

EMERYVILLE CENTER OF INNOVATION

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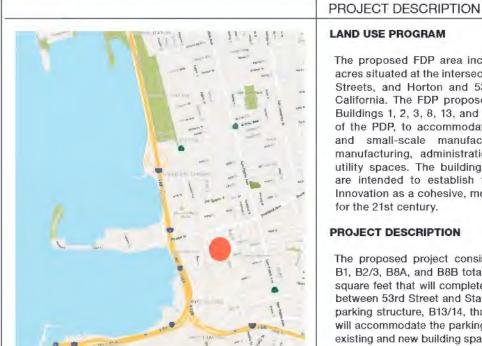


G000

# EMERYVILLE CENTER OF INNOVATION

Flad Project Number 19396-05

## BMR CAMPUS VISION



#### **LOCATION MAP**



#### LAND USE PROGRAM

The proposed FDP area includes approximately 8.51\* acres situated at the intersection of Hollis and Stanford Streets, and Horton and 53rd Streets in Emeryville, California. The FDP proposes to develop the area of Buildings 1, 2, 3, 8, 13, and 14 identified in Figure 2-5 of the PDP, to accommodate research, development and small-scale manufacturing, production-scale manufacturing, administration, and mechanical and utility spaces. The building and landscaping design are intended to establish the Emeryville Center of Innovation as a cohesive, modern life science campus for the 21st century. \*Includes Horton Landing Park

#### PROJECT DESCRIPTION

The proposed project consists of four new buildings, B1, B2/3, B8A, and B8B totaling approximately 911,800 square feet that will complete the Hollis Street frontage between 53rd Street and Stanford Avenue, along with a parking structure, B13/14, that faces Horton Street that will accommodate the parking necessary to support the existing and new building space.

The project components are summarized as follows:

Building	Approx Size	# of Occupied Floors
B1	300,000 SF	11
B2/3	261,300 SF	7
B8A	221,000 SF	7
B8B	129,500 SF	5
B13/14	710,641 SF	
	1,991 Cars	West Side - 5 Levels
		East Side - 11 Levels
		Includes Grade Level and
		Roof Level Parking

This proposed construction complies with the "Minimum Project" as defined in Section 2.2.3 of the PDP. The initial building construction will consist of the building shell and core space, to include the full building structure, building exterior facades, roof level equipment screening, interior stairs and elevators, and primary utility distribution risers. A limited amount of interior improvement is part of the scope of this project, including building lobbies, passenger elevator cabs, all service/firefighter elevator cabs, elevator lobbies, stair lobbies, and restrooms, Build out will include enclosed watertight shell and baseline mechanical systems in the core. Additional scope requested by tenant will be furnished at tenant expense. Specific functions throughout the buildings will be determined by the building tenants as a part of the future tenant improvements. Retail may be provided in any one of the four new buildings. (1, 2/3, 8A, and/or 8B depending on tenant needs.

#### **BUILDING DESCRIPTIONS**

B1 consists of a new, 11-story, approximately 300,000 SF tower designed to accommodate research and development laboratories and associated office and support space on all levels. B1 will be a Type-1 construction. The first floor level will incorporate the primary building entry, tenant spaces facing the streets, courtyard and plaza, and entries to the building loading dock and service areas. Floors 2 through 10 will be designed to accommodate flexible laboratories and associated office and support space on all levels, and the 11th floor will be designed as a "sky box" space that can accommodate either administrative, conference, or research space. The potential for a rooftop terrace space will be incorporated to take advantage of the views from this premier location. The building roof areas will be utilized for mechanical equipment, including boilers, chillers, air handling units, and exhaust fans.

B2/3 consists of a new, 7-story, approximately 261,300 SF building designed to accommodate research and development laboratories and associated office and support space on all levels. B2/3 will be a Type-1 construction. The first floor level will incorporate the primary building entry, tenant spaces facing Hollis Street and the courtyard, and entries to the building loading dock and service areas. Floors 2 through 7 will be designed to accommodate flexible laboratories and associated office and support space on all levels. The building roof areas will be utilized for mechanical equipment, including boilers, chillers, air handling units, and exhaust fans. The street liner will contain building support functions such as conferencing, meeting rooms, training, and education facilities.

B8A consists of a new, 7-story, approximately 221,000 SF building designed to accommodate research and development laboratories and associated office and support space on all levels. B8A will be a Type-1 construction. The first floor level will incorporate the primary building entry, tenant spaces facing 53rd, Chiron Way and the courtvard, and entries to the building loading dock and service areas. Floors 2 through 7 will be designed to accommodate flexible laboratories and associated office and support space on all levels with level 6 featuring sky terraces to take advantage of views to the San Francisco Bay and beyond. The building roof areas will be utilized for mechanical equipment, including boilers, chillers, air handling units, and exhaust fans.

B8B consists of a new, 5-story, approximately 129,500 SF building designed to accommodate research and development laboratories and associated office and support space on all levels. B8B will be a Type-1 construction. The first floor level will incorporate the primary building entry, tenant spaces facing 53rd. Chiron Way and the courtyard, and entries to the building loading dock and service areas. Floors 2 through 5 will be designed to accommodate flexible laboratories and associated office and support space on all levels with level 5 featuring a sky terrace to take advantage of views to the San Francisco Bay and beyond. The building roof areas will be utilized for mechanical equipment, including boilers, chillers, air handling units, and exhaust fans.

B13/14 consists of a dedicated parking structure with vehicle parking on 11 levels, including the grade level and roof level. B13/14, approximately 710,641 SF, will be a Type-1 construction. The grade level will incorporate a potential café space at the north side and secure covered bicycle storage area. Provisions will be made for incorporation of electric vehicle charging as appropriate.

#### **BUILDING FACADES**

B1, B2/3, B8A, and B8B facades will consist of a combination of materials that are respectful and compatible with the architecture of existing B4, while also updating the appearance of these new buildings to meet new sustainability objectives, indoor environmental standards, energy performance, and marketplace expectations. The lower levels of the proposed B1 and B2/3 will incorporate glass and terracotta or masonry materials that relate strongly to the local Emeryville history, current context, and adjacent B4 design. The middle levels of the buildings will consist of glass and metal trim that provide excellent light and views to and from the building interior. The B8 facades will consist of a combination of unitized high-performance curtain wall and deep shaded fin walls on the east and west elevations to protect from solar gain and glare. The opaque areas will be addressed with a combination of shadowbox (spandrel) panels and/or metal infill panels to add interest and variation to the facade. The upper levels and mechanical screens will consist of a combination of opaque glass panels and metal screen materials or terracotta to conceal the rooftop equipment and exhaust risers.

#### PROJECT TEAM

#### OWNER

**Biomed Realty** 4570 Executive Drive, Suite 400 San Diego, CA 92121 (858) 485.9840

#### **ARCHITECT**

FLAD Architects 650 California Street 17th Floor San Francisco, CA 94108 (415) 398.1600

#### PARKING DESIGN

International Parking Design 560 14th Street Suite #300 Oakland, CA 94612 (510) 473.0300

#### LAND USE COUNSEL

Perkins Coie 505 Howard Street Suite 1000 San Francisco, CA 94105 (415) 344.7117

#### **CIVIL ENGINEER**

**BKF Engineers** 150 California Street Suite 600 San Francisco, CA 94111 (415) 930.7949

#### **GEOTECHNICAL ENGINEER**

LANGAN 135 Main Street Suite 1500 San Francisco, CA 94105 (415) 955.5200

#### LANDSCAPE ARCHITECT

BIONIC 833 Market Street Suite 601 San Francisco, CA 94103 (415) 206.0648

#### **ENVIRONMENTAL GRAPHICS**

Propp + Guerin 550 15th Street, Penthouse San Francisco, CA 94103 (415) 558.0550

#### STRUCTURAL ENGINEERS

Forell Elsesser Engineers Inc 160 Pine Street San Francisco, CA 94111 (415) 837.0700

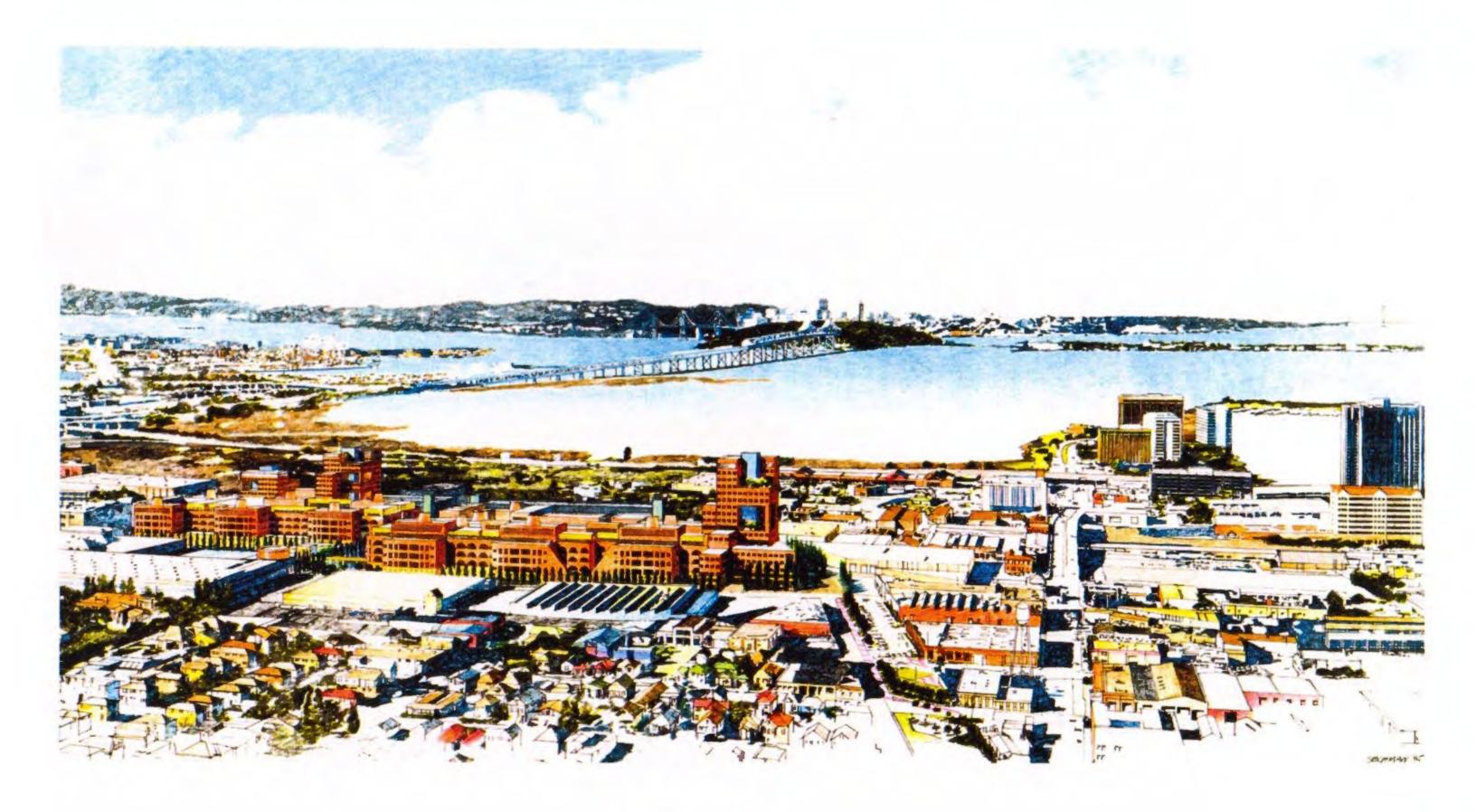
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VICINITY MAP













\*Per Preliminary Development Plan Figure 2-5 & 2-6

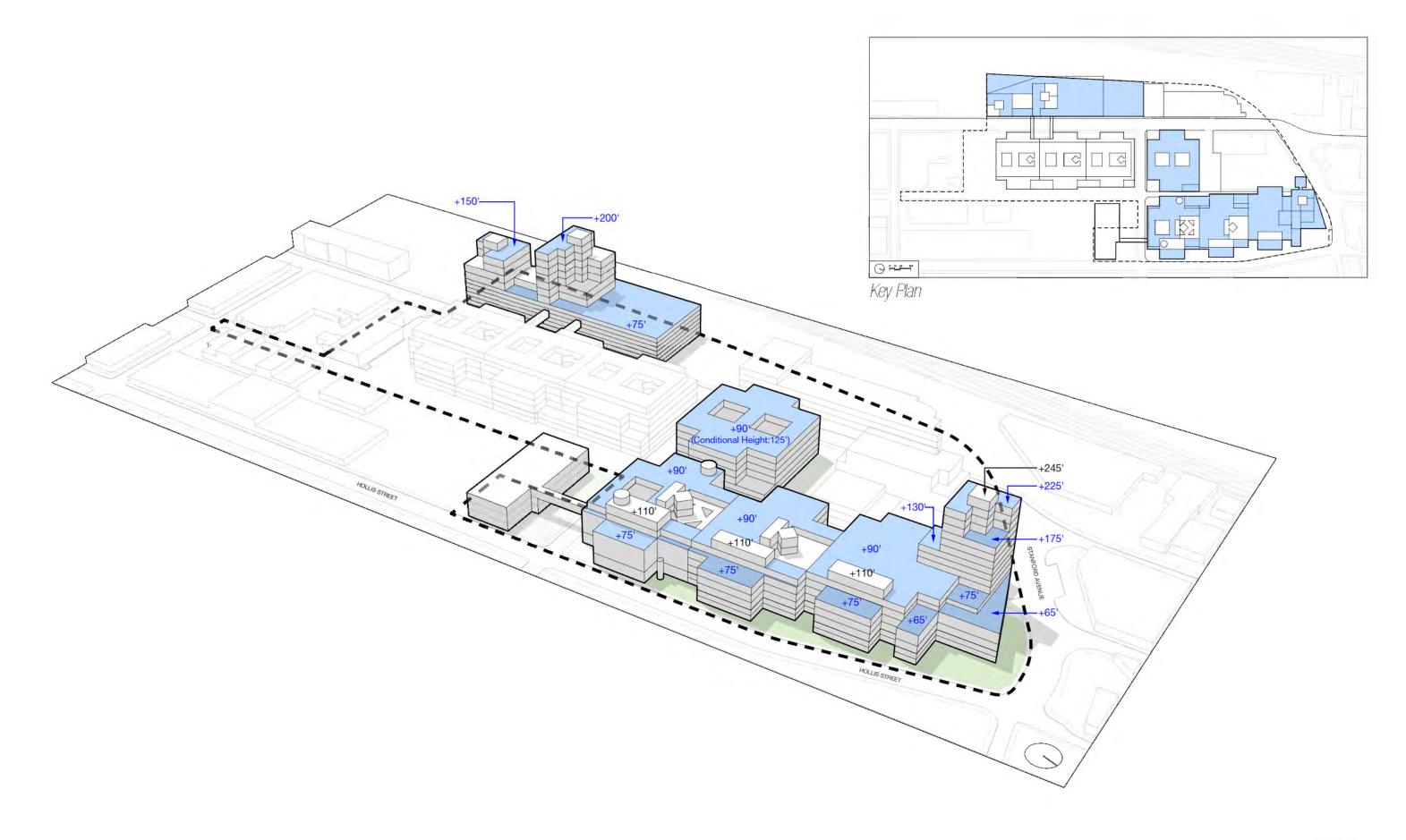




\*Per Preliminary Development Plan Figure 2-5 & 2-6



<sup>\*\*</sup> Per 2018 ALTA/NSPS Land Title Survey





**Sionic** 

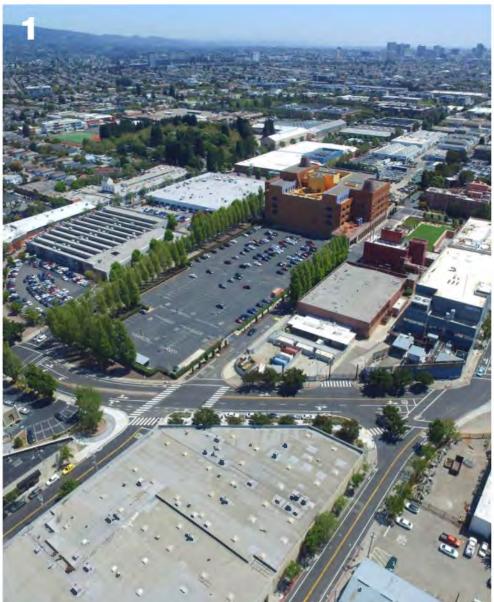


\*Per Preliminary Development Plan Figure 2-5 & 2-6



<sup>\*\*</sup> Per 2018 ALTA/NSPS Land Title Survey













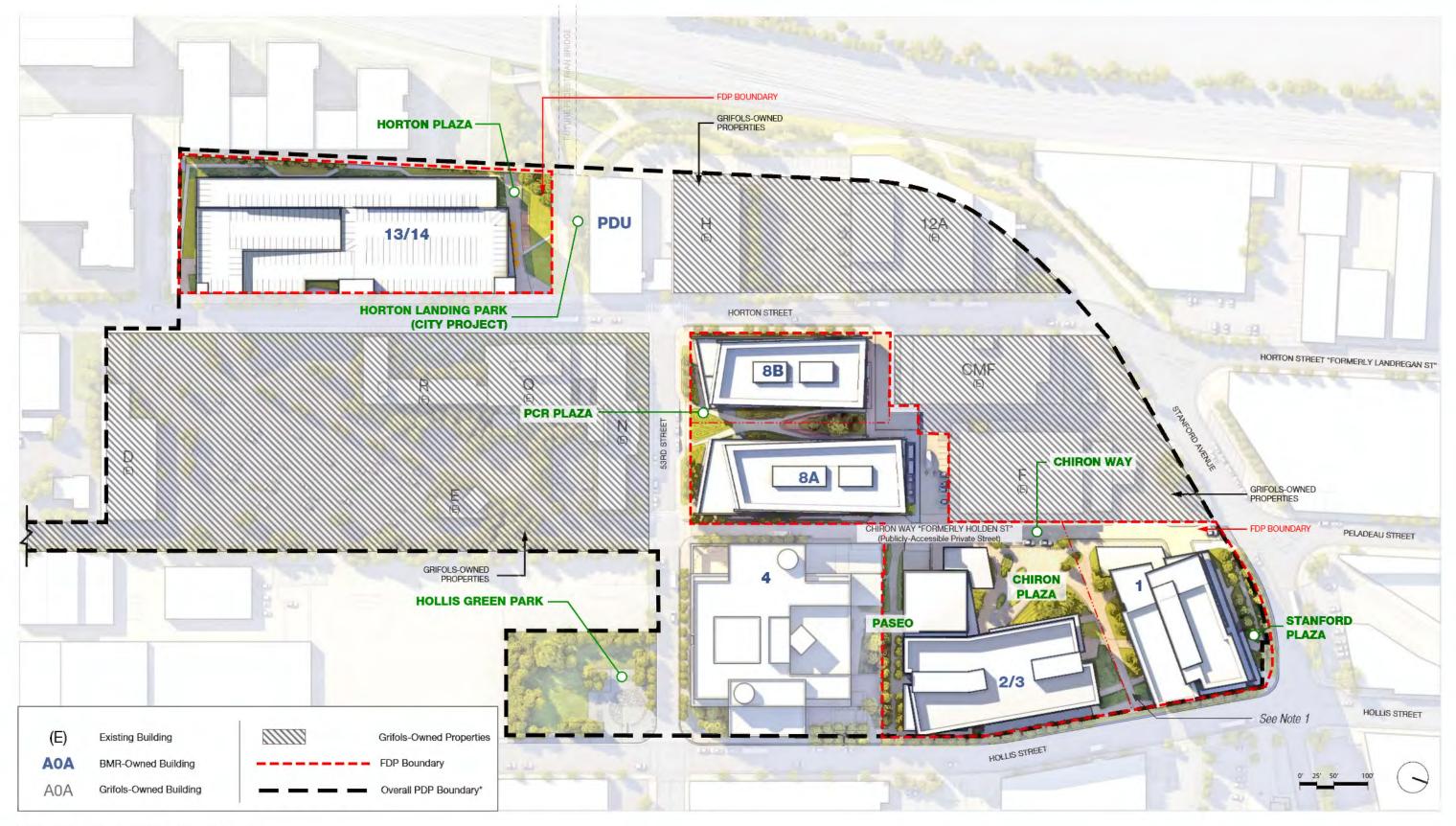


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# 1. CAMPUS DESIGN & ARCHITECTURE

Break down the scale of the buildings versus the PDP "mega-blocks," with buildings that are architecturally interesting, sustainable, and contribute to the quality and character of Emeryville

