

REVISED JULY 2, 2013

Approved as to Form and Legality

2813 JUL 18 AM 9: 44 OAKLAND CITY COUNCIL

Mark P-Wall
City Attorney

RESOLUTION NO. 84498 C.M.S.

Introduced by Councilmember _____

A RESOLUTION, AS RECOMMENDED BY THE CITY PLANNING COMMISSION, ADOPTING DESIGN STANDARDS FOR THE GATEWAY INDUSTRIAL DISTRICT (D-GI) ZONE LOCATED ON APPROXIMATELY 160 ACRES IN THE GATEWAY DEVELOPMENT AREA OF THE FORMER OAKLAND ARMY BASE AND AUTHORIZING STAFF TO MAKE MINOR ONGOING REVISIONS TO THE ADOPTED DESIGN STANDARDS CONSISTENT WITH THE D-GI ZONE AND OAKLAND PLANNING CODE, BUT MAJOR REVISIONS TO BE MADE BY THE CITY PLANNING COMMISSION

WHEREAS, on June 12, 2012, the Oakland City Council, via Resolution No. 83930 C.M.S., approved the amended Oakland Army Base (OARB) Reuse Plan (Master Plan), including adopting the 2012 OARB Initial Study/Addendum, making related California Environmental Quality Act (CEQA) findings, and adopting the Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCAMMRP); and

WHEREAS, the Gateway Development Area encompasses approximately 160 acres of the OARB; and

WHEREAS, the Master Plan involves the removal of all buildings in the Gateway Development Area and the redevelopment of the site with new warehousing, recycling, maritime support, trucking-related, office, research and development, and rail-related activities (Project); and

WHEREAS, a new zoning district called the Gateway Industrial District (D-GI) zone has been created to be applied to the Gateway Development Area, which is intended to implement the Master Plan by permitting land uses consistent with the Master Plan; and

WHEREAS, new design standards have been created to regulate the design of new development in the D-GI zone, including regulating site design, building design, landscaping, lighting, and signage (Design Standards); and

WHEREAS, the D-GI zone requires new development to comply with the Design Standards to ensure that the design quality of new development is high; and

WHEREAS, the Landmarks Preservation Advisory Board held a duly noticed public hearing on the proposed Design Standards, as well as other planning matters, on April 8, 2013; and

WHEREAS, the City Planning Commission held a duly noticed public hearing on the proposed Design Standards, as well as other related planning matters, on May 1, 2013, and at the close of the hearing recommended approval of the Design Standards to the City Council; and

WHEREAS, the Community and Economic Development Committee held a duly noticed meeting on May 28, 2013, to consider the Design Standards, as well as other related planning matters, and recommended approval of such to the City Council; and

WHEREAS, the City Council held duly noticed public hearings on the Design Standards, as well as other related planning matters, on June 4, 2013 and July 2, 2013; now therefore be it

RESOLVED, the City Council, based upon its own independent review, consideration, and exercise of its independent judgment, hereby finds and determines, on the basis of substantial evidence in the entire record before the City, that none of the circumstances necessitating further CEQA review are present. Thus, prior to approving the Design Standards, the City Council finds and determines that it can continue to rely on the previously adopted 2012 OARB Initial Study/Addendum for the reasons stated in the June 12, 2012, and May 28, 2013, City Council Agenda Reports and related attachments/exhibits. The (Final and Corrected) Standard Conditions of Approval/Mitigation Monitoring and Reporting Program, dated October 15, 2012, is also hereby reaffirmed/readopted, including the clarifying corrections discussed at the June 4, 2013, City Council hearing (Mitigation Measure 4.4-3b, West Gateway Rail and Maritime Emissions Reduction Program) and in the Agenda Report for the July 2, 2013, City Council meeting (Mitigation Measure 4.3-10, Parking Demand Study), and the revisions discussed at the July 2, 2013, City Council meeting (Mitigation Measure PO-1, Stakeholder Review of Air Quality and Trucking Plans); and be it

FURTHER RESOLVED, the City Council finds and determines that this action complies with CEQA and the Environmental Review Officer is directed to cause to be filed a Notice of Determination with the appropriate agencies; and be it

