - mitigating urban heat island effect with techniques such as pervious paving, high albedo paving, shade, and minimizing paved areas
  - incorporating climate appropriate planting and high efficiency irrigation.
- Consideration should be given to the integration of public art into all aspects of the public realm as a means of enriching the visitor experience and fostering community identity.
- Larger public spaces should be designed to provide opportunities for event programming (e.g., small-scale performances, street theater, etc.) and commercial activities (e.g., vendors, art shows, etc.) in addition to passive enjoyment of the open space amenity.



City Place, West Palm Beach, CA



The Grove, Los Angeles, CA



Pioneer Square, Portland, OR

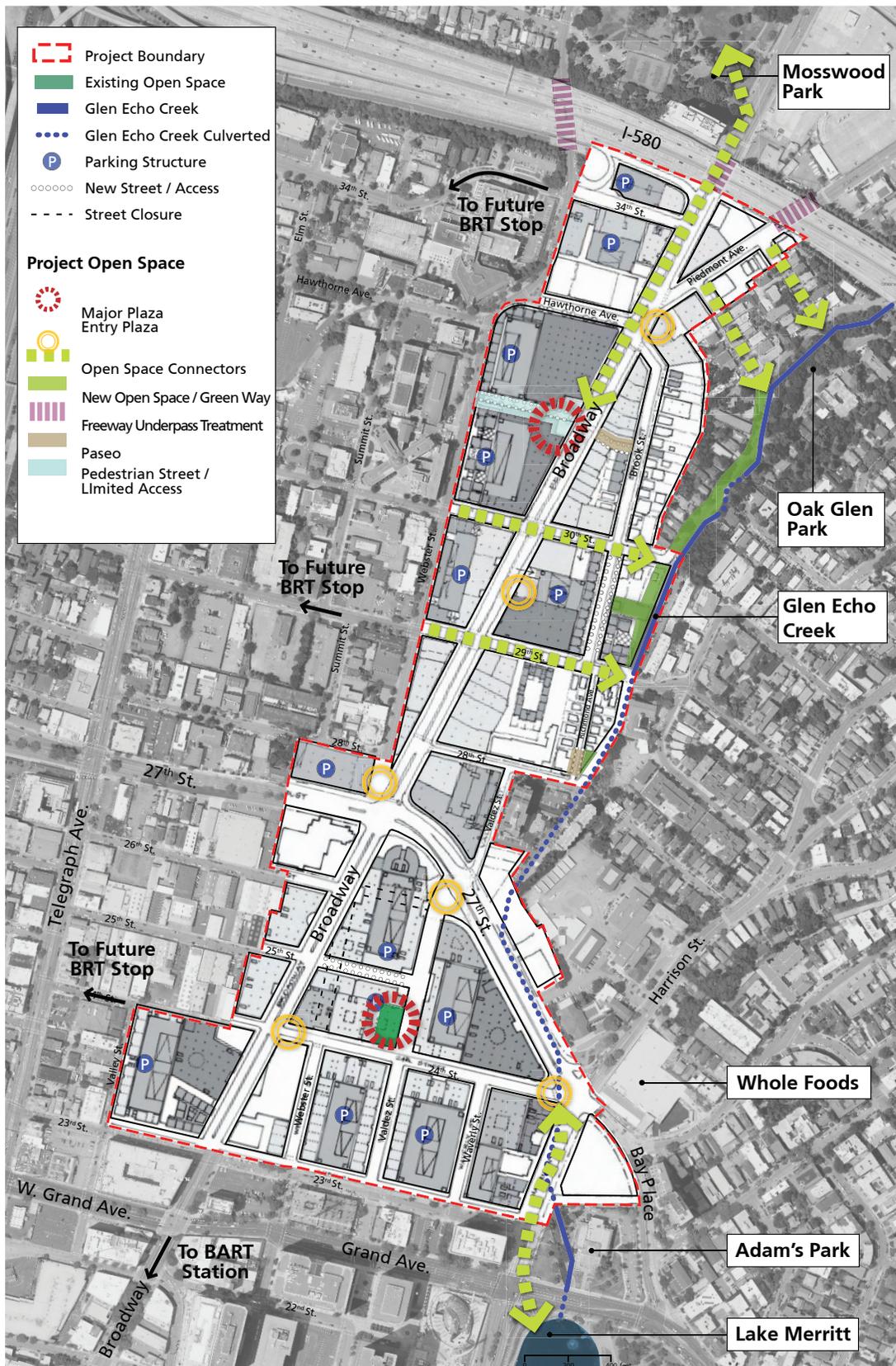
## Open Space Framework

The Broadway/Valdez District Public Realm is comprised of the following six open space elements:

1. Major Plazas
2. Entry Plazas
3. Pedestrian Streets (Paseos)
4. Neighborhood Parks
5. Open Space Connectors
6. Public Streets

The distribution of these open space elements are shown in Figure: Open Space Framework (Land Use Alternative 3) and a brief description of the intent, location, and preliminary design considerations are provided below. Figure illustrates Land Use Alternative 3. Variations in Open Space for all three land use alternatives are shown in the following Page. Street character, an essential component of the public realm, is described under Chapter 3: Street Typologies.

Open Space Framework (Land Use Alternative 3)



Source: Alameda County Office of the Assessor, City of Oakland, WRT.

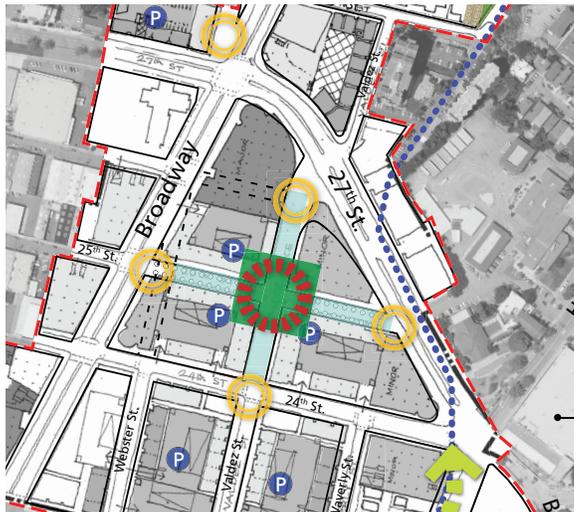
**DRAFT**

November 16, 2009

Variations of Public Realm Framework for Valdez Triangle Land Use Alternatives



Land Use Alternative 1



Land Use Alternative 2



Land Use Alternative 3

# 1. Major Plazas

**Intent:** To provide major open spaces that serve as central focal features that give structure and identity to the retail district and provide a place for public gathering and programmed activities.

**Locations:** Two major plazas are proposed to anchor the two retail sub-districts—one in the Valdez Triangle and the other near the center of the North End retail zone.

The North End Plaza is located on the west side of Broadway midway between Hawthorne Street and 30th Street, on axis with a proposed east/west paseo that would connect to the medical center on Pill Hill and to the retail and residential uses on the east side of Broadway (see Figure at left).

Three alternative locations are being considered for the Valdez Plaza. In Alternative V1, the plaza is located in the northeast quadrant of the intersection of Broadway and 24th Street (see Figure at left). In Alternative V2, the plaza is located in at the intersection of two pedestrian streets, Valdez and 25th Street. In Alternative V3, the plaza is located in the northwest quadrant of the intersection of Valdez and 24th Street.

**Design Considerations:**

- The major plazas should be large enough to accommodate a range of features and activities, and to feel like a destination.
- The design should incorporate major features such as water features, pavilions, stairs, sculpture, etc. that express the significance of these public spaces.
- Use high quality paving treatments such as decorative concrete, stone, unit pavers, etc. to create distinctive patterns while maintaining a durable, functional paved surface.

**Legend**

- Major Plaza
- Entry Plaza
- Pedestrian Street / Limited Access

- Incorporation of a central sculpture or other vertical thematic elements should be considered in the plaza design as to serve as a focal feature and visual terminus that will help attract and orient visitors.
- Retail and restaurant uses should actively engage the plazas with displays, kiosks, sidewalk cafes, etc.
- Public art should be incorporated into the design of the major plazas to add visual interest and express the uniqueness of the place and social function.
- The plaza design should consider the potential for programmed activities and being adaptable to serving as a venue for informal outdoor performances and special event gatherings.
- The major plazas are envisioned as being primarily paved areas with landscape planting used to add color and visual interest, soften hard edges and surfaces, and provide natural comfort.



Union Square, San Francisco, CA

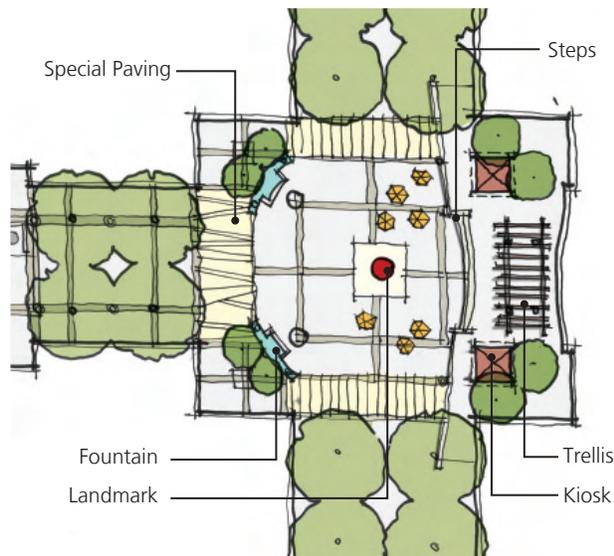


Shellmound Plaza, Emeryville, CA



Paseo Colorado, Pasadena, CA

### Major Plaza





Paseo Entrance, Walnut Creek, CA



Corner Plaza, Walnut Creek, CA



Broadway Plaza, Walnut Creek, CA

## 2. Entry Plazas

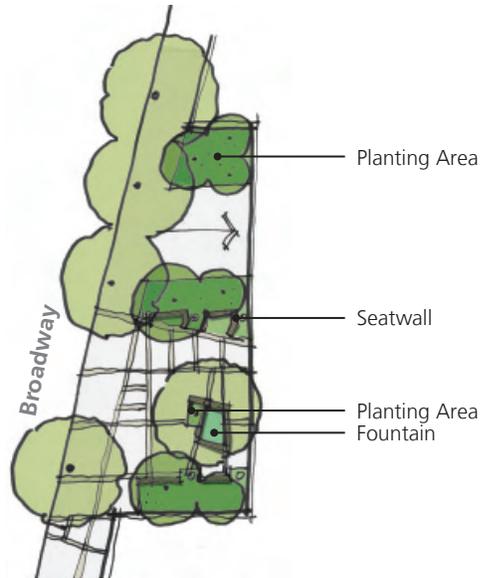
**Intent:** To provide smaller street-side plazas that provide a place for resting and people-watching and announce significant activity nodes and entry points from major streets into an adjoining shopping street or retail node.

**Locations:** The plan identifies multiple potential locations for Entry Plazas, with the majority being along Broadway and 27th Street. The precise locations for Entry Plazas will be dependent on the preferred land use/urban design alternative.

### Design Considerations:

- The intent is to create an activity node along the street and a portal to shopping areas and other open spaces.
- The plaza design should extend the look and feel of the adjoining street into the plaza through the extension of paving materials, lights, furnishings, and ground plane treatments.
- Seating, planters, furnishings, and other features that help activate the plaza and invite public use should be incorporated into the design.
- Plaza design should introduce elements such as lighting, banners, sculpture, fountains, etc. that distinguish these plazas as entry points to the adjoining retail stores, paseo, or shopping street.
- The plazas should be open to allow views into adjoining retail and down connecting paseo or shopping street.
- Retail and restaurant uses should actively engage the plazas with displays, sidewalk cafes, etc.