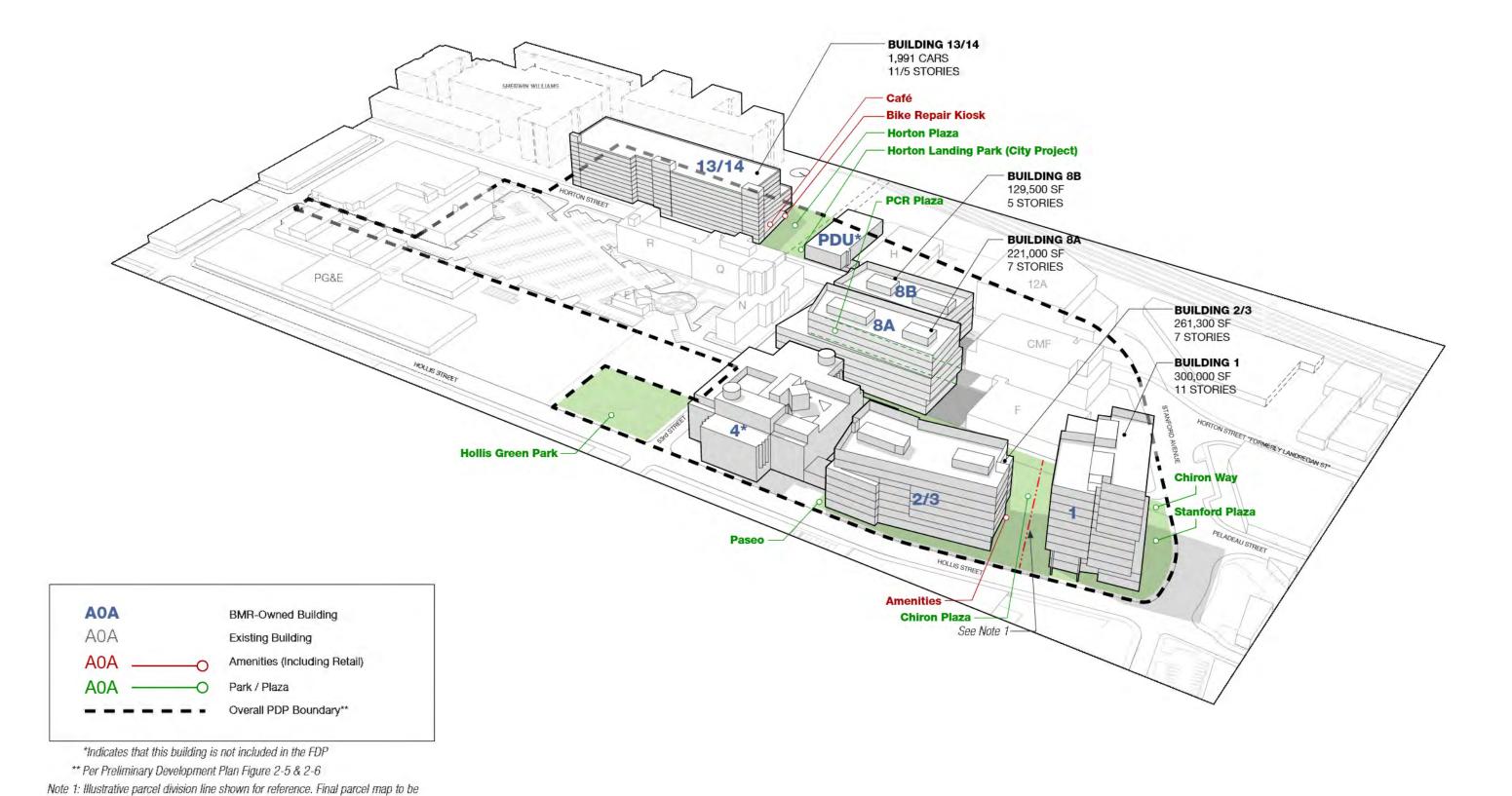


\*Per Preliminary Development Plan Figure 2-5 & 2-6

Note 1: Illustrative parcel division line shown for reference. Final parcel map to be provided in future submittal













provided in future submittal

floor	B1	B2/3	B8 A	B8 B	Subtotal
11	17,000				
10	30,000				
9	30,000				
8	30,000				
7	30,000	34,700	27,000		
6	27,000	34,600	27,000		
5	27,000	36,300	34,000	26,500	
4	27,000	36,300	34,000	26,500	
3	26,000	35,700	34,000	26,500	
2	28,000	40,700	34,000	26,500	
1	28,000	43,000	31,000	23,500	
В	0	0	0	0	
Area	300,000	261,300	221,000	129,500	911,80

**Note-1**: PH = 18'-0", Ground floor = 18'-0", Typical Floor = 16'-0"

Note-2: Assume all figures are in GSF

Note-3: Total BMR square footage reflected in the PDP Tables 2-3 and 2-5, plus PDU building, totals 1,370,000 GSF for BMR

Note-4: Total amount of building coverage is 58% of total area of BMR FDP Boundary

Note-5: Existing surface parking at B4 lot is approximately 371 spaces

Note-6: Existing surface parking at Rifkin lot on Hollis street is approximately 278 spaces

Note-7: Existing street parking along west side of Horton Street from 53rd to end of Rifkin lot to be removed

	B4	B7A	PDU PDU	G-T	Subtotal
	281,194	14,400	20,700	41,500	
Area	281,194	14,400	20,700	41,500	357,794

TABLE-	3: EXISITIN	NG GRIFOLS BU	ILDING SQUAR	E FEET, GSF	
	CMF	N,Q,R,E,H	F	D	Subtotal
	85,000	157,300	27,400	15,000	
Area	85,000	157,300	27,400	15,000	284,700

Note-1: Building F area according to PDP table 2-3

Note-2: Buildings H,E,N,Q and R area according to PDP table 2-3





- 1 HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- (2) LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- (3) INSULATED GLAZING UNITS WITH BACK PAINTED SHADOW BOX
- ${\color{red} 4}{\color{black}}$  TERRACOTTA, GFRC, OR MASONRY PANEL
- 5 PRECAST WITH FACE BRICK AND INSULATED GLAZING UNITS

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Project Images - Intersection View at Hollis Street and Stanford Avenue - B1







TYPICAL FLOOR PLAN

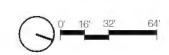




LOBBY

LEVEL 1 FLOOR PLAN

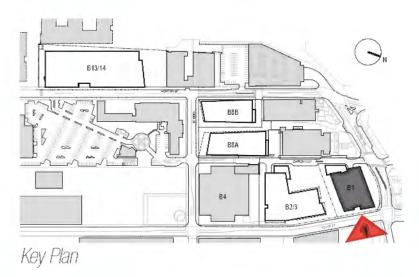
HOLLIS ST



**ROOF PLAN** 



- (1) HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- 2 LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- (3) INSULATED GLAZING UNITS WITH BACK PAINTED SHADOW BOX
- 4 TERRACOTTA, GFRC, OR MASONRY PANEL





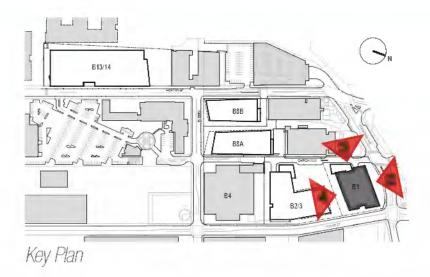
Note 1: Vent shafts on final designs will comply with Condition 90, Height, F.2, and F.3

Note 2: Liner spaces on final design will comply along Hollis Street

Note 3: H.O.L. - Highest Occupiable Level



- 1 HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- 2 LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- (3) INSULATED GLAZING UNITS WITH BACK PAINTED SHADOW BOX
- (4) TERRACOTTA, GFRC, OR MASONRY PANEL
- (5) TERRACOTTA, GFRC, OR MASONRY MECHANICAL SCREEN WALL AT 14'-0" HIGH



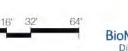


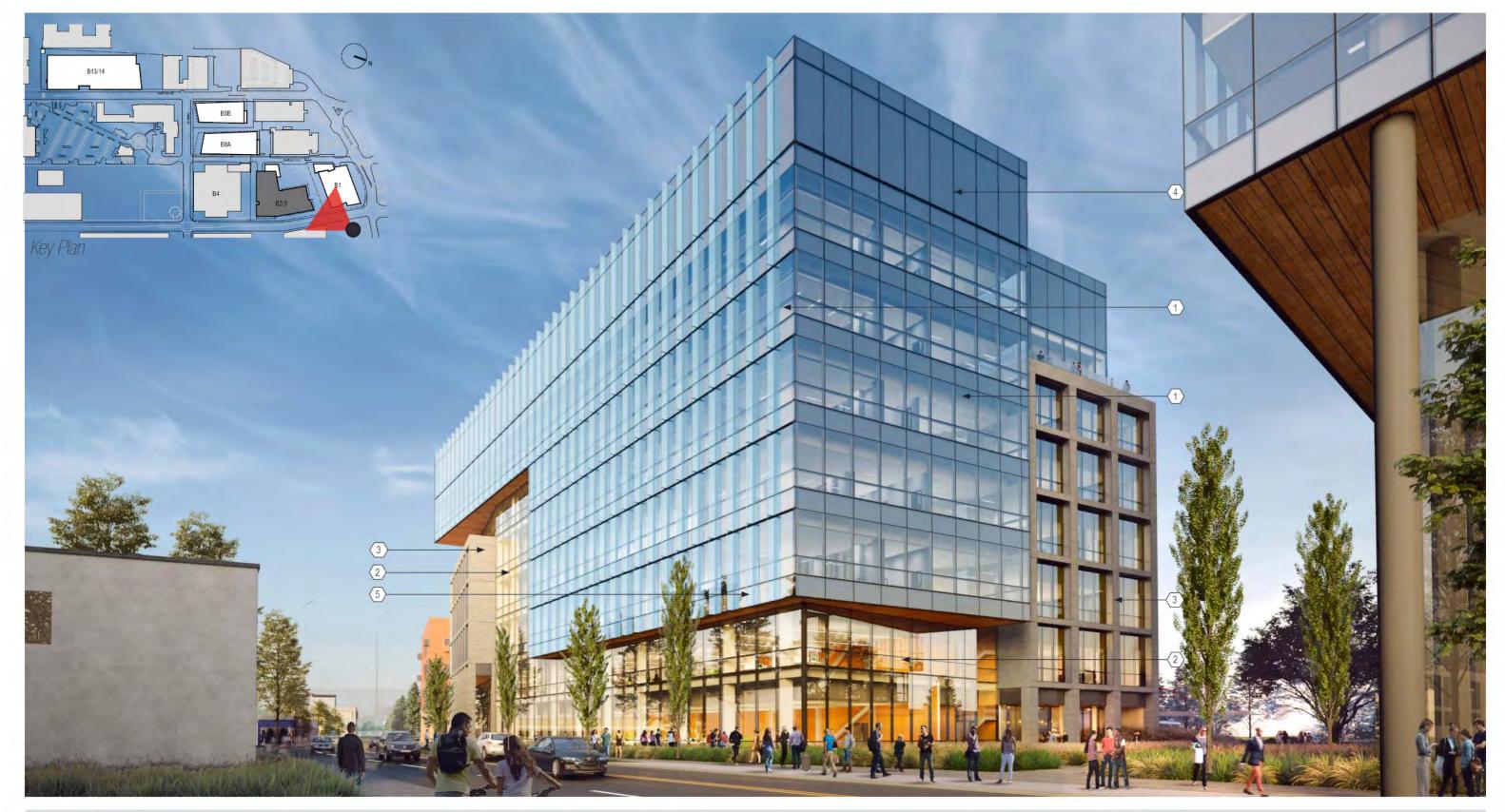
WEST ELEVATION
(CHIRON WAY)



Note 1: Vent shafts on final designs will comply with Condition 90, Height, F.2, and F.3 Note 2: H.O.L. - Highest Occupiable Level



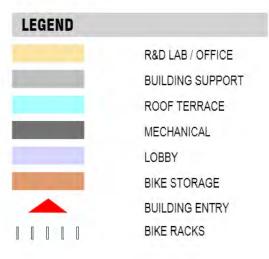




- HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- 2 LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- ③ PRECAST WITH FACE BRICK AND INSULATED GLAZING UNITS
- 4 INSULATED GLAZING UNITS WITH BACK PAINTED SHADOW BOX
- $\langle \overline{\tt 5} \rangle$  LAMINATED GLASS FINS



Floor	B2
7.	34,700
6	34,600
5	36,300
4	36,300
3	35,700
2	40,700
1	43,000
Area	261,300

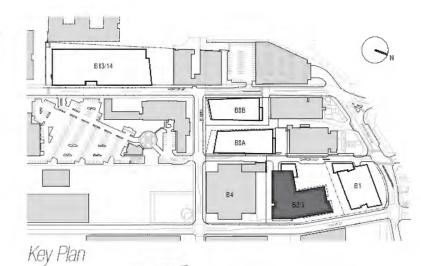


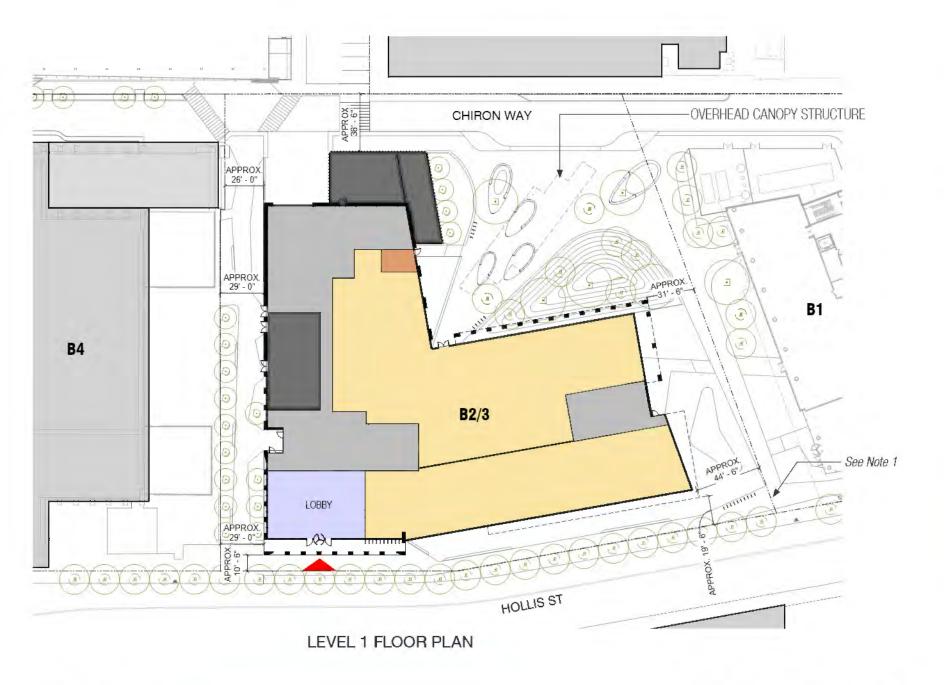
Note 1: Illustrative parcel division line shown for reference. Final parcel map to be provided in future submittal

Note 2: Vent shafts on final designs will comply with Condition 90, Height, F.2, and F.3

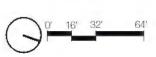
Note 3: Preliminary dimensions shown. Final building location subject to code analysis

Note 4: Wind Comfort: Building entrances, pedestrian walking paths, and seating zones are optimized for ground level pedestrian comfort. Louvers and overhangs are incorporated on north and east facade to enhance pedestrian comfort.

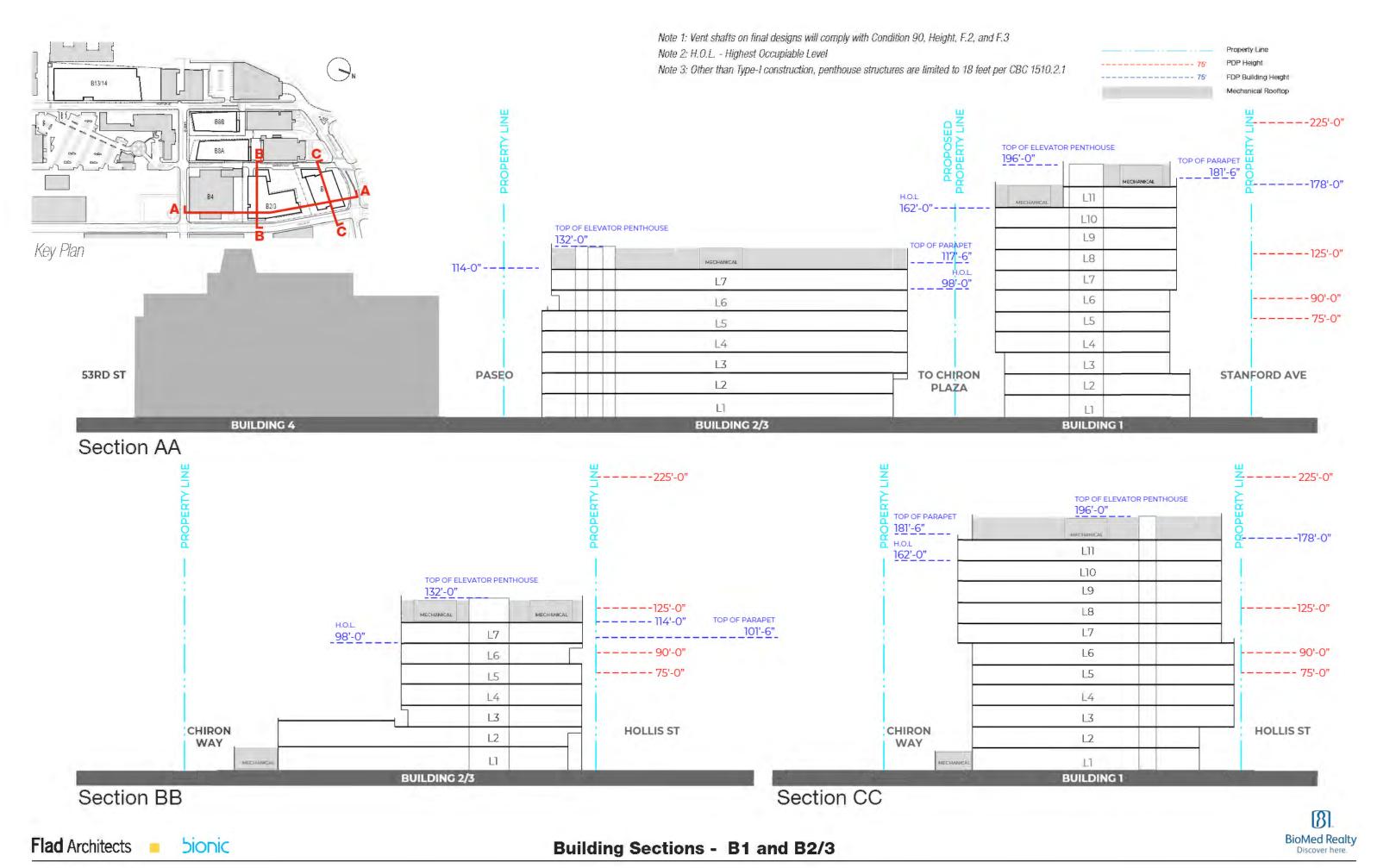




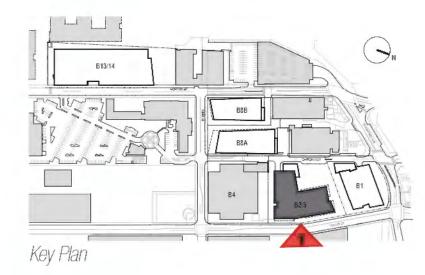








- (1) HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- (2) LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- (3) PRECAST WITH FACE BRICK AND INSULATED GLAZING UNITS
- (4) INSULATED GLAZING UNITS WITH BACK PAINTED SHADOW BOX
- (5) LAMINATED GLASS FINS

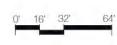




Note 1: Vent shafts on final designs will comply with Condition 90, Height, F.2, and F.3

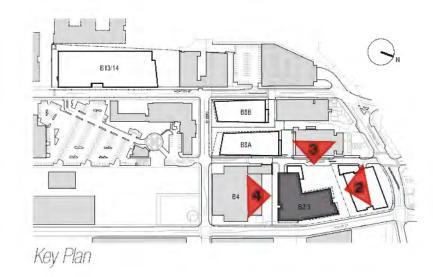
Note 2: Liner Spaces on final design will comply along Hollis Street

Note 3: H.O.L. - Highest Occupiable Level





- (1) HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- (2) LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- (3) PRECAST WITH FACE BRICK AND INSULATED GLAZING UNITS
- (4) INSULATED GLAZING UNITS WITH BACK PAINTED SHADOW BOX
- 5 LAMINATED GLASS FINS
- 6 PAINTED METAL SCREEN WALL AT 18'-0" HIGH

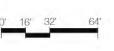








Note 1: Vent shafts on final designs will comply with Condition 90, Height, F.2, and F.3 Note 2: H.O.L. - Highest Occupiable Level







- (1) HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- (2) LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- (3) GLAZED MECHANICAL SCREEN WALL

4 TERRACOTTA, GFRC, OR MASONRY PANEL





- 1 HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- 2 LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- ③ GLAZED MECHANICAL SCREEN WALL

4 TERRACOTTA, GFRC, OR MASONRY PANEL

Note 1: Intersection to be improved with diagonal crossings and a signal with a pedestrian scramble phase.



