

Table 13. Cove Terrace Specifications

(See Section 2.5 for Public Realm Elements)

BANK SLOPES: NTE 2:1

BIKE FACILITIES: MULTI-USE TRAIL, RACKS

SURFACING

P1	MULTI-USE TRAIL	TYPE H, I, M
P2	CLASS I BIKEWAY	TYPE L
P3	PLAZA	TYPE H, I, J
P4	SHARED ZONE	TYPE J, N
P5	PLAZA	TYPE H, I, J
P6	DECKING	TYPE U
P7	TERRACES	TYPE H, I, U

PLANTING

L1	TERRACE PLANTING	UNDERSTORY TYPE C
L2	PLAZA PLANTING	UNDERSTORY TYPE B
L3	TREE	LANE/LANEWAY
L4	TREE	OPEN SPACE
L5	SCRUB	UNDERSTORY TYPE G

LIGHTING

LT1	PLAZA LIGHTING	TYPE B, C
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FURNISHING

F1	CAFE SEATING	TYPE A, F
F2	PLAZA SEATING	TYPE D, F

STRUCTURES

S1	CONCESSIONS/RETAIL	
S2	CONCESSIONS/RETAIL	
S3	OVERLOOK	PED TYPE I

Standards

2.4.38. Elements All elements shown in Figure 2.56 are required. Dimensions may vary.

2.4.39. Specifications Specifications shall conform to Table 12. Cove Terrace Specifications.

2.4.40. Furnishings Accommodate at least one built-in fire pit in the plaza to increase use.

2.4.41. Surfacing A 12' wide zone shall be demarcated through the plaza at top of bank to signify the Bay Trail alignment by a change in surfacing texture, color, and/or paving pattern that complements the Cove Terrace plaza paving. A distinct line between these two zones is not permitted.

2.4.42. Planters Locate planters on the plaza with perimeter seatwalls that vary in height not to exceed 24" high.

2.4.43. Percentage Softscape At least 15% of the cove terrace plaza and bank shall be softscape.

2.4.44. Trails A universally accessible minimum 8' wide pathway and minimum 12' wide Class-1 bikeway shall connect to the adjacent site to the northwest.

Guidelines

2.4.45. Access Access from the shoreline boardwalk to cove terrace at top of bank shall be provided in the form of stairs or terraces.

2.4.46. Terraces Locate stadium terraces and/or low, planted retaining walls to accommodate the grade change between Griffith Street and Class-I bikeway.

2.4.47. Overlook A protruding overlook shall be located to align with the mid-block pedestrian passage and shall be oriented to the downtown San Francisco view. Surfacing used for the overlook shall extend across New Hudson to toe of stair at mid-block passage for continuity.

2.4.48. Shared Zone Where Class-1 Bikeway passes through plaza, demarcate by a change in surfacing texture, color and/or paving pattern. Change in surfacing shall be prioritized over appliqué.

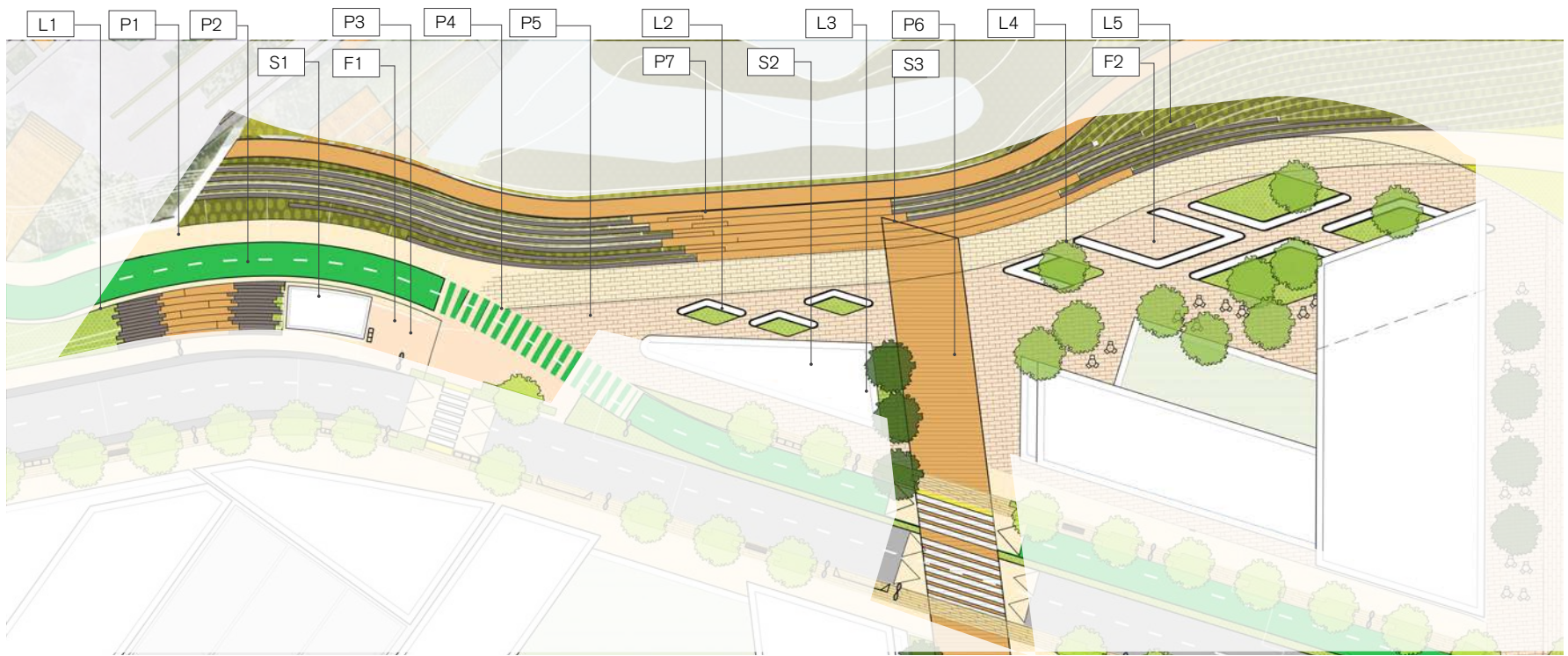
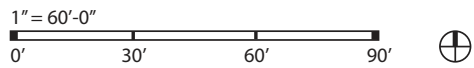


FIGURE 2.52: COVE TERRACE ENLARGEMENT PLAN





Big Green & Stormwater Pond

Big Green

The Big Green is the heart of the open space system and functions as a performative landscape with diverse ecologies and programs. It balances a range of active, passive, and water related recreation with habitats, stormwater treatment, and earthworks, resulting in a diverse open space where urban meets the wilds. Trails meander through topography and engage with a range of program offerings and educational moments for a sense of discovery and engagement. Design emphasis shall be placed preserving the character of the Big Green as natural, rugged, feral, and wild. Where feasible, the Big Green will also treat blackwater and reuse recycled water to create habitats.



Big Green Meadow & Hiking Trail Rendering



Earthwork, Science Lab



Earthwork, Storm King

Table 14. Big Green Specifications

(See Section 2.5 for Public Realm Elements)

BANK SLOPES: NTE 2:1

SURFACING

P1	ELEVATED BOARDWALK	TYPE U
P2	HIKING TRAIL	TYPE N
P3	MULTI-USE TRAIL	TYPE G, M, O, P
P4	MULTI-USE TRAIL	TYPE M

PLANTING**UNDERSTORY**

L1	UPLAND PLANTING	TYPE I
L2	UPLAND PLANTING	TYPE B
L3	UPLAND PLANTING	TYPE E
L4	UPLAND PLANTING	TYPE D
L5	UPLAND PLANTING - STORMWATER WETLAND	TYPE F
L6	UPLAND PLANTING - GARDEN	TYPE B
L7	UPLAND PLANTING - WETLAND	TYPE F/H

LIGHTING

LT1	PARK LIGHT	TYPE C, D
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FURNISHING

F1	DOG RUN FENCING	TYPE A, C
F2	FIRE PITS & HAMMOCKS	
F3	RECREATION AMENITIES	
F4	AMENITY ZONE	SEATING TYPE B, G

STRUCTURES

S1	OVERLOOK	
S2	SCULPTURE / INSTALLATION	
S3	LIGHTWEIGHT PAVILION	

Standards

2.4.49. Elements All elements shown in Figure 2.57 are required. Dimensions may vary.

2.4.50. Specifications Specifications shall conform to Table 14. Big Green Specifications.

2.4.51. Overlooks Locate at least 3 distinct viewing areas at the top of bank. Location, size, and form shall maximize views and fit with surrounding landforms.