FURTHER RESOLVED, the City Council hereby adopts the Design Standards as contained in Exhibit A, attached hereto and hereby incorporated by reference; and be it

FURTHER RESOLVED, the City Council finds that the Design Standards will ensure that new development in the D-GI zone will equal or exceed the design quality of the existing OARB buildings to be removed as part of the Project and will be compatible with the character of the area; and be it

FURTHER RESOLVED, that the City Council hereby authorizes staff to make minor ongoing revisions to the adopted Design Standards consistent with the DG-I zone and Oakland Planning Code, but with major revisions to be made by the Planning Commission; and be it

FURTHER RESOLVED, the recitals set forth above are true and correct and are an integral part of this Resolution; and be it

FURTHER RESOLVED, the City Council finds and determines the following:

- a) The Project is consistent with the General Plan and all applicable planning and zoning enactments; and
- c) The Design Standards are desirable in order to facilitate the successful Project implementation; and
- d) The Project will have substantial economic and community benefits to the City, including generating permanent and construction jobs and the catalytic effect the project will have on revitalizing the surrounding neighborhood, which will result in increased property values in the surrounding area and an increase in the viability of existing businesses; and
- e) The public safety, health, convenience, comfort, prosperity and general welfare will be furthered by the Design Standards; and be it

FURTHER RESOLVED, if any phrase, clause, section, subsection, paragraph, subdivision, sentence, term or provision of this Resolution or its application to any person or circumstances is finally found to be void, invalid, illegal or unenforceable by a court of competent jurisdiction, then notwithstanding such determination, such term or provision shall remain in force and effect to the extent allowed by such ruling and all other terms and provisions of this Resolution or the application of this Resolution to other situations shall remain in full force and effect; and be it

FURTHER RESOLVED, that the record before this Council relating to this Resolution includes, without limitation, the following:

- 1. the applications, including all accompanying maps and papers;
- 2. all relevant plans and maps;
- 3. all final staff reports, decision letters, and other documentation and information produced by or on behalf of the City;
- 4. all oral and written evidence received by the City staff, Landmarks Preservation Advisory Board, Planning Commission, and City Council before and during the public hearings on the application; and
- 5. all matters of common knowledge and all official enactments and acts of the City, such as (a) the General Plan and the General Plan Conformity Guidelines; (b) the Oakland Municipal Code, including, without limitation, the Oakland real estate regulations, Oakland Fire Code; (c) Oakland Planning Code; (d) other applicable City policies and regulations; and (e) all applicable state and federal laws, rules and regulations; and be it

FURTHER RESOLVED, that the custodians and locations of the documents or other materials which constitute the record of proceedings upon which the City's decision is based are respectively: (a) the Office of Neighborhood Investment, 250 Frank H. Ogawa Plaza, 5th Floor, Oakland; (b) the Planning and Building Department, Planning Division, 250 Frank H. Ogawa

Plaza, 3rd Floor, Oakland; and (c) the Office of the City Clerk, 1 Frank H. Ogawa Plaza, 1st Floor, Oakland.

N COUNCIL, OAKLAND, CALIFORNIA,	N COUNCIL, OAKLAND, CALIFORNIA,	JUL	2 2013	
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PASSED BY THE FOLLOWING VOTE:

AYES - **PHONKY**, GALLO, GIBSON MCELHANEY, KALB, KAPLAN, REID, SCHAAF and PRESIDENT KERNIGHAN ~ 7

NOES -

ABSENT - 6

ABSTENTION - Brooks-1

ATTEST/:__(

LaTonda Simmons
City Clerk and Clerk of the Council
of the City of Oakland, California



GATEWAY INDUSTRIAL DISTRICT DESIGN STANDARDS

INTRODUCTION

A. APPLICABILITY

These Design Standards apply to all projects in the Gateway Industrial District (D-GI) Zone, including new construction and alterations.

B. INTENT

The intent of the Design Standards is to:

- Ensure high quality design through the use of quality building materials, pleasing building composition and form, and visual interest;
- Create a functional environment consistent with the industrial nature of the D-GI Zone;
- Enhance the view of the district as seen from the street and nearby freeways;
- Reduce the potential for criminal activity through the use of Crime Prevention Through Environmental Design (CPTED) principles;
- Utilize landscaping to soften the urban industrial character of the district, enhance the architecture of the site, and provide appropriate visual screening and environmental benefits; and
- Create a district with a visual identity that incorporates characteristics of Oakland industrial architecture in a contemporary way, and reflects current industrial design and construction methods.