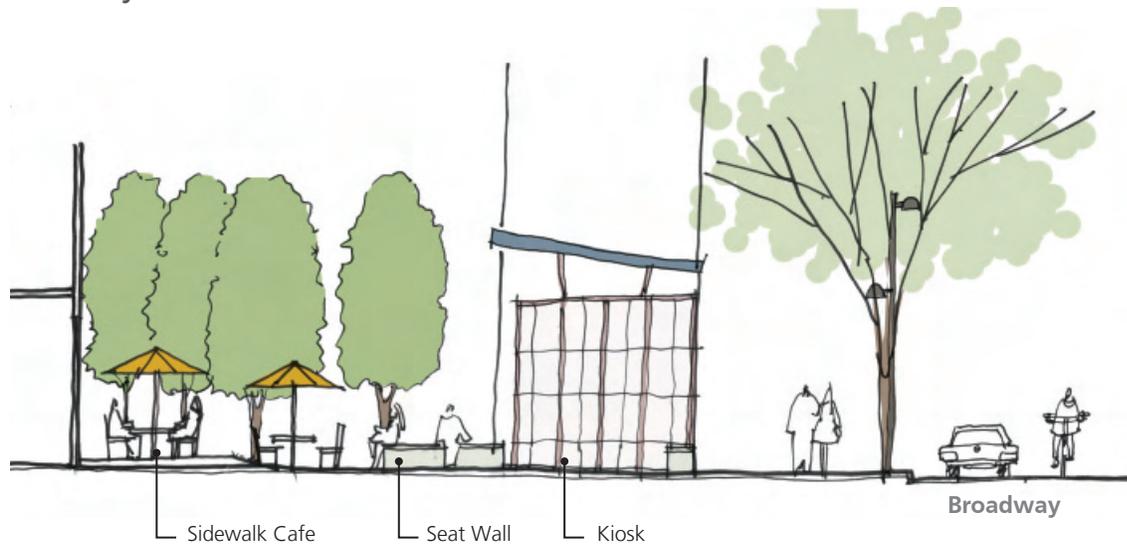
Entry Plaza Concept - Broadway between  
29th and 30th Street



Entry Plaza Concept - Broadway at 27th Street



Entry Plaza Concept - Section  
Broadway at 27th Street





Oak Lane, Walnut Creek, CA



Broadway Plaza, Walnut Creek, CA



The Grove, Los Angeles, CA

### 3. Paseos and Pedestrian Streets

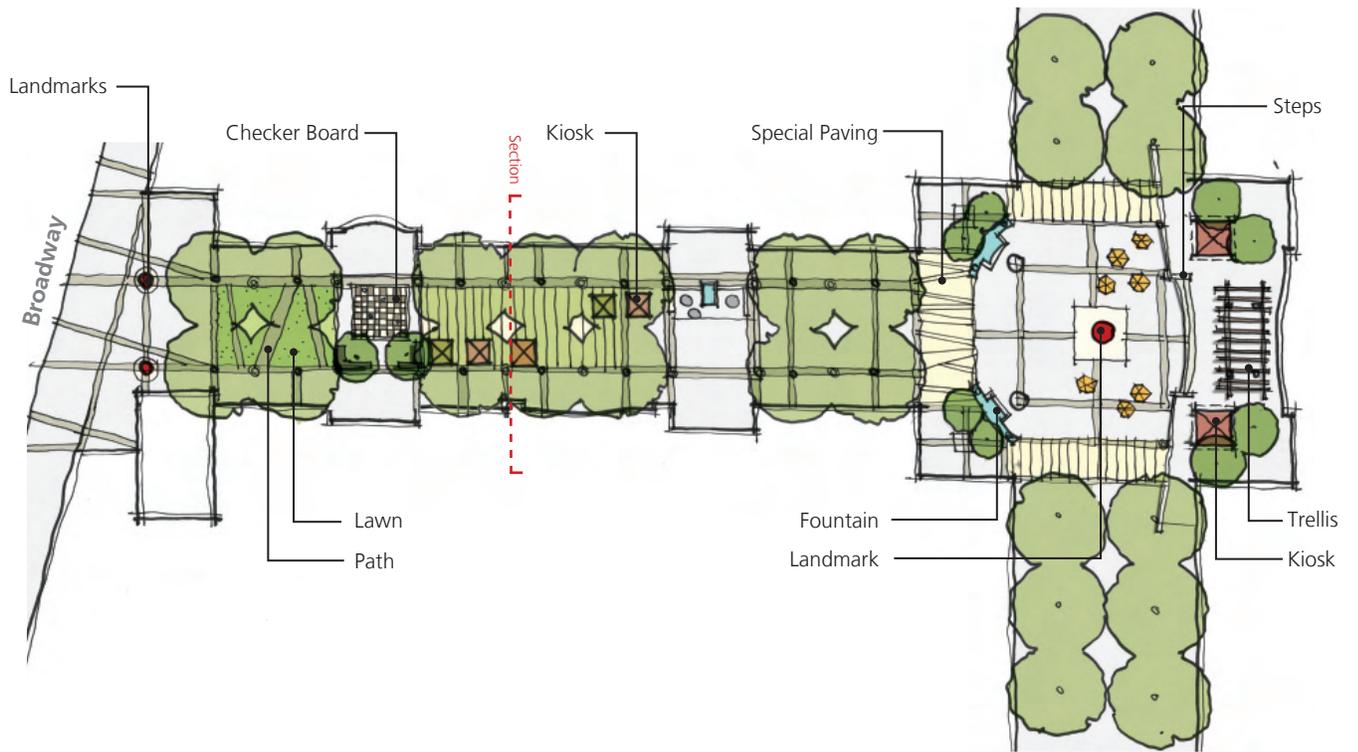
**Intent:** To create vibrant, human-scale pedestrian shopping streets that enhance the area’s walkability by improving access and connectivity to and within the retail district.

**Locations:** Primary locations connect to the hospital from between Broadway and Webster; and in the Valdez triangle to extend the street grid of Valdez and 25th Street.

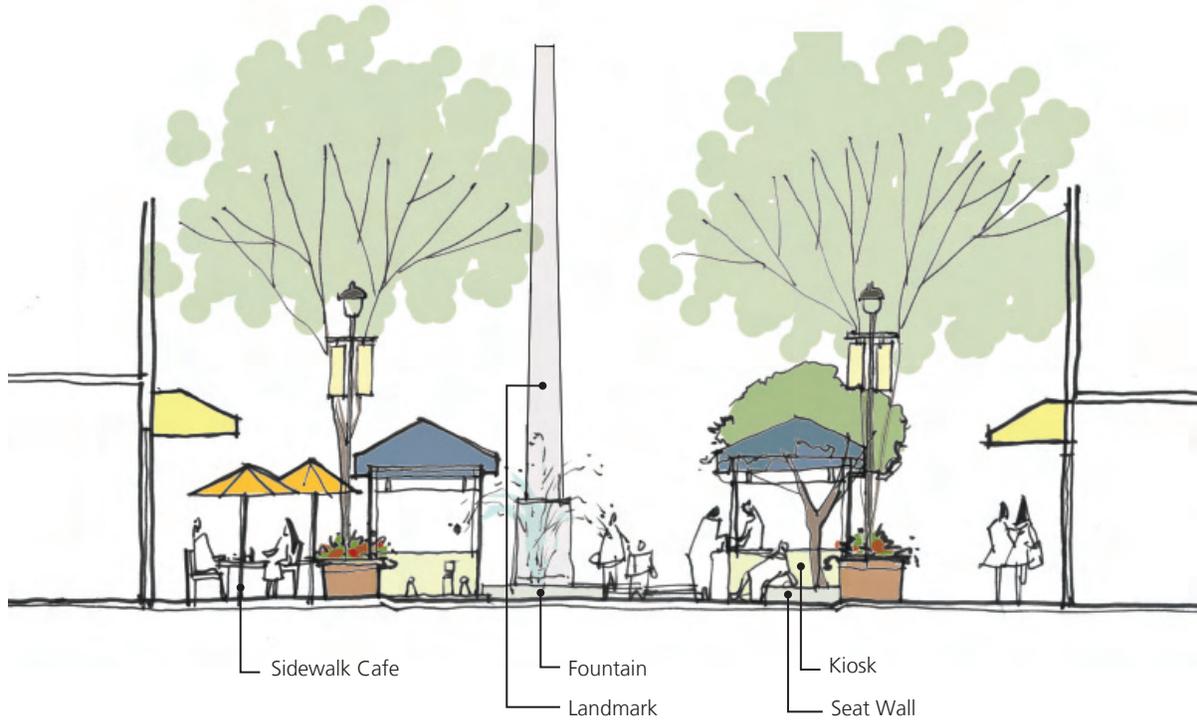
**Design Considerations:**

- Paseo and pedestrian street entrances should be designed to provide a sense of welcome at both ends of the paseo, and to provide visual cues for pedestrians that these are unique spaces.
- Paseos and pedestrian streets should be wide enough and open enough to feel safe and comfortable for pedestrians, and generally should provide visibility from one end to the other.
- Paseos and pedestrian streets should be designed as active retail streets that are lined with active facades that include storefront entrances, display windows, and outdoor dining.
- Paseos and pedestrian streets should include distinctive design features and amenities such as custom furnishings, fountains, art, and movable furniture, sitting areas, games, and landscaping.
- Paseos and pedestrian streets should be designed for strolling with places for respite and people watching.
- Paseos and pedestrian streets represent two alternative approaches to providing for greater pedestrian circulation without conflict with motor vehicles. Paseos are typically designed as narrow pedestrian-only passages in the tradition of European cities. An alternative design strategy is to create a more traditional street with curbs (e.g., sidewalks would be 20 feet in width with a similar roadway dimension) that would remain closed to traffic but would easily support delivery, maintenance and emergency vehicles. It also preserves the option of opening it to traffic in the future if desired.

25th Street - Pedestrian Street + Valdez Plaza Concept



25th Street Pedestrian Street - Section





Frog Park, Oakland, CA



Pocket Park on Glen Echo Creek at Montevista Avenue, Oakland, CA



Oak Glen Park, Oakland, CA

## 4. Neighborhood Parks

**Intent:** To create neighborhood parks that provide open space amenities for existing and future residents and enhance access to Glen Echo Creek, the area’s primary natural resource.

**Locations:** A series of diverse park spaces are located along the east side of the Project Area, in the vicinity of Glen Echo Creek. The first piece is a linear greenway along the west bank of Glen Echo Creek that will connect Oak Glen Park south to 30th Street. The second park space includes a linear piece along the creek from 30th Street to 29th Street as well as a perpendicular branch that links the Brook Street extension to the creek. The third park space is a small pocket park located at the eastern terminus of 28th street.

### Design Considerations:

- Over the long term, acquisition of property would be necessary to achieve the continuous band of creekside parkland recommended. Such acquisition should be strongly considered in order to expand and protect natural creek resources and create a continuous pedestrian connection along the creek.
- The proposed parks should be designed primarily for passive use, with a focus on the natural creek corridor, activities for children, and facilities for the elderly.
- The public right-of-way along the west side of the creek should be improved between Oak Glen Park and 30th Street to include a pedestrian trail and natural plantings.
- The open creek channel between 29th and 30th Streets (it enters a culvert about 50 feet north of 29th Street) should be enhanced to restore a natural appearance with creation of gentle side slopes where possible. Natural stones and logs should be placed for as erosion control and to act as weirs. Natural resources should be protected and where possible, restored and expanded. Invasive exotic plants should be removed and native species should be planted.
- Facilities at the larger park between 29th and 30th Streets should include features such as: soft and hard surface walking paths, a play lawn, a local-serving tot lot and age 2-5 play zone that emphasizes creative play, a small plaza for childcare givers and parents to gather and socialize, arbors and creek overlooks, demonstration planting, interpretive elements, and rustic seating logs and boulders.