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Building Images, View at 53rd Street And Horton Street - B8A and B8B



- 1 HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- 2 LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- ③ GLAZED MECHANICAL SCREEN WALL

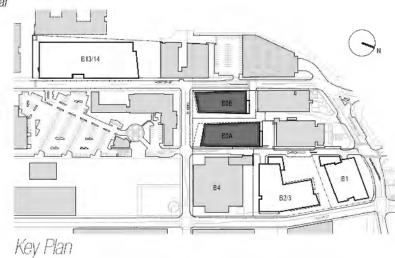
4 TERRACOTTA, GFRC, OR MASONRY PANEL

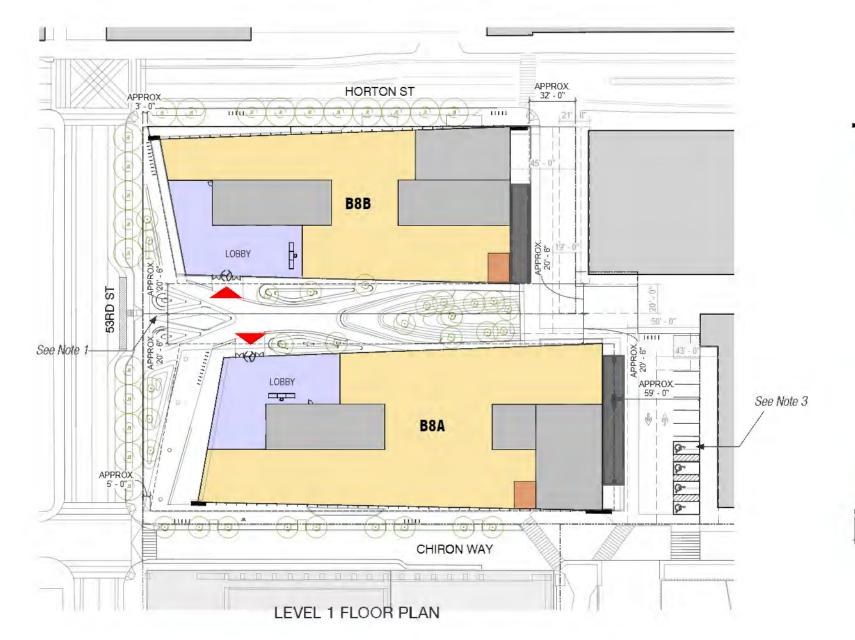


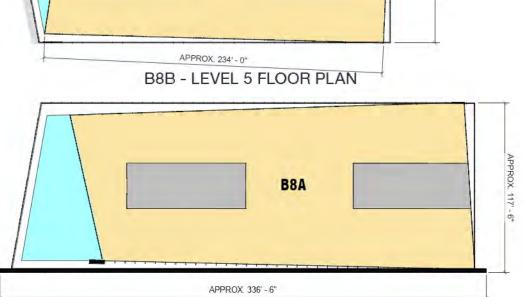
Floor	B8A	B8B
7	27,000	
6	27,000	
5	34,000	26,500
4	34,000	26,500
3	34,000	26,500
2	34,000	26,500
1	31,000	23,500
Area	221,000	129,500

LEGEND	
	R&D LAB / OFFICE
	BUILDING SUPPORT
	ROOF TERRACE
	MECHANICAL
-	LOBBY
	BIKE STORAGE
	BUILDING ENTRY
	EASEMENTS
	BIKE RACKS

- Note 1: Illustrative parcel division line shown for reference. Final parcel map to be provided in future submittal
- Note 2: Vent shafts on final designs will comply with Condition 90, Height, F.2, and F.3
- Note 3: Accessible short-term parking will be provided. Accessible path of travel from ADA parking stalls to all building entrances will be provided
- Note 4: Preliminary dimensions shown. Final building location subject to code analysis
- Note 5: Wind Comfort: Building entrances, pedestrian walking paths, and seating zones are optimized for ground level pedestrian comfort. Louvers and overhangs are incorporated on north and east facade to enhance pedestrian comfort





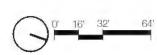


B8B

**B8A - LEVEL 6 FLOOR PLAN** 

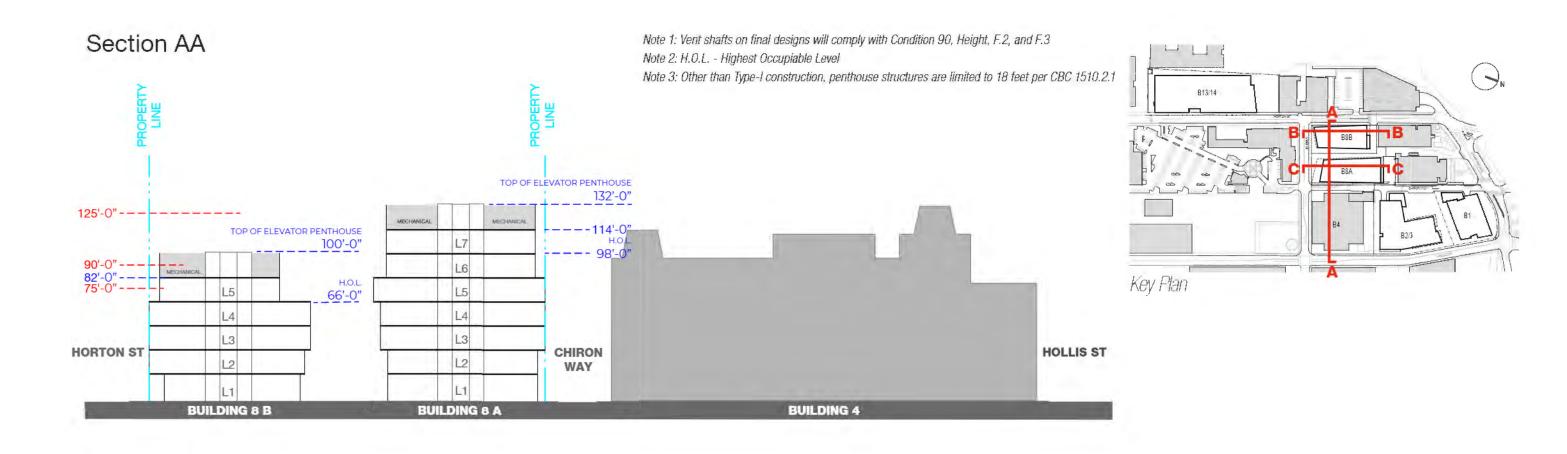


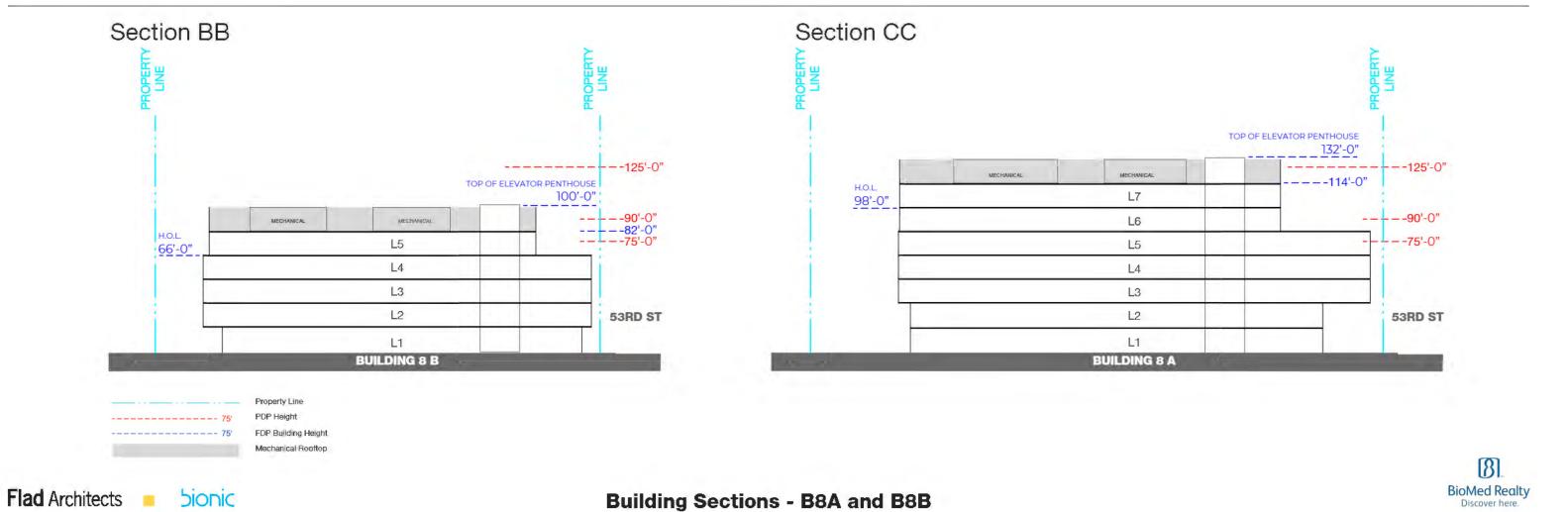
**Building Plans - B8A and B8B** 



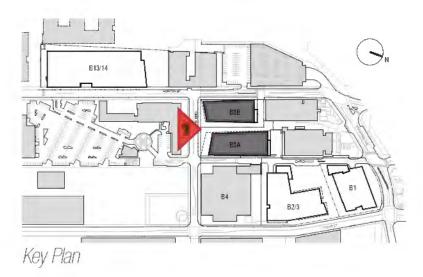


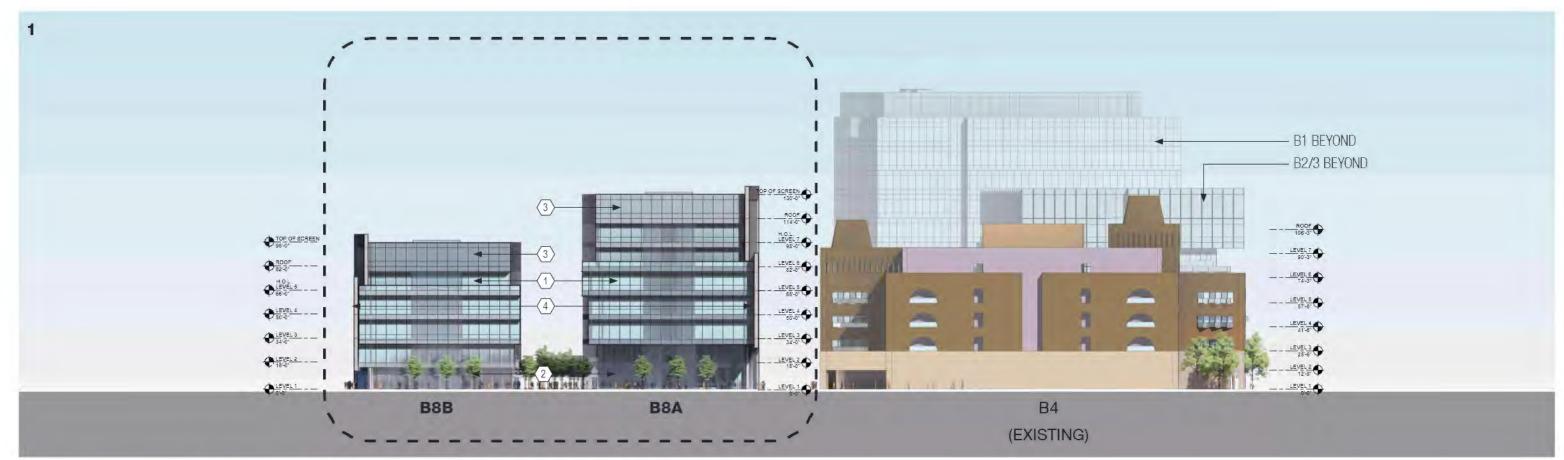
G024



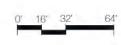


- 1 HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- 2 LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- 3 GLAZED MECHANICAL SCREEN WALL
- (4) TERRACOTTA, GFRC, OR MASONRY PANEL



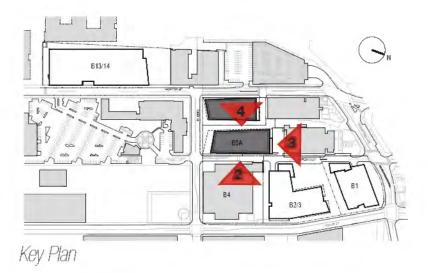


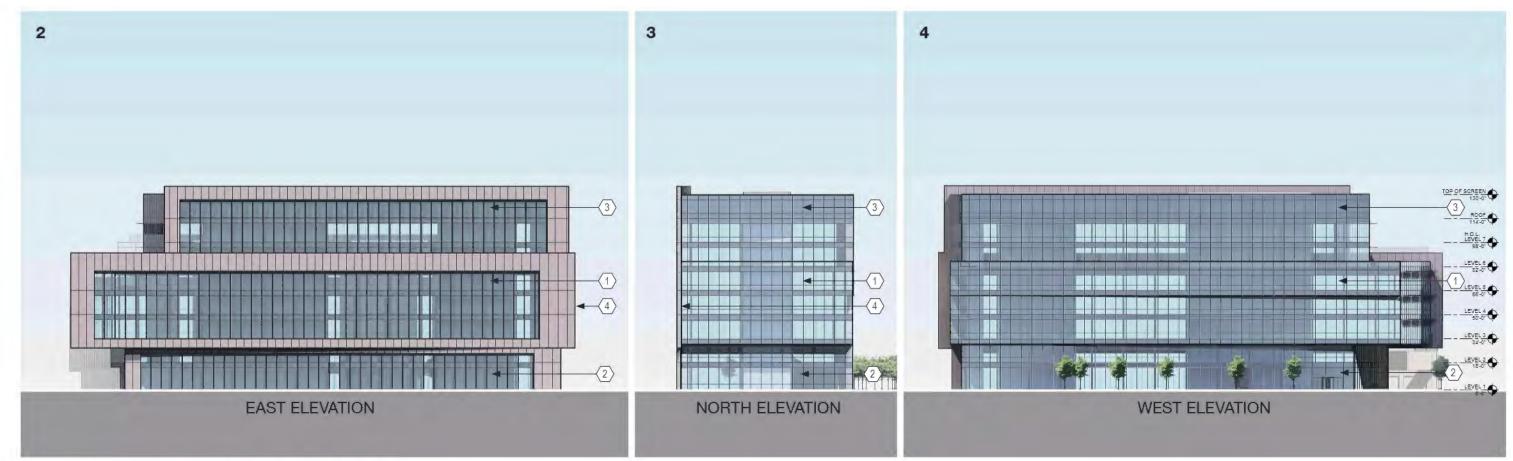
Note 1: Vent shafts on final designs will comply with Condition 90, Height, F.2, and F.3 Note 2: H.O.L. - Highest Occupiable Level





- 1 HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- 2 LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- (3) GLAZED MECHANICAL SCREEN WALL
- (4) TERRACOTTA, GFRC, OR MASONRY PANEL

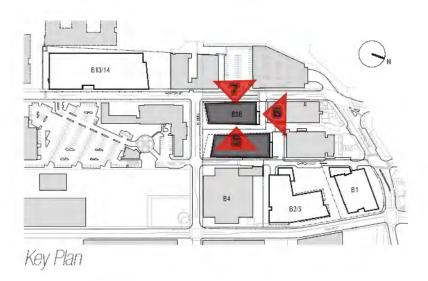


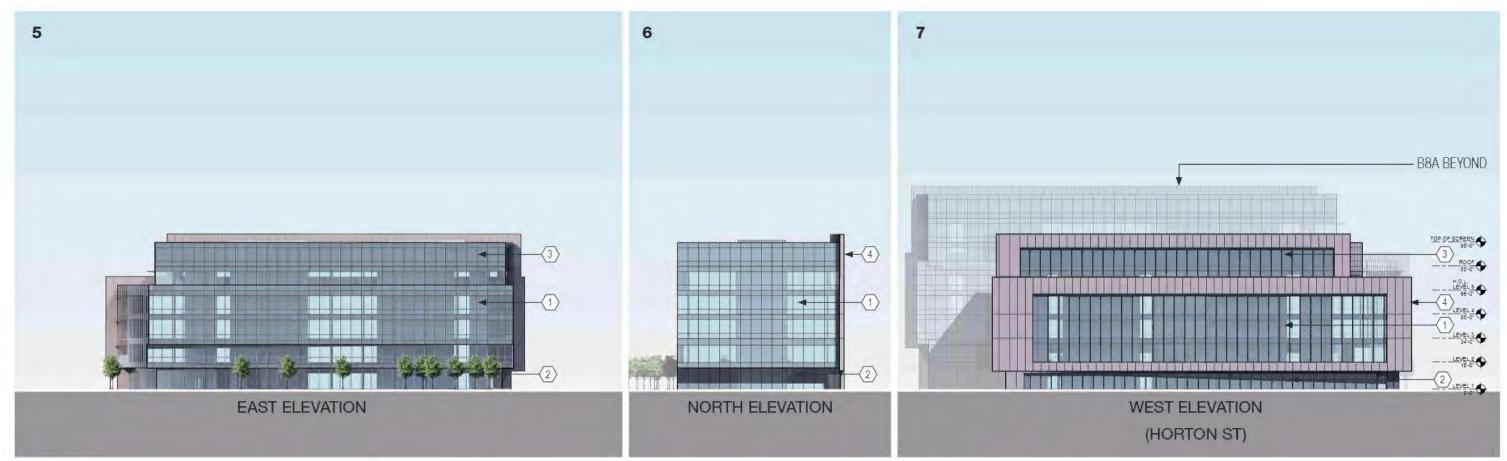


Note 1: Vent shafts on final designs will comply with Condition 90, Height, F.2, and F.3 Note 2: H.O.L. - Highest Occupiable Level



- 1 HIGH PERFORMANCE INSULATED GLAZING UNITS WITH LOW-REFLECTIVE, ANTI-GLARE SURFACE COATINGS
- 2 LOW-IRON HIGH PERFORMANCE INSULATED GLAZING UNITS
- (3) GLAZED MECHANICAL SCREEN WALL
- (4) TERRACOTTA, GFRC, OR MASONRY PANEL





Note 1: Vent shafts on final designs will comply with Condition 90, Height, F.2, and F.3 Note 2: H.O.L. - Highest Occupiable Level





- 1 PAINTED METAL PANEL SYSTEM
- 2 PAINTED METAL GUARDRAIL

- ③ EXPOSED CONCRETE
- 4 PAINTED PERFORATED METAL SCREEN SYSTEM
- 5 DECORATIVE METAL SECURITY SCREEN
- (6) INTEGRATED METAL CABLE/PLANTER SCREEN SYSTEM

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**Building Images, Night View at Horton Street - B13/14** 

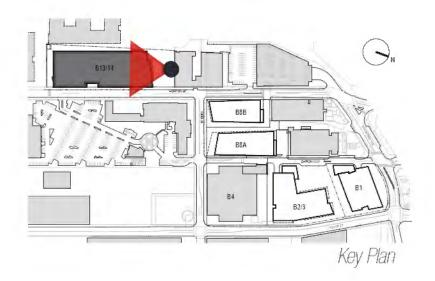


AREA	ON-GRADE	ELEVATED	м	и в	DESIGNATED PARKING						KING S	TOTAL		
AREA	SLAB (S.F.)	SLAB (S.F.)	м	ь	CP	EV-AMB	EV-VA	EV-A	EVCS	AS	VS	FS	С	TOTAL
PARKING AREA:					1-1						71			
GROUND LEVEL	67,594			159	2	5	2	5	2	23	5	66		110
SECOND LEVEL	4,976	70,271			2			==(	22			189		213
THIRD LEVEL		75,098			2				21			189		212
FOURTH LEVEL		75,407			2				22			190		214
FIFTH LEVEL		75,098			2				21			190		213
SIXTH LEVEL		55,985			2			_	22			152		176
SEVENTH LEVEL		55,676			2				21			151		174
EIGHTH LEVEL		55,985			2				22			152		176
NINETH LEVEL		55,676			2				21			151		174
TENTH LEVEL		55,985			2				14			160		176
ELEVENTH (ROOF) LEVEL		49,081			2			==(				151		153
SUB TOTAL:	72,570	624,262	0	159	22	5	2	5	188	23	5	1,741	0	1,991
TOTAL:	696	832	- 1		- 1		1 4		- 01					- 333
TOTAL PARKING AND NON-PARKING AREA:	76,938	633,703												

Note 1: Parking Garage openings to comply with CBC 406.5.2 for natural ventilation. Note 2: Bicycle signage graphic is illustrative, not proposed

LEGEND:
M - MOTORCYCLE
B - BIKES
CP - CAR POOL
EV-AMB - AMBULATORY ELECTRIC VEHICLE CHARGING STATION
EV-VA - VAN ACCESSIBLE ELECTRIC VEHICLE CHARGING STATION
EV-A - REGULAR ACCESSIBLE ELECTRIC VEHICLE CHARGING STATION
EV-CS - ELECTRIC VEHICLE CHARGING STATION
AS - REGULAR ACCESSIBLE STALL
VS - VAN ACCESSIBLE STALL
FS - FULL SIZE STALL
C - COMPACT STALL

\* DOES NOT INCLUDE MOTORCYCLE AND BIKE SPACES
\*\* INCLUDES ELECT., MECH., SWEEPER, TRASH AND STORAGE AREAS
\*\*\* INCLUDES STAIR WELLS & ELEVATOR SHAFTS AT LOWEST LEVEL ONLY AND LOBBIES AT ALL LEVELS





## **EXTERIOR MATERIALS**

- 1 PAINTED METAL PANEL SYSTEM
- 2 PAINTED METAL GUARDRAIL

- ③ EXPOSED CONCRETE
- 4 PAINTED PERFORATED METAL SCREEN SYSTEM
- (5) INTEGRATED METAL CABLE/PLANTER SCREEN SYSTEM

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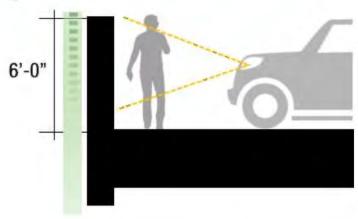


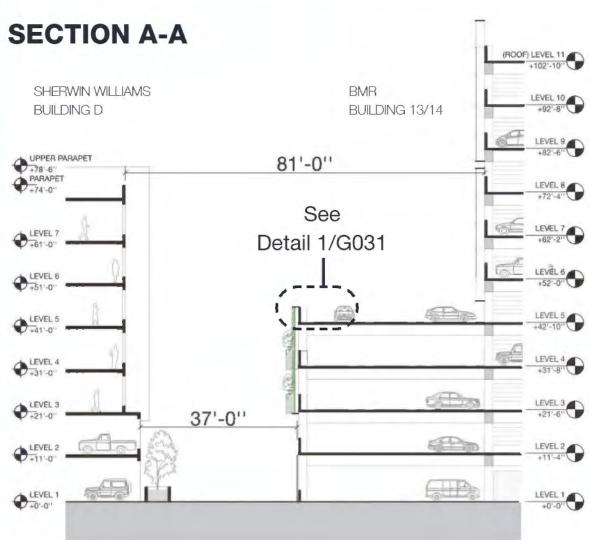
Building Images, Horton Plaza View - B13/14