C. EXCEPTIONS

Exceptions to the Design Standards may be granted by the Director of City Planning in accordance with the Regular Design Review procedure contained in Section 17.136.040(C) if the project complies with the Regular Design Review approval criteria contained in Section 17.136.050 and with the following additional criteria:

- 1. The proposed design is consistent with the intent of the Design Standards; and
- 2. One of the following is applicable:
 - a. Strict compliance with the Design Standards would preclude a superior design solution; or
 - b. There are unique circumstances related to the project and/or site and an effective design solution is proposed.

D. AMENDMENTS

Minor non-substantive amendments to the Design Standards, and minor substantive clarifications and refinements that are consistent with the overall intent of the Design Standards, may be approved administratively by the Director of City Planning.

Major substantive amendments to the Design Standards require review and approval by the City Planning Commission.

DESIGN STANDARDS

OAKLAND INDUSTRIAL CONTEXT

The City of Oakland has a rich legacy of high quality industrial architecture. There are certain characteristics present in Oakland industrial architecture that impart design quality, for example:

- Building forms tend to be articulated into shapes with multiple surfaces;
- · Large warehouses typically have a visually differentiated office area;
- · Industrial materials, such as metal, masonry, concrete, and glass, predominate; and
- Industrial steel sash windows are common.

Below are photographs of existing buildings that represent these characteristics of Oakland industrial architecture.1



Example of historic building with articulated shape



Example of industrial materials – masonry, concrete and glass



Example of historic warehouse building with visually differentiated office area



Example of industrial steel sash windows

¹ Note that the purpose of the photographs is to provide visual examples of architectural concepts; not to recommend that new development in the D-GI Zone should match the architectural style of these buildings.

Existing Oakland industrial architecture provides a vocabulary that can be reinterpreted in a contemporary way so that new buildings in the D-GI Zone have an Oakland industrial character. Like most of the historic industrial buildings in Oakland, new development in the D-GI Zone will consist of utilitarian buildings and land uses representative of the period in which they are developed. The design standards below incorporate, where appropriate, concepts from Oakland industrial architecture and present those concepts in a way that provides the flexibility necessary to have a successful contemporary and utilitarian industrial district.

1. SITE DESIGN

- 1.1. <u>Surfacing</u>: All driveway, parking, and loading areas shall have a durable, dustless, all-weather surface. Examples of allowable surfaces include, but are not limited to, concrete, asphalt, and individual pavers. Examples of prohibited surfaces include, but are not limited to, gravel and turf. This standard does not apply to temporary surfaces or emergency access routes.
- 1.2. Pedestrian Pathway: A clearly identifiable pedestrian pathway to the main building entry with a minimum width of 5 feet is required from the street and from parking areas. Examples of techniques to provide identity to the pathway include, but are not limited to, using sidewalks, striping or contrasting materials, textures, or colors.
- Fence/Wall Height: The maximum allowed height of any fence, freestanding wall, dense hedge, or similar barrier is 10 feet
- 1.4. Fence/Wall Transparency: The area above 42 inches on any fence, freestanding wall, dense hedge, or similar barrier shall have a minimum transparency of 70 percent. This standard does not apply to the screening of utility equipment, trash collection areas, and other similar enclosed utility areas.
- 1.5. Screening of Utility Equipment and Trash Collection Areas: Utility equipment, trash collection areas, and other similar areas shall be enclosed by a solid fence, wall, or similar barrier no taller than 2 feet above the object(s) being screened and not exceeding 15 feet in height. Trash enclosures shall be covered and contain solid doors and interior concrete curbs, shall be sized to fit both trash and recycling containers that will be necessary to serve the users of the



Example of pedestrian pathway (crosswalk and sidewalk) to main building entry



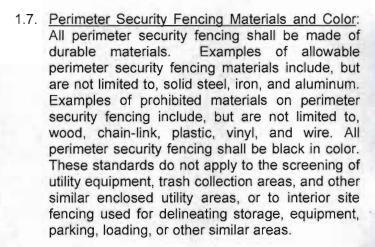
Example of trash enclosure with roof shape related to roof shape of primary building

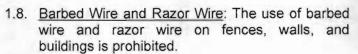


Example of allowable fencing

site, and should be designed to be compatible with the industrial character of the site with similar form, materials, and color as the primary building(s) on the site. Enclosed trash compactors adjacent to truck docks are permitted with no screening required.