- The smaller park at the end of 28th Street should serve as a neighborhood garden for passive uses—sitting, viewing, and conversing. Care should be taken to avoid conflicts with adjacent residential uses. Planting should emphasize biodiversity, climate appropriateness, and naturalistic forms.
- Directional signage should orient residents and district employees to these park resources. Opportunities should be explored for special treatments to streets leading to the creek and park from Broadway. Treatments could include consistent curbside native planting, decorative sidewalk treatments, bioswales/raingardens for stormwater treatment, and art.
- The community should be involved in the design and formation of parks to best meet the needs of neighbors and to encourage long term participation in operations and maintenance. The community may for example participate in restoration planting or maintenance of park gardens.
- Sightlines, safety lighting and police vehicle access should be incorporated into park design.

### Neighborhood Park Concept

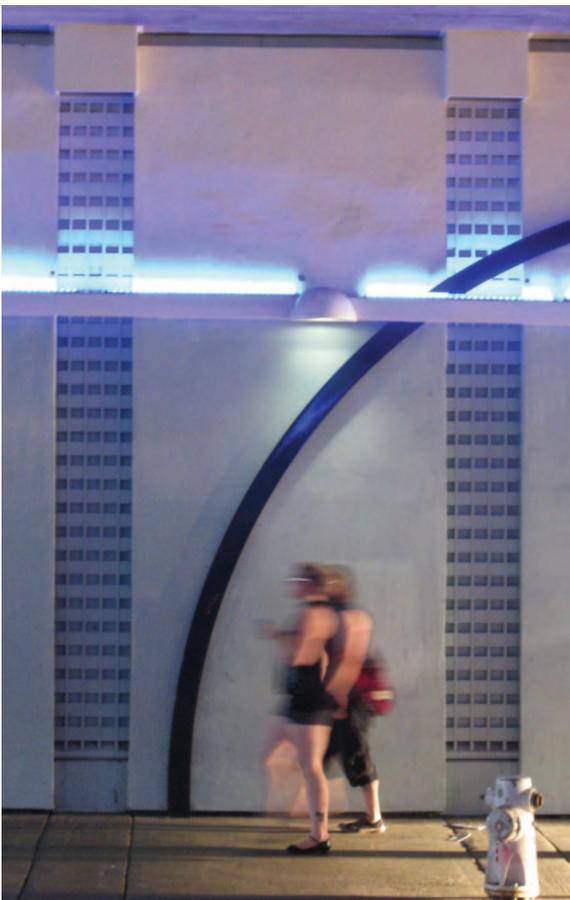




Pedestrian Underpass Mural, Richmond, CA



Overpass Mural, Richmond, CA



MacArthur BART Underpass Lighting, Oakland, CA

## 5. Open Space Connectors

**Intent:** To visually and physically define and enhance key pedestrian routes that connect the Broadway-Valdez District to important existing open space resources that are proximate to the Project Area, including Lake Merritt/Lake Park, Mosswood Park, Oak Glen Park, and Glen Echo Creek.

**Locations:** The Open Space Connectors essentially consist of the pedestrian zones within existing street right-of-ways. Key streets providing an open space connector function include:

- Broadway north to Mosswood Park;
- Harrison Street south to Lake Merritt;
- 29th and 30th streets between Webster and Glen Echo Creek; and
- Randwick and Croxton avenues east of Piedmont Avenue to Echo Glen Park.

### Design Considerations:

- The I-580 Freeway underpasses at Broadway and Piedmont Avenue should receive special design treatments to convert them from psychological access barriers to gateways. Design treatments such as lighting, murals, bollards, and dynamic graphics should be considered as techniques to accent the gateway, but more importantly to make pedestrian access more comfortable and less ominous.
- Sidewalks that provide direct pedestrian connections to key open space destinations (Mosswood Park, Lake Merritt, Oak Glen Park) from the Project Area should receive special consideration for improvements that would enhance access, including signage and wayfinding, increased sidewalk widths and treatments, enhanced pedestrian crossings, new furnishings, tree planting, lighting, and removal of obstructions.
- Neighborhood street connectors to creeks should be enhanced with additional trees and curbside planters, traffic calming, sidewalk improvements, and lighting to create a beautiful neighborhood amenity befitting the residential scale and character. Residents should assist with planning efforts to understand local issues and to guide desired improvements.

## Chapter 3

# STREETSCAPE

## Introduction

A vibrant urban environment is dependent upon the quality of its streetscapes. As the primary public space in the Broadway/Valdez District, streets should be designed to support and encourage public life and positive social interaction. Streetscape improvements are recommended as a strategy that can be publicly implemented to support and catalyze redevelopment of the area. Public investment in the streetscape will enhance property values and provide a supportive context for the transition to higher quality private development. Higher quality streetscapes and development, in turn, will support more pedestrian traffic and greater levels of commercial activity.

The streetscape improvements recommended in the following sections identify preliminary concepts for how the streets in the Broadway/Valdez District might be altered to advance City objectives to create a vibrant new mixed use retail district and enhance the overall quality of life in the area.



Santana Row, San Jose, CA

## Design Principles

While the streetscape improvement recommendations that follow differ for each street, they are all based on a set of common design principles that when implemented will enhance the quality of the pedestrian environment, support effective multi-modal circulation, and be more sustainable. The following seven principles, based on the New York City Street Design Manual (2009), are the basis for the proposed project area street design:

1. Design for Safety
2. Design for Access and Mobility
3. Design for Context
4. Design for Livability
5. Design for Sustainability
6. Design for Visual Excellence
7. Design for Cost Effectiveness

For the Broadway/Valdez District these seven principles have been translated into the following more specific design objectives:

- To promote pedestrian comfort, streetscapes should be well-defined by buildings and landscaping, comfortably scaled, appropriately oriented for solar access, landscaped for shade and ornament, furnished with areas for sitting, and lighted for evening use.
- Landscape materials should be of high quality and suitable for the Northern California climate. Given the general lack of precipitation, especially during summer months, native and low-water-use plant species are preferred.
- Streetscape design should explore opportunities to recognize and reinforce the District's and Oakland's rich history.
- Streetscape design should incorporate and express sustainable design strategies including:
  - capturing and treating stormwater in planted filtration areas, bioretention areas, pervious paving and structural soil cells,
  - using recycled materials,
  - using high efficiency and dark sky compliant lighting
  - planting to promote biodiversity and a healthy urban forest,

- mitigating urban heat island effect with techniques such as pervious paving, high albedo paving, shade, and minimizing paved areas
- incorporating climate appropriate planting and high efficiency irrigation.
- Consideration should be given to the integration of public art into all aspects of the public realm as a means of enriching the visitor experience and fostering community identity.
- Streetscapes should be designed to complement and enhance the function and character of adjacent commercial uses by maintaining storefront visibility and supporting outdoor areas that can accommodate commercial activity (e.g., outdoor dining, display areas, etc.).
- Streets should be framed by active storefronts and building frontages with building entrances and storefront windows that face onto the sidewalk.
- Paseos and pedestrian streets are an important element of the District's urban open space system and are strongly encouraged as connective elements and open space features. They promote pedestrian activity by creating spaces scaled to pedestrian use, reducing conflicts with automobile traffic, and improving pedestrian connectivity. They also provide the benefit of increasing the amount of potential retail frontage.
- Retrofit existing streets to create "Complete Streets" (per California Complete Streets Act of 2008). Complete streets are roadways designed and operated to enable safe, attractive, and comfortable access and travel for all users. Pedestrians, bicyclists, motorists and public transport users of all ages and abilities should be able to safely and comfortably move around the Project Area.
- Add a consistent planting of street trees along each street to enhance aesthetic character, improve environmental character, and contribute to district identity.
- Increase the width of sidewalks wherever feasible to enhance pedestrian capacity and allow for more pedestrian amenities. Target sidewalk widths include:
  - 15' minimum for retail streets
  - 12' sidewalks for other streets
- Narrow curb-to-curb street cross-sections to calm vehicle travel speeds consistent with circulation needs.
  - Balance the need for ample sidewalks with the potential capital costs, by maintaining existing curb locations where possible.

- Introduce curb extensions, i.e., “bulb-outs,” to provide additional pedestrian-oriented space, reduce pedestrian crossing distances, and create additional landscape area. Bulb-outs can be used for bus stops/shelters, bike parking, seating areas, rain gardens, etc.
- Integrate stormwater management features into streetscape design where feasible and appropriate.
- Enhance pedestrian crossings aesthetically and functionally to improve pedestrian safety and convenience.
- Underground all remaining overhead utilities and remove utility poles from sidewalks to remove visual clutter and free up space for amenities.
- Add street furnishings (e.g., benches, trash receptacles, etc.) and other pedestrian amenities (e.g., public art, water features, etc.). Priority locations include streets with a retail and transit focus, including Broadway and 24th Street.
- Enhance bicycle facilities (e.g. bike lanes, sharrows, bike boxes, racks, signage, etc.).
- Enhance transit facilities (e.g., shelters, benches, signage, real-time transit information, etc.)
- Maintain on-street parking as a buffer to moving traffic wherever feasible.

## Bulb-outs (Curb Extensions)

Curb extensions, or bulb-outs, are proposed throughout the Broadway/Valdez District as a means of enhancing street character and function. The space created by a bulb-out can be used in a variety of ways, depending on the needs and character of the street. Generally, bulb-outs are used to locate either additional pedestrian amenities and/or landscaping, including stormwater management features. Bulb-outs can be located at intersections or mid-block. Their length and frequency is determined by their function.

Common pedestrian applications in the Project Area include bus stops, bike parking, outdoor dining areas, seating and other street furniture. Some of the benefits include reduced pedestrian crossing distances, reduced bus delays caused by pulling back into traffic, additional space for pedestrian amenities, etc., all of which will lead to improved pedestrian safety and reduced sidewalk congestion. Bus bulb-outs also retain more on-street parking due to the elimination of tapers needed for a bus to pull into and out from a stop. Landscaping applications for curb extensions include planting areas that can be used for a second row of street trees, additional planting areas, rain gardens, etc.



