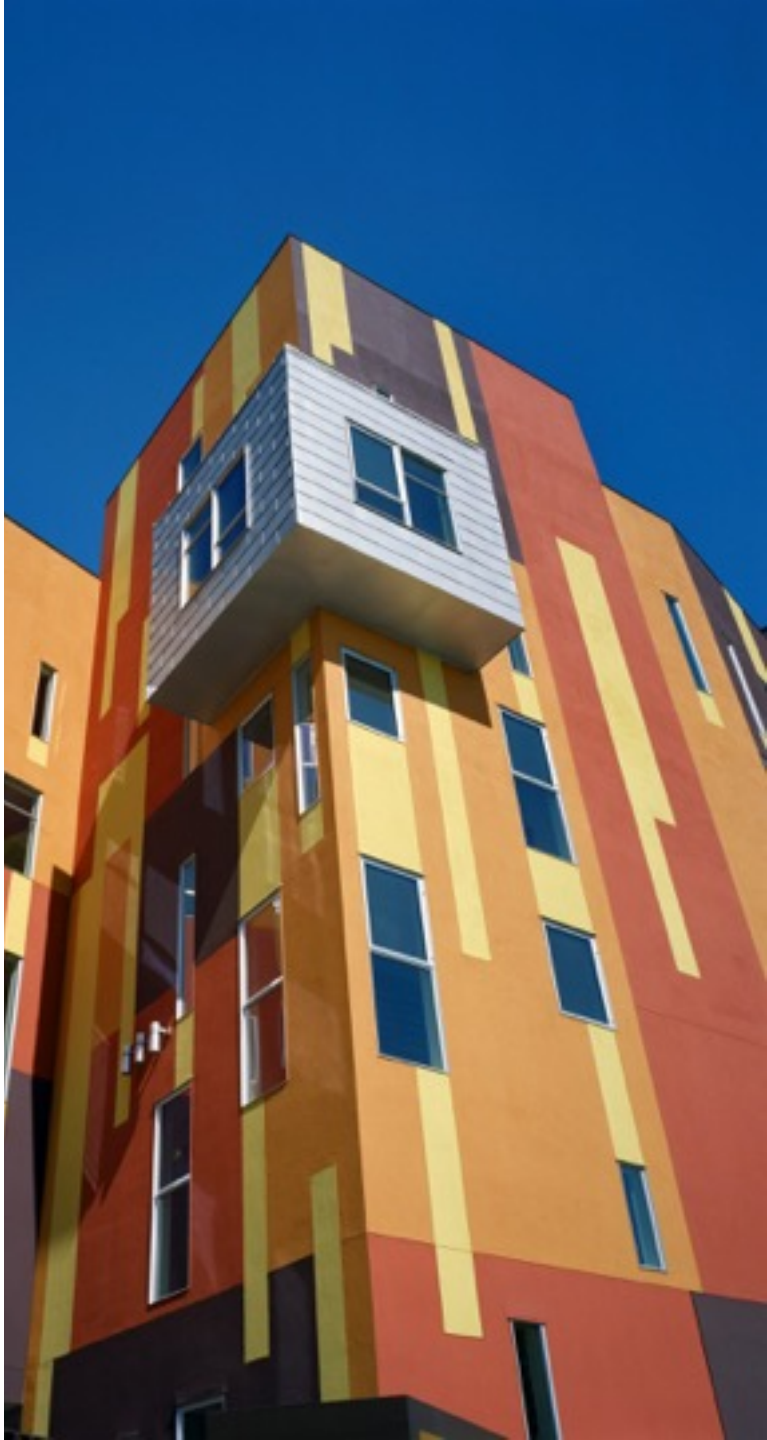
designing TODs

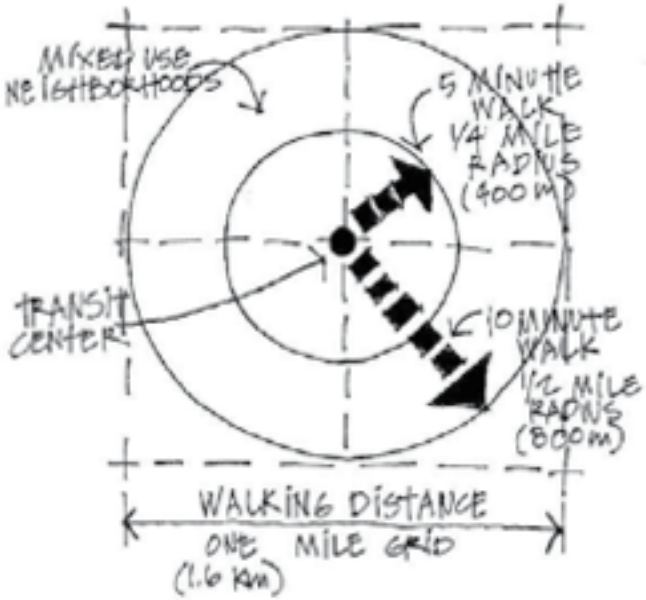
high-density
mixed-use
green
housing developments
at transit stations.....



defining TODs

transit Oriented development

- the area within a half-mile radius
- a ten minute walk
  of a regional / city transit station



defining TODs

recipe:

- transit
- open space
- high quality walking and cycling
- shopping
- employment
- reduced auto parking
- high-density residential
  (allows for a variety of housing choices, size and income)

TODs Prop 1c funding

- initial prop 1c funding of $300 million
- over two funding rounds HCD awarded $271 million
  - Created *27 developments*
  - Produced *6,158 homes*
  - Leveraged *more than $1.6 billion in federal and private capital*
  - Through point scoring system a majority of projects points were based on features that reduce GHG and vehicle miles traveled

why TODs

"Residents living near transit stations are 5 times more likely to commute by transit as the average resident in the same city not living near transit."

BART/CalTrans: Travel Characteristics of TOD in California

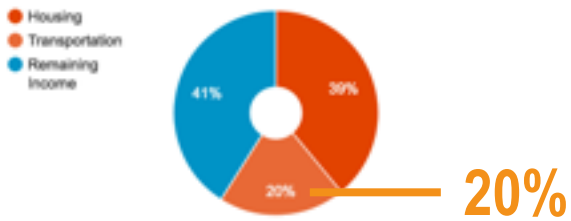
why TODs

Housing + Transportation (H+T)®
Affordability Index
Center for Neighborhood Technology
www.htaindex.cnt.org

Kapolei, HI

Average Housing + Transportation Costs % Income

Factoring in both housing and transportation costs provides a more comprehensive way of thinking about the cost of housing and true affordability.



Transportation Costs

In dispersed areas, people need to own more vehicles and rely upon driving them farther distances which also drives up the cost of living.

$14,848
Annual Transportation Costs

2.02
Autos Per Household

23,442
Average Household VMT

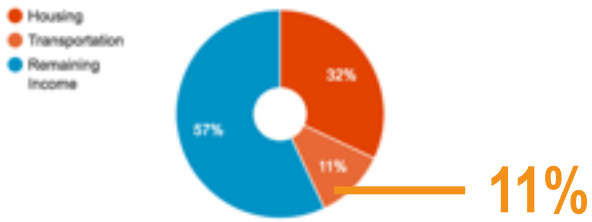
The statistics above are modeled for the Regional Typical Household. Income: $72,764 Commuters: 1.43 Household Size: 3.00 (Urban Honolulu, HI)

1%	20	10.85 Tonnes
Transit Ridership % of Workers	Annual Transit Trips	Annual Greenhouse Gas per Household

San Francisco, CA

Average Housing + Transportation Costs % Income

Factoring in both housing and transportation costs provides a more comprehensive way of thinking about the cost of housing and true affordability.



Transportation Costs

In dispersed areas, people need to own more vehicles and rely upon driving them farther distances which also drives up the cost of living.

$8,919
Annual Transportation Costs

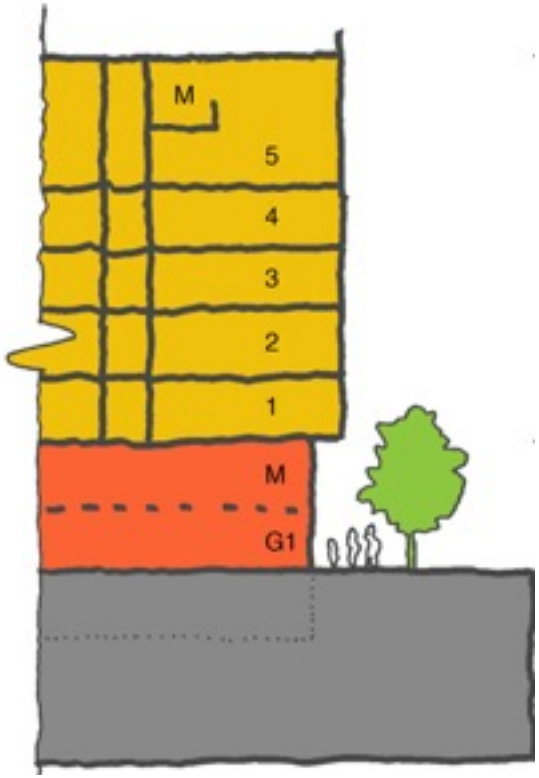
1.15
Autos Per Household

12,226
Average Household VMT

The statistics above are modeled for the Regional Typical Household. Income: $77,887 Commuters: 1.19 Household Size: 2.66 (San Francisco-Oakland-Hayward, CA)