1.6. <u>Secured Areas</u>: Areas of the site not visible from the street shall be secured with a fence, wall, or similar barrier during non-business hours.





- 1.9. <u>Secured Entries</u>: Vehicle entry gates, checkpoints, kiosks, and other similar secured entry points shall be set back from the street at least 20 feet, except that secured entries on sites accessed by trucks shall be set back at least 50 feet, to allow adequate queuing space.
- 1.10. <u>Vehicle Maneuvering</u>: Adequate on-site vehicle maneuvering space shall be provided so that all vehicles, including cars and trucks, may exit the site driving forward.

2. BUILDING DESIGN

2.1. Exterior Building Wall Materials: Allowable exterior building wall materials are concrete, stucco, masonry, fiber cement (and other similar composites), glass, metal, and solid wood. Plywood, plastic, vinyl, and fiberglass are not allowed, except as accent materials.



Example of allowable fencing



Barbed wire and razor wire are prohibited

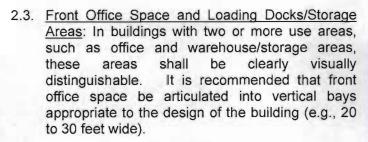


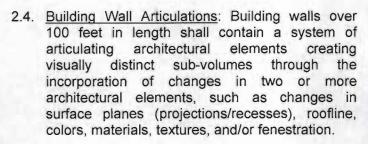
Example of secured entry kiosk

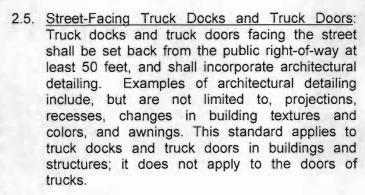


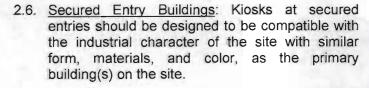
Example of identifiable main entry

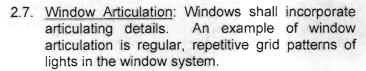
2.2. Main Building Entry: The main building pedestrian entry shall be clearly identifiable from the street. Examples of architectural techniques to provide identity to the main building entry include, but are not limited to, contrasting textures, distinctive colors and materials, projections/recesses, and fenestration.













Example of distinguishable front office area



Example of building wall articulation



Example of building wall articulation

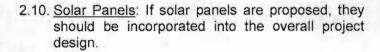


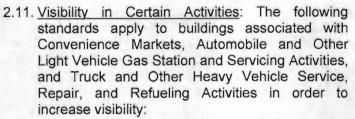
Example of truck docks with awnings



Example of window articulation

- 2.8. <u>Window Recess</u>: Windows shall be recessed from the exterior surface of the wall.
- 2.9. Roof Penetrations/Equipment: Locate building equipment within the building envelope if feasible in order to avoid excessive protrusions on the roof. Roof penetrations (e.g. vents, condensers) should be diverted to other interior locations where feasible. If located on the roof, they shall be an orderly roof design element such as grouped into repetitive roof-top pods. Skylights are encouraged.





- Windows shall be incorporated to provide clear visibility from inside the building to the site and the street. Window area shall constitute at least 60 percent of each exterior building wall.
- Window signs shall cover no more than 10 percent of the window area.
- Cash registers shall be positioned to allow cashiers to see the building entry.
- Interior shelving and displays shall be no higher than five feet and shall be designed to allow cashiers to see down aisles.
- Interior lighting shall be adequately shielded to a point below the light bulb and reflector to prevent visibility of the bulb from the exterior of the building.