Bulb-out with street tree and bicycle parking



Bulb-out with landscaping



Bulb-out with stormwater management function



Permeable paving



Rain garden

## Stormwater Management

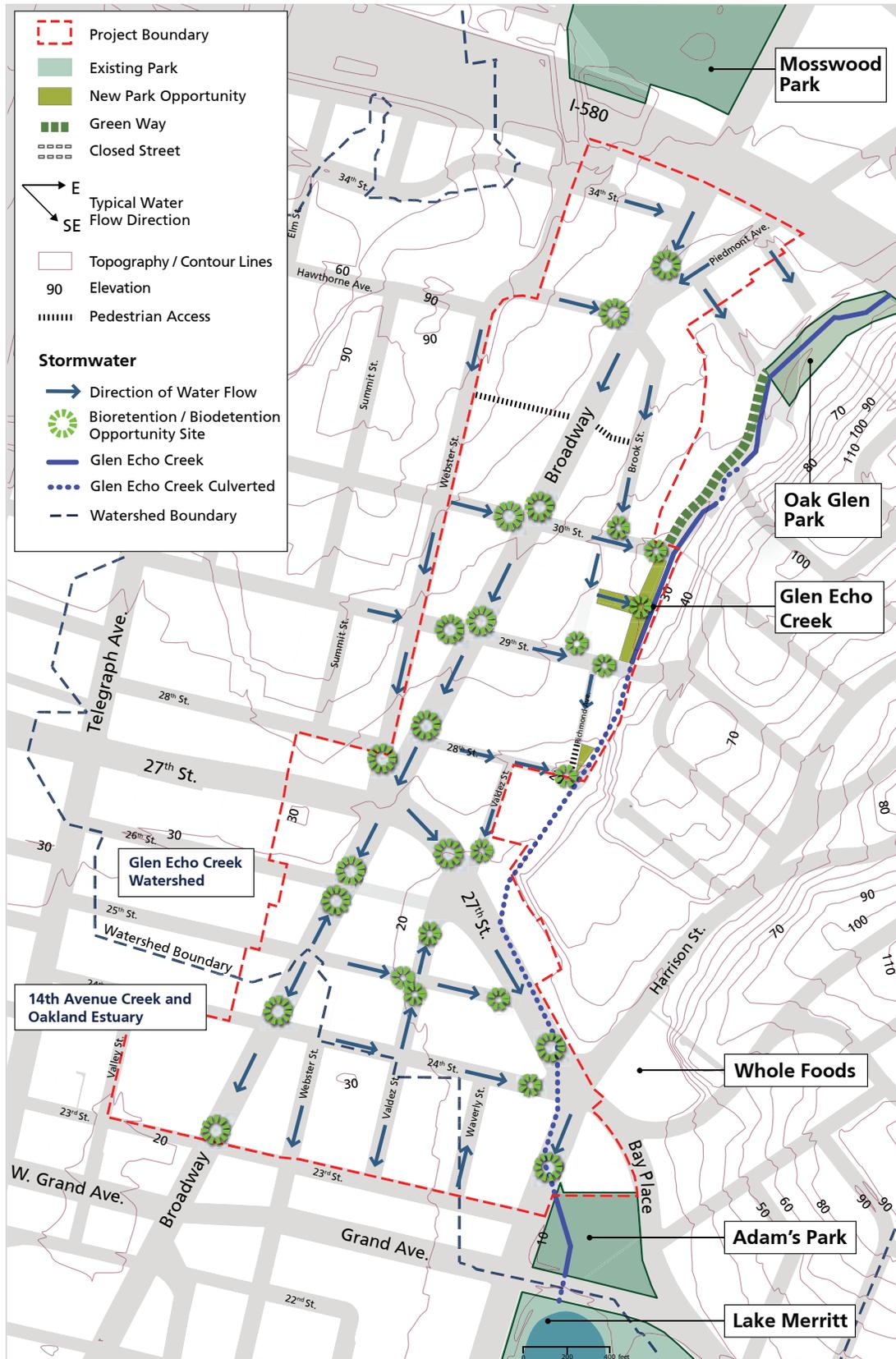
Comprising seventeen acres of land, streets provide a significant opportunity to capture and treat stormwater within the Broadway/Valdez District. The Stormwater Management Concept Diagram illustrates general locations for focused stormwater management areas based on topography and the existing street network. These opportunity sites indicate concentration areas with the potential to capture and treat stormwater. The Concept Diagram is intended to be used as a design tool to aid in the development of detailed street designs, and does not represent specific locations.

The following street design techniques will be considered to reduce stormwater runoff and improve the quality of stormwater runoff entering existing storm drain infrastructure and downstream receiving water bodies:

- Increasing permeable (unpaved) area
- Providing a healthy urban forest
- Using permeable paving, particularly in on-street parking areas (infiltration)
- Rain gardens (bioretention/infiltration)
- Using street tree wells as detention basins for sidewalk runoff and landscaping

These features should be considered in the design of streets throughout the Project Area.

Stormwater Concept Plan (Land Use Alternative 2)



Source: Alameda County Office of the Assessor, City of Oakland, WRT.

**DRAFT**

November 16, 2009

### Rain Garden



### Bioretention and Biodetention Facilities

Landscape bulb-outs reduce the amount of impervious (i.e. paved) land in the area, thereby reducing the amount of runoff that enters the stormwater system and increases the amount of water that returns to the earth as groundwater.

A rain garden is a planted depression that allows rainwater runoff from impervious surfaces the opportunity to be absorbed. This reduces rain runoff by allowing stormwater to soak into the ground (as opposed to flowing into stormdrains and the nearby Glen Echo Creek). Rain gardens are a subset of bioretention planters except that their focus is on percolation of runoff, and they do not typically include engineered soils or an under-drain connection.

Bioretention planters also improve stormwater quality, reduce overall volumes, and delay and reduce stormwater runoff peak flows. They typically combine plants, engineered soils, a rock subbase, to slow, store, and remove pollutants from stormwater runoff, but often include an under-drain connection that carries detained and filtered runoff into the storm drain system.

Landscaped bulb-outs designed into streets provide excellent opportunities for introducing these types of stormwater management features into the Project Area.

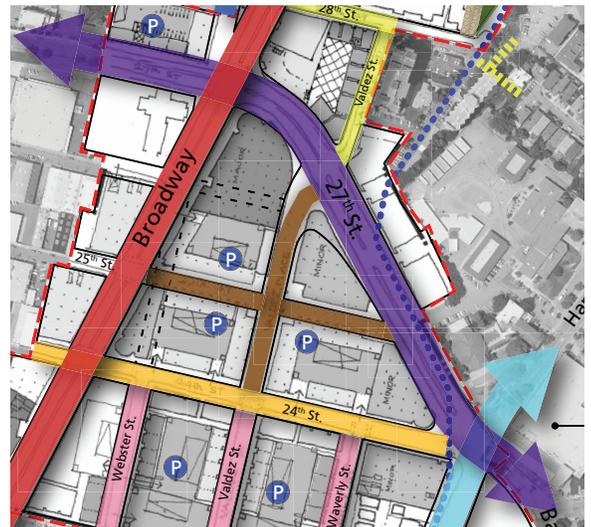
## Streetscape Improvements

For purposes of streetscape design, three general street typologies have been identified in the Project Area: Major Streets, Connectors (including Green Streets), and Pedestrian Streets (see figure on following page). These street typologies go beyond typical “functional classifications” based on vehicular access and mobility needs to categorize streets into broader typologies that respond not only to the vehicular context of vehicular networks, but also transit and bicycle

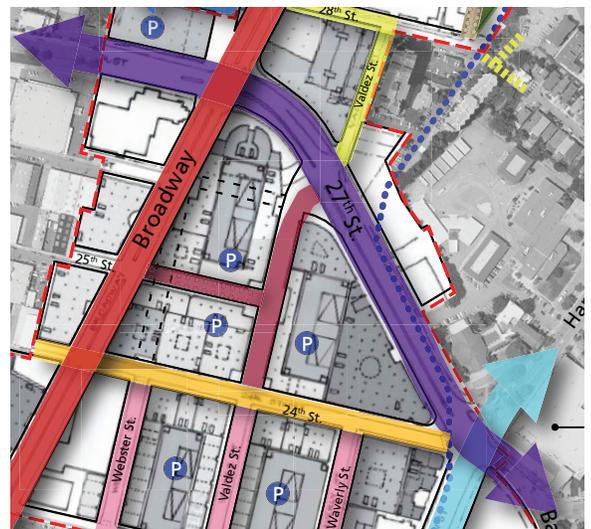
### Variations of Public Realm Framework for Valdez Triangle Land Use Alternatives



Land Use Alternative 1

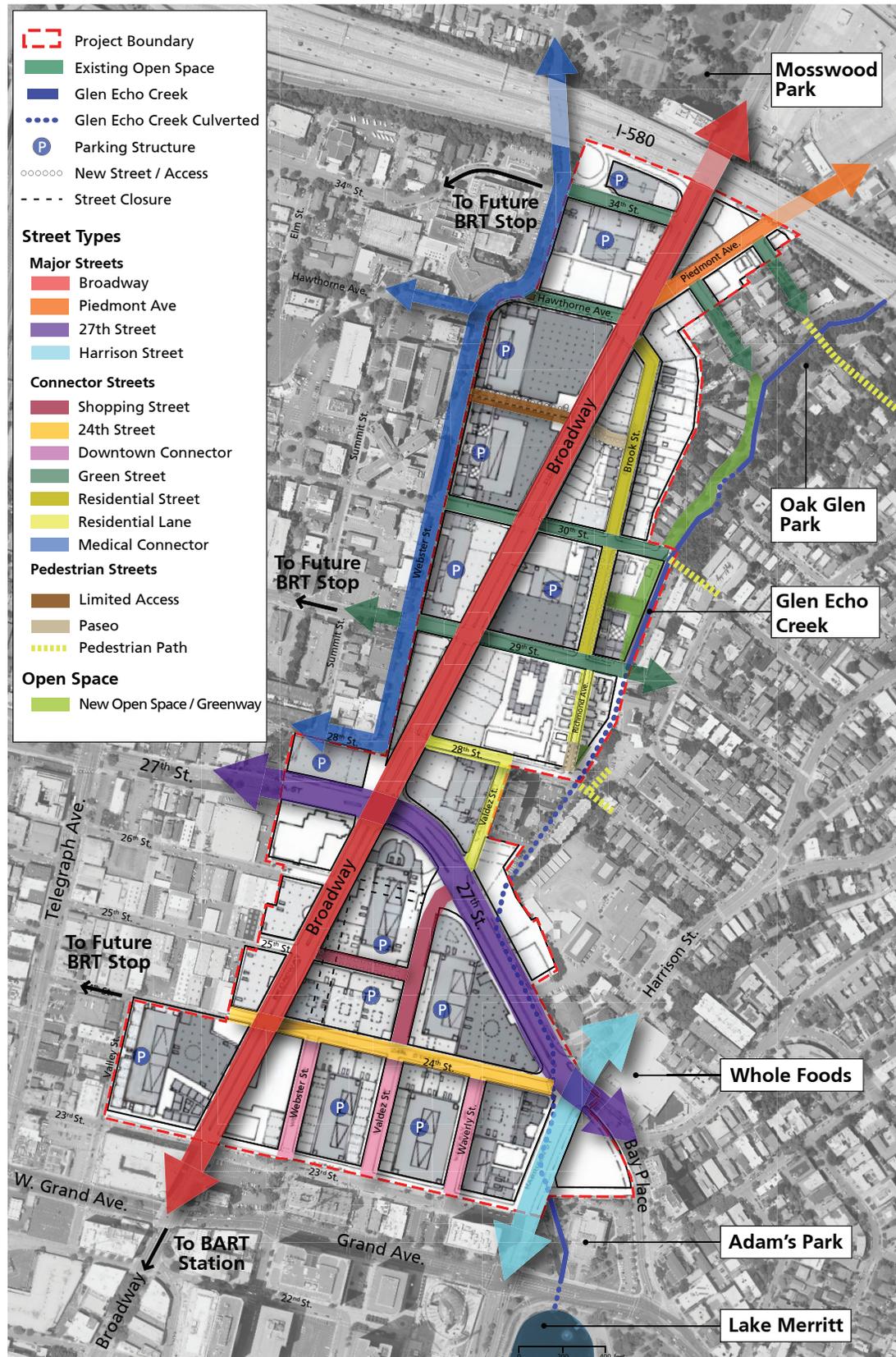


Land Use Alternative 2



Land Use Alternative 3

Streetscape Plan (Land Use Alternative 3)



source: Alameda County Office of the Assessor, City of Oakland, WRT.

**DRAFT**

November 16, 2009

networks, land uses and environmental factors.