36%	501	4.74 Tonnes
Transit Ridership % of Workers	Annual Transit Trips	Annual Greenhouse Gas per Household

4 TOD projects



PARKING / CONSTRUCTION TYPES

- WRAP / TYPE III
- TUCK UNDER + SURFACE / TYPE V
- PODIUM / TYPE V
- MECHANIZED STACKER / TYPE III

affordable rental family housing
+
community space
+
retail

LEED For Homes
Mid-Rise
Platinum

LEED™
FOR HOMES

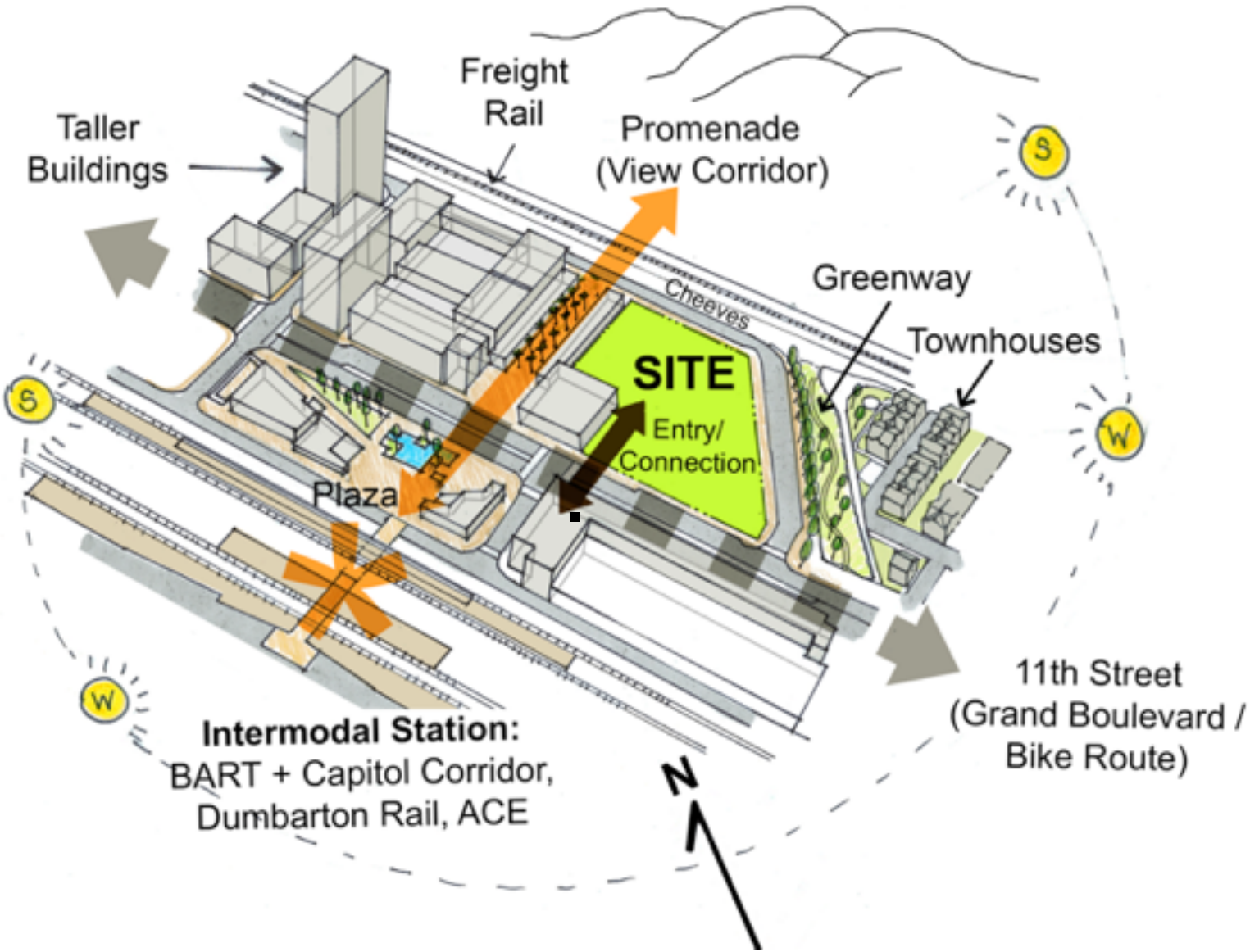
73 units per acre

157 units
204 parking spaces (1.3 per unit)
wrap garage

Developer: MidPen Housing

Station Center TOD - WRAP

Station Center TOD



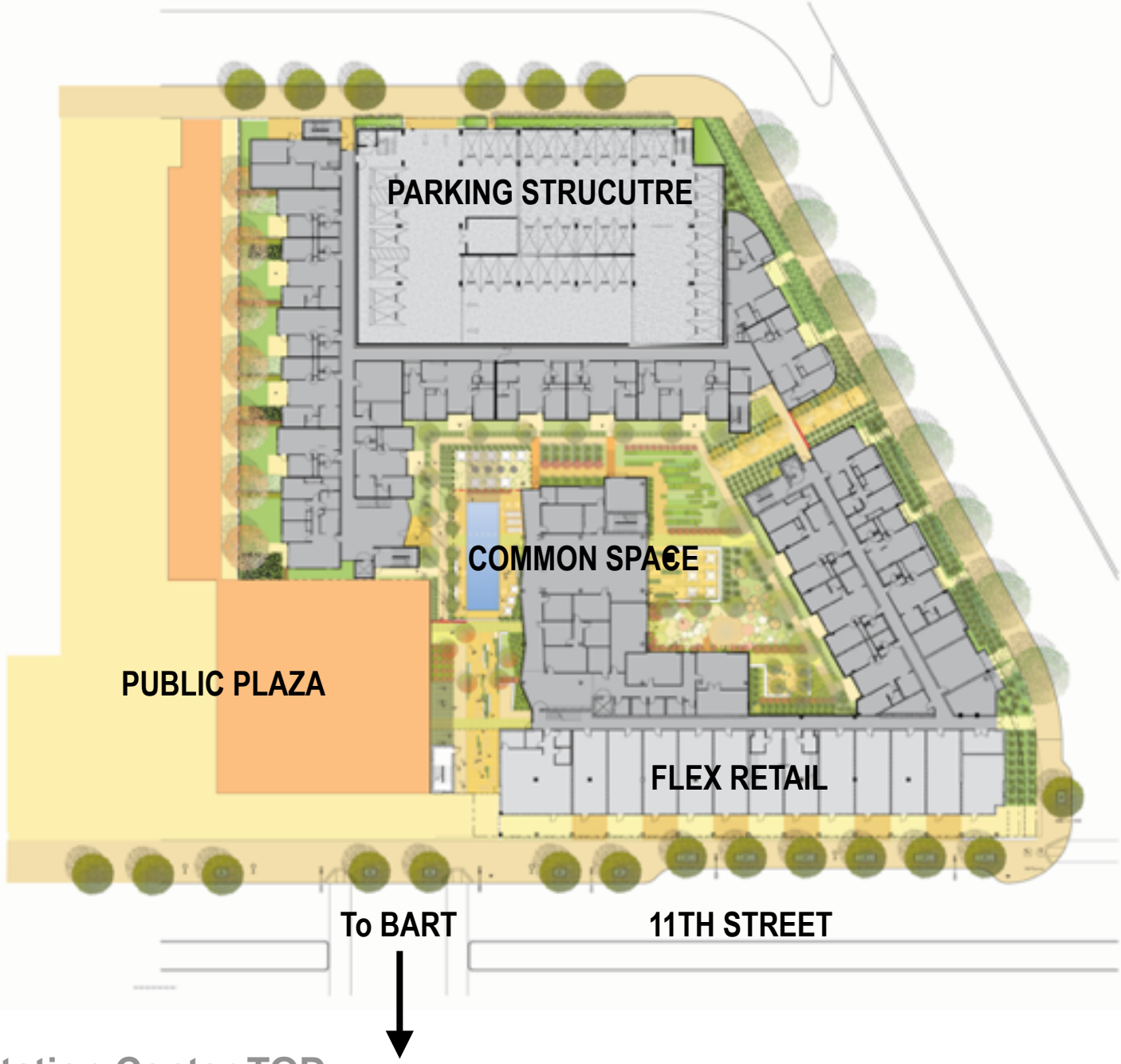
Station Center TOD

Station Center TOD

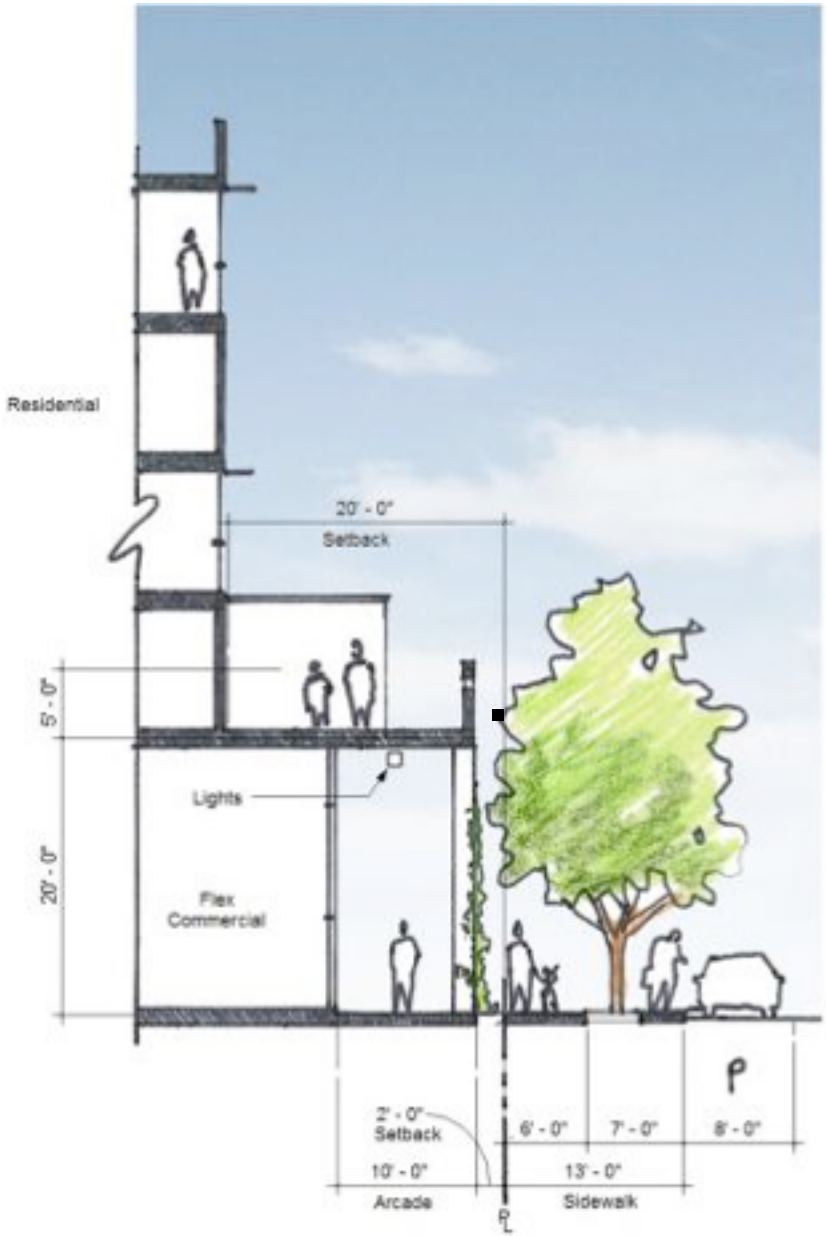