3. LANDSCAPING AND LIGHTING

3.1. Tree and Plant List: Trees and plants shall be selected from the approved Tree and Plant List (see Attachment A) unless alternative species are approved by the Director of City Planning. The tree and plant list includes a variety of trees and plants that will provide year-round interest, tolerate wind, and adapt to the soil conditions of



Example of roof penetrations (vents and skylights) arranged in an organized, repetitive design



Example of skylights



Example of rooftop solar panels

- the site. All plants are climate-adapted and intended to be in harmony with the shoreline plants that already thrive in the area.
- 3.2. Canopy Trees Car Parking Areas: Canopy trees are required in car parking areas. Tree plantings shall be designed to provide at least 40 percent canopy coverage of parking lot surface areas in 15 years. This standard applies to car parking spaces, driveways, and maneuvering aisles. See Attachment B for guidance on calculating This canopy coverage canopy coverage. standard does not apply to truck areas, including parking, storage, loading, or maneuvering areas. Landscaped areas containing trees shall measure no less than 5 feet in any direction. [Note: Staff is continuing to research the appropriate canopy percentage. coverage The percentage requirement may be adjusted depending on the outcome of that research.]
- 3.3. <u>Canopy Trees Truck Areas</u>: Canopy trees are required on the perimeter of truck areas, including parking, storage, loading, and maneuvering areas. Tree spacing shall not exceed the canopy spread at full growth.
- 3.4. Landscape Buffer Parking, Loading, and Storage Areas: A landscape strip at least 5 feet wide is required between off-street car and truck parking, loading, and storage areas and adjacent streets. Landscaping (except trees) shall not exceed 42 inches in height.
- 3.5. <u>Landscape Buffer Buildings</u>: A landscape strip at least 5 feet wide is required along the foundation of at least 50 percent of the length of building walls visible from the street, except where building entries, truck docks, truck doors and storage areas are located.
- 3.6. Screening Trees on Sites Adjacent to Freeways:
 Landscape areas located adjacent to a freeway shall contain trees for visual screening. The species shall be selected based on criteria of fast growth and appropriate significant height for buffering the site. Trees should equal or exceed the height of on-site buildings at full growth. Tree spacing shall not exceed the canopy spread of the trees at full growth.



Example of canopy trees in parking area



Example of screening trees



Example of screening trees

- 3.7. <u>Lighting Minimum Illumination</u>: The following minimum illumination is required during business and non-business hours:
 - · Commercial Activities: 3 foot-candles
 - Industrial Activities Car Parking Areas: 1 foot-candle
 - Industrial Activities Other Areas: 0.5 foot-candle
 - All activities: Minimum-to-maximum uniformity ratio shall not exceed 4:1
- 3.8. Lighting Design: All lighting shall be architecturally integrated into the site and reflect and reinforce the industrial character of the D-Gl Zone. Lighting for circulation, security, and building/sign identification should be non-obtrusive, except for light fixtures, which are themselves features to the industrial character of the area. Lighting fixture height should be appropriate to the type of lighting use area.
- 3.9. <u>Lighting Shielding</u>: Lighting fixtures shall be "full cut-off" to provide adequate shielding to a point below the light bulb and reflector in order to prevent glare onto adjacent properties and minimize contribution to sky glow.



Example of freestanding light fixture in parking area



Example of light fixture with shielding

4. SIGNS

4.1. <u>Signs</u>: All signage shall comply with a Master Sign Program for D-GI Zone as approved by the Director of City Planning. The Master Sign Program shall be consistent with the intent of the Design Standards.

5. OTHER STANDARDS

- 5.1. All projects shall comply with all other applicable requirements, codes, and policies, including, but not limited to, the following:
 - Chapter 17.102 General Regulations
 - Chapter 17.104 Sign Limitations
 - Chapter 17.108 General Height, Yard, and Court Regulations
 - Chapter 17.110 Buffering Regulations
 - Chapter 17.116 Parking Requirements
 - Chapter 17.117 Bicycle Parking Requirements
 - Chapter 17.118 Recycling Space Requirements
 - Chapter 17.120 Performance Standards
 - Chapter 17.124 Landscaping and Screening Standards
 - Chapter 17.128 Telecommunications Regulations