## Major Streets

Major Streets serve as the workhorses of the transportation network within the Broadway/Valdez District. They include Broadway, 27th Street, Harrison Street, and Piedmont Avenue. Not only do these streets provide the capacity to move high volumes of vehicular traffic to and through the Project Area, but they also serve as significant access routes for pedestrians and bicyclists. Bus transit service is provided along the length of Broadway. Gateways into the Broadway/Valdez District are



Walnut Creek, CA



San Francisco, CA

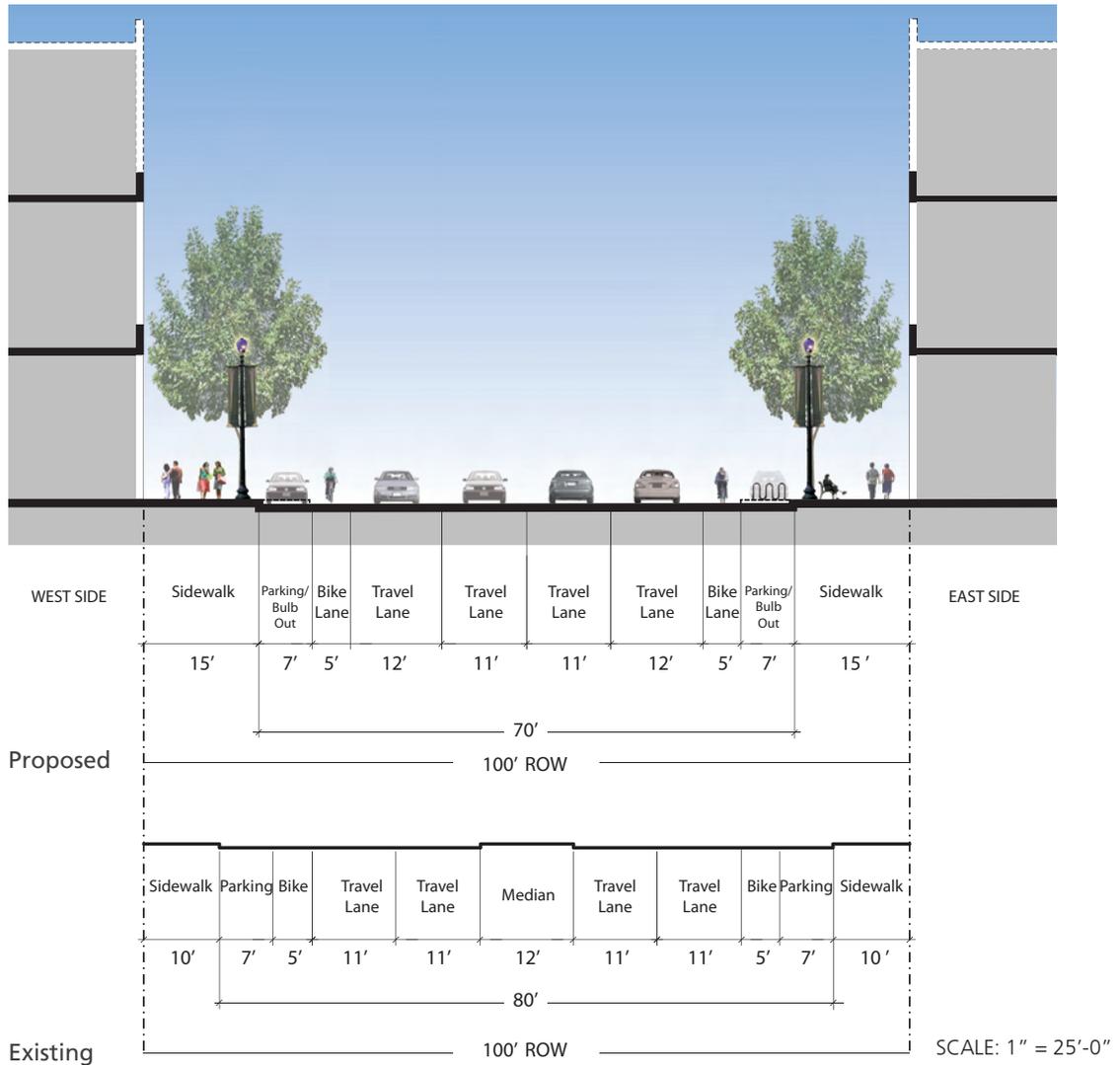
**Broadway**

located at the intersections of these streets.

**Broadway**

**Intent:** As a major retail, transit and bicycle street, Broadway serves as the Project Area's premier complete street. Complete streets are roadways designed and operated to enable safe, attractive, and comfortable access and travel for all users. Pedestrians, bicyclists, motorists and public transport users of all ages and abilities will be able to safely and comfortably move along Broadway. Widened sidewalks, continuous street trees, and bulb-outs provide for a pleasant pedestrian environment and enough room for outdoor merchandise display or restaurant and café

**Broadway - Option 1**

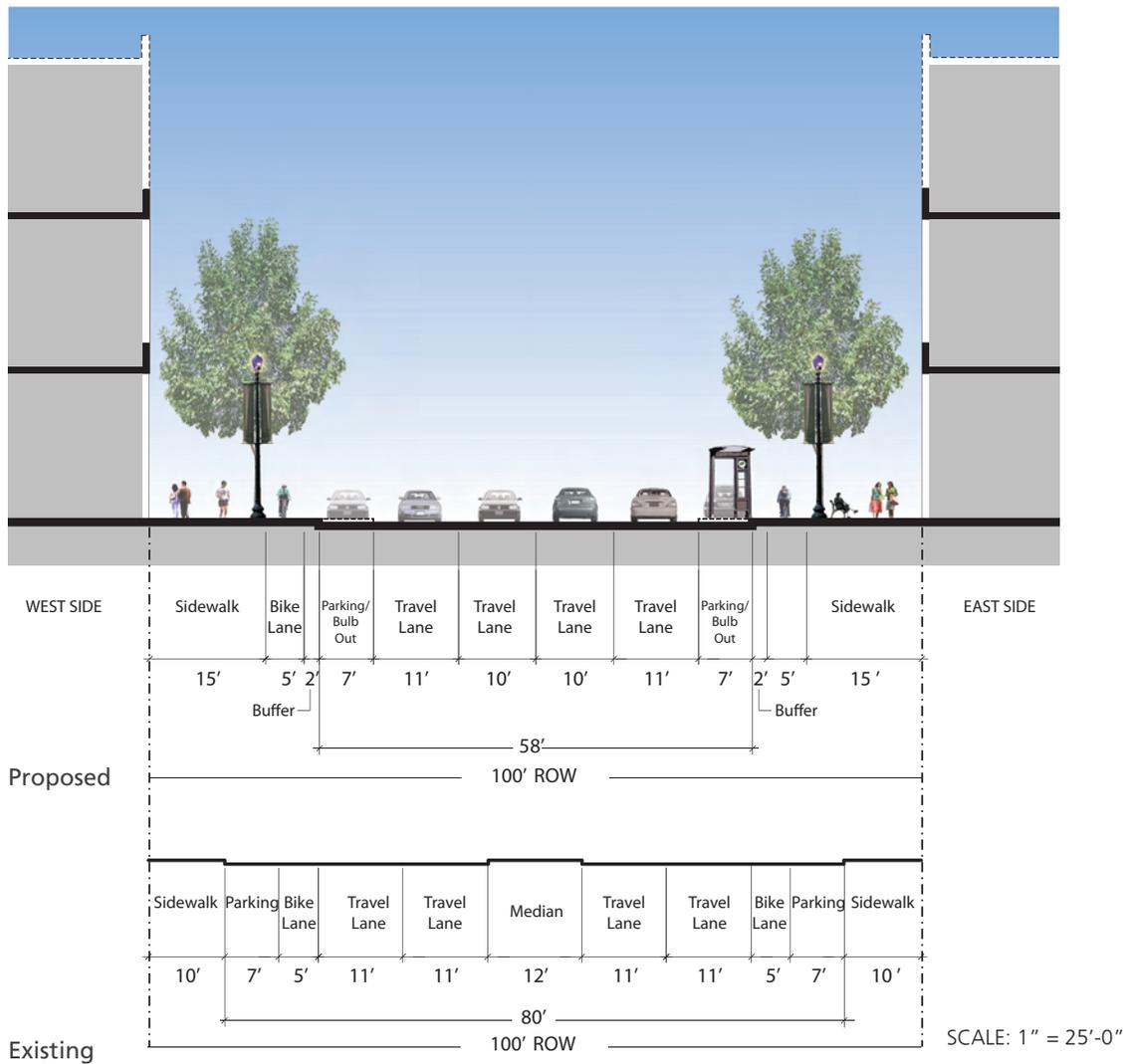


seating.

**Design Considerations - Option 1:**

- Remove center median.
- Widen sidewalks to 15' to accommodate large-scale retail uses.
- Intersections. Neck-down intersections with bulb-outs to facilitate pedestrian crossing, and eliminate parking lane and narrow travel and bike lanes to accommodate turning lanes.
- Lighting. Provide ample pedestrian-scaled lighting along the length of the corridor.
- Landscape. Introduce a consistent planting of large street trees.

Broadway - Option 2

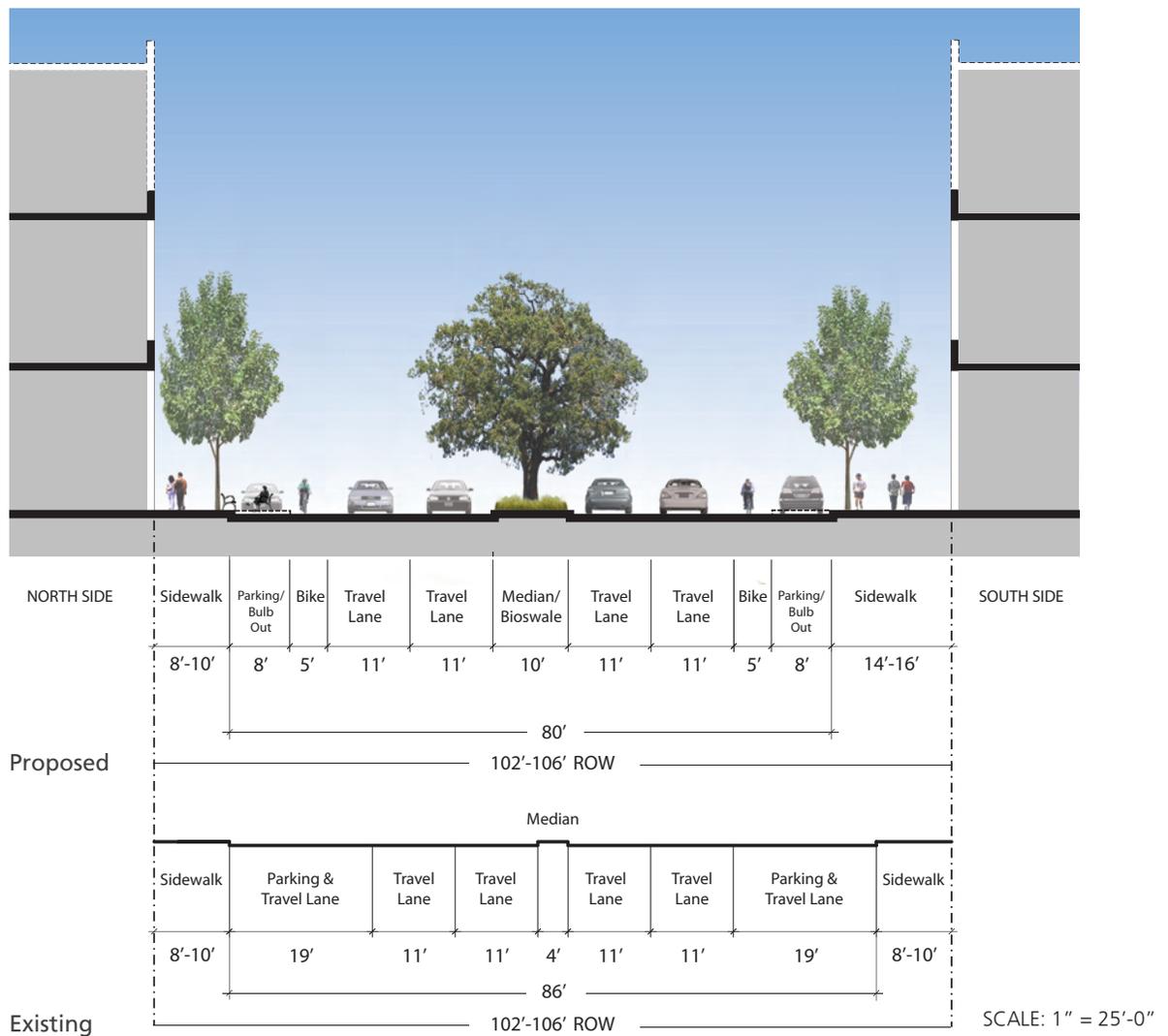


- Bulb-outs. Accommodate a variety of treatments appropriate for a commercial “complete street”, including: bus stop and shelter, bike parking, outdoor seating, additional pedestrian amenity space, and rain garden