## **DETAIL 1 (TYPICAL)**

PARAPET WALL BLOCKS
HEADLIGHTS FROM VIEW





## **EXTERIOR MATERIALS**

- (1) EXPOSED CONCRETE
- 2 PAINTED PERFORATED METAL SCREEN SYSTEM

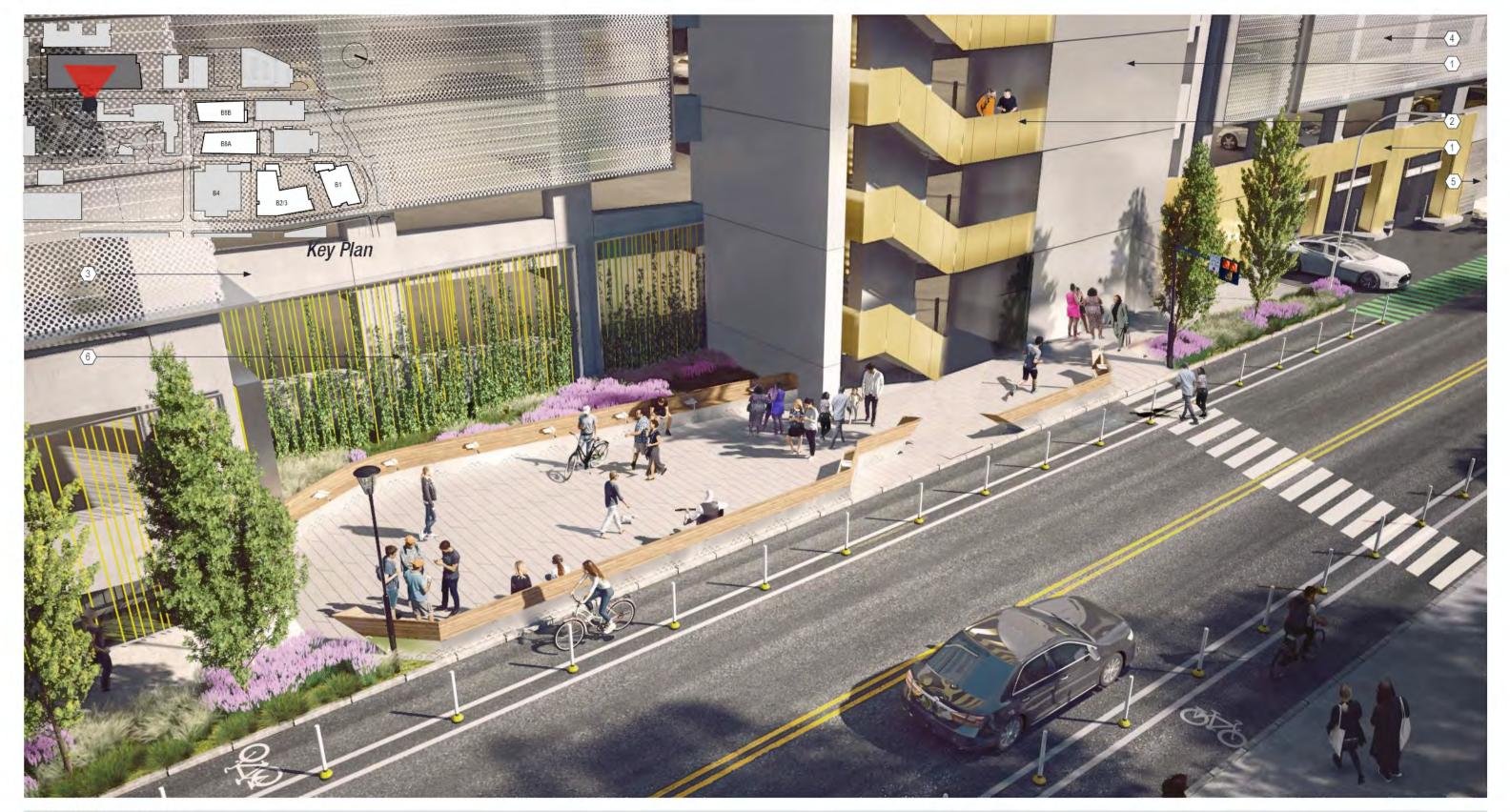
- 3 DECORATIVE METAL SECURITY SCREEN
- 4 INTEGRATED METAL CABLE/PLANTER SCREEN SYSTEM

Flad Architects



**Building Images, West Facade View - B13/14** 





- (1) PAINTED METAL PANEL SYSTEM
- 2 PAINTED METAL GUARDRAIL

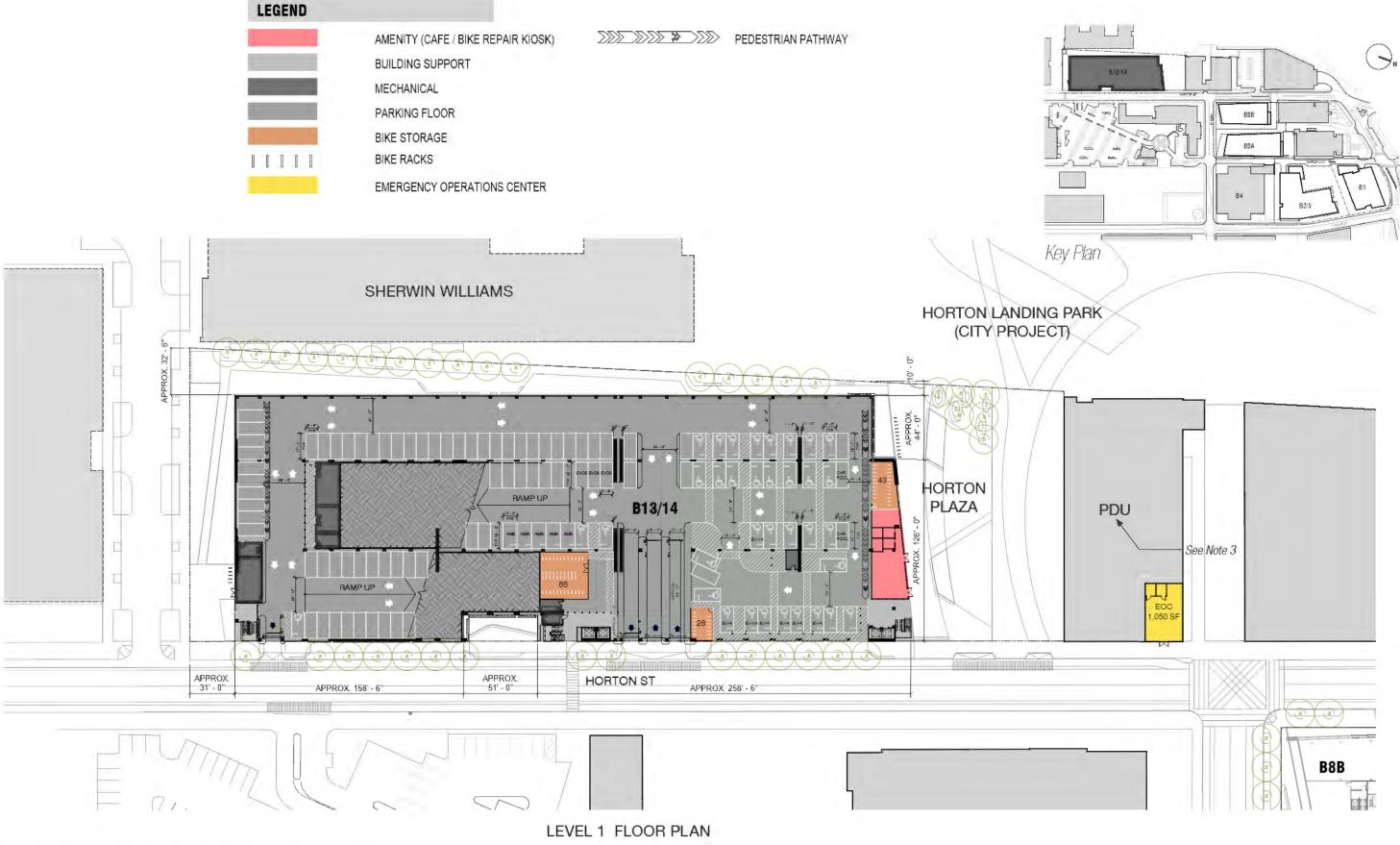
- ③ EXPOSED CONCRETE
- ${\color{red} 4}{\color{black}}$  PAINTED PERFORATED METAL SCREEN SYSTEM
- 5 DECORATIVE METAL SECURITY SCREEN
- (6) INTEGRATED METAL CABLE/PLANTER SCREEN SYSTEM





**Building Images, Pocket Garden View - B13/14** 





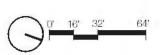
Note 1: Preliminary dimensions shown. Final building location subject to code analysis

Note 2: Pedestrian wayfinding is illustrative and specific painting/treatment will be provided at time of building permit set

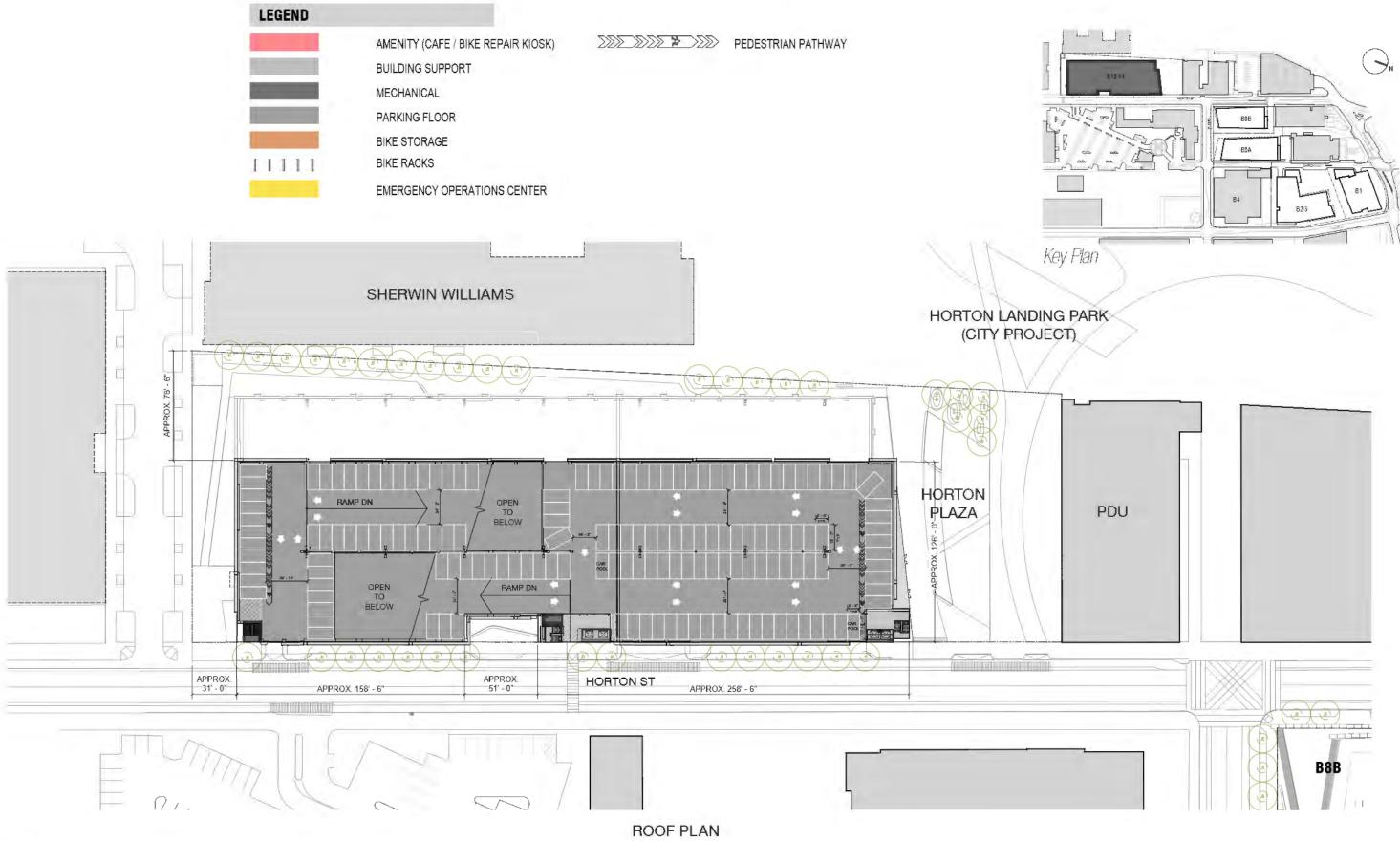
Note 3: Potential campus wide amenity with street activating uses

Flad Architects **Sionic** 







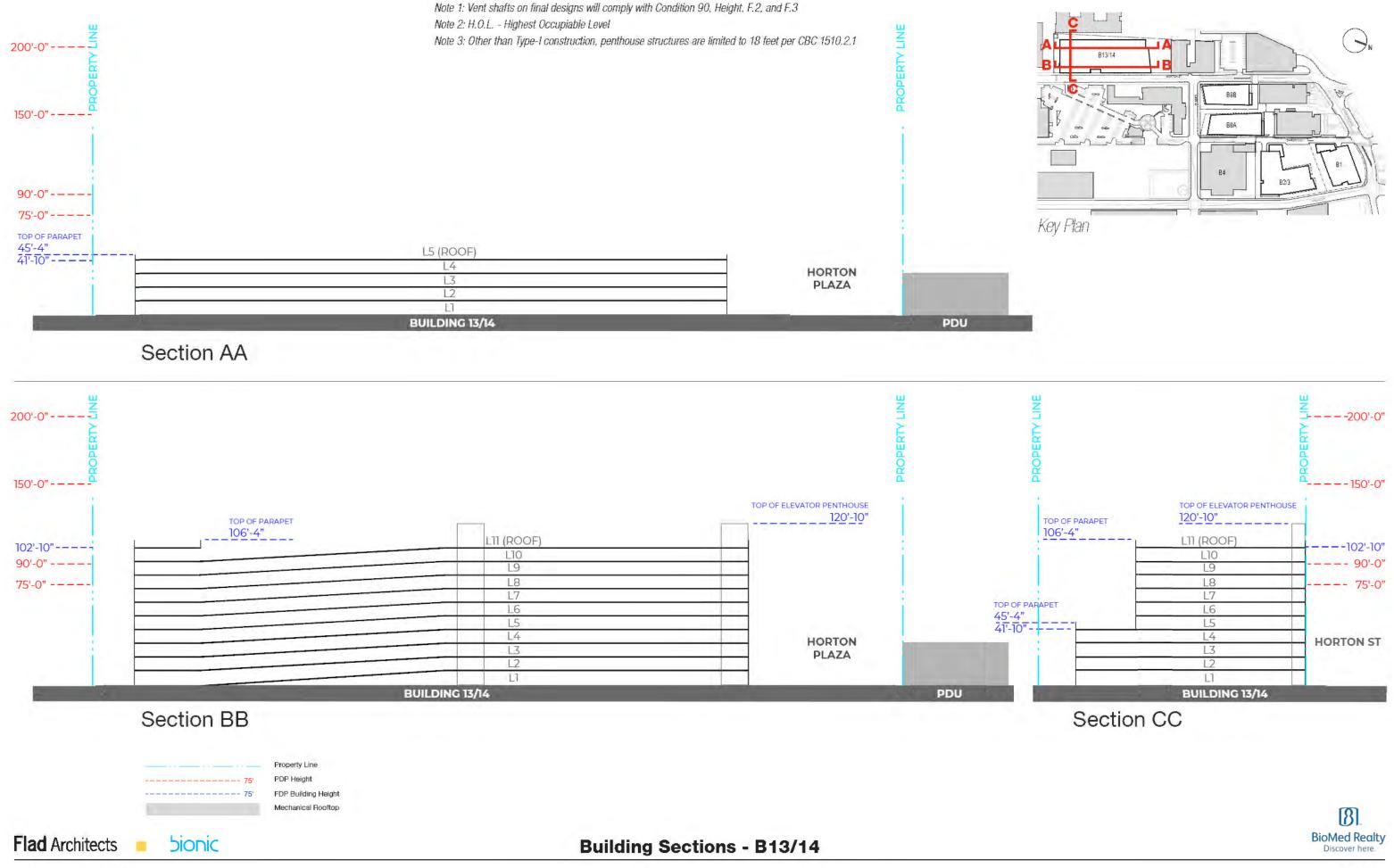


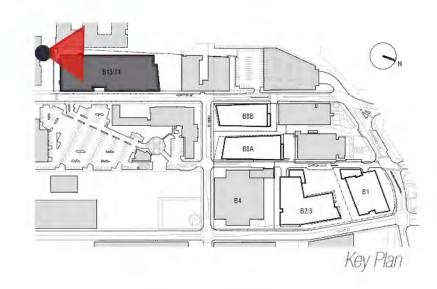
**Sionic** 

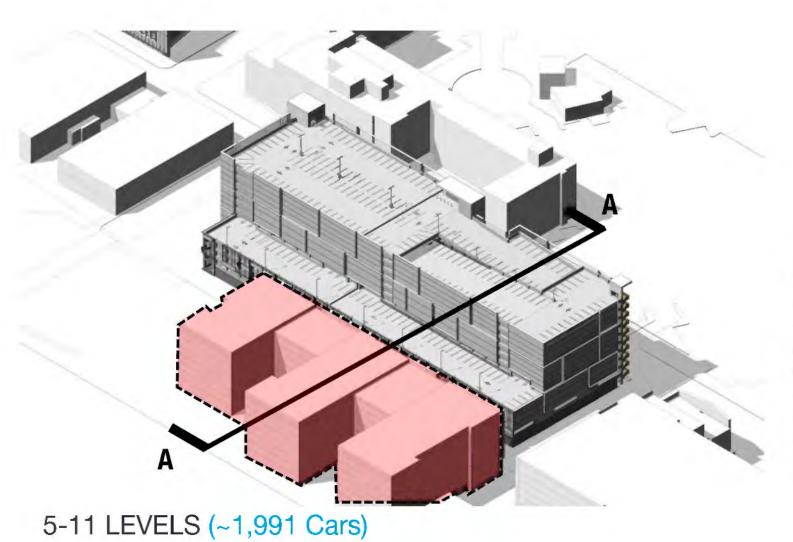
Note 1: Preliminary dimensions shown. Final building location subject to code analysis

Note 2: Pedestrian wayfinding is illustrative and specific painting/treatment will be provided at time of building permit set

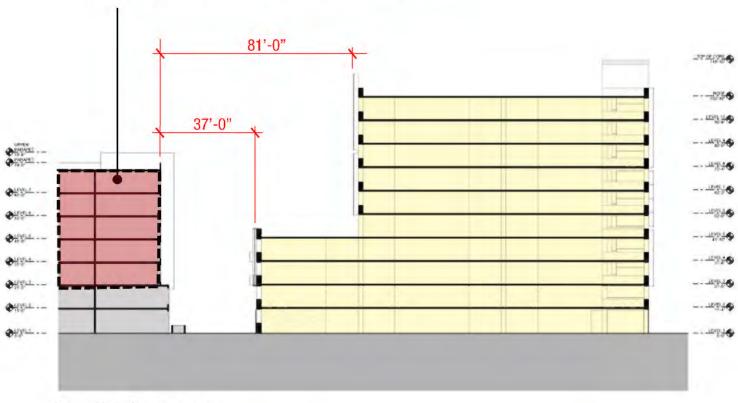








## SHERWIN WILLIAMS - BUILDING D

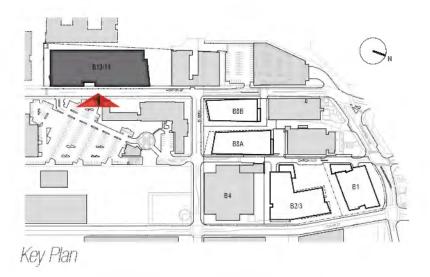


**SECTION A-A** 

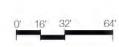


## **EXTERIOR MATERIALS**

- 1 PAINTED METAL PANEL SYSTEM
- 2 PAINTED METAL GUARDRAIL
- (3) EXPOSED CONCRETE
- 4 PAINTED PERFORATED METAL SCREEN SYSTEM
- 5 DECORATIVE METAL SECURITY SCREEN



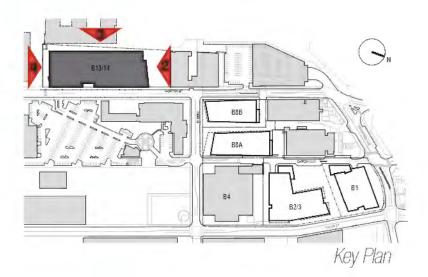






## **EXTERIOR MATERIALS**

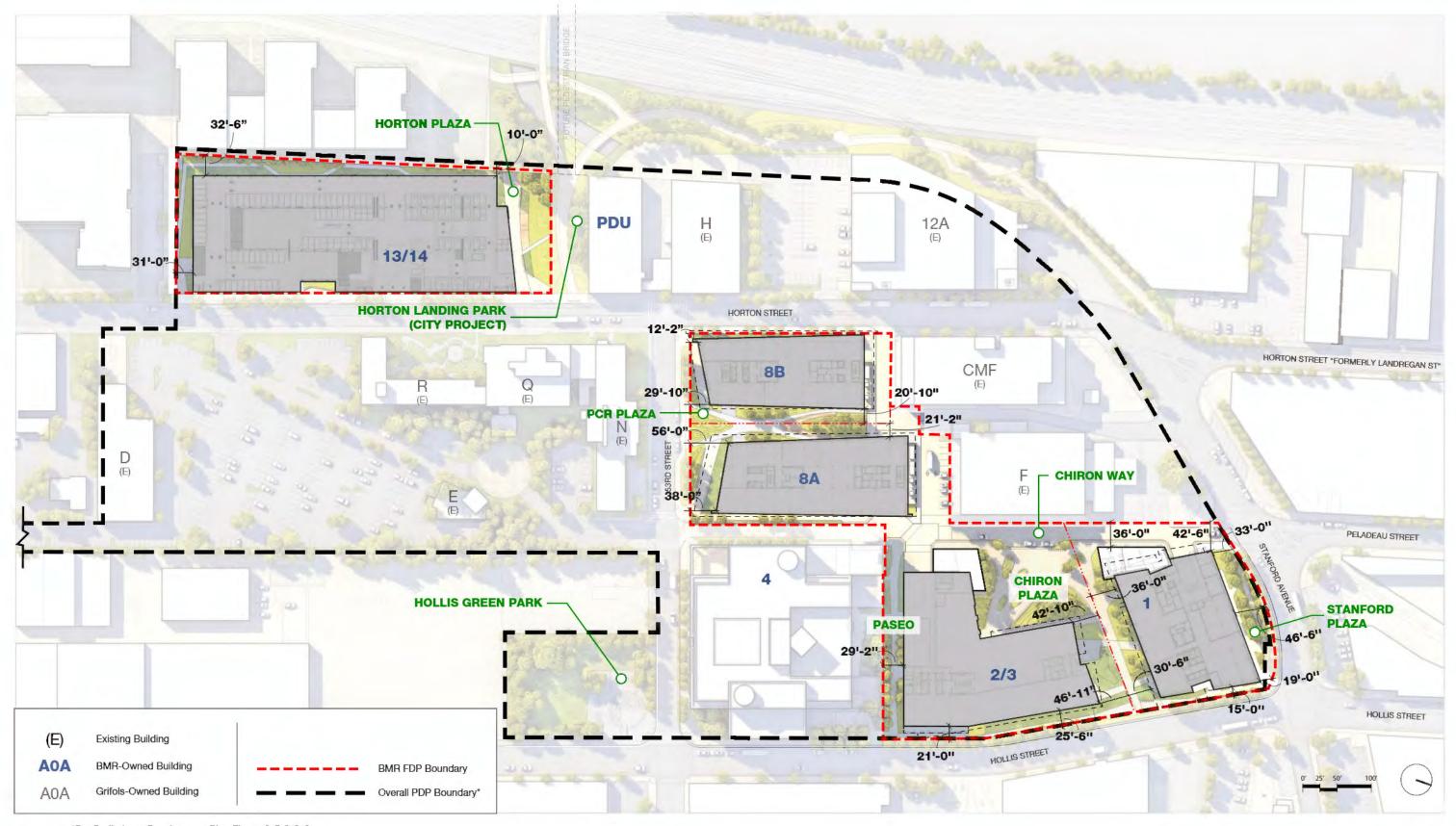
- 1 PAINTED METAL PANEL SYSTEM
- (2) PAINTED METAL GUARDRAIL
- (3) EXPOSED CONCRETE
- 4 PAINTED PERFORATED METAL SCREEN SYSTEM
- 5 DECORATIVE METAL SECURITY SCREEN
- (6) INTEGRATED METAL CABLE/PLANTER SCREEN SYSTEM