2.4.52. Activity Area Locate a lawn, recreational area, and flower cutting garden adjacent to the Public Market Plaza. Lawn slope shall not exceed 5%. Cutting flower garden shall be irrigated.

2.4.53. Percentage Softscape At least 85% of the Big Green shall be softscape.

2.4.54. Emergency Call Box SOS emergency call boxes shall be incorporated into other structures throughout the Big Green. 1 per every 2,000 square feet.

2.4.55. Gathering Areas At least 3 areas for picnicing and small gatherings shall be located throughout the Big Green in protected areas in addition to overlooks at top of bank. Surfacing shall be the same as adjacent trails or

softscape that can accommodate light foot traffic.

2.4.56. Dog Area An off-leash dog area shall be accommodated in the Big Green. Locate between earthworks to decrease impact to surrounding habitats. A perimeter fence no taller than 5' high shall line the perimeter of the off-leash dog area.

Guidelines

2.4.57. Stormwater A centralized stormwater feature shall be located in the Big Green to treat stormwater from the development. See Section 2.4 Stormwater Standards and Guidelines.

2.4.58. Earthworks Earthworks shall be incorporated throughout the Big Green. See Section 2.4 Earthworks.



KEY PLAN

FIGURE 2.53: BIG GREEN ENLARGEMENT PLAN

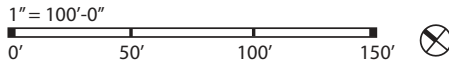


Table 15. Earthworks Specifications
(See Section 2.5 for Public Realm Elements)

COMPLEX		
A1 & A2	COMPLEX A	6-15' HIGH, DIVERSE ECOLOGIES
B2	COMPLEX B	< 6' HIGH, IRRIGATED WILDFLOWER MEADOW

The 2 primary earthwork goals are:

- 1. Achieve a net zero off-haul;
- 2. Improve accessibility from Innes Avenue.

Site grading is designed in 2 layers to retain cut soils on-site. The base layer raises the upland areas for a smoother transition from Innes into the site. The top layer consists of earthwork complexes and mounds that contain additional cut soils. (See Ch. 3)

Standards

2.4.59. Complexes Earthwork complexes shown in Figure 2.58 are required. Dimensions may vary.

2.4.60. Specifications Specifications shall conform to Table 15. Earthworks Specifications.

2.4.61. Views Earthworks shall conform with view corridors. (See Ch. 1)

2.4.62. Slopes Side slopes shall not exceed 2:1 ratios. Use slope stabilization system to prevent erosion and reduce overall maintenance for slopes greater than 3:1.

2.4.63. Soils Earthworks that contain soils with poor quality shall include 24” of soil cover for plant success. Conduct soil profiling of fill material to determine appropriate placement given soil contents.

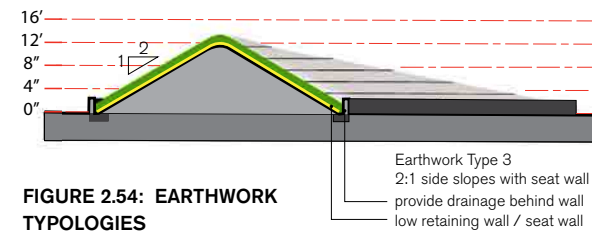
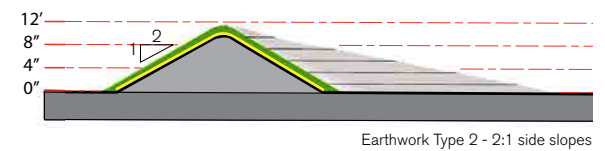
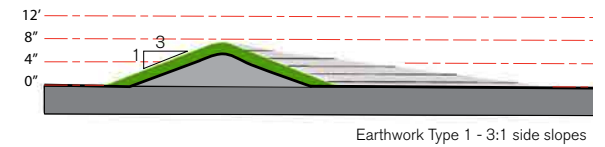
2.4.64. Erosion Control Slopes shall be planted with 90% plant cover after first growing cycle to prevent erosion and create a range of micro-climates and habitat conditions.

Guidelines

2.4.65. High Points High points of individual mounds within larger earthwork complex shall alternate for variation and a layer effect.

2.4.66. Height Where earthworks need increased height to accommodate more fill or achieve design effect, earthworks shall incorporate a low wall at the toe of slope. A drain shall be included behind wall for drainage to limit maintenance and erosion.

2.4.67. Trails Trails shall be designed to traverse large earthwork complexes and pass through low points between individual mounds.



**FIGURE 2.54: EARTHWORK
 TYPOLOGIES**

- 2 Foot minimum Soil Cover
- Slope Stabilization Material
- Top layer (Encapsulated Soils)
- Base layer (Encapsulated Soils)

Table 16. Stormwater Specifications
(See Section 2.5 for Public Realm Elements)

SURFACING		
P1	SPAN	TYPE U
P2	BOARD WALK	TYPE U
PLANTING		
L1	UPLAND PLANTING - STORMWATER WETLAND	UNDERSTORY TYPE F
L2	COASTAL GRASSLAND	UNDERSTORY TYPE H
STRUCTURES		
S1	BIRD BLIND	
S2	SCULPTURE/INSTALLATION	

Stormwater

The Big Green is a performative landscape designed to treat all stormwater from the Hillside and Cove areas to the highest water quality before discharging to the Bay. (Stormwater generated in the Flats will be treated in the Shared Public Way.) See Section 3.2. Trails and overlooks are designed to provide viewpoints. The grading and planting should focus on habitat creation to the greatest extent possible. Where feasible, a wet pond using recycled water should be incorporated to keep low areas wet year round. The feature should be managed to promote habitat growth and long-term sustainability.

Standards

- 2.4.68. Elements** All elements shown in Figure 2.60 are required. Dimensions may vary.
- 2.4.69. Specifications** Specifications shall conform to Table 16. Earthworks Specifications.
- 2.4.70. Size** The stormwater feature shall be sized to accommodate treatment of 100% of the hillside and cove’s stormwater at full build out.
- 2.4.71. Access** Limit public access to a maximum of 6 crossings over stormwater pond.

2.4.72. Sculpture Integrate at least 1 installation and/or sculpture into the stormwater feature as an attraction.

Guidelines

- 2.4.73. Amenities** Locate bird blinds adjacent to the stormwater feature and adjacent to trails.
- 2.4.74. Water** Portions of the stormwater feature shall remain full with stormwater or recycled water year-round.
- 2.4.75. Erosion Control** The stormwater system shall include retention and low control measures to regulate flows and ensure slope stability and erosion control.
- 2.4.76. Materials** The system shall be lined and constructed with inert durable materials that do not have any long term environmental effects on habitats.
- 2.4.77. Outfall** Stormwater feature shall drain to outfall in West Shoreline. See Fig. 2.54.