**Design Considerations - Option 2:**

- Includes all design features of Option 1.
- Invert locations of bicycle and parking lanes to:
  - Extend non-motorized realm and separate cyclists from moving vehicular traffic

27th Street - Gateway



- Remove conflict between transit vehicles and bicycles at bus stops

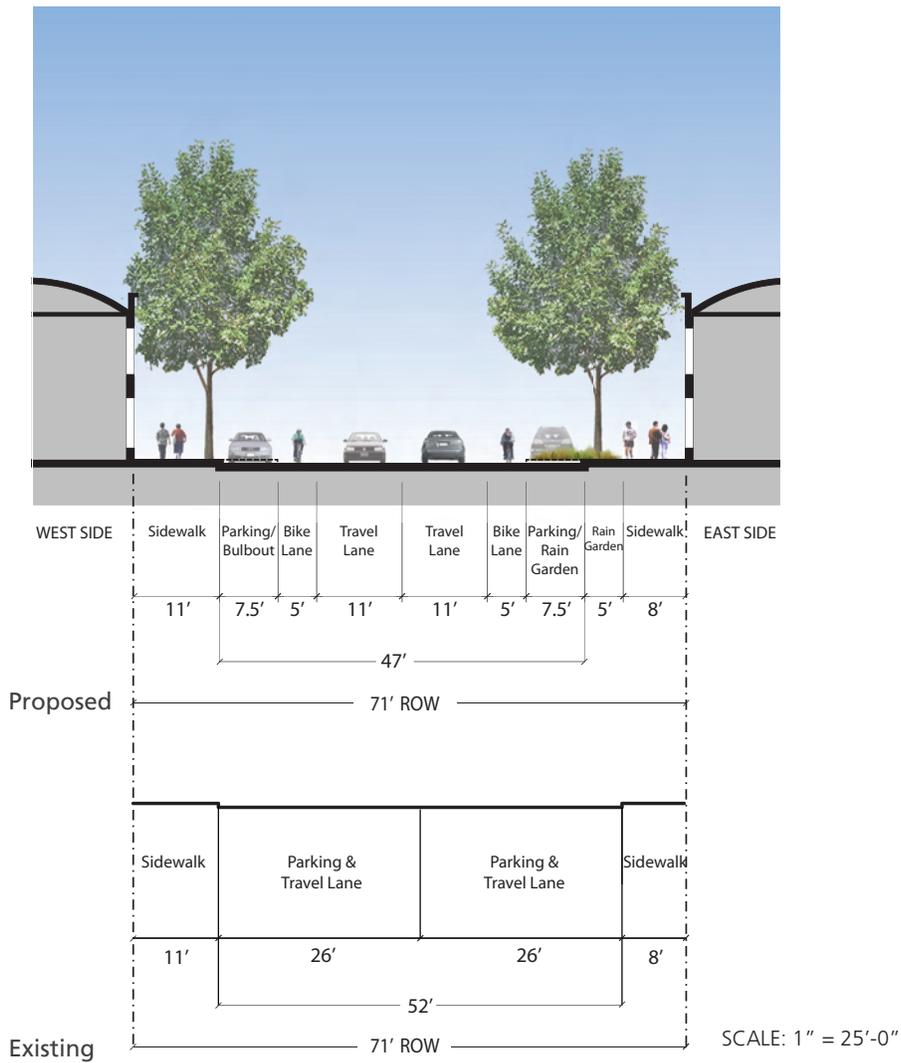
27th Street - Gateway

**Intent:** Primary access into the Project Area from freeways, Lake Merritt and neighborhoods to the east and west, and the location of two District Gateways—at the intersections of Broadway and Harrison.

**Design Considerations:**

- Maintain curb (and 8-10' sidewalk) on north side of street.
- Expand sidewalk on south side to 14-16' to better serve new retail development.
- Add bike lanes.
  - Expand median to 10 feet (from 4') to: Accommodate large canopy trees and explore potential for bio-swale and/or other stormwater treatment function

Piedmont Avenue



- Accommodate turning lane at intersections

**Piedmont Avenue – Gateway**

**Intent:** To serve as a Gateway to Project Area from Kaiser Medical Center and the Piedmont Avenue neighborhood to the north. The street serves as a designated District Bicycle Route and is a potential opportunity site for “green street”

**Design Considerations:**

- Maintain curb (and 11’ sidewalk) on northwest side
- Add bike lanes
- Move curb on southwest side 5’ to accommodate wider sidewalk, stormwater management facilities, and additional landscaping.
- Develop wayfinding to strengthen gateway function and connections to Oak Glen Park and Glen Echo Creek.

- Bulb-outs: primary functions – shorter pedestrian crossings and stormwater management

## Community Connector

Community Connector streets support a mix of retail, service and residential uses by providing important secondary access and circulation routes. There is a balance between through and local traffic , with a strong pedestrian orientation. They play an

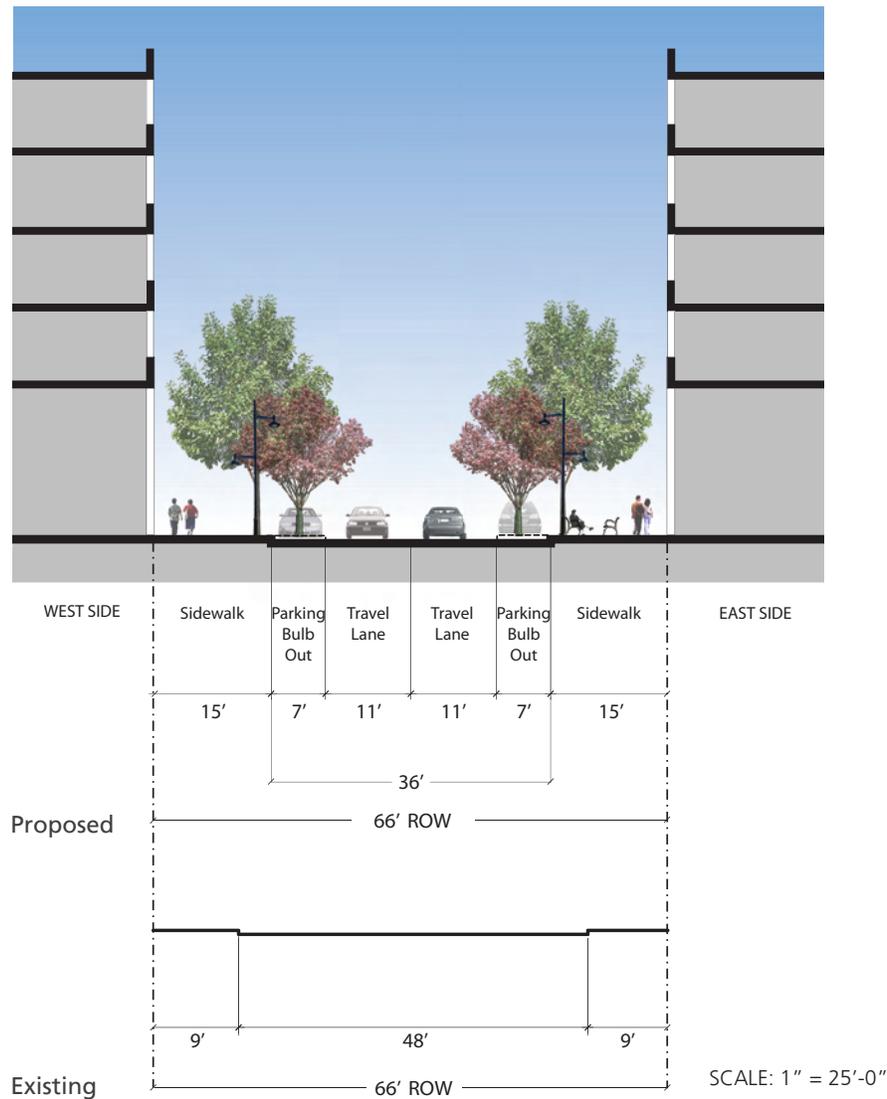


Pearl District, Portland



Hayes Valley, San Francisco

## Shopping Street



important role in connecting the area to adjacent neighborhoods.

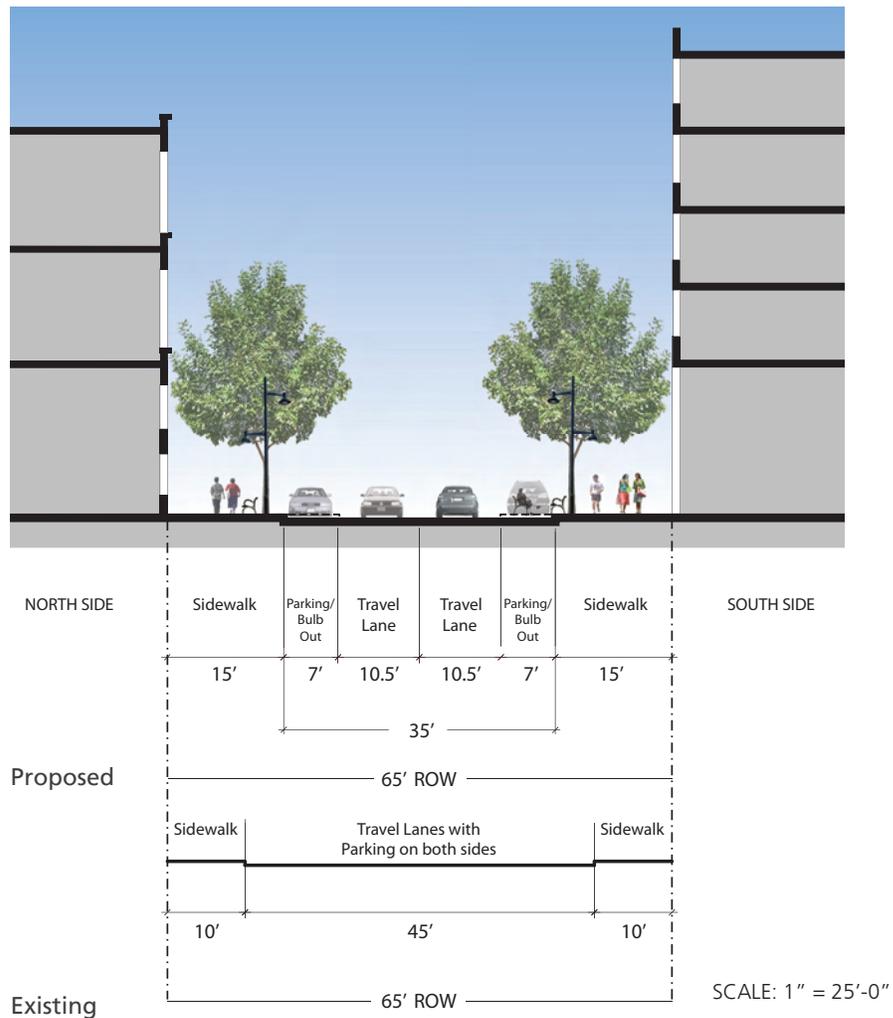
### Shopping Street- Valdez Street

**Intent:** Provide an intimately-scaled street that supports a pedestrian retail environment and provides slow, low-volume vehicular access and on-street parking.