Station Center TOD

Station Center TOD

Station Center TOD



Station Center TOD



Station Center TOD

Station Center TOD

Station Center TOD

Station Center TOD

Station Center TOD

Station Center TOD

Station Center TOD

Station Center TOD

affordable rental family housing
+
community space
+
retail

76 units per acre

63 units
68 parking spaces (1.08 per unit)
tuck under + surface parking

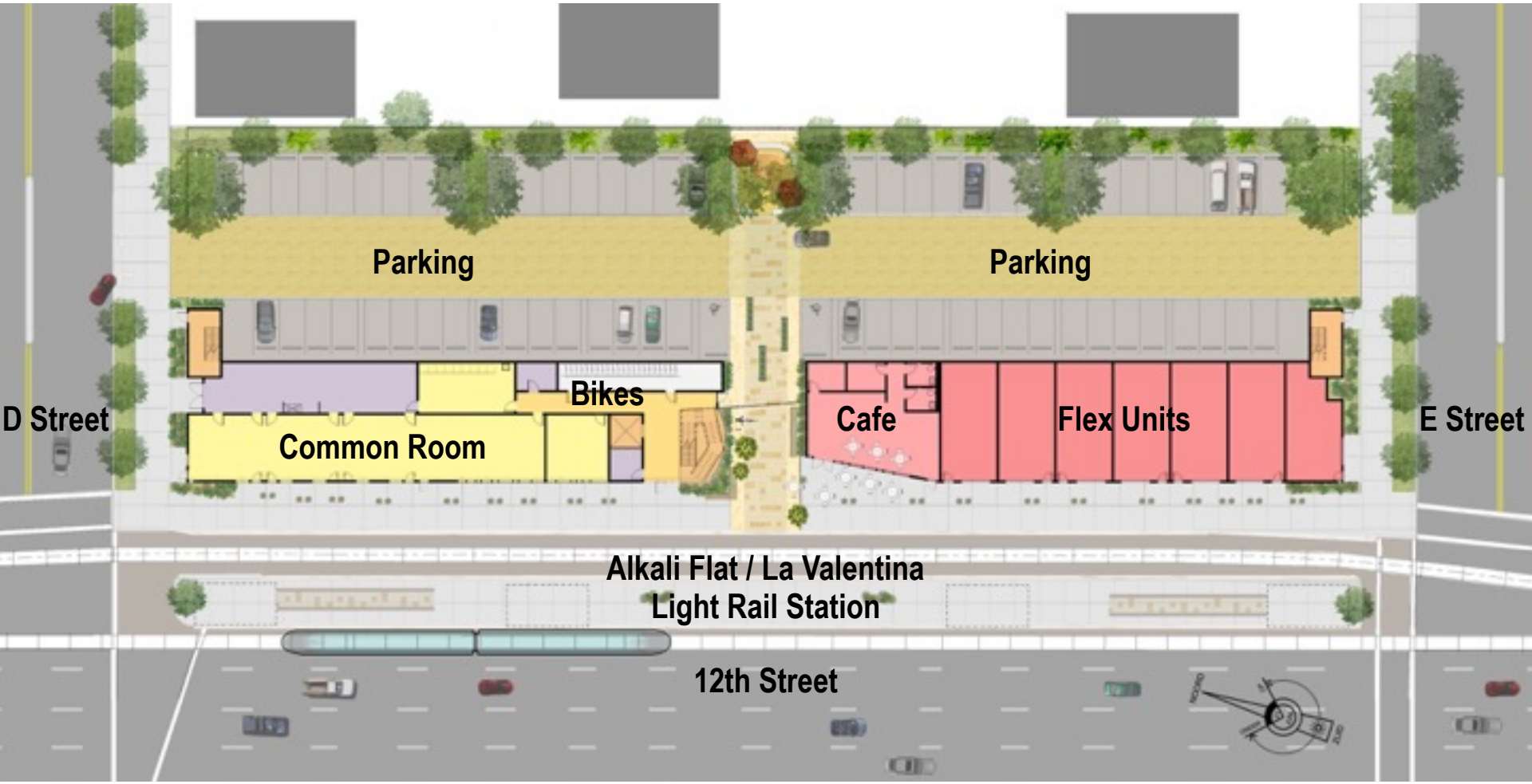
Developer: DOMUS Development

La Valentina - Tuck Under + Surface

La Valentina

La Valentina

La Valentina



La Valentina

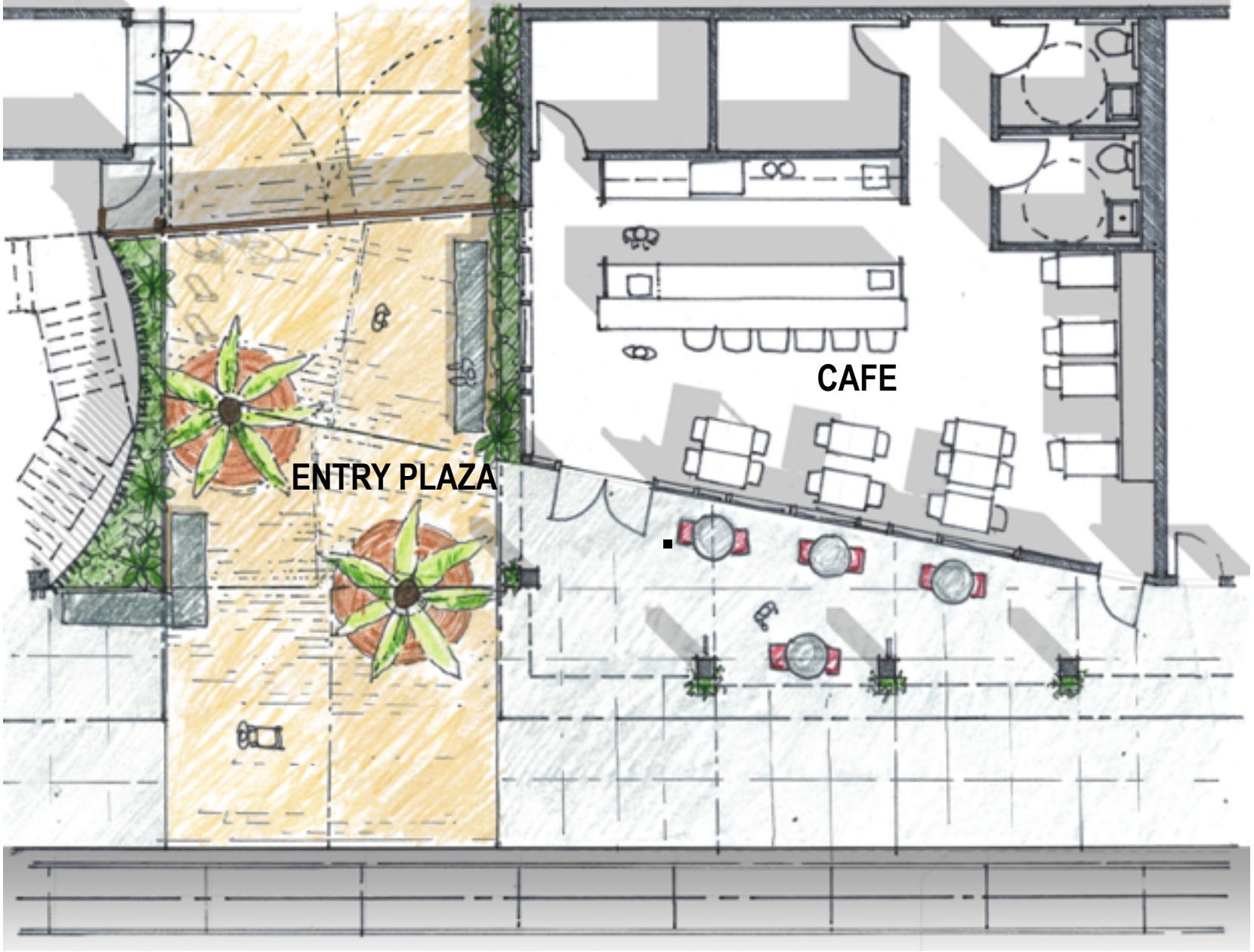
D Street
E Street
Alkali Flat / La Valentina
Light Rail Station
12th Street