Table 17. Shared Front Yard Specifications

(See Section 2.5 for Public Realm Elements)

SURFACING

P1	BOARDWALK	TYPE U
P2	FOOT PATH	TYPE M, F
P3	MULTI-USE TRAIL	TYPE M, F

PLANTING

L1	TREE	OPEN SPACE
L2	BIORETENTION	UNDERSTORY TYPE F

LIGHTING

LT1	PARK LIGHT	TYPE C, D
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FURNISHING

F1	FENCING	TYPE A, D
F2	BIRD BATH	
F3	FIRE PIT	

The shared front yard is a buffer between the Big Green and the Flats. It acts as a visual transition between public open space and private homes, and provides residents with a shared semi-private open space for activities such as play, barbecue, small gatherings, and leisure time. Stoops overlook the shared yard, which fronts the Big Green. Stormwater generated in the Flats is treated between buildings.

Standards

2.4.78. Elements All elements shown in Figure 2.61 are required. Dimensions may vary.

2.4.79. Specifications Specifications shall conform to Table 17. Shared Front Yard Specifications.

2.4.80. Fence A low fence no taller than 36 inches with at least 85% transparency is permitted at the perimeter of each shared yard.

2.4.82. Percentage Softscape At least 80% of the shared yard shall be softscape.

Guidelines

2.4.83. Furnishings Placement of permanent and temporary furnishings in the shared front yard shall be permitted and maintained by the building HOA.

2.4.81. Stormwater Planted areas between buildings shall be used for stormwater treatment to treat the stormwater generated in the Flats. Paths over stormwater features shall be elevated boardwalks.



Shared yard for residences



Activated edge and public realm engagement



FIGURE 2.57: SHARED FRONT YARD ENLARGEMENT PLAN



Table 18. Public Market Plaza Specifications
(See Section 2.5 for Public Realm Elements)

BIKE FACILITIES: RACKS

SURFACING

P1	PLAZA	TYPE D,I,J,M,N,O / UNDERSTORY PLANTING TYPE I
P2	FURNISHING ZONE	TYPE I, J, N
P3	TRAVEL ZONE	TYPE G

PLANTING

L1	TREE	COMMERCIAL CORRIDOR
L2	TREE	OPEN SPACE

LIGHTING

LT1	PLAZA LIGHT	TYPE B
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FURNISHING

F1	SEATING	TYPE A, C, D, E, F
----	---------	--------------------

STRUCTURES

S1	PUBLIC MARKET	SEE SECTION X.X
----	---------------	-----------------

The Public Market is a flexible plaza space capable of hosting large events as well as everyday market functions. It serves as the threshold from the developed Hillside into the Big Green. The edge between plaza and Big Green should be integrated. The configuration allows for the plaza to evolve over time to suit the needs of the community, starting as a site activation location during early construction phases and becoming an active space for daily functions, gatherings, play, and events.

Standards

2.4.84. Elements All elements shown in Figure 2.62 are required. Dimensions may vary.

2.4.85. Specifications Specifications shall conform to Table 18. Public Market Plaza Specifications.

2.4.86. Public Market Locate 2 lightweight structures in the plaza to function as a public market. Total footprint not to exceed 10,000 sq ft. Construct the structures to allow for some enclosable spaces for community facilities.

2.4.87. Restroom Accommodate at least 6 restroom stalls in the public market pavilion or within 100 feet of the public market pavilion.

2.4.88. Amenities The following amenities shall be provided within the plaza: movable and built-in seating, lighting, a bicycle corral, signage, drinking fountains, and refuse receptacles.

2.4.89. Percentage Hardscape The plaza shall be at least 75% hardscape.

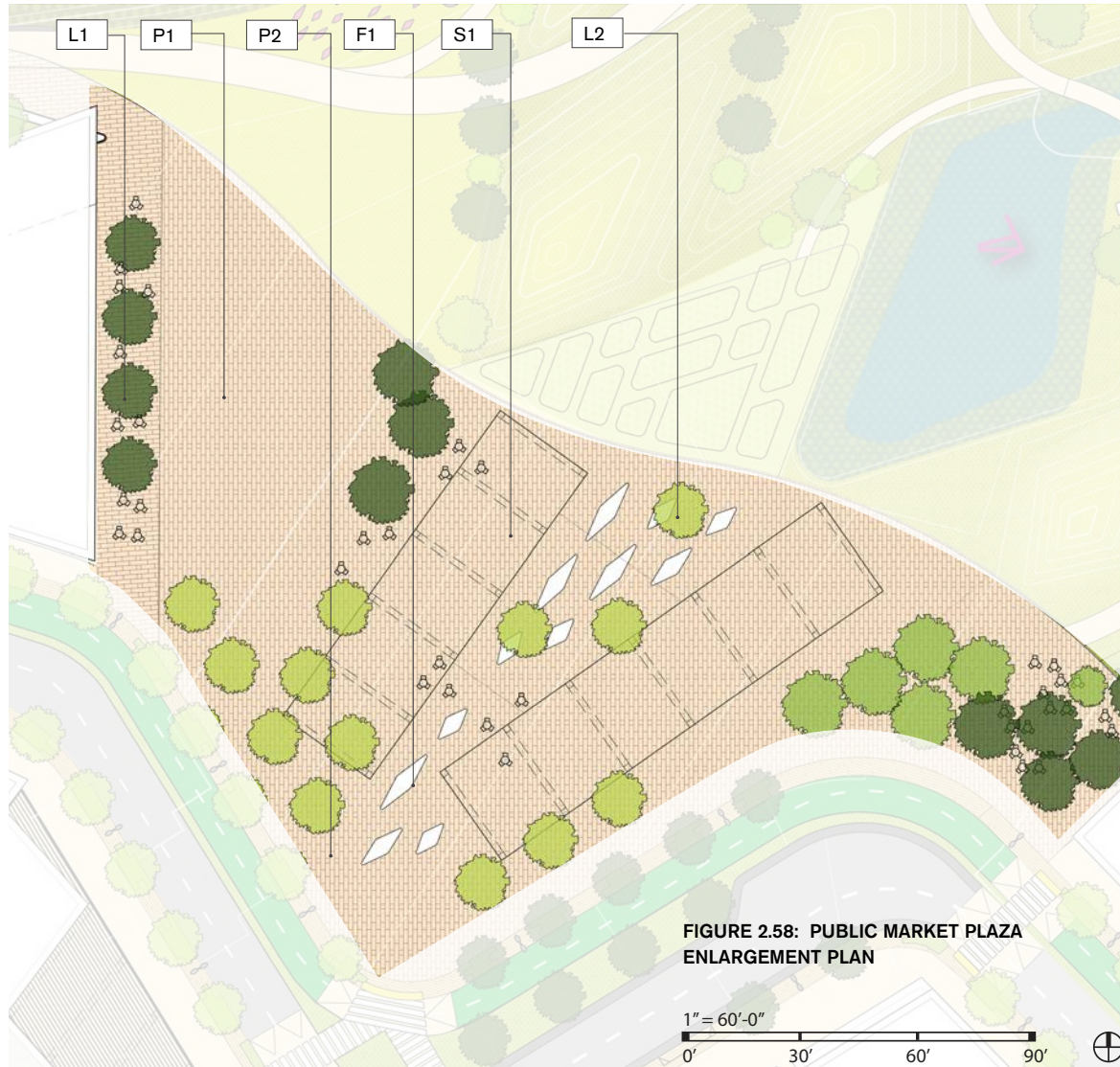
Guidelines

2.4.90. Shade Provide a lightweight canopy for cover and shade adjacent or attached to the public market structures.

2.4.91. Trees Locate trees in plaza to create a grove adjacent to New Hudson Avenue and allees to enhance view corridors.

2.4.92. Vehicular Access The plaza shall be designed to accommodate vehicular access.

2.4.93. Program Temporary programs and activities shall be allowed within the Plaza.



Flexible Plaza Space (The Plaza, Cambridge)



Canopy Typology (Flora Grubb, San Francisco)



Transit Plaza Rendering

Transit Plaza

The Transit Plaza is a primary entry into the site located at the corner of Innes Avenue and Arelious Walker. It will welcome people arriving by public transit, and should be inviting and comfortable. The plaza shall be robust in nature for durability on a primary transit corridor.