**Design Considerations:**

- Expand sidewalks (both sides) to 15' minimum to support ground-floor retail and residential uses
- Street Trees: balance canopy cover objectives with solar access desired for successful retail.
- Provide pedestrian-scaled lighting
- Stormwater function south of 24th Street limited due to flat topography
- Bulb-outs
  - Accommodate a wide variety of treatments appropriate for retail supportive uses, including outdoor seating, additional pedestrian amenities, bicycle parking.

**24th Street - Retail Connector**



- Stormwater management features such as rain gardens are a secondary priority to pedestrian amenities.

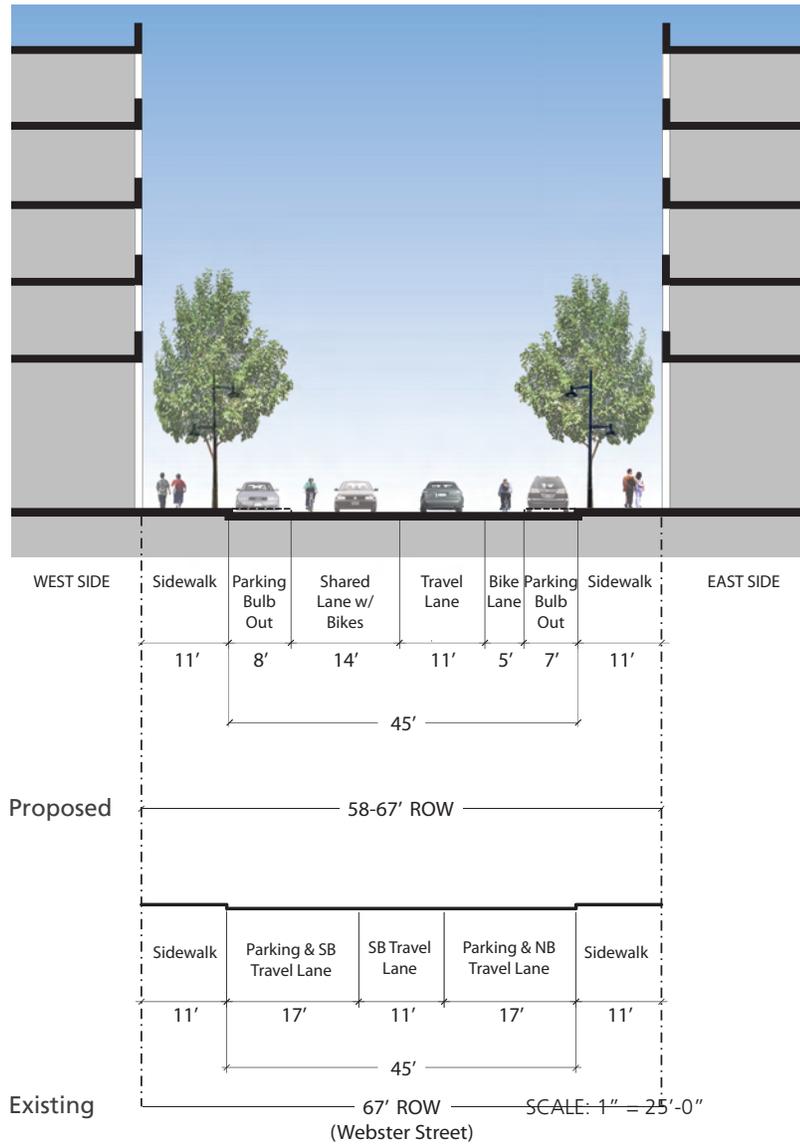
**24th Street – Retail Connector**

**Intent:** Active pedestrian-oriented retail street that provides direct connector between Broadway and Whole Foods on Harrison Street

**Design Considerations:**

- Same as Shopping Street.

Webster Street - Downtown Connector



- Maintain 2-way vehicular access.

**Webster Street**

*Intent:* To connect the Valdez Triangle Shopping District to Downtown Oakland. The street is a designated Neighborhood Bicycle Route and serves an important function in north-south bicycle circulation.

**Design Considerations**

- Maintain existing 11-foot sidewalks
- Introduce a northbound bicycle lane (uphill, and connection to Broadway lane to the north)
- Create a 14' Southbound shared bicycle/vehicle travel lane with sharrows
- Bulb-outs serve both pedestrian and landscape function

## Green Street

- Stormwater function limited due to relatively flat topography

### Green Street

**Intent:** Green Street design places emphasis on the integration of storm water management features in addition to accommodating the various transportation uses. Key east/west streets have been identified as Green Streets in order to capture and treat stormwater that currently drains directly into Glen Echo Creek and to create an attractive set of corridors that connect and attract visitors down to the area's primary natural resource—the creek.

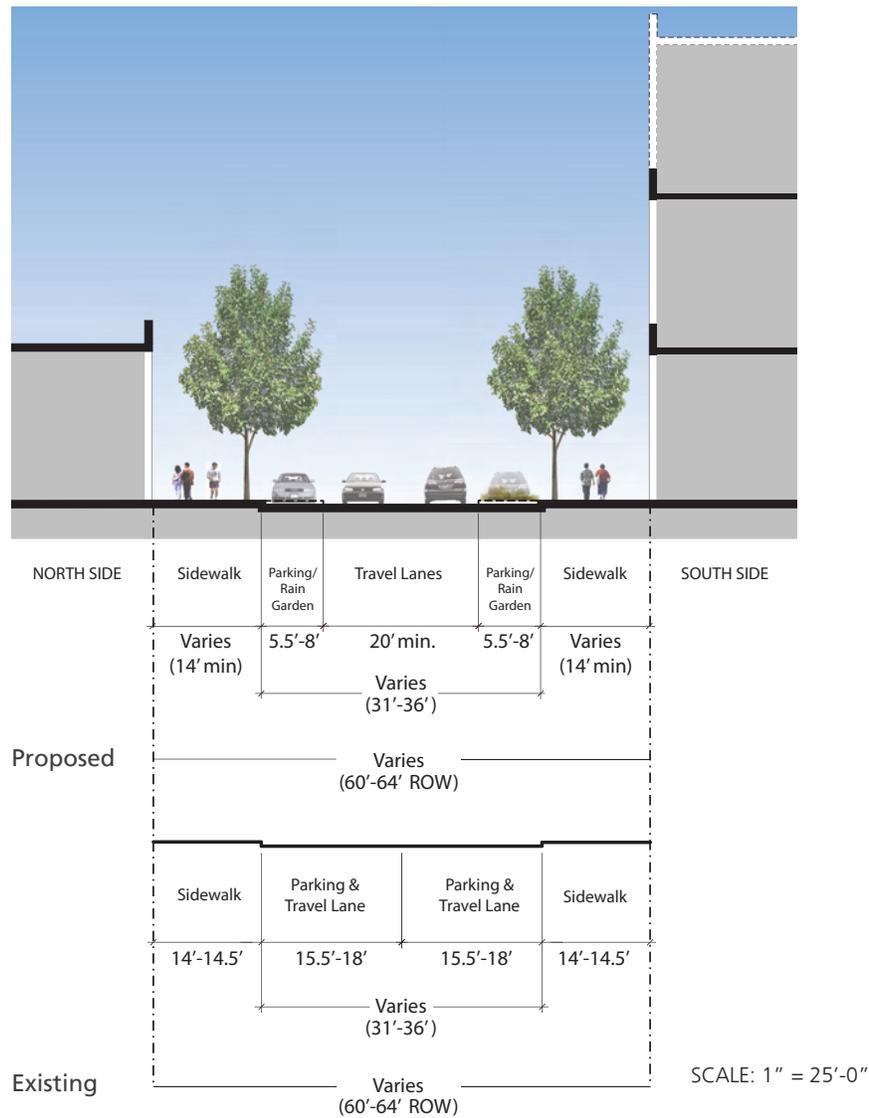
### **Design Considerations:**

- Maintain existing curbs
- Install ample bulb-outs to maximize opportunities to add landscaping
- Use continuous planting strips where feasible to maximize landscape and stormwater management potential
- Bulb outs - primarily to accommodate rain gardens and other landscape features, bike parking near Broadway
- Use permeable paving where possible



Vine Street, Seattle

Green Street: Typical (30th, Hawthorne, 34th Street)



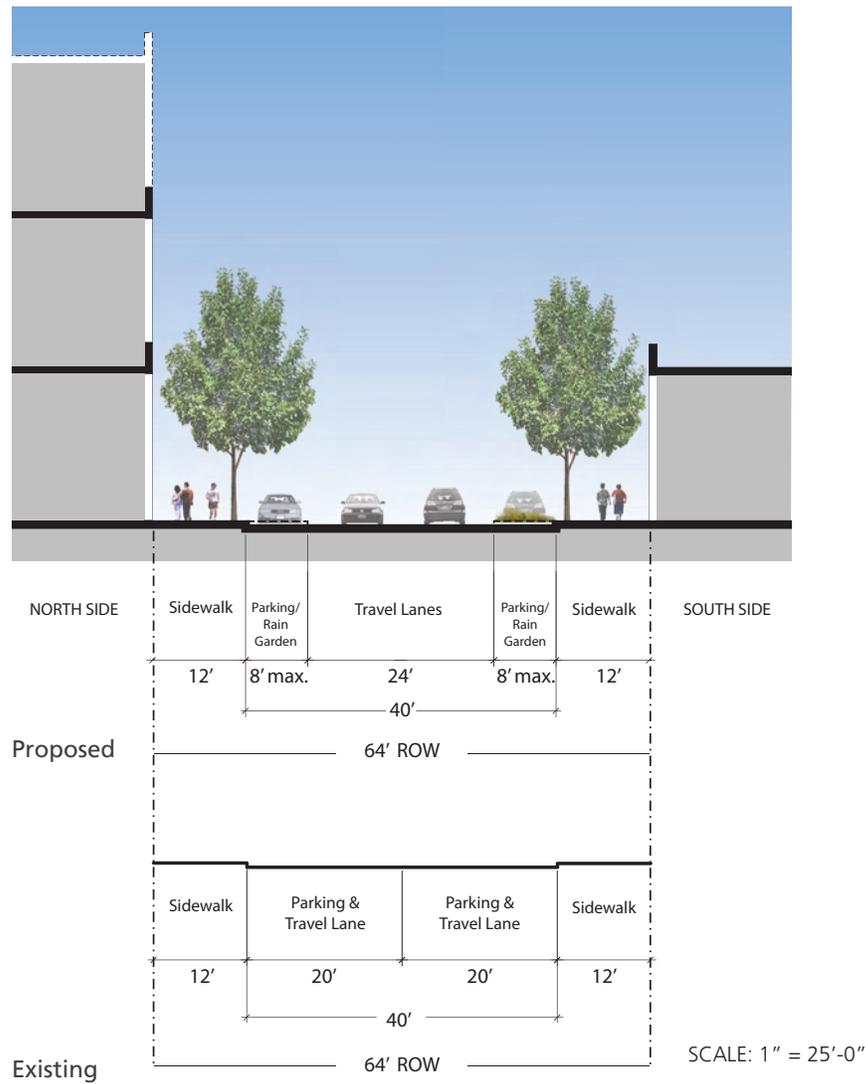
- Wayfinding – creek connections and other education opportunities.