La Valentina

La Valentina

La Valentina

La Valentina



TRANSIT STATION

La Valentina

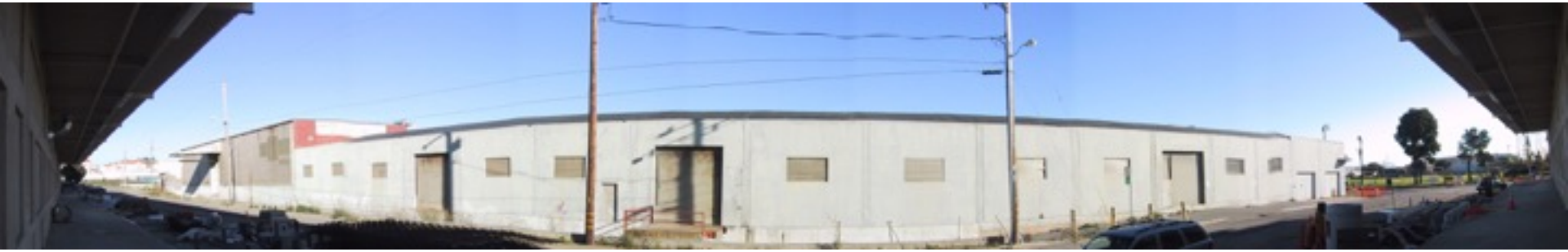
La Valentina

Armstrong Place and Armstrong Senior Affordable Housing

5600 Third Street
BRIDGE Housing, Developer

Total Parcel Area:
136,756 sf
240 units on 3.14 acres
76 units per acre
155 parking spaces
.65 spaces / unit

EXISITNG SITE - VIEW ALONG 3RD STREET



EXISITNG SITE - VIEW ALONG BANCROFT

View from 3rd and Armstrong

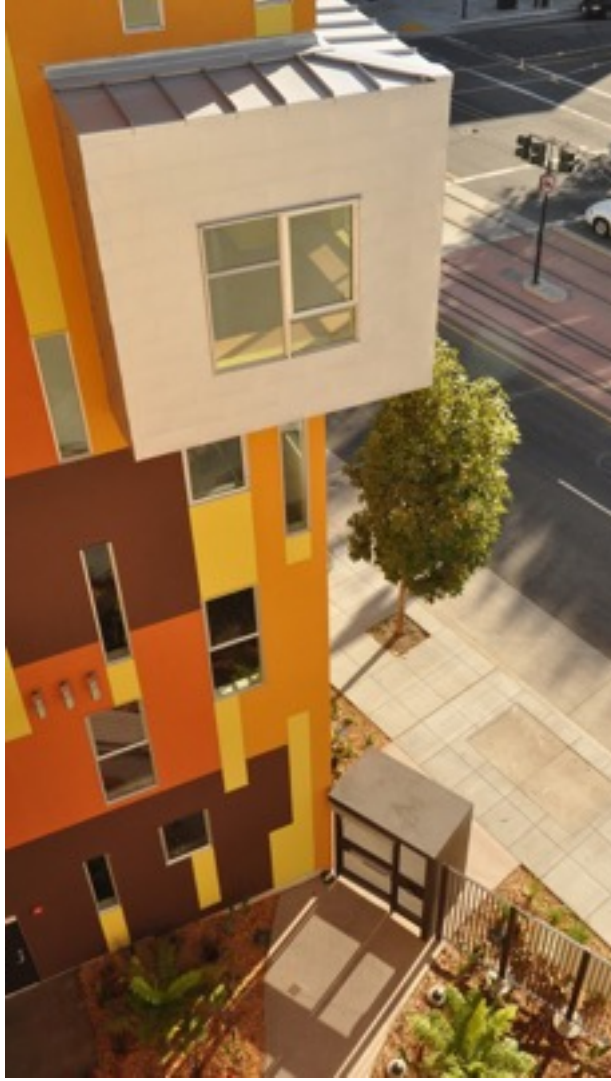
LEED NC
GOLD

100% affordable
senior rental housing
retail
teen health center
structured parking

145 units per acre
116 units on 0.8 acre
29 parking spaces
2 car-share spaces
0.27 spaces / unit

Armstrong Senior HUD Apartments

Site Plan



Courtyard Entry

Armstrong Senior HUD Apartments

Upper Level Podium Plan

Rents: $0 to $635 per month

Income Level 0 to 50 % AMI with AMI at $86,000

Funding Sources

- Low Income Housing Tax Credits - $10,000,000
- State Transit Oriented Development Funds (Prop 1c) - $9,000,000
- 60% of the units are HUD 202 (includes construction cost + operating expenses) - $9,000,000
- $10,000,000 long term loan from SF Redevelopment Agency (SFRA)
- $2,500,000 land cost from SFRA

Development Costs

- Land Purchase: ($2,500,000)
- Construction: $30,000,000 / $225 per GSF
- Soft costs: $8,000,000
- Total: $40,500,000

Armstrong Senior HUD Apartments

ANANSE NTONAN: "spider's web"
A symbol of wisdom, creativity and the complexities of life

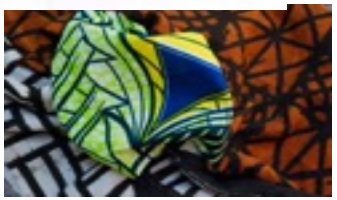
BESE SAKA: "sack of kola nuts"
A symbol of abundance and power