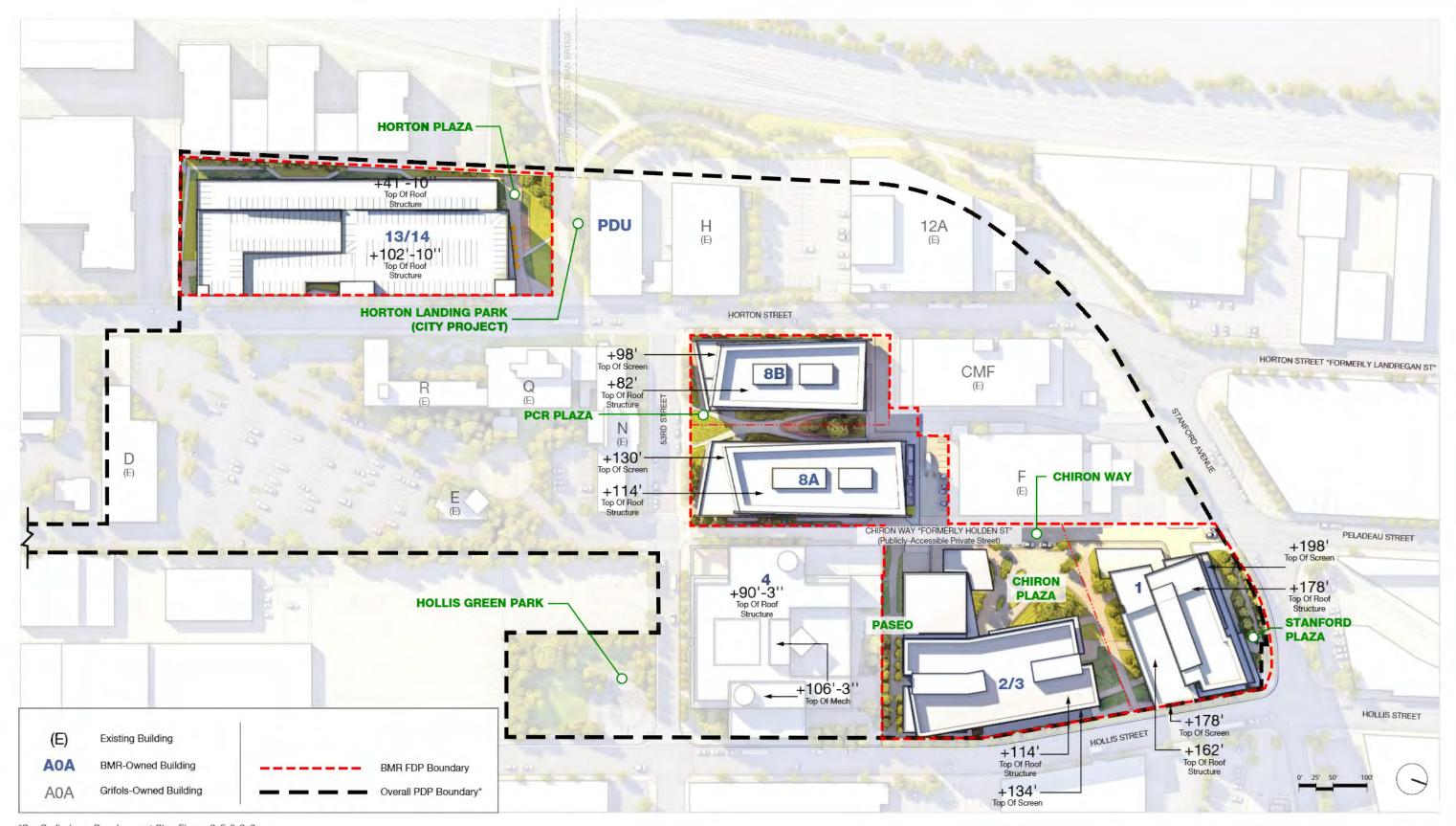




\*Per Preliminary Development Plan Figure 2-5 & 2-6

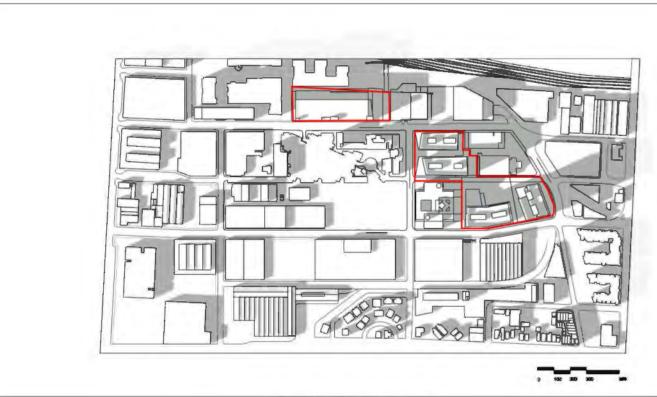
**Sionic** 

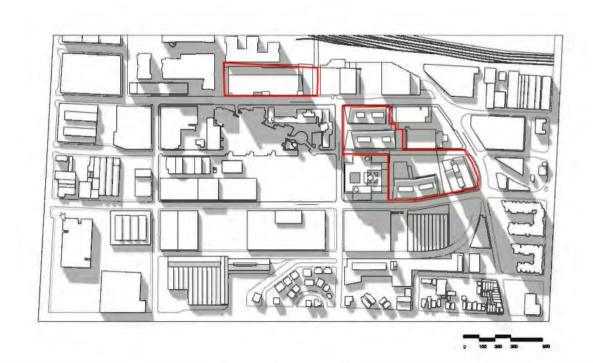




\*Per Preliminary Development Plan Figure 2-5 & 2-6





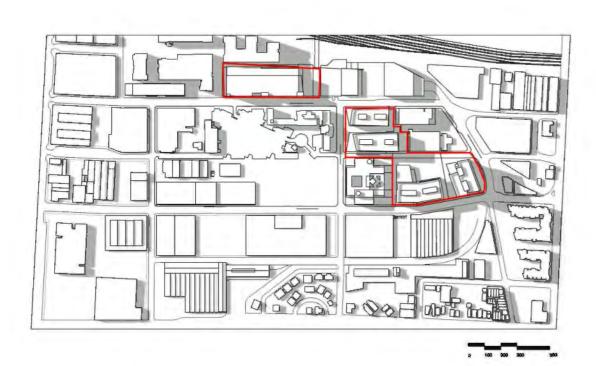


(DECEMBER 21) - 3 PM

(DECEMBER 21) - 9 AM





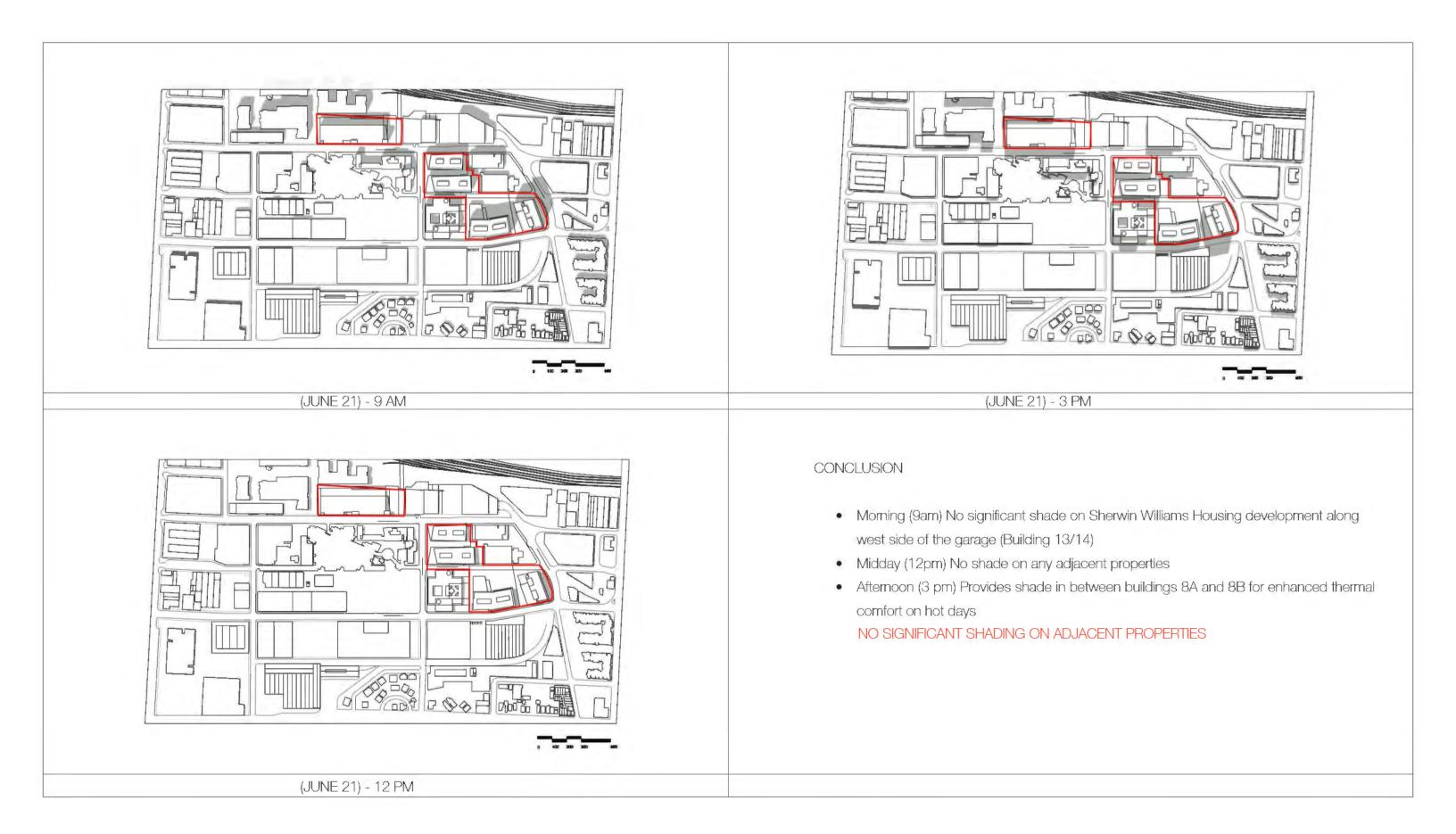


- Morning (9am) Shades lower levels of Sherwin Williams Housing development along west side of the garage (Building 13/14)
- Midday (12pm) Shades lower levels of housing development on the northeast corner of the campus
- Midday (12pm) Shade allows for protected thermal comfort and usability for community and tenants during hot days
- Afternoon (3 pm) Shades on buildings on the west side of B1 and enhanced thermal comfort in between buildings 8A and 8B in the afternoon

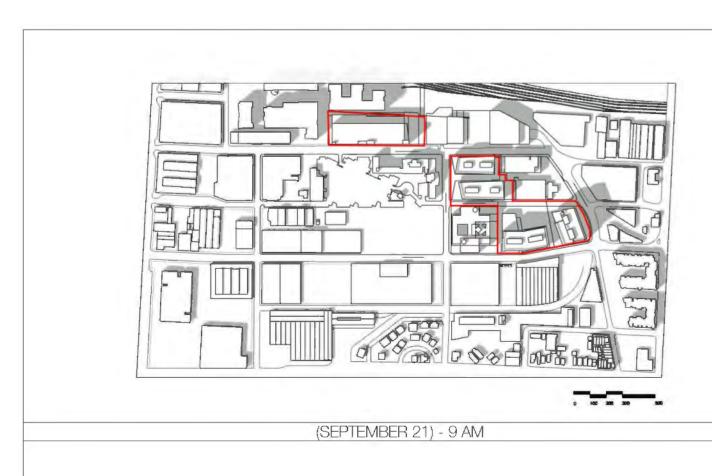
NO SIGNIFICANT SHADING ON ADJACENT PROPERTIES

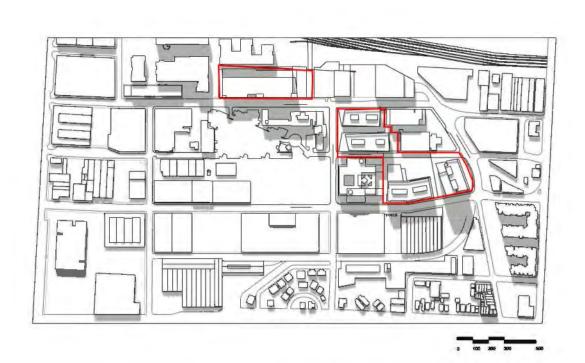
(DECEMBER 21) - 12 PM

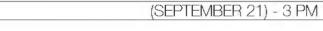


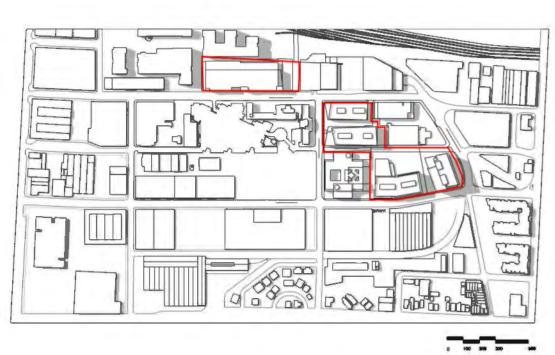










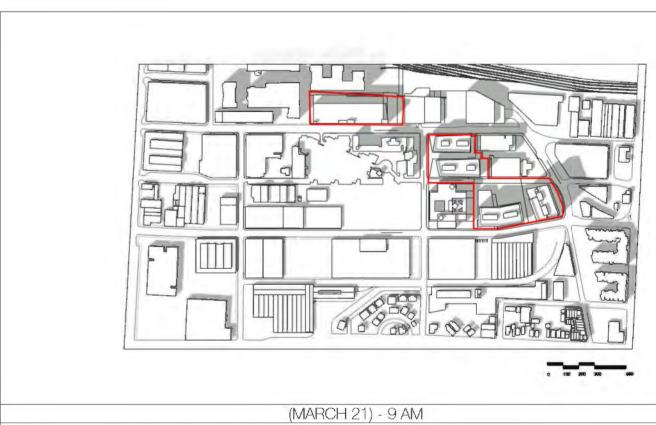


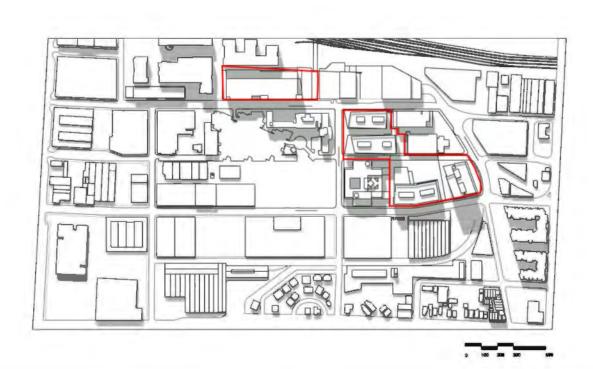
## CONCLUSION

- Morning (9am) Full shade covering PCR Park and Chiron Plaza. Some shading on the northern portion of the site at the entrance to the Emeryville Greenway
- Midday (12pm) No significant shading outside FDP property
- Afternoon (3 pm) Full shade in PCR plaza. Some shade from Building 1 on the southeast comer of Stanford and Hollis

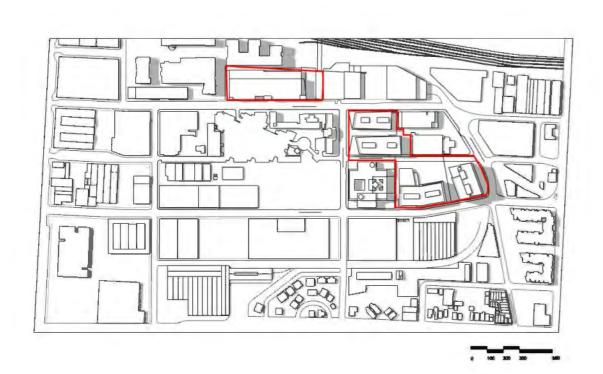
NO SIGNIFICANT SHADING ON ADJACENT PROPERTIES

(SEPTEMBER 21) - 12 PM





(MARCH 21) - 3 PM



CONCLUSION

- Morning (9am) No significant shades on Sherwin Williams Housing development along west side of the garage (Building 13/14)
- Midday (12pm) No shade on any adjacent properties
- Afternoon (3 pm) Provides shade in between buildings 8A and 8B for enhanced thermal comfort on hot days

NO SIGNIFICANT SHADING ON ADJACENT PROPERTIES

(MARCH 21) - 12 PM



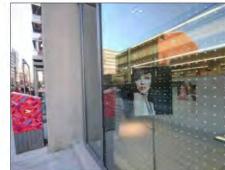
**Fritted and Frosted Glass** (Standards for Bird Safe Buildings, San Francisco Planning Department)



**Fritted and Frosted Glass** (fieldconditions.com)



collidespace.org



**Fritted and Frosted Glass** (walkerglass.com)

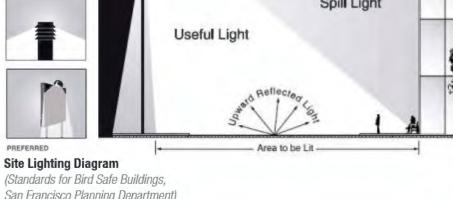


**UV Glass** (ceramics.org)

# Direct Upward Light OI Spill Light **Useful Light**

(Standards for Bird Safe Buildings, San Francisco Planning Department)

Note 1: Images and diagrams are illustrative



**Lighting Sensors** (Standards for Bird Safe Buildings, San Francisco Planning Department)



Building 1 Facade at Hollis St and Stanford Ave

## BIRD SAFETY AND MITIGATION

## 1. Glass:

- a. Reflectivity: Buildings will incorporate lower reflective coatings in high performance glazing
- b. Transparency: Buildings will incorporate a blend of translucent with transparent glass.
- c. Fritted and Frosted Glass: Buildings will incorporate a blend of frit and translucent glass to mitigate bird strikes.
- d. Glass %: Buildings will incorporate a balance of solid and vision thereby reducing glazing percentages in the overall façade.
- e. UV glass: Buildings will incorporate of UV-light reflecting coatings on glass. This provides a dual function of reducing heat load on façade and subsequently reducing energy demand.

## 2. Architectural Features:

a. Overhangs, louvers and awnings will be incorporated in building facades treatments to block view of glass from birds

## 3. Lighting Treatments:

- a. Buildings will incorporate motion sensors to avoid light spill and bird strikes Avoiding light spill.
- b. Site and exterior building lighting will avoid up-lighting to limit evening bird strikes.

## 4. Landscape Treatments:

a. Proposed site trees will be located directly adjacent to glazing to slow down birds on approach at lower levels.