**Green Street : Typical (30th Street, Hawthorne, 34th Street)**

*Intent:* Support adjacent land uses while providing additional impervious areas and landscaping

*Design Considerations:*

**Green Street: 29th Street, East of Broadway**



- See Green Street Design Considerations

**Green Street: 29th Street, East of Broadway**

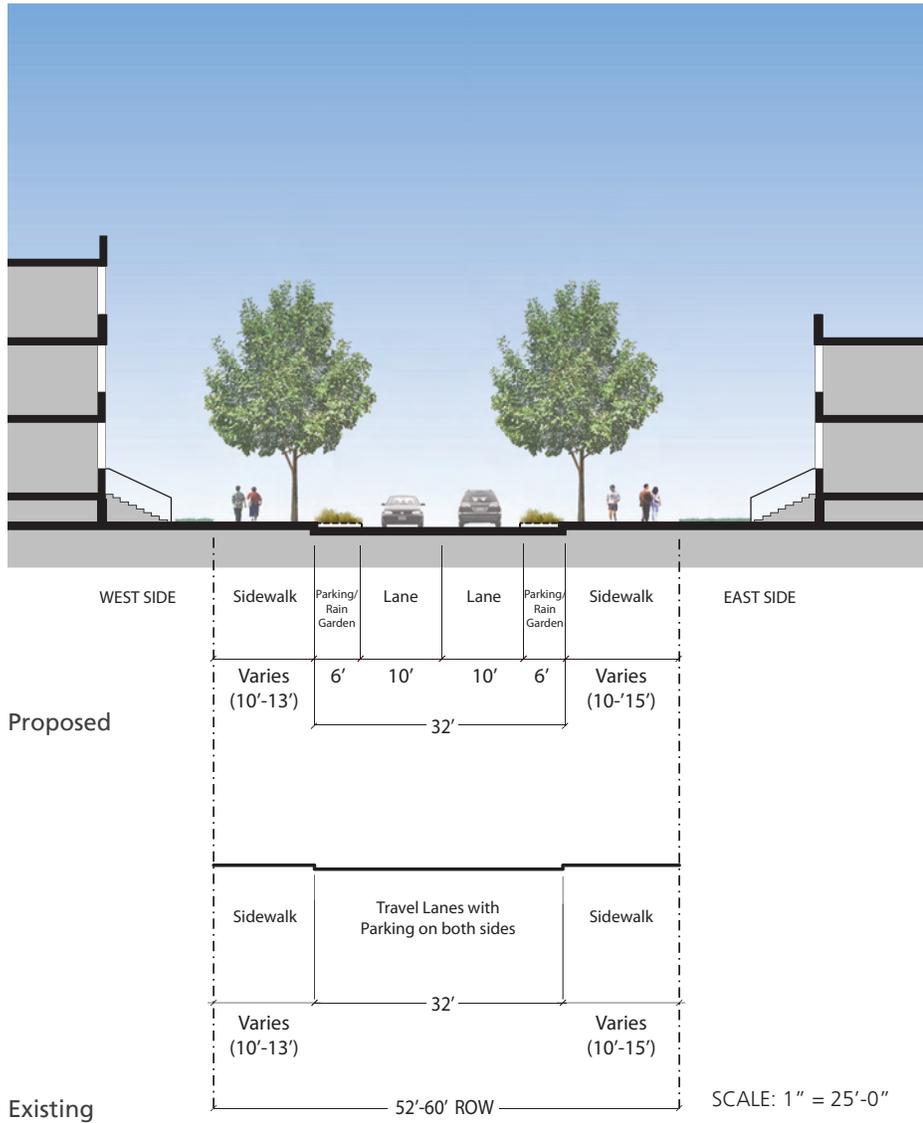
**Intent:**

- Support adjacent land uses while providing additional impervious areas and landscaping
- Provide connectivity to adjacent neighborhoods, potential bicycle boulevard route, and new park

**Design Considerations:**

- See Green Street Design Considerations

Brook Street - Residential Connector



- Bicycle Boulevard Treatment, including sharrow and signage.

- Add rain gardens where appropriate

**Brook Street – Existing**

**Brook Street - Extension**

**Intent:**

**Intent:**

- Design for low traffic volumes and traffic speeds of 25 miles per hour or less
- Maintain and enhance existing residential scale and character.

- See Brook Street Design Considerations
- Provide/Improve neighborhood connectivity and access

**Design Considerations – Brook Street (Existing):**

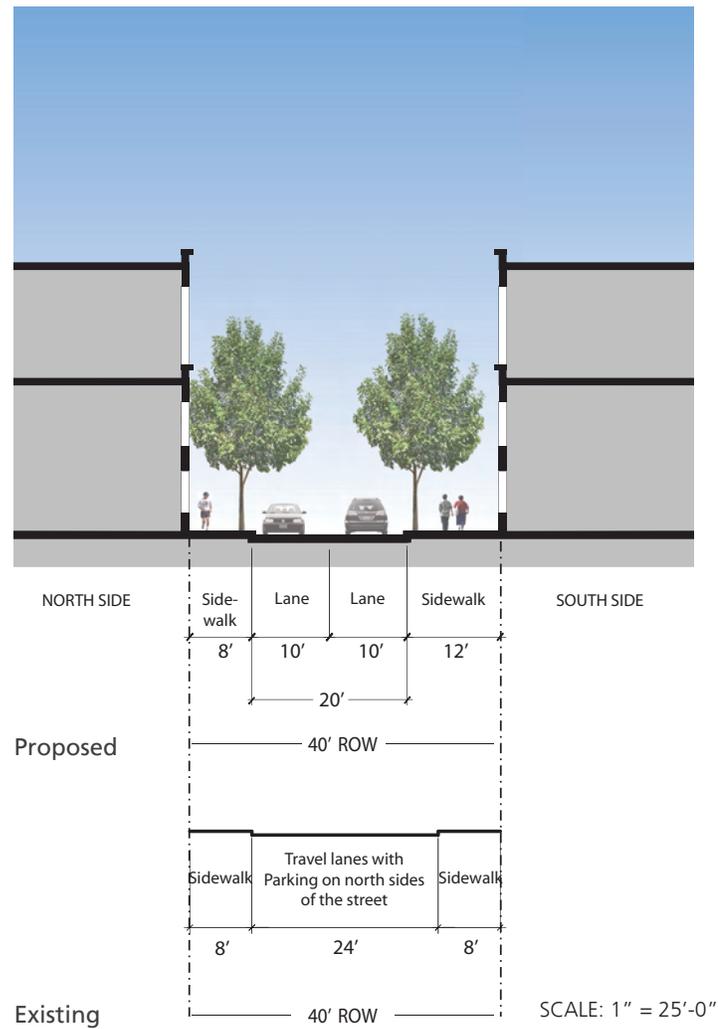
- Midblock access to new park

- Maintain existing curbs
- Add street trees where feasible

**Design Considerations – Brook Street Extension:**

- 35-foot curb-to-curb width to accommodate sufficient room for on-street parking on both sides of street
- Wayfinding at intersections to direct to mid-block

**28th Street - Broadway to Valdez Street**



entrance to new park

- Bulb-outs for rain gardens as appropriate

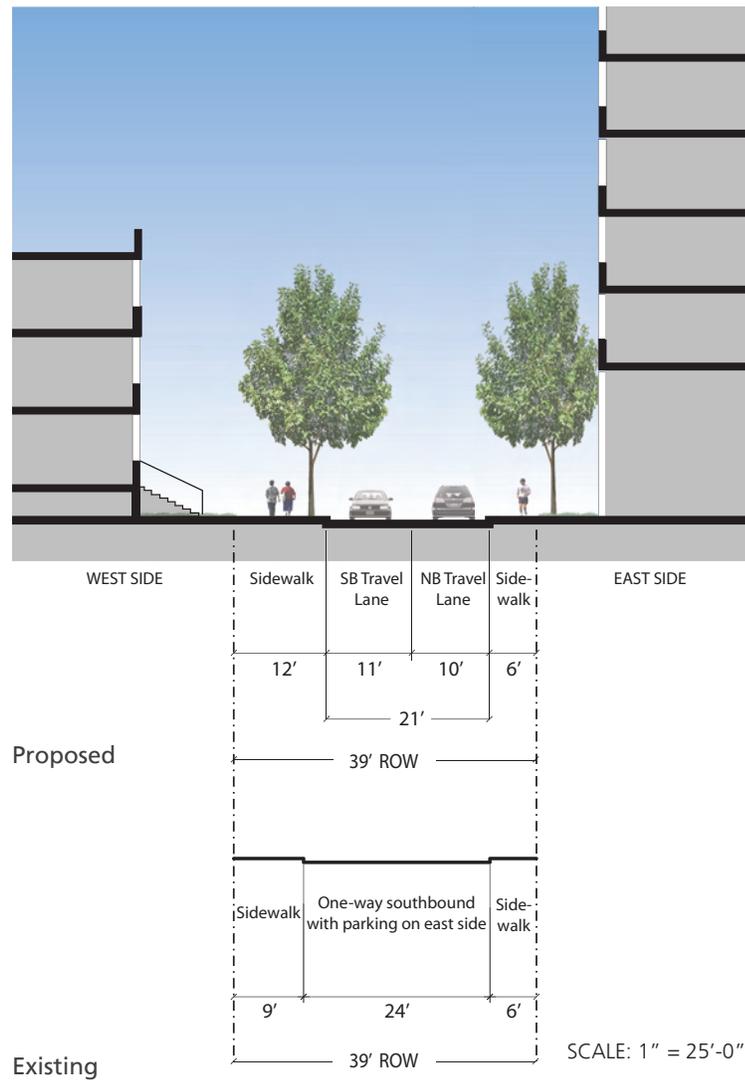
**28th St. – Broadway to Valdez Street**

**Intent:** Support increased pedestrian activity from new development by expanding sidewalks, provide connection to new pocket park.

**Design Considerations:**

- Maintain curb on north side of street.
- Widen sidewalk on south side (add 4 feet) to accommodate increased activity from new development, including retail,

Valdez Street (27th St. to 28th St)



residential and structured parking.

- Remove on-street parking.

**Valdez Street (27th Street to 28th St.)**

*Intent:* Support increased pedestrian activity from new development by expanding sidewalks

*Design Considerations:*

- Maintain curb on east side.
- Move curb on west side (expand sidewalk to 12') to accommodate increased activity from new development.



Paseo Nuevo, Santa Barbara



Walnut Creek, CA

- Remove on-street parking.
- Work with property owner to plant trees within setback on east side of street.

## Pedestrian Streets

Pedestrian streets in the Project Area include both limited-access streets and streets where motorized vehicles are prohibited (paseos). Limited-access streets are found in the retail-oriented Valdez Triangle area, and bisecting the block bounded by Broadway, Webster Street, Hawthorne Street and 30th Street. There is a paseo in the Project Area between Hawthorne Street and 30th Street that provides new connectivity from Broadway to Brook Street and the residential neighborhood to the east. In addition, a new connection has been proposed in between Richmond Avenue and 28th St.

Pedestrian streets usually involve the full-time restriction of vehicle access. However, delivery access may be allowed in off-hours. Bicycles can either be allowed to ride through or be required to dismount and walk. Pedestrian Streets can be more intensively designed with attractive street materials, furniture, landscaping, and plaza treatments. Please see Chapter 2: Open Space for additional information.

This page intentionally left blank.



**Wallace Roberts & Todd, LLC**

1328 Mission Street

4th Floor

San Francisco, CA 94103

415.575.4722

[www.wrtdesign.com](http://www.wrtdesign.com)