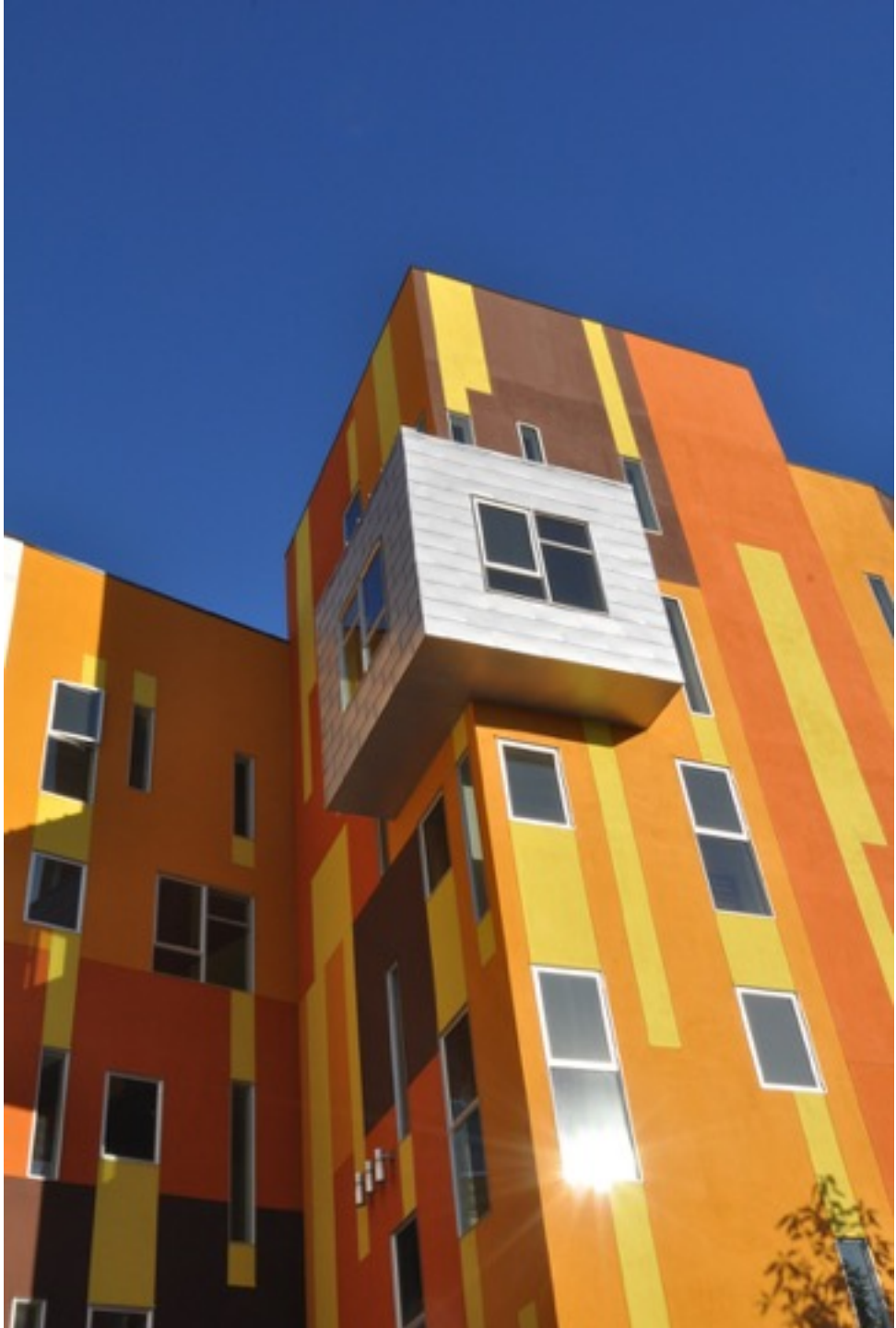
Adinkra: West African Tribal Symbols

Armstrong Senior HUD Apartments

African "Quilt Wall"

Ghanian Dutch
wax-resist batiks





Armstrong Senior HUD Apartments

Armstrong Senior registered - LEED NC Gold

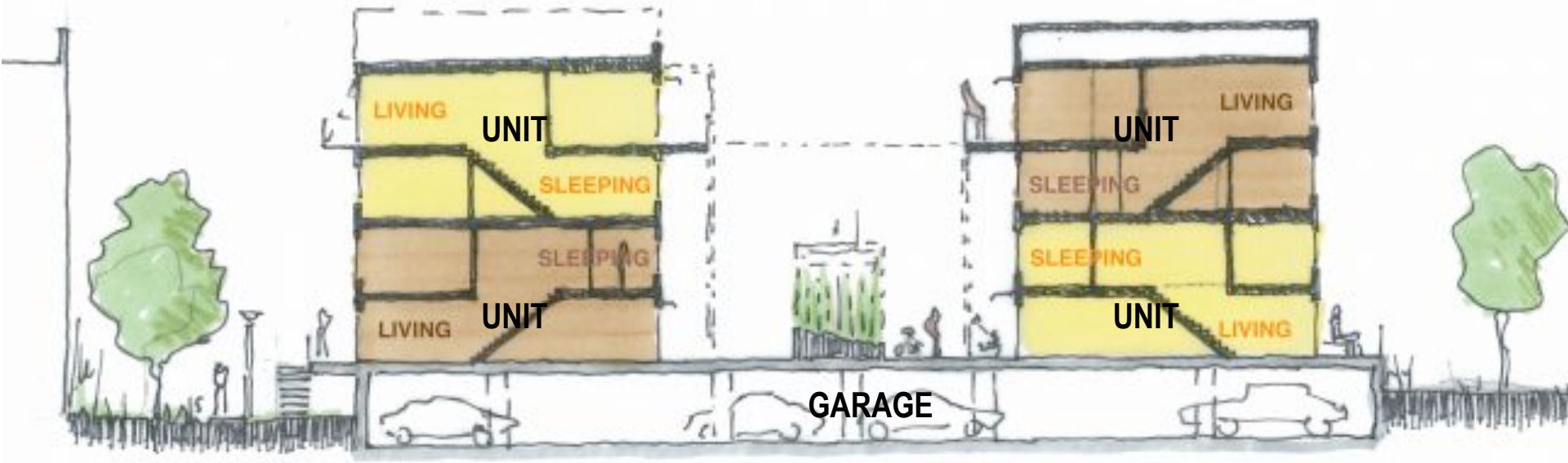
- transit & walkable neighborhood
- storm water retention system
- bike room
- bicycle showers & lockers for retail
- City Carshare pod
- exceed Title 24 by 23.5%
- 52 kW photovoltaic system
- 2,000 gal. solar thermal system 60%
- hydronic space heat
- enhanced commissioning
- energy star appliances
- recycled & regional materials
- no-low VOC materials
- corridor motion sensor lighting controls
- Green Communities grant

100% affordable
first-time home buyer ownership housing

53 units per acre
124 units on 2.33 acres
52-2 bedrooms
48-3 bedrooms
24-4 bedrooms
124 parking spaces

1 spaces / unit

Armstrong Place Affordable Ownership Townhouses



Armstrong Place Affordable Ownership Townhouses

View of Townhouse Stoops along Bancroft

Armstrong Place Affordable Ownership Townhouses

Home Buyer Overview

- first time home buyers
- income levels of 60%, 80%, and 100% of the Area Medium Income
- down payment assistance-HomeBricks
- units priced from $166k to $350k

Funding Sources

- $30,000,000 loan from SFRA
- $30,000,000 conventional construction loan from Bank of America

View of Main Entry Court along Bancroft

Development Costs

- Land Purchase: $7,000,000
- Construction Cost: $41,000,000 / $170 per gross SF
- Soft costs: $12,000,000
- Total: $60,000,000

View of play structure in Main Courtyard which measures 100 x 80 feet

Armstrong Place Affordable Ownership Townhouses

Urban Land Institute

2012 Global Award for Excellence

2012 ULI Global Award for Excellence Winner

Presented to

Armstrong Place Senior and Family Housing

San Francisco, California, United States

Owner/Developer: Kevin Griffith, BRIDGE Housing Corporation

Architect: David Baker + Partners, Full Circle Architecture, TSH International

Peter S. Rummell, Chairman

Patrick L. Phillips, Chief Executive Officer

The mission of the Urban Land Institute is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide.

ULX

RON NYREN

The Art of Affordable Housing

Ten affordable housing developments take creative design approaches to providing appealing environments while controlling costs.

AFFORDABLE HOUSING DOES not have to look like plain boxes. Though tight budgets may restrict options for materials, architects have found ways to add variety, mixing exterior textures and colors, breaking up massing, and integrating art into the architecture. Careful siting leaves room for generous outdoor open spaces—whether landscaped courtyards or public plazas—that provide places for residents to get to know each other or enjoy a respite from life in the city.

All completed in the past five years, the following ten projects (listed alphabetically) exemplify levels of design more typically found in market-rate housing. A number incorporate sustainable design strategies that reduce energy and water use—crucial whether the tenant or the owner/operator pays the utility bills.

RON NYREN is a freelance architecture, urban design, and real estate writer based in the San Francisco Bay area.

1. Armstrong Place Senior and Family Housing

SAN FRANCISCO, CALIFORNIA

When people move out of traditional housing into seniors' residential complexes, they risk becoming isolated from the larger community. To encourage continued cross-generational interactions, local nonprofit developer Bridge Housing and local firm David Baker + Partners Architects teamed up to transform a former industrial site in San Francisco's Bayview neighborhood, building affordable apartments for seniors as well as a complex of for-sale townhouses next door available to families. The 124 townhouses are stacked around a large public courtyard that includes vegetable gardens; bioswales help manage stormwater runoff.

The four stories of seniors' apartments above ground-level retail are connected to the family townhouses by a landscaped mews. They also have their own central courtyard. To reference the historically African American neighborhood, the architects patterned the exterior paint scheme and window placement after traditional African textiles. A wall inset of Ashanti tribal symbols rings the courtyard. The 116 apartments are earmarked for seniors earning less than 50 percent of the area median income (AMI), while the townhouses are intended for households earning 60 to 100 percent of AMI. Both portions were completed in 2010.