Table 19. Transit Plaza
(See Section 2.5 for Public Realm Elements)

BIKE FACILITIES: RACKS & BIKE SHARE

SURFACING		
P1	THROUGHWAY ZONE	TYPE H, I, J
P2	FURNISHING ZONE	TYPE H, I, J, K, N
PLANTING		
L1	TREE	COMMERCIAL CORRIDOR
LIGHTING		
LT1	PLAZA LIGHT	TYPE B
FURNISHING		
F1	SEATING	TYPE A, C, D, E, F
F2	SIGNAGE & WAYFINDING	SEE CHAPTER 7
F3	BIKE SHARE	
STRUCTURES		
S1	OVERHANG	SEE CHAPTER 6

Standards

2.4.94. Elements All elements shown in Figure 2.63 are required. Dimensions may vary.

2.4.95. Specifications Specifications shall conform to Table 19. Transit Plaza Specifications.

2.4.96. Percentage Hardscape The plaza shall be at least 90% hardscape.

Guidelines

2.4.97. Lighting Plaza lighting shall be incorporated into building and hardscape, and/or planters.

2.4.98. Shade See Ch. 6 for building overhang.

2.4.99. Amenities The following amenities shall be provided within the plaza: movable and built-in seating, lighting, signage, and refuse receptacles.

2.4.100. Paving Paving shall be distinct from DPW standard sidewalk, including enhanced cast in place concrete or concrete unit pavers.



Table 20. Town Triangle Specifications
(See Section 2.5 for Public Realm Elements)

SURFACING		
P1	TOWN TRIANGLE PAVING	TYPE H, I, J
PLANTING		
L1	TREE	COMMERCIAL CORRIDOR
L2	COURTYARD/PLAZA	UNDERSTORY TYPE B
LIGHTING		
LT1	STREET LIGHT	TYPE 2
FURNISHING		
F1	SEATING	ALL TYPES

The town triangle is a signature plaza for the community designed to accommodate small to medium size gatherings, neighborhood events, and retail seating areas. The plaza should enable a range of activities and allow the ground floor retail outdoor space for seating and occasional events. Accordingly, the plaza is designed for flexibility with a large paved area, as well as more intimate gathering spaces. Located adjacent to the Class-I bikeway, the plaza also provides bicycle infrastructure and places for bicyclists to stop for a break.

Standards

2.4.101. Elements All elements shown in Figure 2.64 are required. Dimensions may vary.

2.4.102. Specifications Specifications shall conform to Table 20. Town Triangle Specifications.

2.4.103. Raised Planters Raised planters shall be maximum 18" above adjacent finish surface. Raised planters edges shall incorporate seating/play elements where possible.

Guidelines

2.4.104. Gathering Spaces Provide gathering spaces at a variety of scales to accommodate a range of programmatic activities, from larger scale formal performances and events to small scale informal gatherings.

2.4.105. Furnishings A range of fixed and movable furnishings shall be provided to accommodate programmatic activities.

2.4.106. Infrastructure Power, water and internet shall be provided to accommodate users and a range of outdoor programs and events.

2.4.107. Paving Paving shall be distinct from DPW standard sidewalk. Variation may include jointing pattern, paving type, texture and color.

2.4.108. Building Activation Open spaces shall be oriented to activate building and retail frontages.

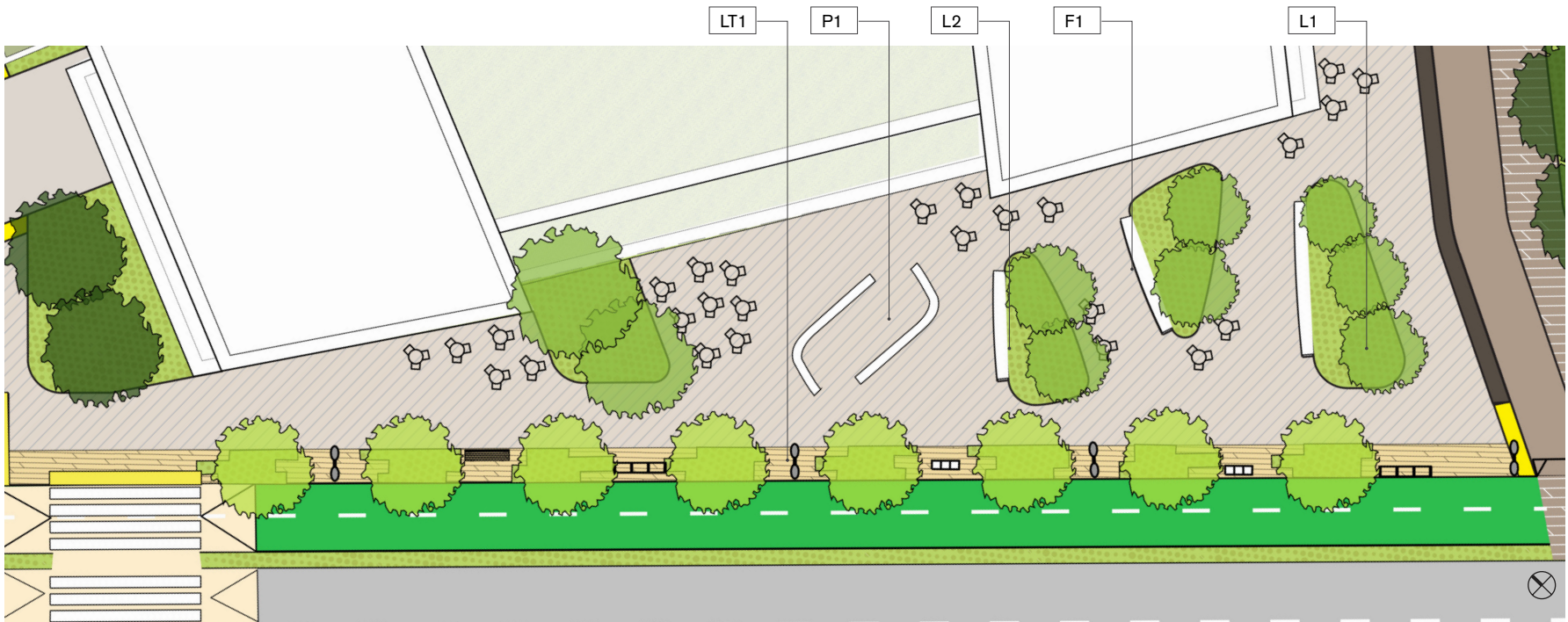


FIGURE 2.60: TOWN TRIANGLE ENLARGEMENT PLAN



Table 21. Pocket Plazas Specifications
(See Section 2.5 for Public Realm Elements)

SURFACING

P1	POCKET PLAZA ZONE	TYPE H, I, J
----	-------------------	--------------

LIGHTING

LT1	PED LIGHT	TYPE 2
-----	-----------	--------

FURNISHING

F1	SEATING	ALL TYPES
----	---------	-----------

Pocket Plazas are nestled into the flats. They are community gathering and program spaces located at strategic nodes within the neighborhood. The pocket plazas are reserved as locations for site specific installations, and a range of interventions should be considered for these locations to mark them as distinct signature places within the public realm. These could include site specific furnishings, inlay/pressed paving and art installations. Reuse found objects to retain the character of the place. Consider engaging a local artist or artisan for creation of site specific interventions in the pocket plazas.

Standards

- 2.4.109. Location** Location shall conform to Figure 2.65. Dimensions may vary.
- 2.4.110. Specifications** Specifications shall conform to Table 21. Pocket Plaza Specifications.

Guidelines

- 2.4.111. Site Specific Interventions** Site specific interventions shall be incorporated into the pocket plazas. These may include site specific custom furnishings, inlay/pressed paving and art installations incorporating found objects.
- 2.4.112. Seating** A range of seating types shall be provided.
- 2.4.113. Paving** Paving at pocket plazas shall be distinct from adjacent surfacing. Variation may include jointing pattern, paving type, texture and color.