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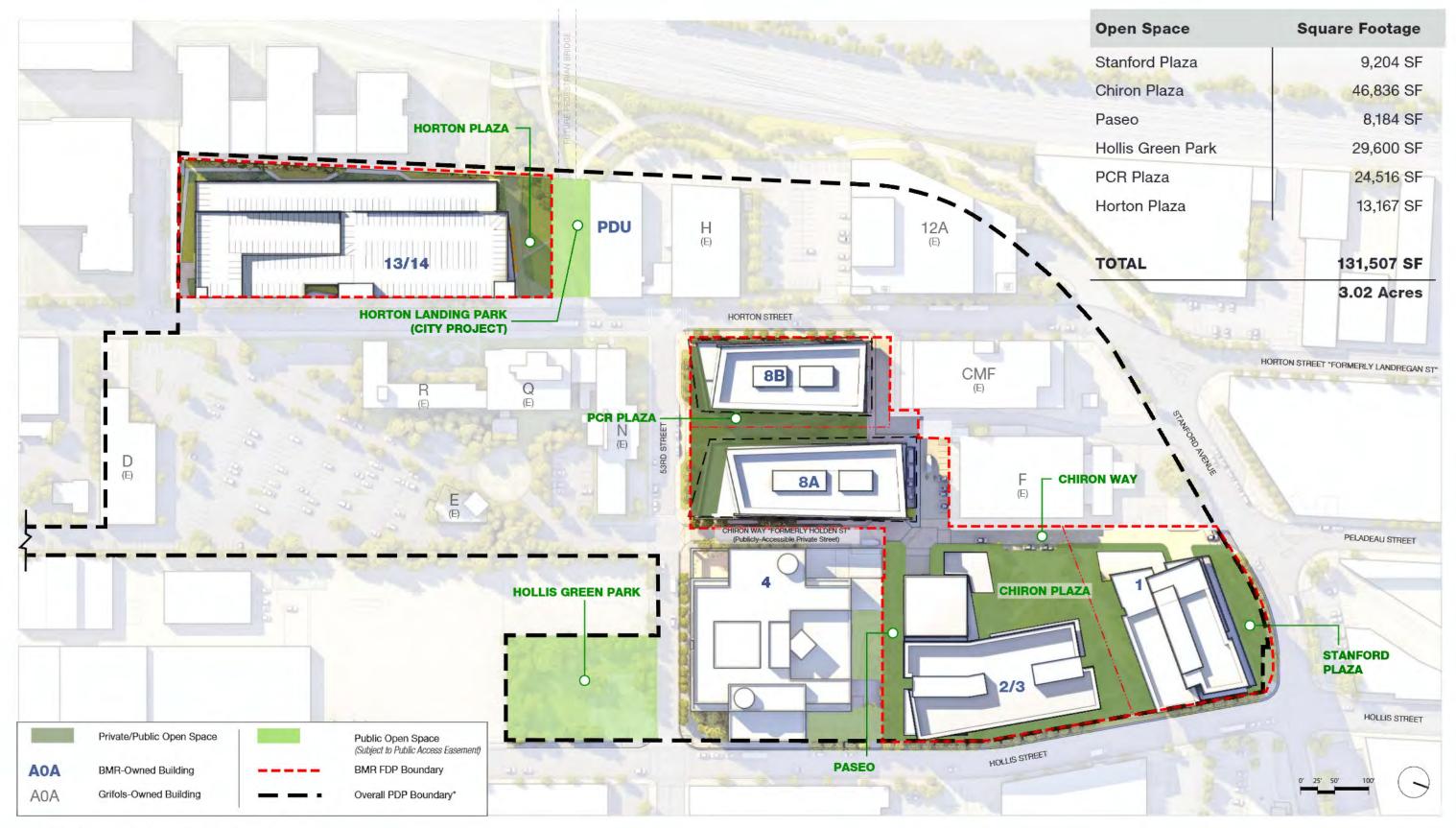






## 2. OPEN SPACE & LANDSCAPE

Incorporate privately owned, publicly-accessible open space as the focal point between these new, smaller footprint building elements



<sup>\*</sup> Per Preliminary Development Plan Figure 2-5, 2-6, 2-30

Note 1: Total amount of open space coverage is 36% of total area BMR FDP Boundary









Key Plan





Key Plan

Key Plan



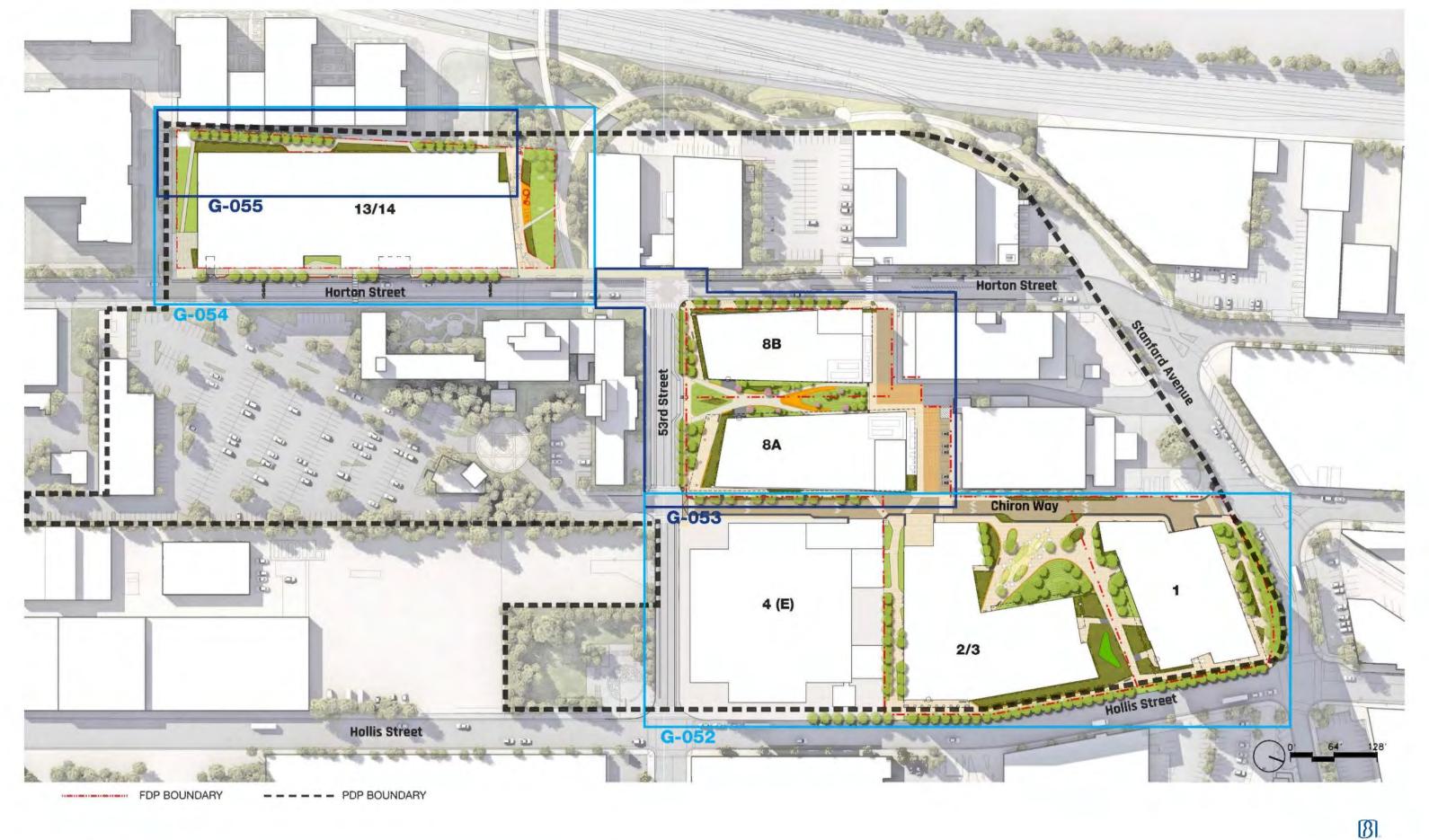








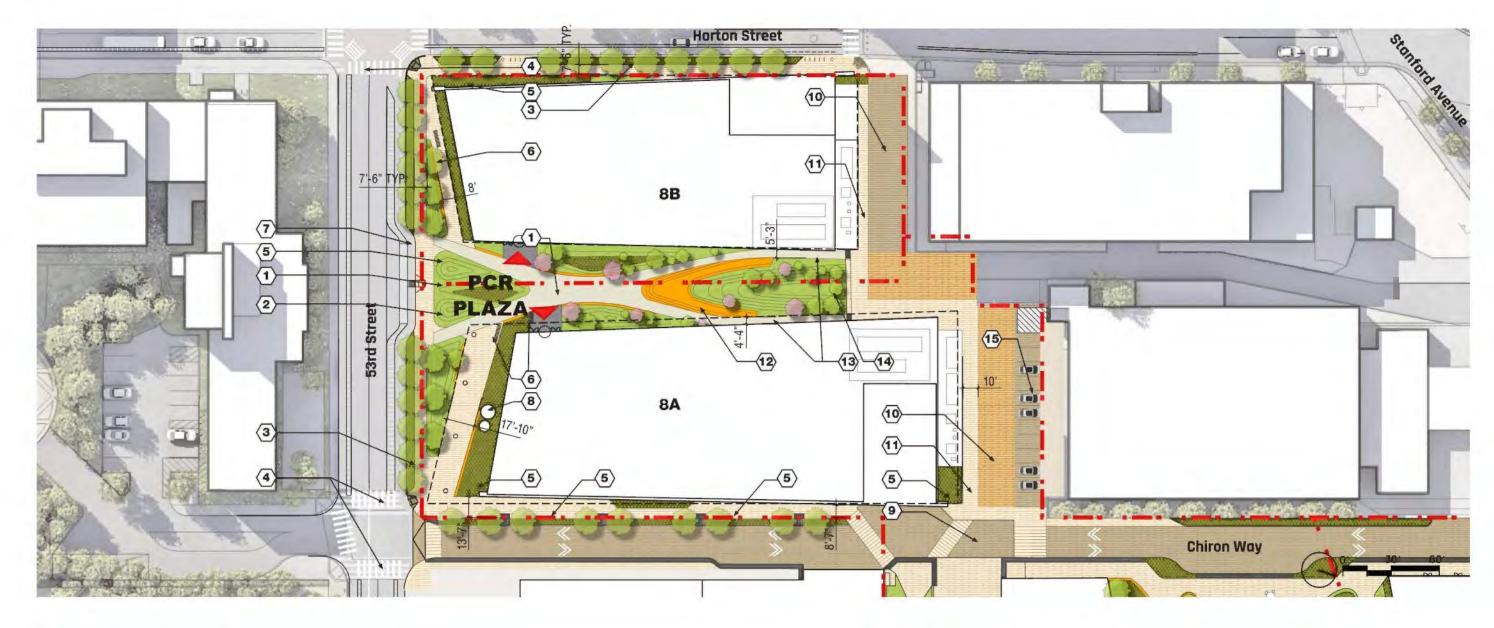










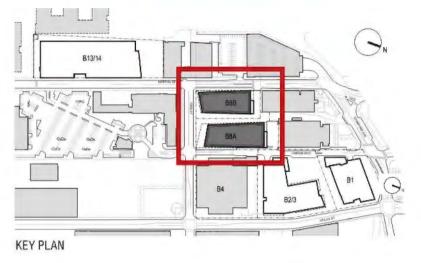




**Building Entry** 

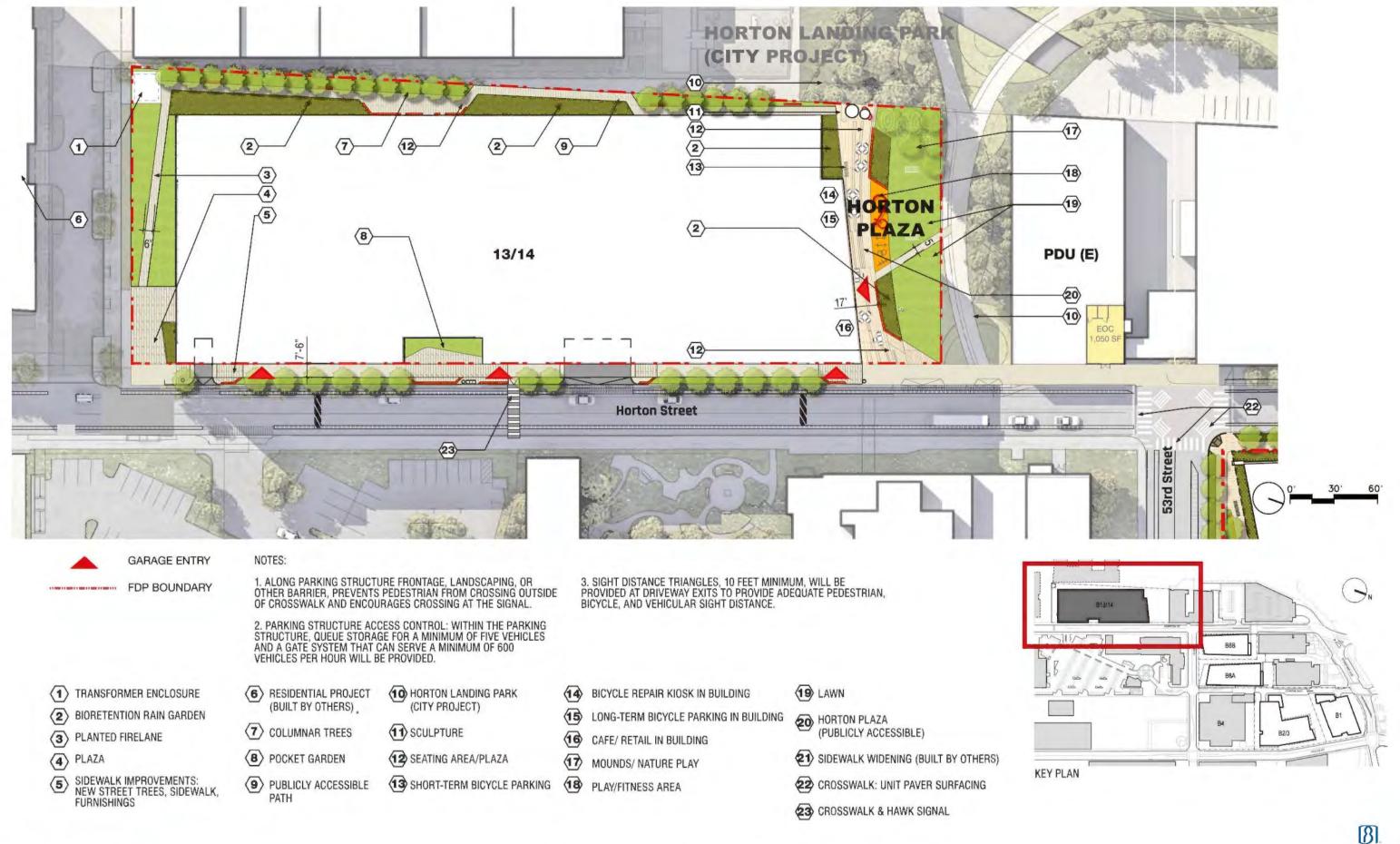
FDP BOUNDARY

- 1 PCR PLAZA (PUBLICLY ACCESSIBLE)
- 2 MOUNDS
- SIDEWALK IMPROVEMENTS:
  NEW STREET TREES, SIDEWALK, FURNISHINGS
- (4) CROSSWALK: UNIT PAVER SURFACING (8) SCULPTURE
- (5) BIORETENTION RAIN GARDEN
- 6 SHORT-TERM BICYCLE PARKING
- 7 DRDP OFF/LOADING ZONE
- (9) SHARED PUBLIC WAY & CLASS III BICYCLE ROUTES (13) PUBLICLY ACCESSIBLE PATHWAY
- SERVICE DRIVE AISLE
- 11 PUBLICLY ACCESSIBLE CONNECTION
- TERRACED SEATING AREA
- 14 PLANTED GARDEN
- SHORT TERM PARKING

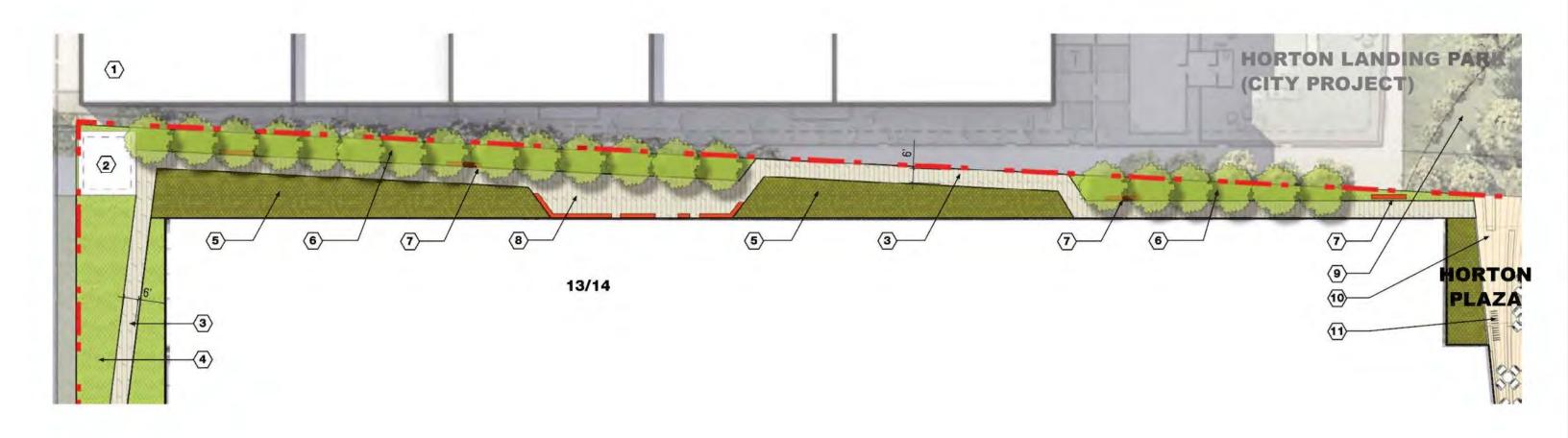


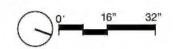


8









FDP BOUNDARY

RESIDENTIAL PROJECT (BUILT BY OTHERS)

2 TRANSFORMER ENCLOSURE

3 PUBLICLY ACCESSIBLE PATH

4 PLANTED FIRELANE

**5** BIORETENTION RAIN GARDEN

HORTON LANDING PARK (CITY PROJECT)

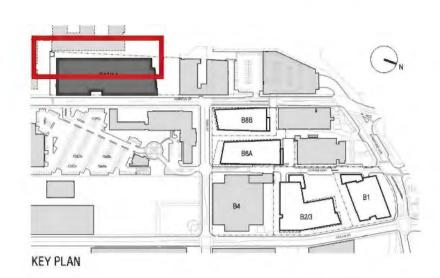
6 COLUMNAR TREES

HORTON PLAZA (PUBLICLY ACCESSIBLE)

(7) SEATING

(8) POCKET SEATING AREA

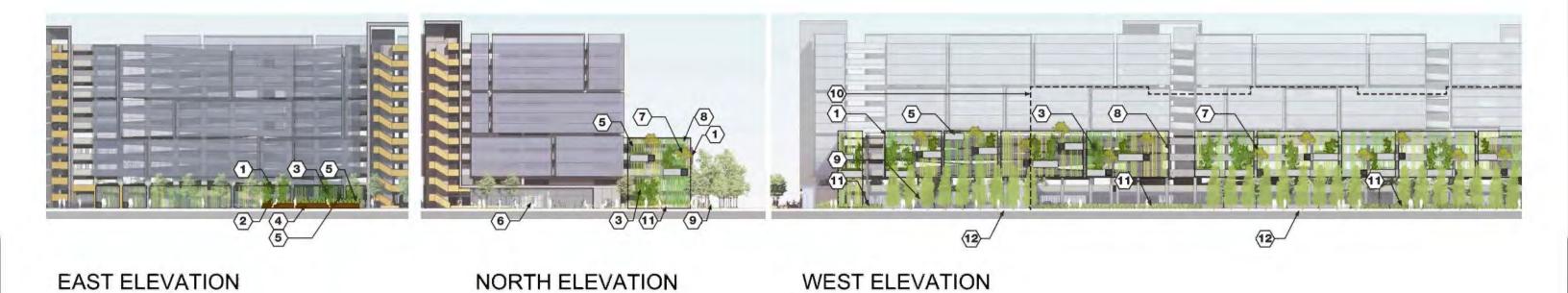
SHORT-TERM BICYCLE PARKING









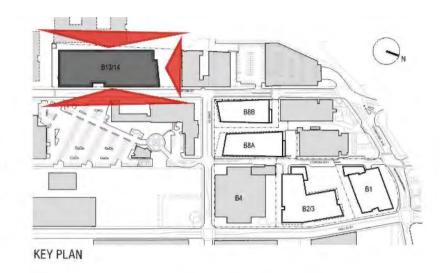


- METAL FRAME (SEE ARCHITECTURE DRAWINGS)
  - 4 SEAT WALL

6 HORTON PLAZA

- 7 MULTI-STEM FLOWERING TREE IN PLANTER
- (5) PERENNIAL / SHRUB IN PLANTER (8) COLOR-COATED METAL WIRE (SEE ARCHITECTURE DRAWINGS)
  - COLUMNAR TREES AT GARDE