32 URBAN LAND JANUARY/FEBRUARY 2012

Armstrong Place Affordable Ownership Townhouses

Armstrong Place & Armstrong Senior

market-rate rental housing
+
retail
+
PDR (production, distribution & repair)
+
public park

99 units per acre

453 units

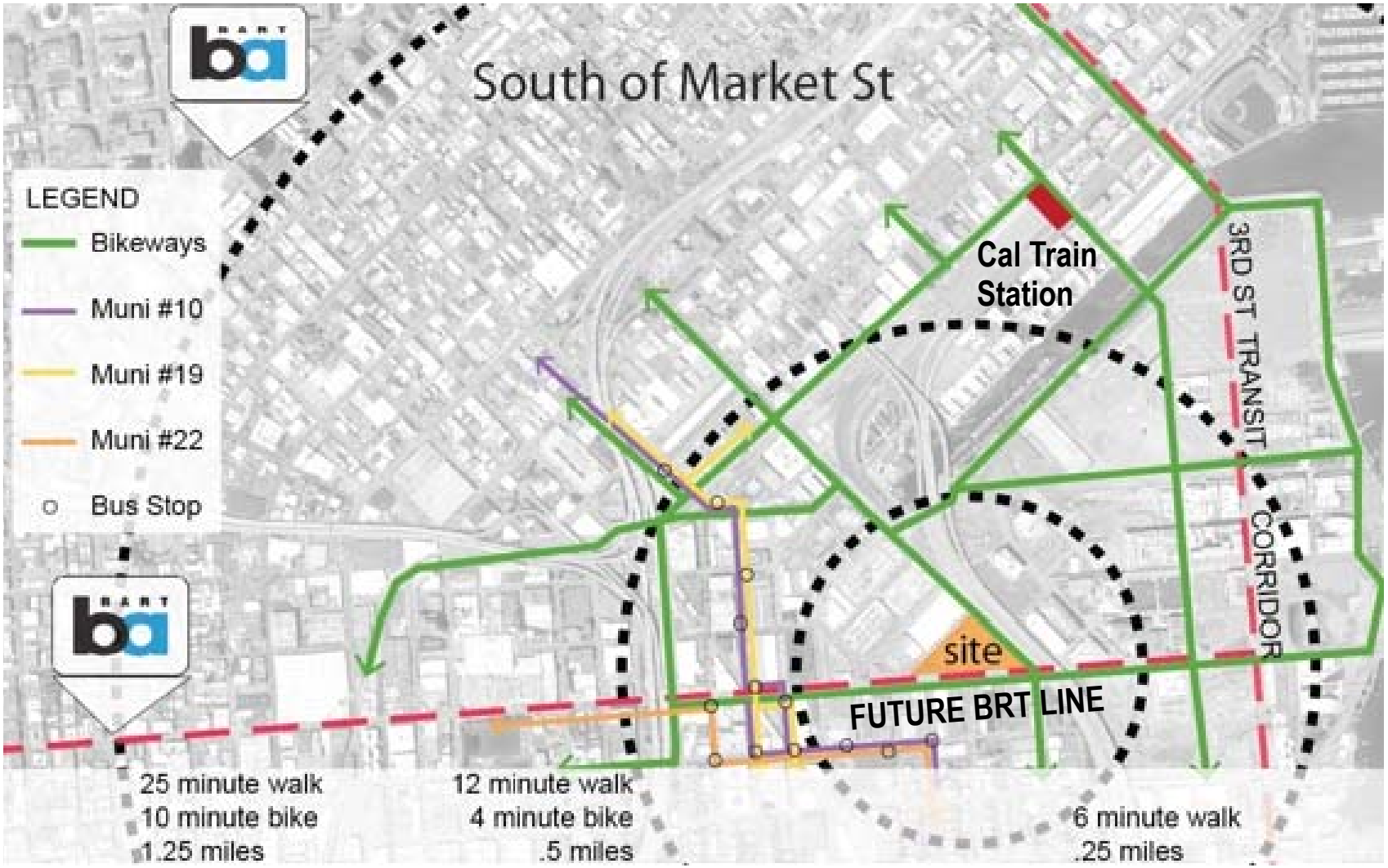
307 parking spaces (0.65 per unit)
mechanized parking stackers

Developer: Equity Residential

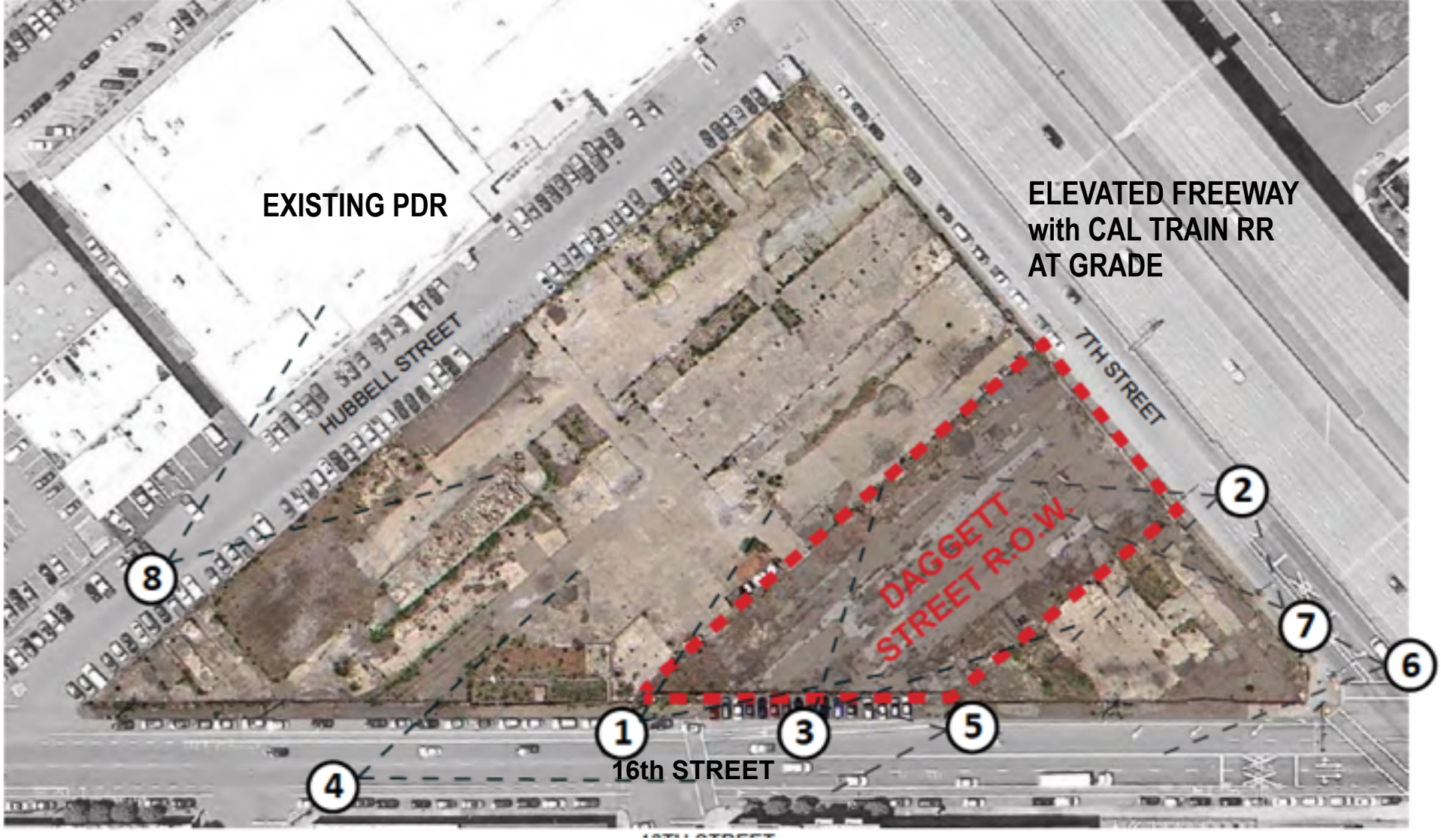
Potrero 1010 - Mechanized

CalTrain
BART
3rd Street
MUNI Line
Future BRT Line

Neighborhood Linkages



30 MINUTE WALKING DISTANCE to 30,000 JOBS!


EXISTING PDR
ELEVATED FREEWAY
with CAL TRAIN RR
AT GRADE
HUBBELL STREET
7TH STREET
DAGGETT
STREET R.O.W.
16th STREET
1
2
3
4
5
6
7
8