Courtyards & Stairs

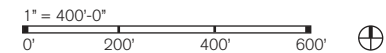
The courtyards and stairs provide important functional spaces for India Basin. The courtyards function in the urban design framework is to provide residents with gathering and program spaces near their home. These spaces serve as extension of living spaces where residents can carry out community life. Programmatic activation and a sense of community ownership are key for the success of these spaces.

The stairs provide transition from streets to the elevated podium level, which includes the laneways and courtyards. These are intended to feel welcoming, generous and comfortable and should not act or feel like a barrier. Planting, art and water are incorporated into the stairs to increase comfort and animate these spaces.



FIGURE 2.62: COURTYARDS, STAIRS, & LANEWAYS

 See Laneways Section 2.4





Laneway Grand Stair

Table 22. Courtyard & Stairs Specifications
(See Section 2.5 for Public Realm Elements)

SURFACING

P1	PEDESTAL PAVING	TYPE C, S
P2	STAIRS	TYPE I, J, T

PLANTING

L1	COURTYARD TREE	ABOVE GRADE
L2	COURTYARD PLANTING	UNDERSTORY TYPE A
L3	PLANTING	UNDERSTORY TYPE C

LIGHTING

LT1	PEDESTRIAN LIGHT	TYPE 2
-----	------------------	--------

FURNISHING

F1	SEATING	ALL TYPES
----	---------	-----------

Standards

2.4.114. Access Control Access control shall conform to Figure 2.67.

2.4.115. Specifications Specifications shall conform to table 22 Courtyard and Stair Specifications

2.4.116. Soil Depth Trees on structure shall be provided minimum 4' soil depth. 5' is recommended.

2.4.117. Storage Courtyards shall provide storage space for residents to store items such as garden tools, toys and furnishings.

2.4.118. Bicycle Channel A bicycle channel or rail shall be incorporated into stairs to facilitate ease of bicycle transport.

2.4.119. Raised Planters Raised planters shall be maximum 18" above adjacent finish surface. Edges of raised planters shall incorporate seating/play elements where possible.

Guidelines

2.4.120. Overhead Cover Courtyards shall provide common space with overhead cover that may include shade sails, canopies, and trellises.

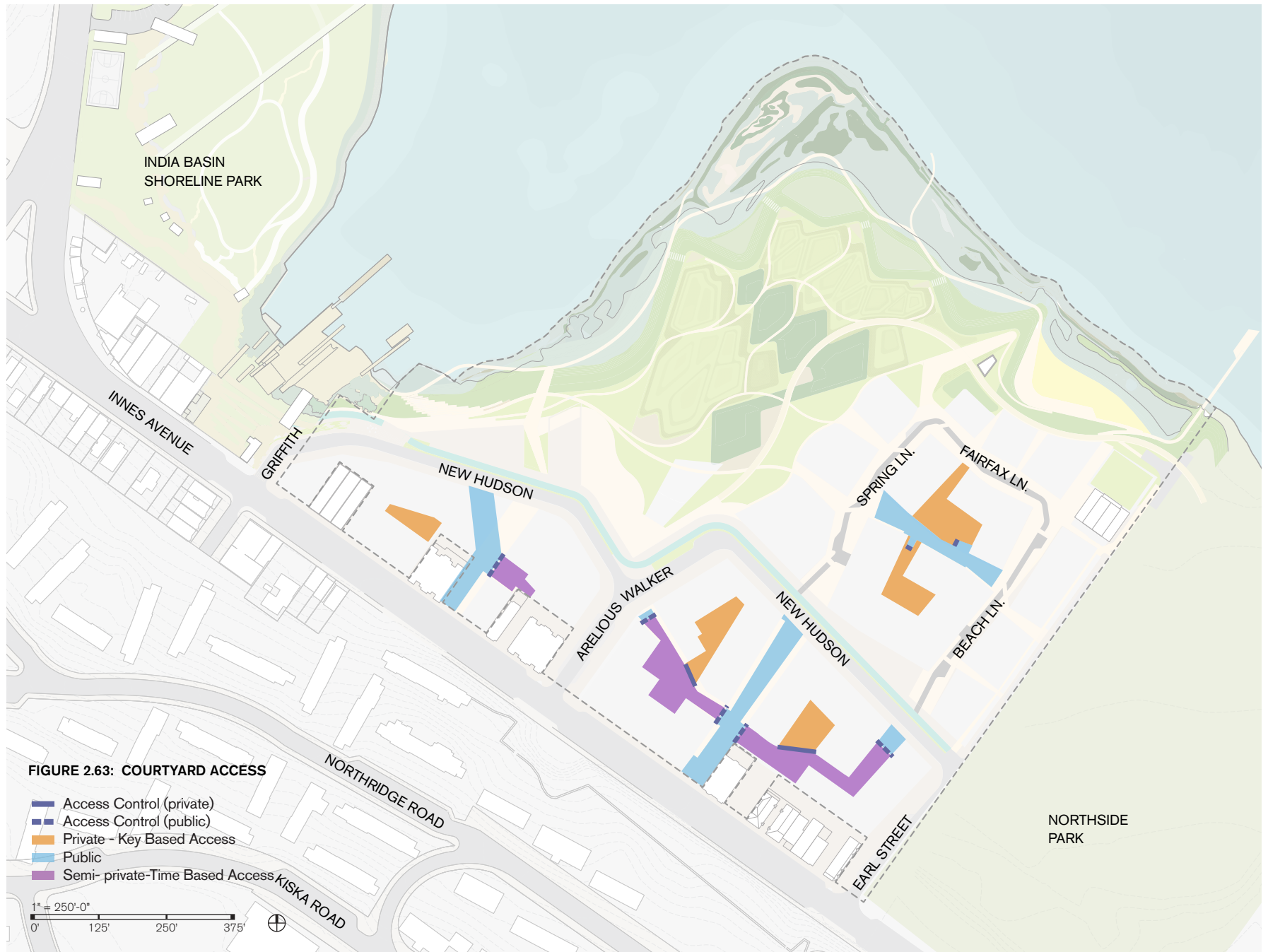
2.4.121. Sightlines Stoops and entrances shall have sightlines to common spaces.

2.4.122. Amenities and Programming Courtyards shall include common amenities for residents that may include community gardens, fire pits, play areas, bbq facilities and community common resource sharing facilities (e.g. tool lending library).

2.4.123. Thermal Comfort Thermal comfort shall be considered when locating courtyard planting and program zones. Gathering spaces shall be provided with a variety of sun/shade conditions.

2.4.124. Planting Areas Planting areas shall be placed with consideration given to solar exposure. Plants shall be located where they will receive adequate sun.

2.4.125. Paving Surfacing of courtyards and stairs shall match laneway surfacing.



2.5 Public Realm Elements

A comprehensive mix of elements and India Basin-specific materials are proposed to create public spaces for active public life that cherish and embrace the nuances of India Basin.

An active and vibrant public realm is reliant on places with a diverse and appropriate mix of elements and amenities that extend the use of a space to all times and conditions of the year. To achieve the guiding principals, a comprehensive palette of elements and India Basin-specific materials are proposed to create public spaces for active public life that cherish and embrace the nuances of the existing place. The following palettes, precedents, and design guidelines and standards included in this section should be closely adhered to for authenticity and a site that is true India Basin.