- SHERWIN WILLIAMS BUILDING OUTINE
- BIO-RETENTION PLANTER (AT GRADE)
- 42 AT-GRADE PATHWAY



NOTE: PARKING GARAGE OPENINGS SHALL COMPLY WITH CBC 406.5.2 FOR NATURAL VENTILATION



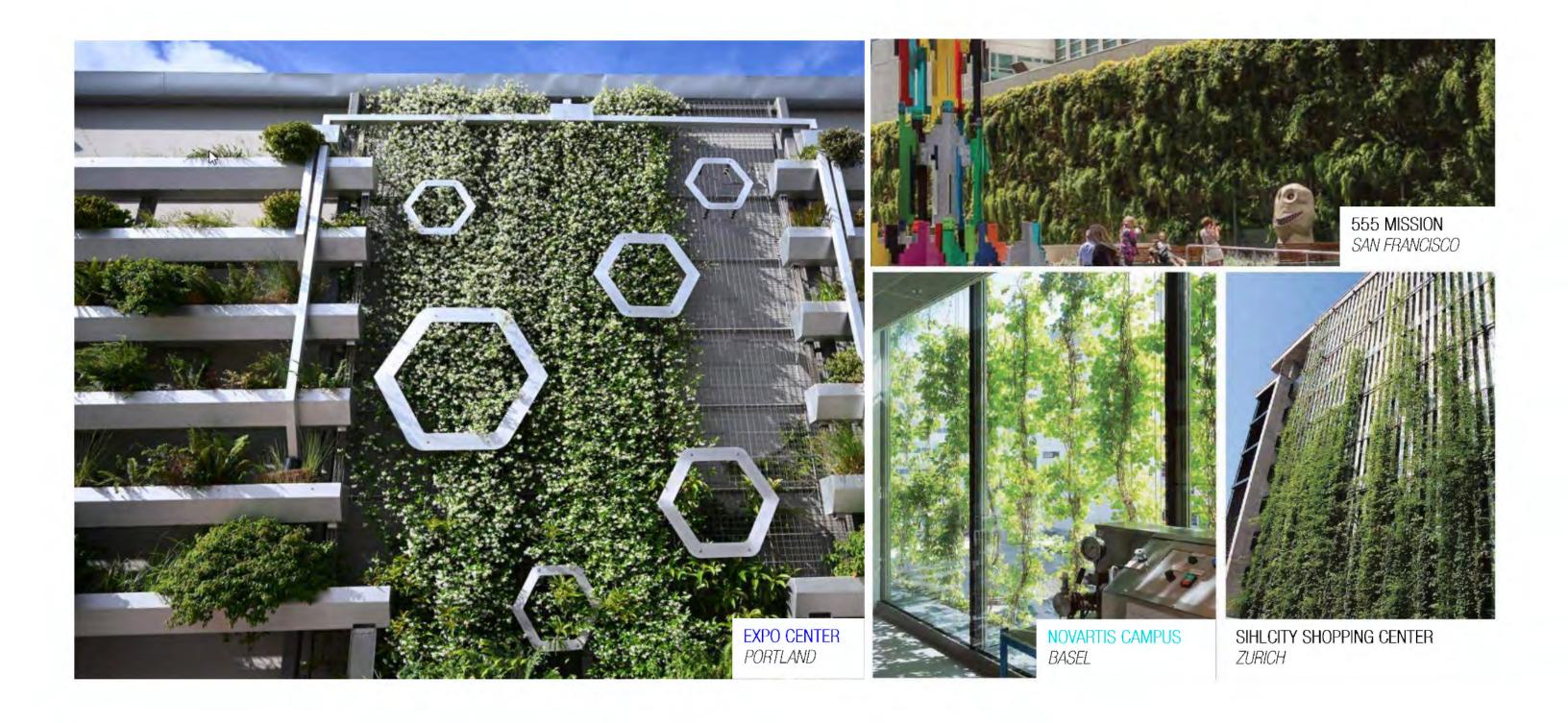






2 POCKET GARDEN

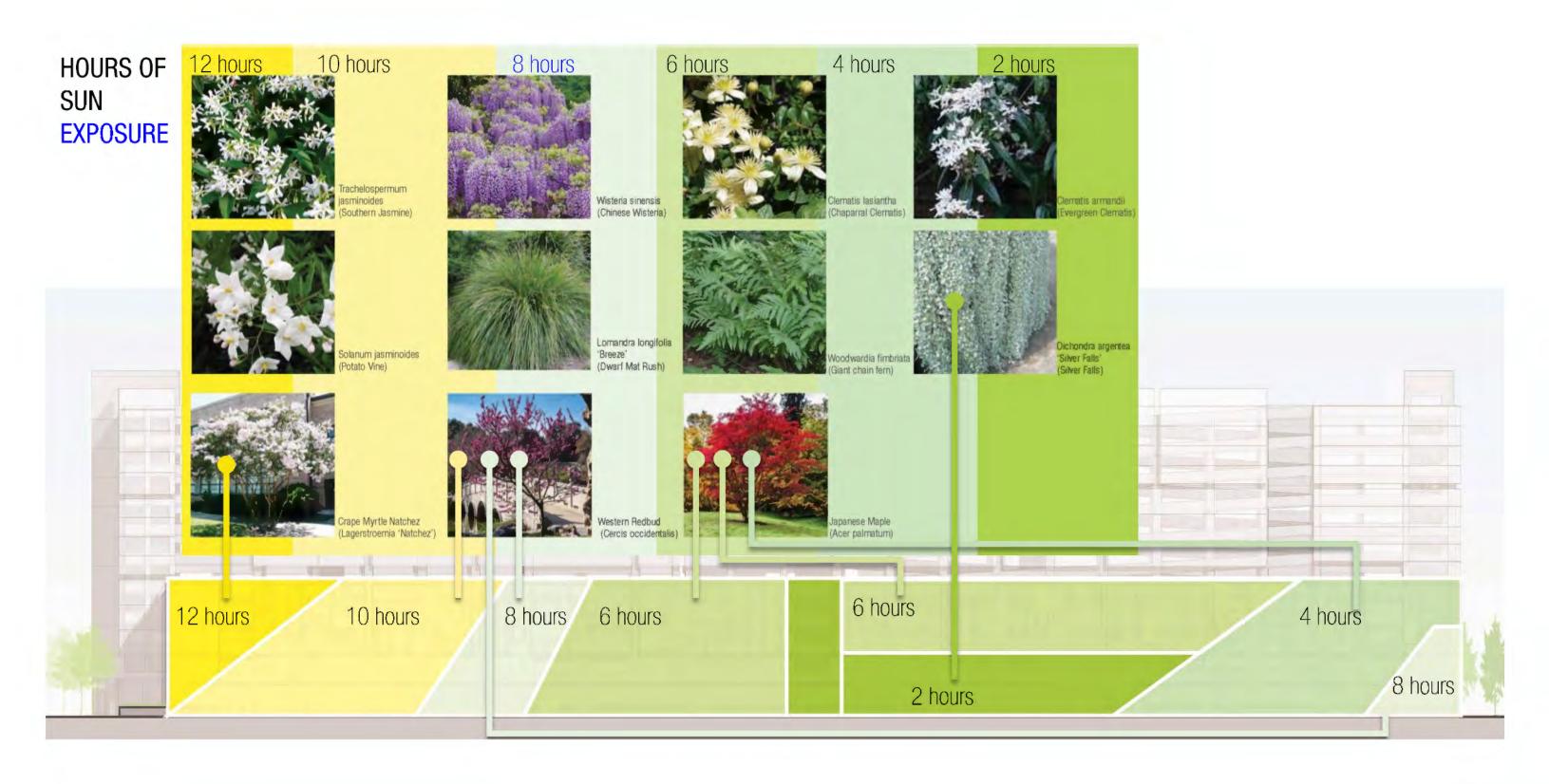
3 CLIMBING VINE IN PLANTER



















2 POCKET GARDEN



3 PLAY / FITNESS



4 PARK & PLAZA



(5) NATURE PLAY



6 ACTIVITY SPACE / TURF



7 PCR PLAZA



8 PCR PLAZA GARDEN & TERRACED SEATING



SHARED PUBLIC WAY



CHIRON PLAZA

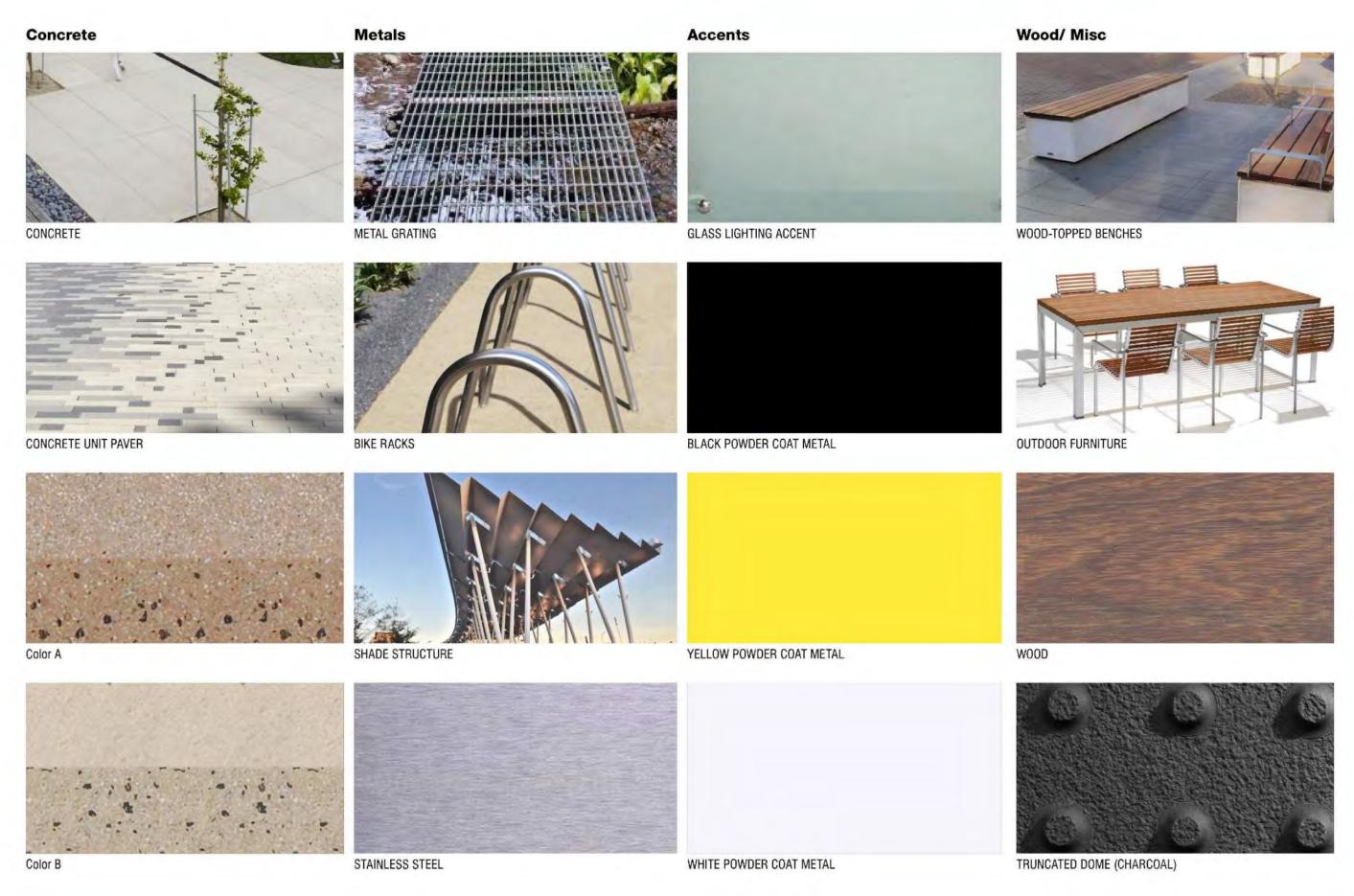


PASEO SHADE GARDEN

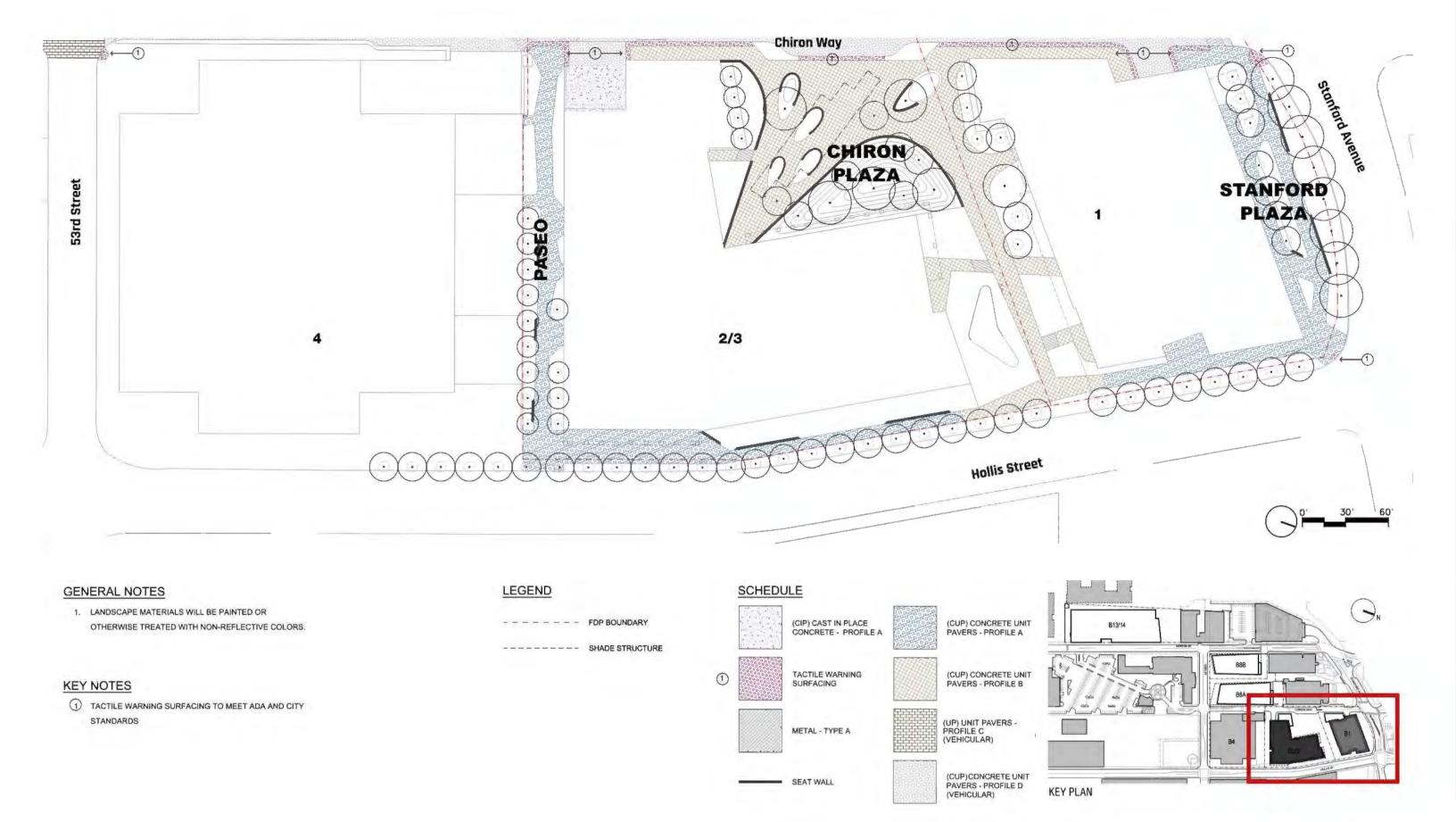






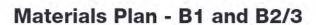




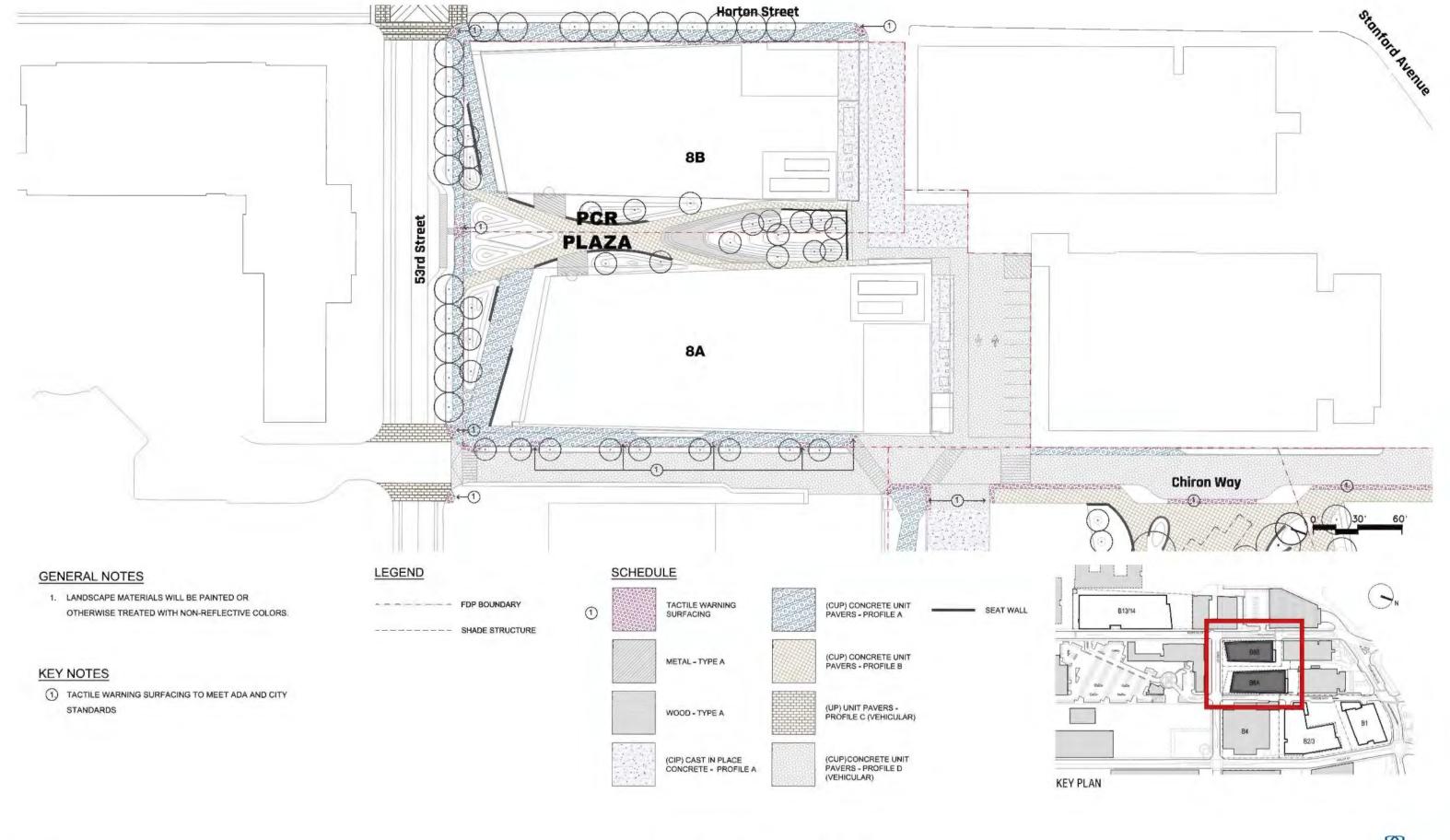






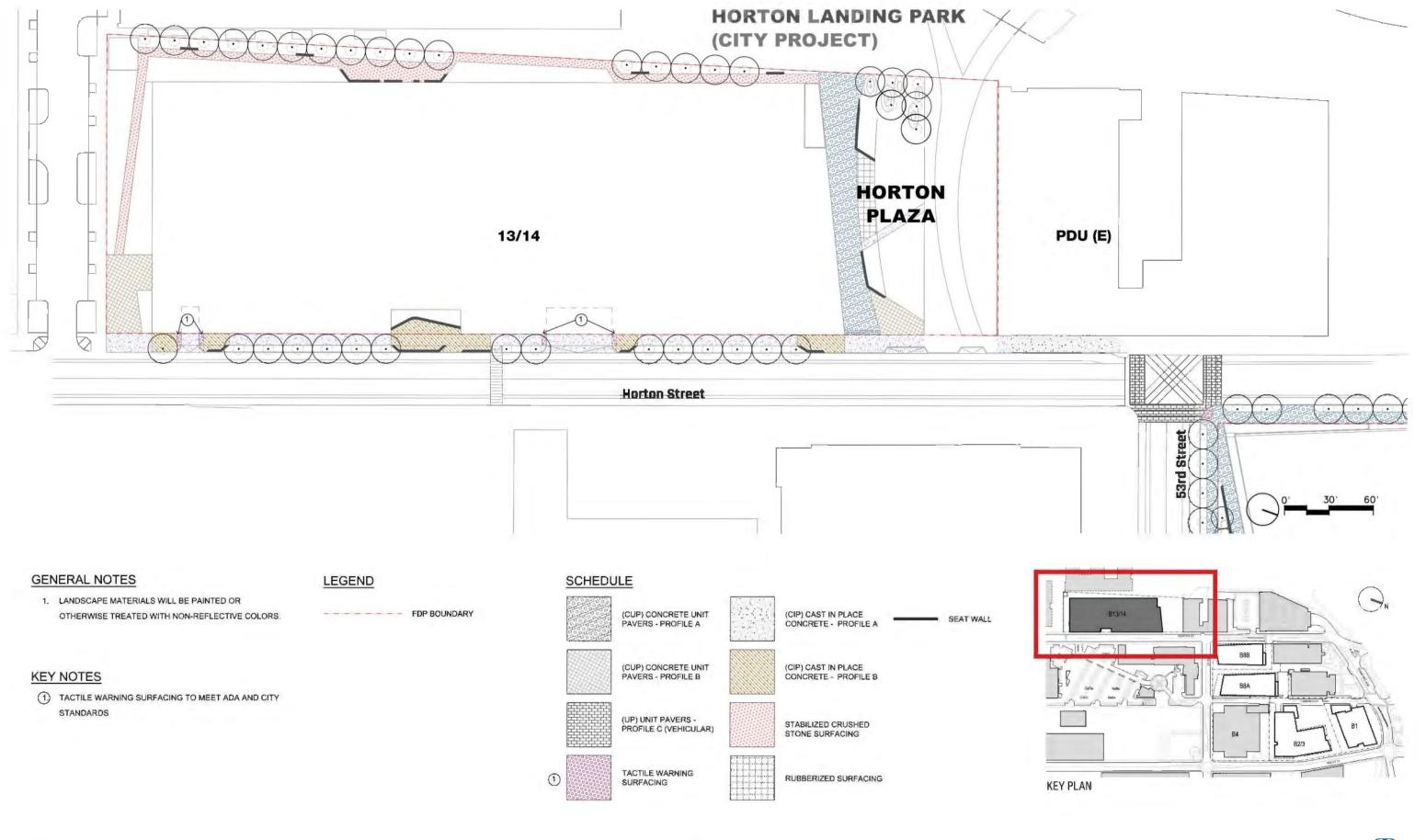






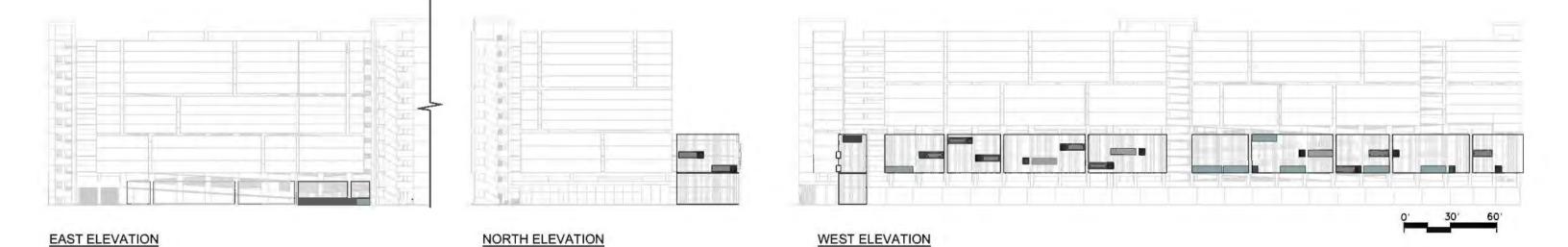
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**Sionic** 



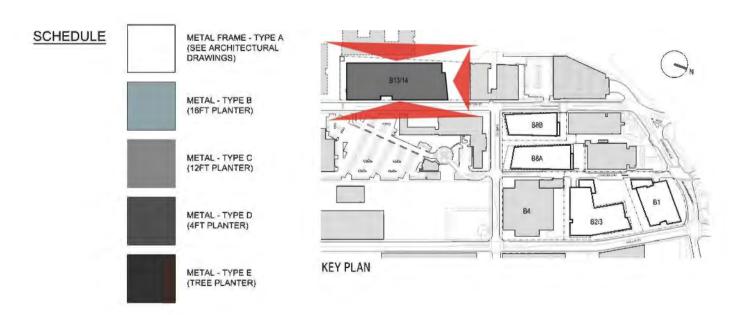
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**Sionic** 