Gateway Industrial District Design Standards

- Chapter 18.02 Green Building Requirements
- National Pollutant Discharge Elimination System (NPDES) C.3 Stormwater Requirements
- Oakland Building Code
- Oakland Fire Code
- Applicable Standard Conditions of Approval and Mitigation Measures

ATTACHMENT A: TREE AND PLANT LIST

TALL SCREENING TREES TO BUFFER VIEW FROM FREEWAYS		
Botanic name	Common name	Native or Climate adapted
Acer microphyllum	Big leaf maple	Bay native, BCDC list
Acer rubrum	Red alder	Bay native, BCDC list
Casuarina equisetifolia	Beach she-oak	Climate adapted
Celtis australis	European hackberry	Climate adapted
X chitalpa tashkentensis 'pink	Pink dawn Chitalpa	Climate adapted
dawn'		
Cupressus macrocarpa	Monterrey Cypress	Climate adapted
Geijera parviflora	Australian willow	Climate adapted
Metrosideros excelsus	New Zealand Christmas	Climate adapted
	Tree	
Nyssa sylvatica `Red Rage'	Tupelo tree	Climate adapted
Pinus eldarica	Elderica pine	Climate adapted
Pinus pinea	Italian stone pine	Climate adapted
Pinus torreyana	Torrey pine	Climate adapted
Populus fremontii `Nevada'	Fremont poplar (sterile hybrid)	Bay native

CANOPY AND SHADE TREES FOR PARKING AREAS AND SITE PERIMETER		
Botanic name	Common name	Native or Climate adapted
Acer rubrum	Red alder	Bay native, BCDC list
Casuarina equisetifolia	Beach she-oak	Climate adapted
Celtis occidentalis 'Prairie Sentinel'	Hackberry	Climate adpated
X chitalpa tashkentensis 'Pink Dawn'	Pink dawn Chitalpa	Climate adapted
Cupressus macrocarpa	Monterrey Cypress	Climate adapted
Geijera parviflora	Australian willow	Climate adapted
Laurus noblis `Saratoga'	Saratoga bay	Climate adapted
Nyssa sylvatica `Red Rage'	Tupelo tree	Climate adapted
Pinus eldarica	Elderica pine	Climate adapted
Pinus pinea	Italian stone pine	Climate adapted
Pinus torreyana	Torrey pine	Climate adapted
Populus fremontii `Nevada'	Fremont poplar (sterile hybrid)	Bay native
Umbellularia californica	Californian laurel	Bay native, BCDC list
Quercus robur 'fastigata'	English she-oak	Climate adpated

TALL SHRUBS AND SMALL TREES FOR SCREENING EDGES		
Botanic name	Common name	Native or Climate adapted
Arbutus marina	Arbutus	California native
Arctostaphylos densiflora 'harmony'	'Harmony' manzanita	California native

Gateway Industrial District Design Standards

Cercis occidentalis	Western redbud	California native, BCDC list
Corylus Coronuta var.	Western hazelnut	Bay native, BCDC list
californica		
Dodennaea viscosa var.	Purple Hopseed bush	Climate adapted, BCDC list
purpurea		
Dodennaea viscosa var.	Flannel bush	California native, BCDC list
purpurea		
Garrya elliptica 'James Roof'	Coast silk tassle	Bay native
Hakea suaveolens	Sweet Hakea	Climate adapted, BCDC list
Hetermoles arbutifolia	Toyon	Bay native, BCDC list
Lavatera maritima	Tree Mallow	Climate adapted
Lavatera maritima	California wax myrtle	Bay native, BCDC list
Rhamnus californica 'eve case	Coffeberry	Bay native, BCDC list
Sambucus mexicana	Blue Elderberry	Bay native, BCDC list