Included Elements:

- | | |
|------------------------|-----------------------------|
| ▪ Surfacing | ▪ refuse Receptacles |
| ▪ Furnishing | ▪ Recreation Elements |
| ▪ Bike Racks & Corrals | ▪ Fences & Gates |
| ▪ Newsracks | ▪ Lighting |
| ▪ Parking Meters | ▪ Structures |
| ▪ Boardwalks & Spans | ▪ Streetscape Systems |
| ▪ Bollards | ▪ Stormwater Treatment |
| ▪ Fire Pits | ▪ Signage (see Chapter 6) |
| ▪ Drinking Fountains | ▪ Ecology (see Section 2.6) |



EXISTING	FUTURE
FOUND	INTENTIONAL
RANDOM	DURABLE AND LASTING
INDUSTRIAL	ARTFUL AND COMPOSED
VARIETY	VARIETY AND CHANGE

Existing Basin-Wide Elements

Shaped by forces of economy, industry, and improvisation, India Basin exists today as a site of variety, remnants, artifacts, patterns, and materials. Leftover pieces, oddities, and a patchwork of materials result in found objects. Constant interaction with the Bay creates dynamic experiences, views, and unique habitats. The resulting site character is feral, rugged, industrial, and wild. India Basin’s industrial and storied past has been integral to envisioning the future of this place, and the proposed design for India Basin reflects the community’s desires to preserve the wild and post-industrial character of the Basin and promote the legibility of such formative eras in the landscape.

The materials and colors throughout the Basin and the surrounding sites inspire an India Basin unique materials and color palettes that are durable, site specific, and in this condition, mundane. All elements will conform to the materials, textures, and colors of this overarching project palette to achieve a public realm that is authentic India Basin.





1



2



3



4



7

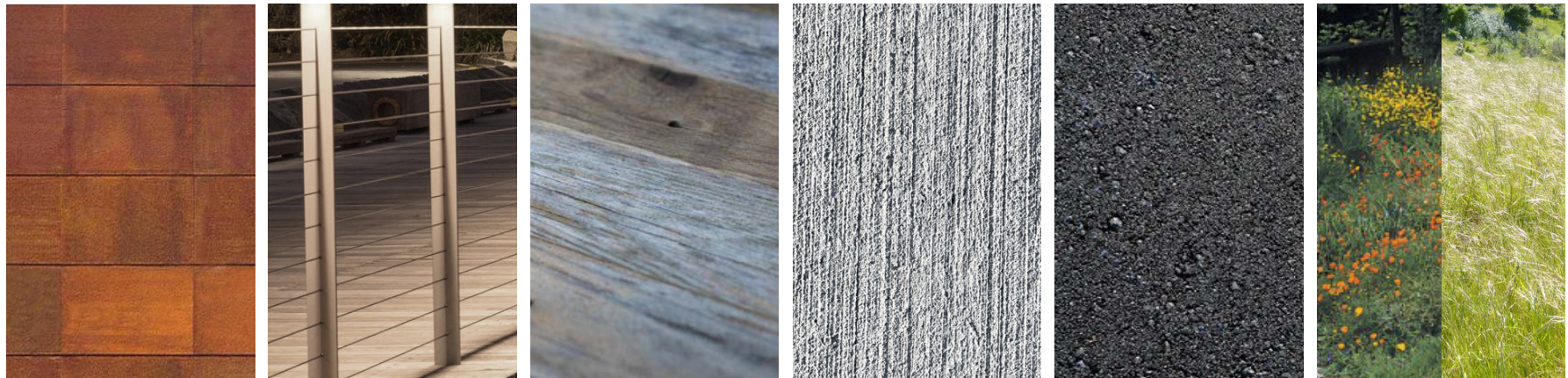
- 1. Wildflower meadow
- 2. Concrete rubble and Oystercatchers
- 3. Cracked asphalt paving
- 4. Existing coastal scrub and upland grasslands
- 5. Power sub-station, galvanized metal
- 6. Steel
- 7. Rip rap breakwater



5



6



Corten Steel

Galvanized Metal

Hardwood

Raw Concrete

Asphalt

Native & Adaptive Vegetation

Color & Materials Palette

Wildness, variation in light, seasonal dynamics, and the affects of time on materials in India Basin inspire a palette of material and colors that will blend into the existing setting and will preserve the unique character, look, and feel of India Basin. The color palette shall be used as a basis to guide color selection of public realm elements. The materials and textures in this palette shall serve as guiding principles for selection of public realm materials. The “Trust” should be engage to manage and coordinate all public realm elements.

Standards

2.5.1. *Materials* All materials and furnishings shall conform to the color and materials palette included here.

Guidelines

2.5.2. *Durability* All materials and furnishings shall be durable, resilient, suitable for use in an urban coastal environment, and require minimal maintenance.

2.5.3. *Life-cycle* Materials and furnishings shall be selected to conform with sustainability goals. See Ch. 3.

Surfacing

The India Basin public realm surfacing palette is composed of durable materials appropriate for an urban environment. Materials should require minimal maintenance. At the time of this publication, it is anticipated that permeable surfacing may only be applicable if an underdrain is provided. Permeable materials are provided herein pending future geotechnical investigations.

Standards

2.5.4. Vehicular Surfacing Surfacing in vehicular zones shall be designed with appropriate profiles to accomodate vehicular traffic. Concrete unit pavers in vehicular zones shall not exceed 4" x 12" module size.

Guidelines

- 2.5.5. Surfacing** Provide visual and textural contrast between pedestrian and vehicular surface.
- 2.5.6. Joints** Cast in place concrete joints shall be saw cut.
- 2.5.7. Edge Restraint** Non rigid paving shall have an edging composed of either a stainless steel or aluminum edging or cast in place concrete.

Surfacing Types



Type A: Permeable Asphalt

Standard hot mix asphalt with reduced fines.



Type B: Permeable Concrete

Custom concrete mixture contains little or no sand which results in high void content.



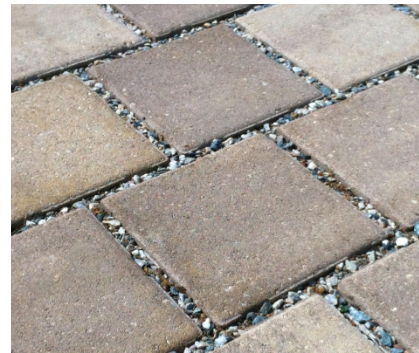
Type C: Grass Pave

Pervious, planted load bearing surface composed flexible grid system. Provides high permeability suitable for vehicular loading



Type D: Turf Block

Modular paving system with large voids to allow for planting and passage of water.



Type E: Permeable Unit Pavers

Modular cast concrete paving system. Paving joints allow for passage of water.



Type F: Reinforced Planting

Modular cut stone pavers set into turf or crushed stone surrounds.

Surfacing Types



Type G: Asphalt

Smooth, durable road surface.



Type H: CIP Concrete

DPW standard CIP concrete..



**Type I: Enhanced
Cast In Place Concrete**

Cast in place concrete with integral color. May include embossing or patterns.



Type J: Concrete Unit Pavers

Modular cast concrete system. In vehicular areas, size of modules shall accommodate vehicular loading. May be sand set on an aggregate base or mortar set on a concrete slab. Install per geotechnical recommendations.



Type K: Cobblestone

Modular cut stone paving.



Type L: Thermoplastic

Marking to delineate Class I bike lane.

Surfacing Types



Type M: Decomposed Granite

Flexible non porous paving system.



Type P: Stenciled Concrete

Pressed use found object as stencil in CIP concrete or asphalt.



Type N: Demarcation Multi-use Paving/Pavers

Flexible non-porous paving system



Type Q: Stabilized Crushed Stone

3/8" or 1/4" minus aggregate with integrated non-toxic stabilizer.



Type O: Exposed Aggregate

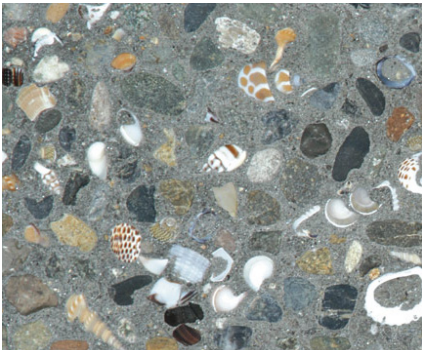
Select materials inlaid into concrete and/or asphalt for a distinct pattern. Finish surface shall be smooth and durable with no sharp protruding objects. Inlay materials may include shells, found objects, large aggregate.