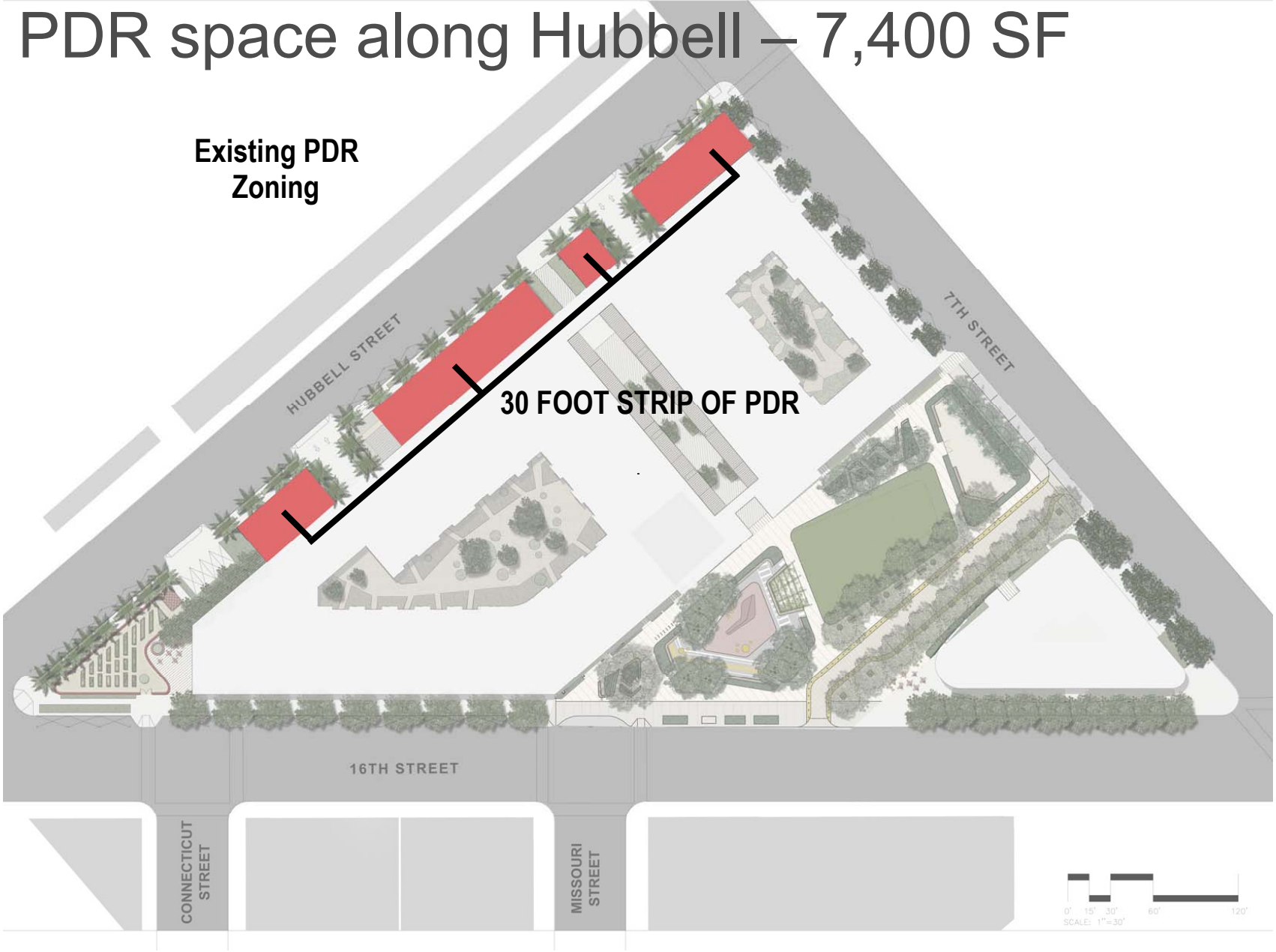
Potrero 1010

PDR
COMMUNITY PARK

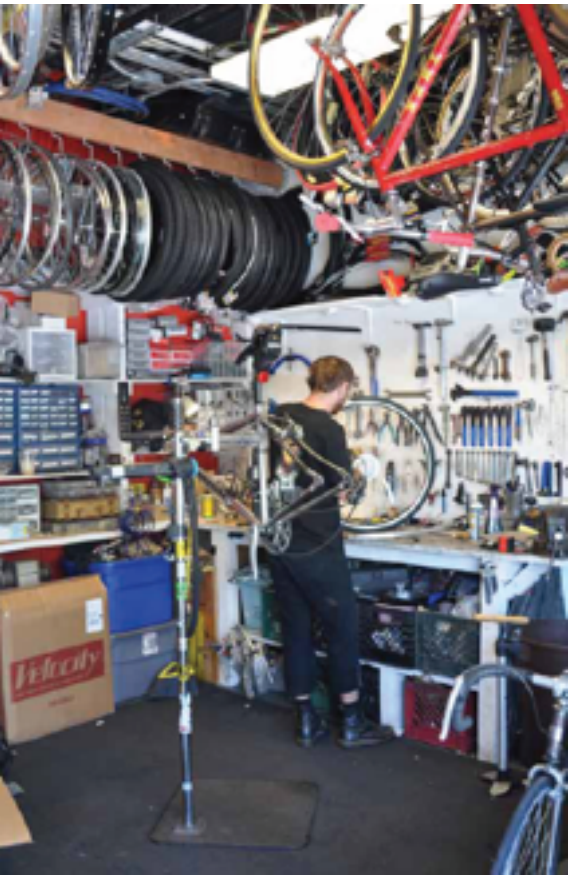
Potrero 1010

Potrero 1010

PDR space along Hubbell – 7,400 SF



Potrero 1010

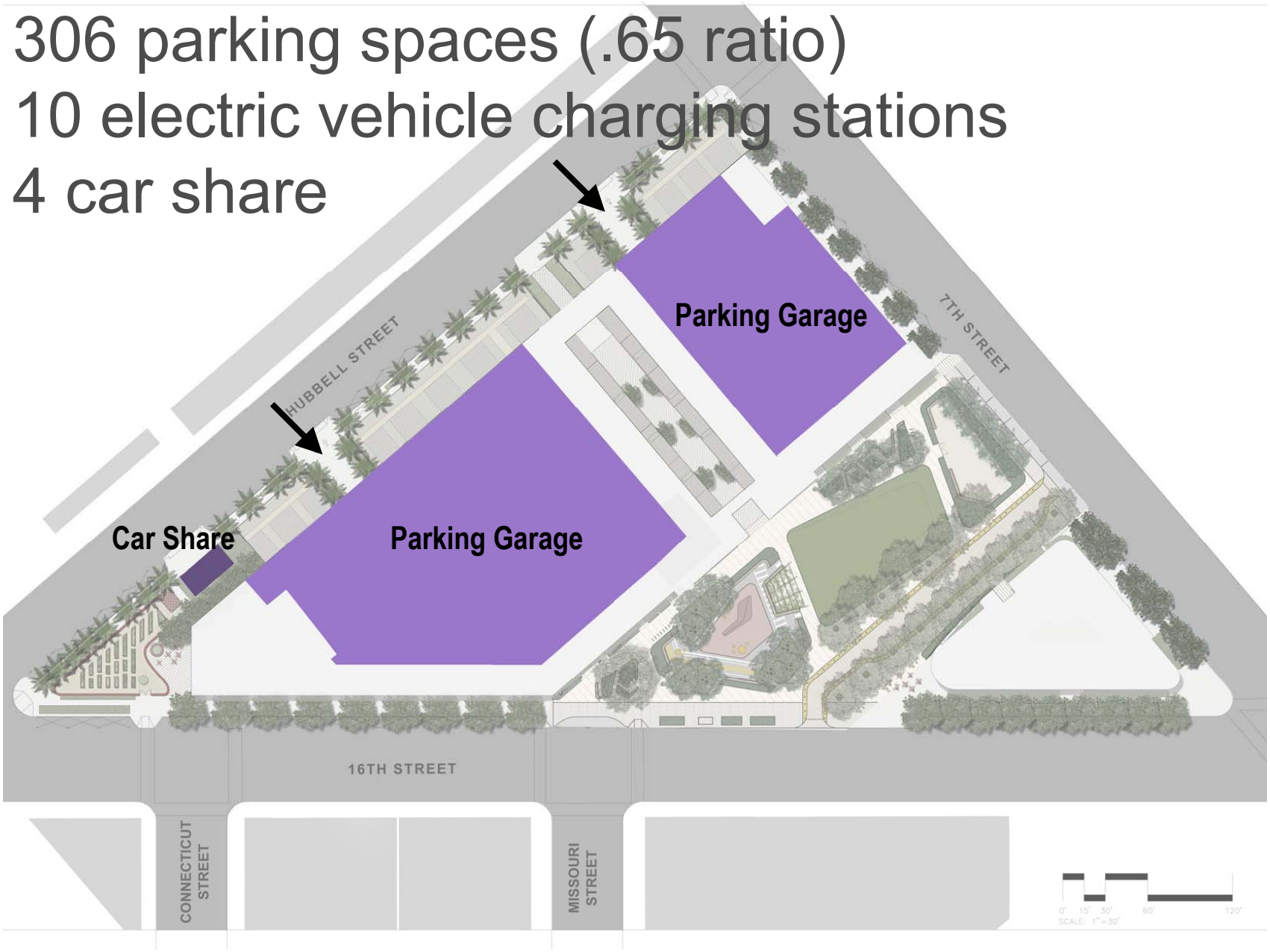


Potrero 1010

CCA Artist Studios

CCA Artist Studios

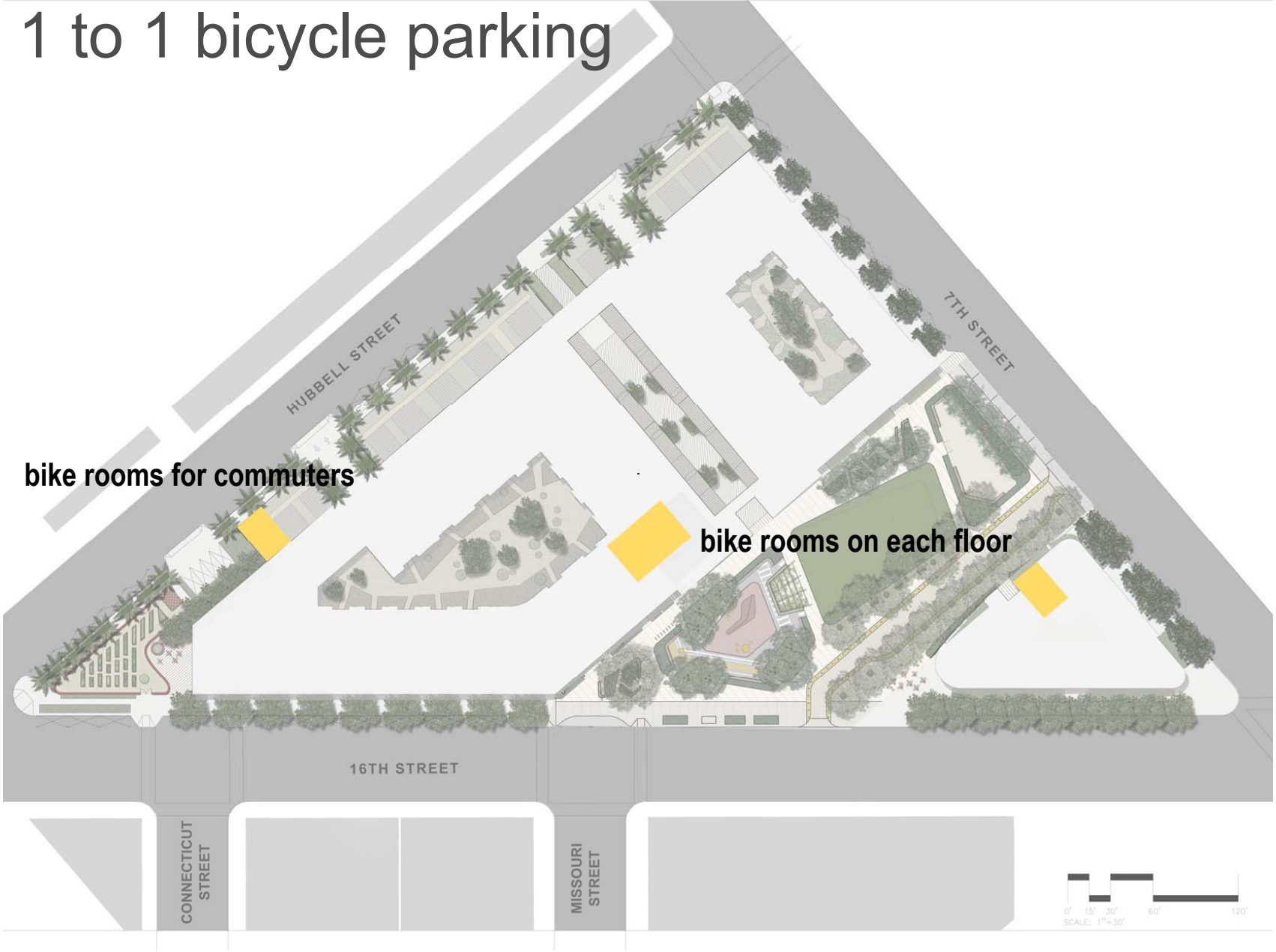
306 parking spaces (.65 ratio)
10 electric vehicle charging stations
4 car share



Potrero 1010

Car Share - Zip Car

1 to 1 bicycle parking



Bike Storage

……..ONE BIKE SPACE PER BEDROOM……

Potrero 1010

Ground Level Flex Units – 28 units

Potrero 1010

Potrero 1010

Potrero 1010

SHED Hair Salon

Potrero 1010

SCHEMATIC PLAN

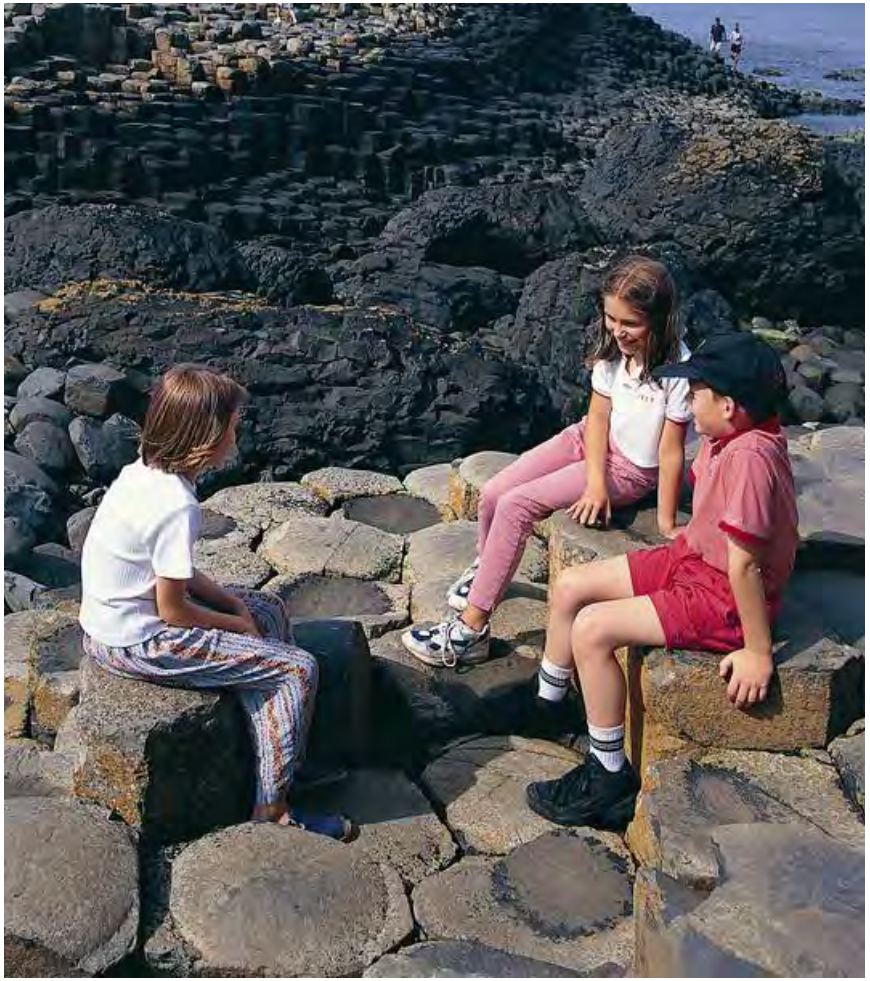
Community Public Park

Community Park as Public Benefit

Potrero 1010

Potrero 1010

“PENTA-STEP” LANDSCAPE FEATURE

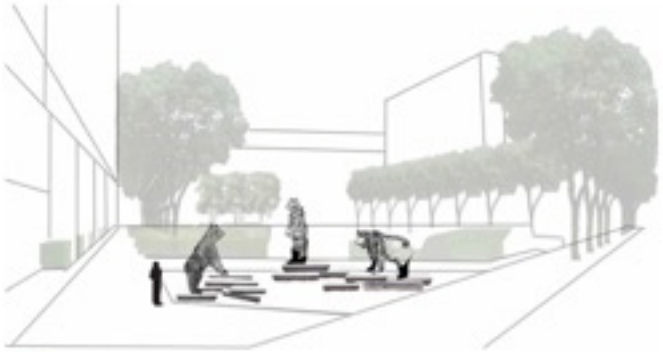


Giants Causeway, Northern Ireland

Potrero 1010

LAWN FEATURES

Potrero 1010



ELEVATION

MISSION MARSH BEARS

A DYNAMIC ENTRYWAY INTO A NEW NEIGHBORHOOD PARK

Mission Marsh Bears consists of three large sculptures of grizzly bears made from 1/2" weathering steel. The bears will stand atop pedestals made from stacked piles of reclaimed granite curbing provided by the SF Department of Public works. As the sun crosses the sky and passes over the three bears, these intricate forms will cast an array of shadows across the ground. The bears will be oriented to maximize their interaction with light and to create a dynamic entryway into the park.

NATIVE PLANTS AND ANIMALS OF THE AREA