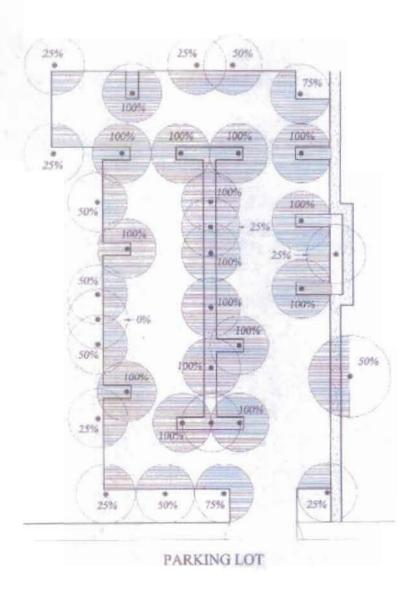
LOWER SHRUBS & GROUNDCOVERS		
Botanical name	Common name	Native or Climate adapted
Anigozanthos	Kangaroo paw	Climate adapted
Arctostaphylos uva-ursi `Green	Arctostaphylos	California native, BCDC list
Supreme'		·
Arctostaphylos "Pacific Mist"	Arctostaphylos	California native, BCDC list
Artemisia californica	California sagebrush	Bay native, BCDC list
Baccharis pilularis ssp. Pilularis	Dwarf coyote brush	Bay native, BCDC list
Calamagrostis x acutiflora	Feather reed grass	Climate adapted
Carex testacea	Orange sedge	Climate adapted
Carex divulsa	Berkeley sedge	Climate adapted
Carex glauca	Blue sedge	Climate adapted
Ceanothus thyrsiflorus var.	Ceanothus	Bay native, BCDC list
Repens		
Cistus salviifolius	Rockrose	Climate adapted
Chonropetalum elephantinium	Large cape rush	Climate adapted
Deschampia caespitosa	Tufted hair grass	Climate adapted
Elymus glaucus	Blue wild rye	Bay native, BCDC list
Epilobium californicum	California fuchsia	Bay native, BCDC list
Erigeron glaucus	Seaside daisy	California native, BCDC list
Festuca californica	California festuca	Bay native, BCDC list
Iris douglasiana	Douglas iris	Bay native
Muhlenbergia rigens	Deer grass	California native, BCDC list
Phormium varieties	New Zealand flax	Climate adapted
Polystichum munitum	Western sword fern	Climate adapted
Salvia microphylla grahamii	Bezerkeley salvia	Climate adapted
`Bezerkeley'		
Vaccinium ovatum	Evergreen huckleberry	Climate adapted
No mow sod		
Koeleria macrantha	June grass	California native
Nassella pulchra	Purple needlegrass	
Nassella cernua	Nodding needlegrass	
Festuca rubra	Molate fescue	

Gateway Industrial District Design Standards

Hydroseed mix		
1. Seed mix at 70 lbs./acre: Festuca rubra molate blue;	Molate blue fescue	California native
Festuca idahoensis 'mt. Tam'; Festuca occidentalis	Native blue bunch fescue Western fescue	
'mokelumne'. 2. 100% wood fiber at 2,000		
lbs./acre 3. M binder tackifier at 120		
lbs./acre 4. 16-6-8 commercial fertilizer		
at 500 lbs./acre		

PLANTS FOR STORMWATER BIOTREATMENT AREAS		
Botanic name	Common name	Native or Climate adapted
TREES		
Acer microphyllum	Big leaf maple	Bay native, BCDC list
Acer rubrum	Red alder	Bay native, BCDC list
Nyssa sylvatica `Red Rage'	Tupelo tree	Climate adapted
Populus fremontii `Nevada'	Fremont poplar (sterile hybrid)	Bay native, BCDC list
Washngtonia robusta	Mexican fan palm	Climate adapted
SHRUBS & GROUNDCOVERS		
Carex divulsa	Berkeley sedge	Climate adapted
Carex glauca	Blue sedge	Climate adapted
Iris douglasiana	Douglas iris	Bay native
Deschampia caespitosa	Tufted hair grass	Climate adapted
Phormium varieties	New Zealand flax	Climate adapted
Chonropetalum elephantinium	Large cape rush	Climate adapted
Vaccinium ovatum	Evergreen huckleberry	Climate adapted
HYDROSEED MIXTURE OR SOD		
Festuca rubra Hordeum brachyantherum brachyantherum Hordeum californicum Nassella pulchra	Molate fescue Meadow barley California barley Purple needle grass	Climate adapted

ATTACHMENT B: TREE CANOPY COVERAGE CALCULATION DIAGRAM



Source: City of Sacramento