Type R: Truncated Domes

Detectable warning surface to delineate edge between pedestrian and vehicular zones. Refer to DPW standards for material, color and installation specifications.

Surfacing Types



Type S: Inlay Pressed Paving

Select materials inlaid into concrete and/or asphalt for a distinct pattern. Finish surface shall be smooth and durable with no sharp protruding objects. Inlay materials may include shells, found objects, large aggregate.



Type T: Wood Plank

Smooth, linear wooden planks. Suitable for vehicular loading.



Type U: Wood Boardwalk

Hardwood planking for porous surfacing and elevated trails. Allows for access through stormwater facilities without interrupting hydraulic flow.



Type V: Sand

Fine grain, clean sand for perched sand areas.



Seating with Back Support



Long, linear seating



Furnishings

Furnishings are an important component of the public realm. The furnishings at India Basin are sturdy and resilient while at the same time fulfilling aesthetic aspirations. To this end, furnishings at India Basin are constructed of simple, robust materials that can withstand the urban environment and coastal exposure. The use of industrial materials with integral finishes is encouraged. They should be inviting, comfortable and accessible.

To establish a unique and site-specific identity, a family of furnishings are envisioned for the site. Sizes, dimensions, layout, configuration, and type vary within the family. Materials should conform to the public realm palette, and be durable and appropriate for an urban waterfront setting.

Standards

2.5.8. Location & Type Furnishing type shall conform to Figure 2.68.

2.5.9. Backing Backed and backless varieties shall be provided, functional areas shall include at least one seating option with back and armrest.

Guidelines

2.5.10. Location Furnishings shall be located outside main path of travel within furnishing zones and allow for sufficient space for comfortable seating. Furnishings shall be located in areas where they are likely to be used. Furnishings shall be visible and located in a manner that allows them to be easily accessed.

2.5.11. Intervals Seating shall be located at regular intervals.

2.5.12. Experience Furnishings shall be located to define unique places and enhance unique experiences, such as views, sculpture, and activities.



Type A: Small Scale Seating

Small scale seating that can be configured to provide seating for individuals and small groups. Can be used in small scale spaces.



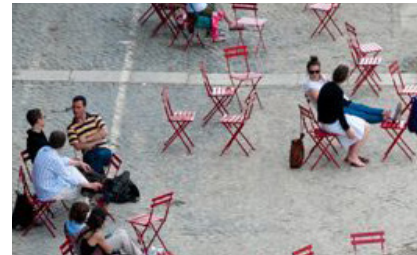
Type E: Modular Furnishing System

Modular furnishing systems allows for various configurations which enables adaptability to varied public realm conditions.



Type B: Standard Bench

The standard India Basin streetscape bench will be medium scale and be robust and built to withstand urban conditions. Primary materials to include galvanized or stainless steel and durable hardwood.



Type F: Movable Furnishings

Standard India Basin furnishing that is repositionable by users. Should be easy to store, durable, and offer a variety of seating positions including straight back chair, reclined back chair, foot rest, and table.



Type C: Large Bench

Substantial bench element for large scale gathering and plaza spaces. Can accommodate large groups of people



Type G: Site-Specific / Custom Furnishings

To define a unique experience or view at gathering places and/or unique places, a site-specific, built-in furnishing and/or art piece should be commissioned to define the public realm.



Type D: CIP Concrete Seating

Built in seating elements constructed of cast in place concrete.

Furnishing family durable materials





Durable, corten steel bike rack

Bike Racks

Bike racks should be a simple, robust design. Bike racks constructed of galvanized or stainless steel without powder coating are easier to maintain and are encouraged. Refer to Ch. 1 for bike network and bike corral locations.

Standards

2.5.13. Location Bike racks shall be located no further than 50 feet from program areas such as building entries, small and large gathering areas and signature places. Bike racks shall be provided near major destinations and locations with high pedestrian traffic.

2.5.14. Design Bike racks shall contain at least 2 points of contact and multiple locking options for a range of bikes.

2.5.15. Design All elements of a bike rack shall have a minimum 2 inch diameter or 2 inch square tube.

Guidelines

2.5.16. Material Bike racks shall be galvanized or stainless steel to facilitate ease of maintenance. Bike racks shall not be powder coated.

2.5.17. Visibility Bike racks shall be visible to cyclists and pedestrians.

2.5.18. Location Bike racks shall be located where ample space is available and pedestrian flow will not be compromised. Bike racks shall be located to avoid conflict with access to underground utilities.



Built-in fire pit for year round use

Fire Pits

Fire pits are proposed for public areas to provide comfort that should increase the use of the public realm spaces to all times of day and year.

Guidelines

2.5.19. Construction Fire pits shall be constructed as integral, built-in elements to the place.

2.5.20. Design Provide built-in utility lines to supply fire pits.

Recreation Elements

The Big Green is envisioned to create a healthy, fun, and engaging environment for people of all ages and abilities. A range of recreation and adventure elements are intended for the Big Green.

Standards

2.5.21. Design Shall be designed for all ages and abilities.

2.5.22. Fencing Shall be designed without the need for fencing and controlled access.

Guidelines

2.5.23. Activities Shall provide space for a range of experience and activities

2.5.24. Drinking Fountains Drinking fountains shall be provided at all active recreation areas.

2.5.25. Lighting Lighting shall be provided in active and adventure areas for evening use.



Variety and adventure



Recreation amenities for all ages and abilities



Spaces for outdoor fitness



Flexible public spaces maximum potential uses



Integrate play features into the landscape



Elevated boardwalk

Boardwalks & Spans

Standards

2.5.26. Material Boardwalks shall be made of wood materials.

2.5.27. Guardrail Guardrail shall be at least 80% transparent.

2.5.28. Roll Guard Where drop from boardwalk exceeds 4", provide a 6" high roll guard for edge detection. Roll guard material shall be integral to boardwalk material.

Guidelines

2.5.29. Guardrails Trails and boardwalks shall be designed to use guardrails sparingly, and only at overlooks and bridges. (See section 2.4)



Newsracks combined as one feature

Newsracks

Standards

2.5.30. Location Only 1 six-unit pedmount newsrack shall be placed behind the curb of any passenger loading (white) zone.

2.5.31. Clear Width Where newsracks are located in the furnishings zone, placement shall meet the minimum clear width with the newsrack door open.

2.5.32. Location Newsracks shall be located next to red curbs that are not marked for a bus stop.

2.5.33. Bus Zone No newsrack shall be placed within 6 feet of the curb for the length of any bus zone.

2.5.34. Location A maximum of five free-standing newsracks may be placed in a continuous row. No more than two pedmount newsracks shall be placed within 5 feet of each other except if the sidewalk is 25 feet wide or greater, in which case the maximum is 3 pedmounts.

Guidelines

2.5.35. Location Newsracks shall be placed in building setbacks, instead of the furnishings zone, with the property owner's approval.

2.5.36. Design Newsracks shall be consolidated into a single integral cabinet. The cabinet shall have a simple design that complements the design and color of other street furniture. Newsracks shall be permanently affixed to the sidewalk.



Parking meter stations

Parking Meters

Standards

2.5.37. EV Charging Provide EV charging at on-street parking meters for electrical vehicles and bikes. EV charging stations shall be provided for at least 50% of street level parking spaces within the public realm.

3.5.38. Location Multi-space meters shall be placed every 8 to 10 parking spaces, 150 to 200

feet apart.

2.5.39. Multi-Space Meters Signage shall clearly direct patrons to the multi-space parking meter. Signage directing patrons to multi-space meters shall be placed every 100 feet (4 to 5 parking spaces).