Mission Marsh bears reflects the history of the site of Daggett Park while simultaneously responding to the contemporary role the park will play in the neighborhood. The location of Daggett Park is on the shores and mudflats of what was formerly Mission Bay. This body of water was home to a multitude of plants and animals until it was filled in with urban debris from fires, earthquakes and the removal of sand dunes in the late 1800's and early 1900's. This work of art will reintroduce historic species such as the Grizzly Bear and the native plants and animals that make up the form and structure of the sculptures. It will also combine a geometric element into the organic animal forms, referencing the contemporary grid of urban streets and architecture in concert with the natural world.

UNITING HISTORIC AND CONTEMPORARY SAN FRANCISCO

As the area surrounding the former Mission Bay become developed with new structures, transit, industry and homes, the neighborhood carries a distance aesthetic difference from older areas of San Francisco. Mission Marsh Bears brings other parts of the city to this new area by incorporating reclaimed curbing. This material brings with it the legacy of an older San Francisco and the mark of a long history of feet walking across them. The curbs continue a long tradition of reuse in San Francisco and are a reference to the historic debris that lies beneath the ground.

As the sun crosses the sky, the forms will cast an array of shadows across the ground.

FIGURE
10 feet high

Sculptures reference historic species such as the Grizzly Bear, native plants of the area and the contemporary grid of urban streets.

Reclaimed curbing references a long history of people walking in the city, as well as the tradition of reuse in San Francisco.

Potrero 1010

It’s All About the People - Mahalo