Guidelines

2.5.40. Striping & Numbering Some payment mechanisms require striping, and in some cases numbering, of individual spaces on the roadway while others allow cars to freely fill in the entire block. Where roadway striping and/or numbering is required it shall be minimal and not visually



Drinking Fountains
Water filling stations as bicycle infrastructure
distracting or unnecessarily large.

Drinking Fountains & Bottle Filling Stations

Guidelines

2.5.41. Location Provide at least 1 drinking fountain and bottle filling station near recreation areas, signature spaces, and recreation areas.

2.5.77. Location Locate bottle filling stations adjacent to bicycle facilities, including the Class-I bikeway, and the primary multi-use trail.

Fence Types



Type A: Wire Mesh A

Lightweight, low-profile fence to create a clear yet transparent divide between spaces. 36-42" high. 60-72" high in select places. Durable materials with integral finish appropriate for marine environment and occasional flooding.



Type B: Cable

Rustic wood and cable and/or rope materials designed to fit into the wild and feral landscape. 36-42" high. Durable materials with integral finish appropriate for marine environment and occasional flooding.



Type C: Wood Slats

Lightweight, low-profile fence to create a clear and opaque divide between spaces. 36" high. Durable materials with integral finish. Industrial aesthetic.



Type D: Gate

At entries to private courtyards, a gate is provided for secure resident entry. 48-72" high in select places. Gates should meet or exceed City of San Francisco residential guidelines and standards in transparency and access requirements.



Type E: Screen

Structure to provide screening from adjacent spaces. 48-72" high in select places. Screen should meet or exceed City of San Francisco residential guidelines and standards in transparency and access requirements.





Identity



Multi-Stream & Capacity



User Behavior

Refuse Receptacles

Refuse receptacles will be located throughout the public realm to support the City's ambitious zero waste goal (see Ch. 3) and are intended to serve 3 functions.

1. Identity - Custom designed refuse receptacles unique to India Basin palette for wayfinding and identity.
2. Multi-Stream and Capacity - Modular system to collect different refuse streams. High capacity in busiest areas to minimize collection frequency and overflow.
3. User Behavior - Furnishings for refuse collection for all users and refuse streams.

Standards

2.5.43. Capacity refuse receptacles shall be high capacity (36 gallon or greater) to minimize collection frequency.

Guidelines

2.5.44. Maintenance refuse receptacles shall be easily cleaned.

2.5.45. Design refuse receptacles shall be side opening and covered for rain protection.

2.5.46. Location refuse receptacles shall be located in the furnishing zone outside of pedestrian circulation path. refuse receptacles shall be located where ample space is available and pedestrian flow will not be compromised. refuse receptacles shall be placed in a location visible to pedestrians and adjacent to high activity zones. refuse receptacles shall be located to avoid conflict with access to underground utilities. refuse receptacles shall be located as near to corners as practicable but out of the corner clear zone.

2.5.47. Design refuse receptacles shall contain a closed flap to limit wildlife exposure and access.

Lighting

Lighting is designed for safe roadways, pedestrian and open spaces to foster an active urban environment and provide an important component of India Basin's identity. India basin lighting fixtures provide flexibility and allow for multiple configurations while providing the ability to integrate with security and data components. Fixture materials will build on India basin's industrial heritage. The India Basin lighting design balances lighting requirements with minimization of light pollution to protect habitats and dark skies.

Standards

2.5.48. Height Street lighting: Street lighting fixtures shall be mounted 20-30' high

2.5.49. Height Pedestrian-scale lighting: Pedestrian-scale lighting fixtures shall be mounted 12-15' high, min 15' high in vehicular travel zones

2.5.50. Sky Glow Sky glow shall be mitigated by selecting dark sky friendly lighting fixtures that direct most of the light downward, by eliminating excessive light level, and turning lights off when not needed. Light fixtures shall achieve a semi-cutoff light (5% or less concentration of light

above a 90 degree angle from the fixture than the light output of the fixture), with a target of full-cutoff (zero light loss above the fixture or shield level).

2.5.51. Location Light poles and fixtures in the Big Green shall not exceed 36" high. Locate light fixtures in the shoreline only at the beach upper and lower decks. Only footlighting with motion sensor activation or no lighting will be permitted on the shoreline boardwalk.

2.5.52. Efficiency Select lighting to maximize energy efficiency to meet or exceed the minimum energy performance requirements of Title 24 at the time of construction. See Ch. 3 for energy efficiency.

2.5.53. Maintenance & Cost Light fixtures shall be chosen to minimize maintenance and operating costs, and should have a minimum lifespan of 50,000 hours.

Guidelines

2.5.54. Location Street lighting poles shall be located on the sidewalk close to the curb on the curb side edge, or centered within, the furnishing zone.

2.5.55. Pedestrian Lighting Pedestrian lighting shall be added to street light poles where feasible unless spacing between street light poles does not support adequate pedestrian lighting, in which case pedestrian lighting may need to be located between street light poles.

2.5.56. Light Distribution Light fixtures shall be selected to efficiently direct light to the desired area of the roadway and sidewalk. Light fixtures should enable a variety of light distributions to adapt to different street and sidewalk configurations while maintaining the same fixture appearance. The distribution type shall be selected based on street and sidewalk width. Glare shall be mitigated by selecting the proper lamp wattage and mounting fixtures at the appropriate height.

2.5.57. Light trespass Lighting fixtures shall not be located close to windows to avoid light trespass or glare and disturb the adjacent building's occupants. House-side shields may be used on fixtures to minimize light trespass into residences or other areas.

Lighting Types



Type A: Street Light

20–30' high. Industrial aesthetic. Simple durable materials with integral finish. Can incorporate pedestrian light (12–15' high). Configurability. Able to integrate security, data gathering, cameras



Type B: Pedestrian Light

12–15' high (min 15' in vehicular travel zones). Industrial aesthetic. Simple durable materials with integral finish



Type E: Solar Powered Light

Consider light features that incorporate PV to generate on-site renewable energy to achieve the ambitious sustainability goals. See Ch. 3.



Type C: Bollard Light

36–42" high. Industrial aesthetic. Simple and durable materials with integral finish that is designed to fit into the surrounding landscape. Shall be placed outside of primary foot traffic. Limit light pollution to limit impact to habitat and preserve dark skies.



Type D: Foot Light

6–12" high. For low level foot traffic pathways in Big Green and residential areas. Industrial aesthetic. Simple, durable materials with integral finish.



Structures

A range of structures - small and large - will be incorporated throughout the Big Green to provide amenities, services, and experiences for visitors. The form, dimension, and materiality of all structures should be designed as site-specific and purpose-specific constructions that reference the surrounding landscape, industrial heritage, waterfront setting, and environment. As a field house to augment the Heron's Head EcoCenter, a lightweight pavilion should be provided in the Big Green.

The unique waterfront setting and landscape lends itself to a robust sculpture park program. A collection of large, environmental scale pieces that are site-specific, interactive, and/or interpretive are envisioned to be dispersed throughout the Big Green as a local amenity and destination. Consider contracting site-specific pieces by local artists, and contracting local artists / artisans for fabrication of pavilions and structures. Installations should be interactive and engaging to the greatest extent possible.

Standards

2.5.58. Elements Structures shall conform to Figure 2.71. Dimensions and locations may vary.

2.5.59. Size Maximum allowable footprint per structure in Big Green and Beach Terrace is 1,500 square feet, excluding public market pavilion. Only sculptures, art installations, and shade canopies built-into overlooks or the bank shall be permitted below top of bank.

Guidelines

2.5.60. Collection Both permanent and temporary / rotating sculptures shall be permitted.

2.5.61. Experience Locate pieces to create views, unique experiences and encounters.

2.5.62. Varied Designers & Artist Pavilions and structures shall be designed by different designers / artists.

2.5.63. Restrooms Restrooms shall be incorporated into structures. Standalone restroom facilities shall not be permitted.