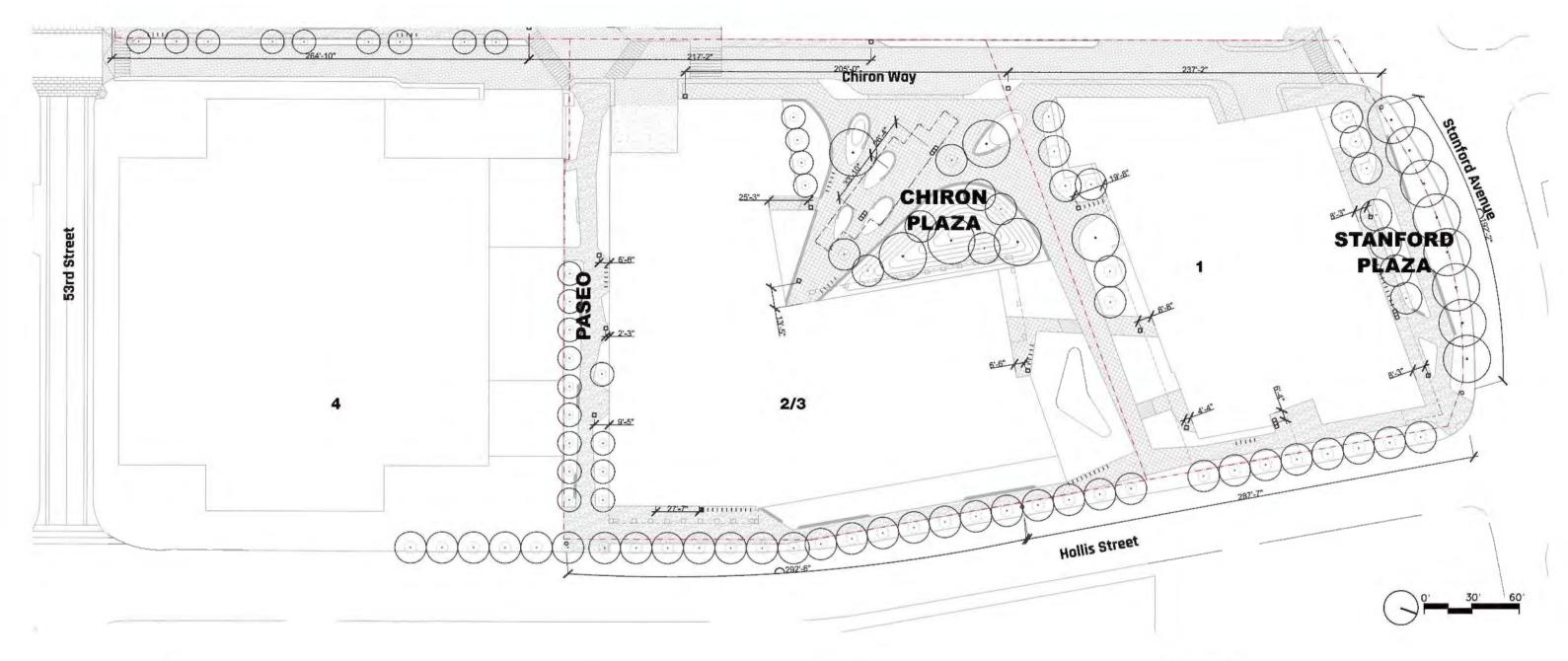


## **GENERAL NOTES**

- LANDSCAPE MATERIALS WILL BE PAINTED OR
   OTHERWISE TREATED WITH NON-REFLECTIVE COLORS.
- PARKING GARAGE OPENINGS SHALL COMPLY WITH CBC 406.5.2 FOR NATURAL VENTILATION







## **GENERAL NOTES**

- WASTE CONTAINERS ON PRIVATE PARCELS SHOW PRELIMINARY LOCATIONS. PRODUCTS TO BE DETERMINED AT TIME OF BUILDING PERMIT.
- MAINTENANCE PLAN FOR PRIVATE CONTAINERS AND PUBLIC CANS TO BE COMPLETED AT TIME OF BUILDING PERMIT.
- LOCATION OF WASTE CONTAINERS ON CITY RIGHT OF WAY PRELIMINARY TO BE CONFIRMED AT TIME OF BUILDING PERMIT.
- OWNER WILL BE RESPONSIBLE FOR MAINTENANCE OF DISCARDS CONTAINERS LOCATED IN PUBLIC SPACES ON PRIVATE PROPERTY.

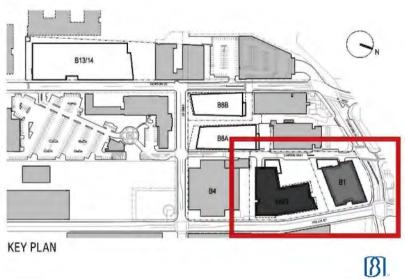
## LEGEND

--- FDP BOUNDARY

---- SHADE STRUCTURE

#### SCHEDULE

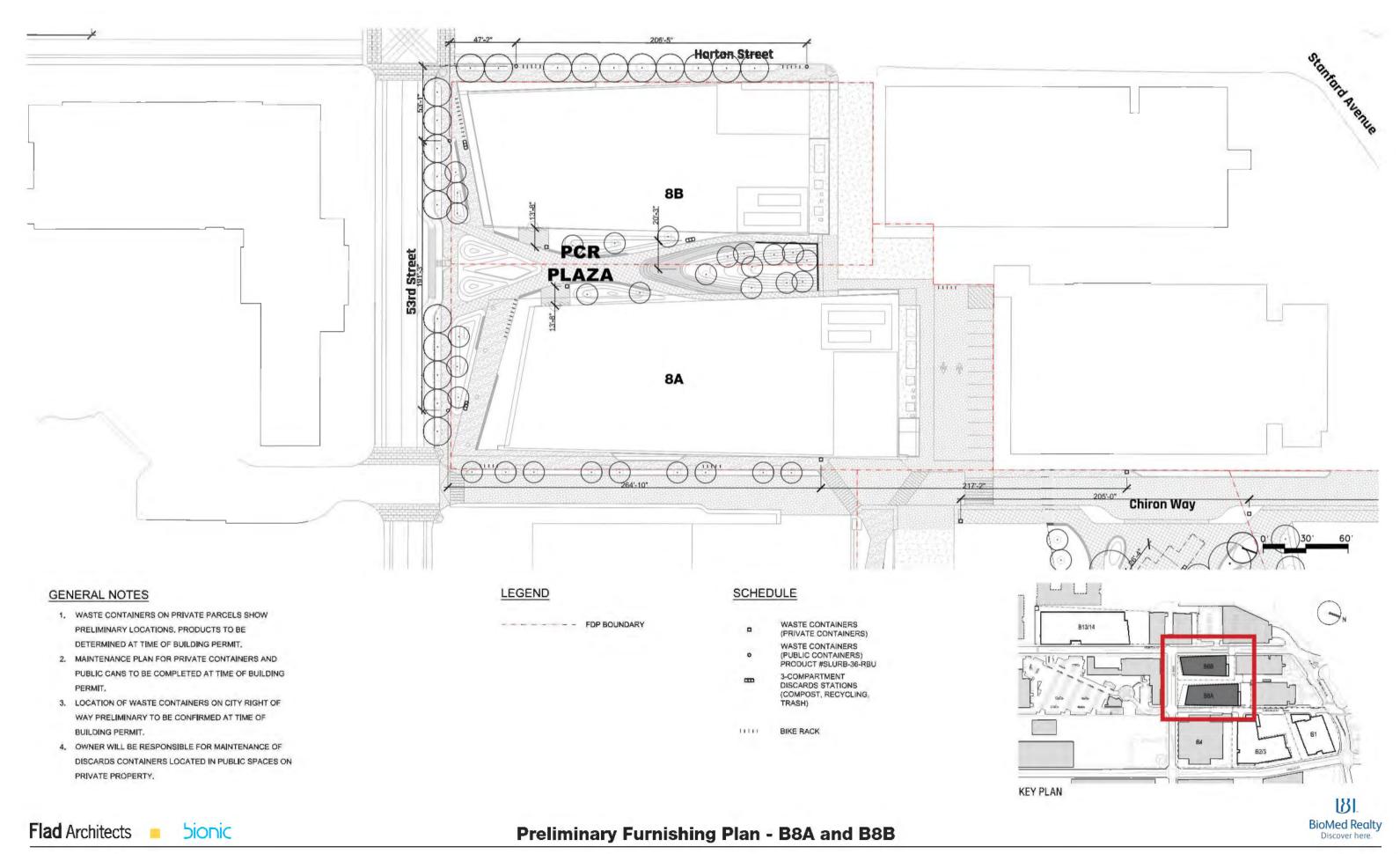
- WASTE CONTAINERS (PRIVATE CONTAINERS)
- WASTE CONTAINERS (PUBLIC CONTAINERS) PRODUCT #SLURB-36-RBU
- 3-COMPARTMENT
  DISCARDS STATIONS
  (COMPOST, RECYCLING,
  TRASH)
- HIH BIKE RACK

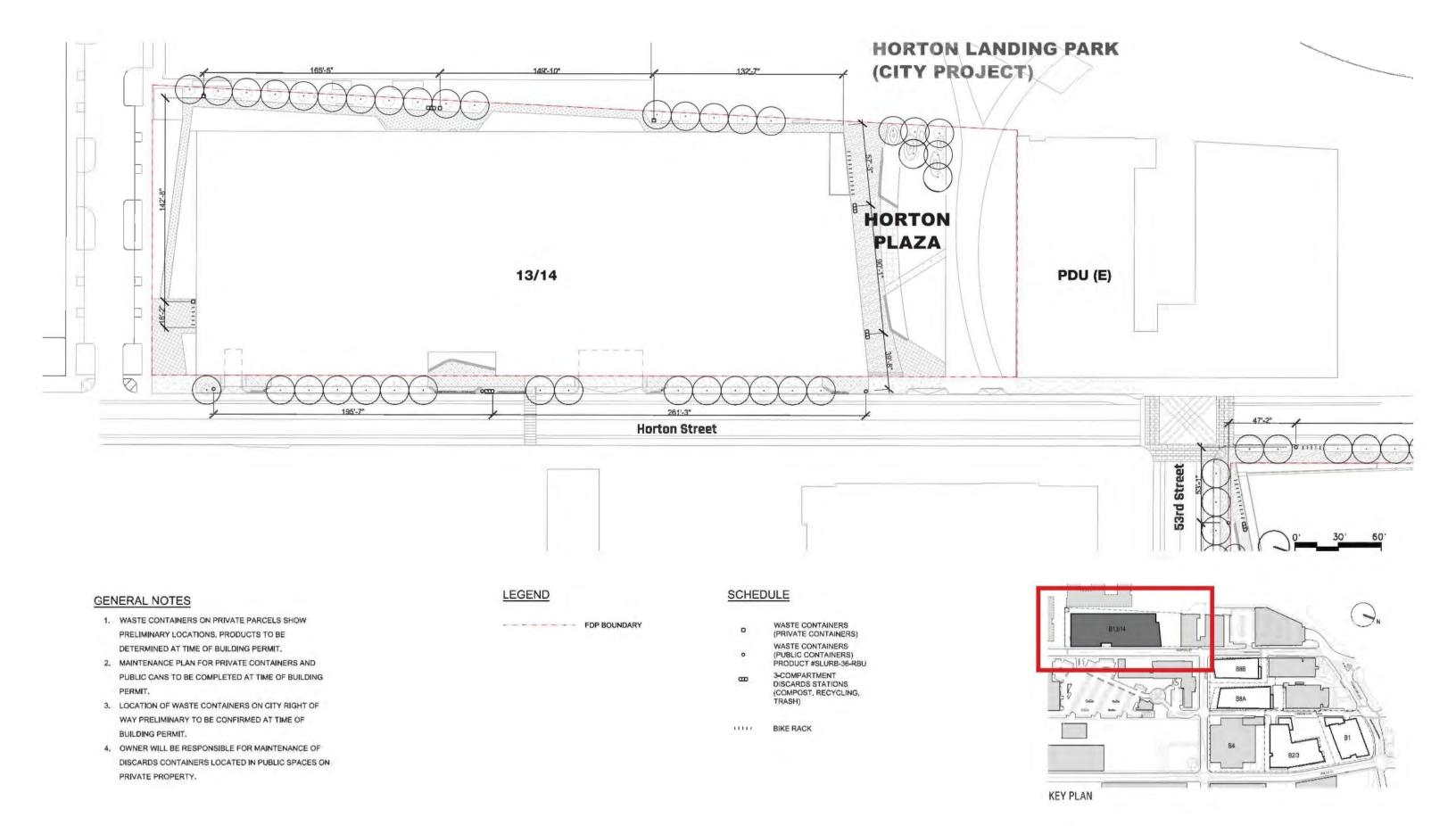


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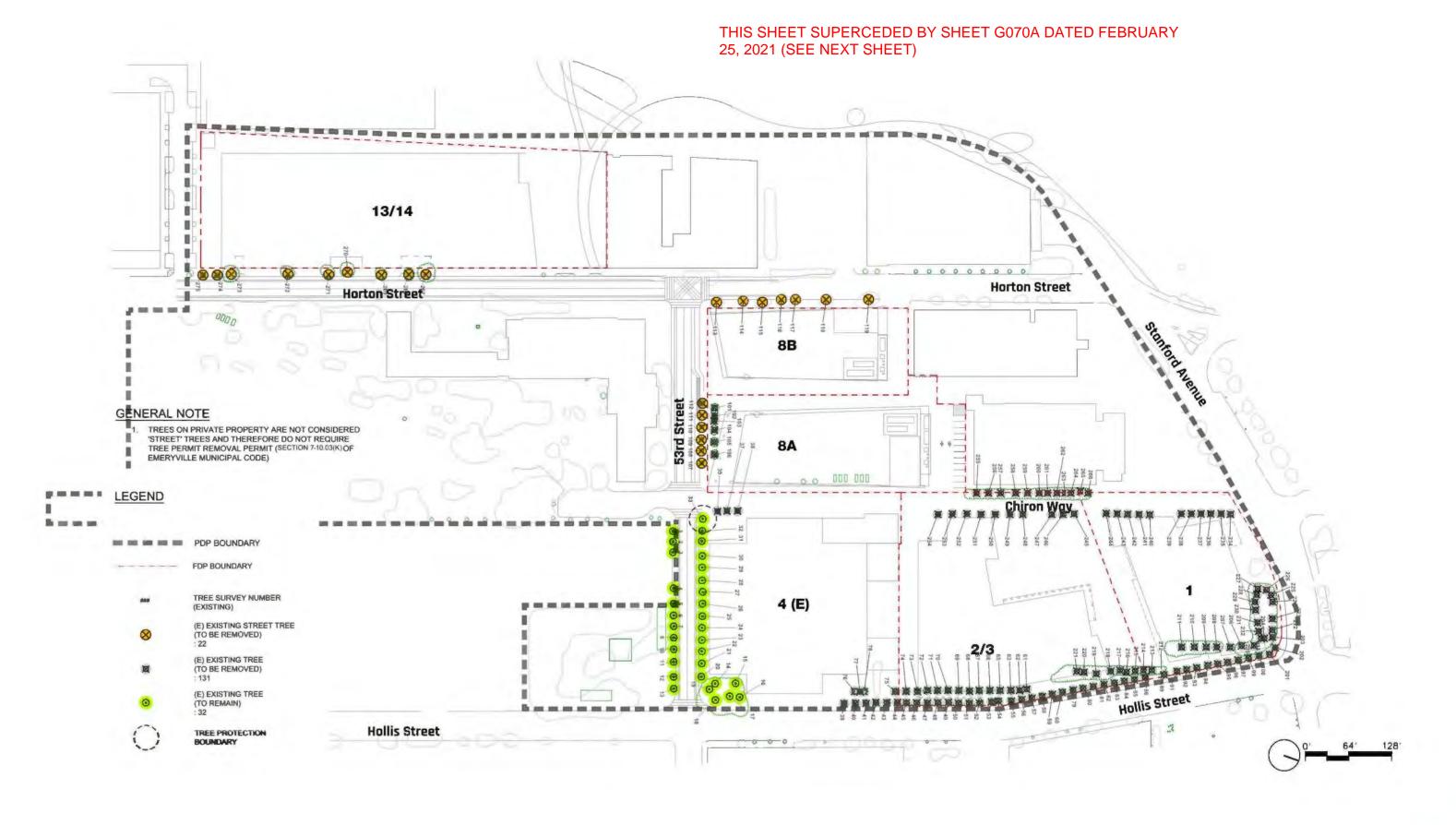
Symbol	Bolanical Heme	Common Name	Native or Adaptive	Evergreen/ Deciduous		Size *	Salribuit	Size @ 10 Yr.			WUCOLS	
								н	w		L-W-H	Nursery Availability
Trees							-	-	-			
Am.	Arbutus Manna	Strewberry Tree	A	E		36 DOX	\$10	20	15	15	UM	60 box - Big trees nursery
Ced	Cedrus deodara	Deoder Cedar	N	E		36 bax	Std	40	20	20	M	1 gal - Monterey bey nursery
Se .	Cercis texensis 'Oklahoma'	Oklahoma Redbud	N	D		24 box	Mutti	15	15	15	L/M	24 box - Beimont nursery
lm:	Jacaranda mimosilolia	Jacaranda	A	0		72 box	S16	30	20	20	L	72 box - Big Trees nursery
Die .	Olea europea 'Swan Hill'	Swan Hill Olive	A	E		72 box	Std	307	30	30	L	72 box - Big Trees nursery
>	Quarcus bicolor	American Dream Dak	N	0		48 box	Std	55	40	50	M .	
Qr .	Quercus frametto Forest Green'	Hungarian Oak	A.	0		48 box	Said	60	40	60	M	24 tios - Boething treetand ferms
												15 gal & 24 box - Boetning
ar .	Quercus rubra	Red Call	N	0		36 box	Std	60"	50	60	Mi.	treeland farms
26	Quercus buckleys	Texas Fled Cak	N	0		18 box	Std	30"	30'	30	L	#15 - Beimont nursery
Quer	Guercust macrocarps a robur	Hirritage Cah	N	0		48 box	Std	80	40	60	M	24 box - Boething treating farms
Qe	Quercus engelmennii	Engelmann Oak	N	E		60 box	Multi	40	90	90	L	60 box - Big trees nursery
Qu	Quercus Iomentolia	Island Oak	H	3		36 box	Bad	40	35	30	H	
Qv	Quercus virginiana	Southern Live Clak	N	E		60 box	\$10	40'	60	60	M	60 box - Big trees nursery
Street Trees												
M	Acer x freemans	Freeman Maple	A	O		24 box	Std	50"	35	25	M	#15 - Beimont nursery
lr .	Acer rubrum 'Armstrong'	Armstrong Gold Red Maple	N	0		24 box	Std	50'	15	25	H	24 box - Belmont nursery
Gb	Ginkgo biloba Princeton Sentry	Princeton Sentry Maidenhair	A	0		24 box	\$1d	50	15	15	M	24"Box - Normans Hursery
Pc	Pietacia chinensis 'Keth Devey'	Kerth Devey Chinese Pistache	A	6		24 box	Std	40'	30	30	L	60 box - Big trees nursery
Que	Quercus muehlenberge	Chinquepin Oak	N	0		24 bax	Std	40	50	50	M	
Np.	Robinia pseudoecacia Frisia'	Frisia Black Locust	A	0		24 box	Std	40'	25	30	M	
И	Schinus terebinthilolius	Brazilien Pepper	A	E		24 bas	Std	40"	30	30	L	24 box - Belmont nursery
Cin	Quercus robur x alba 'Crimschmidt	Crimson Spire Dait	A.	D		24 box	Std	45	15	20	M	#15 - Belmont nursery
Qb	Quercus robur x bicolor 'long'	Regal Prince Columnar Oak	A	0		24 box	Std	45	16	20	M	#15 - Belmont nursery
Woody Shrubs			100	100						300		
Mac	Mahonia aquifolium 'Compecta'	Oregon Grape	N	€		1 Gal		24	42	42	L	15 gal - pacific nursery
Mar	Mahonia aquifolium ver ropens	Creoping Barbony	N	8		1 Gal		30	42	42	L	15 gel - pacific nursery
Ra	Ribes sanguineum	Red-Flowering Current	N	0		5 Gal		72	72	72	L	5 gel - Bay netnes nursery
RG .	Risemous cardomica Linie Sur	Little Sur Coffeeberry	N	E		1 Gai		48	46	48	L/M	5 gat - pacific nursery
lv	Symphonicarpos albus	Snowberry	N	0		1 Gei		72	96	96	L/M	1 gal - Bay natives nursery
By Dec	Ceanothus Conche	Concha Wild Lilac	N	2		5 Gal		96	96	96	L	5 gal - pacific nursery
Fc	Fremontodendron californicum	California Fianneibush	N	8		5 Gal		84	84	84	VL.	5 gal - pacific nursery
u u	Ligustrum japonicum	Wax-leef privet	A	8		5 Gal		84	72	72	M	1
Y	Photiva x faseri	Frauer photinus	A	6		5 Gal		120	120	72	84	
PI	Prunus taurocerasus	Cherry Laurel	N	€		3 Gal		30	30	30	M	15 gal - pacific nursery
Ni.	Pitrus integritoria	Lemonade Berry	N	E		5 Gel		00	96	60	L	15 get - pacific nursery
Rv	Ribes vibumilatium	Evergreen Current	N	E		5 Gal		48	72	72	L.	5 gal - Bay natives nursery
Sa	Salva apana	White Sage	N	E		1 GM		80	60	60	VL	1 gat - pacific nursery
Sc	Salva clevelandii Winnifed Gilman	Blue Cleverand Sage	N	E		1 Gel		60	80	60	L	1 gel - Bay natives nursery
81	Salva Inucantha Midnight	Purple Mexican Sage	A	8		5 Gal		48	60	48	L	Point Sal' 5 gal - pacific nursery
Se	Salva spathaces	Hummingbird Sage	N	6		5 Gai	_	30	48	36		5 gat - Say natives nursery
54	s ava spanacea	Purchagere sage	N			2 (18)	_	120	40.	34	L	o gai - say name nowery
Perennials	+	-	-	-	-	-	-	$\vdash$	-	_	-	
B.	Erigeron karvinskianus	Mexican Delsy	N	8		1 Gar		12	30	30	L/M	QT - Monterey Bay nursery
Egr	Enogonum grande var. rubescens	Red-Flowered Buckwheat	N	E	_	1 G#	_	18	18	18	-	1 gal - Bay natives nursery
-tm	Heuchera maxima	Island Alum Root	N	E		1 Gal	-	18	30	30	L	1 gai - Bay natives nursery
d	ins douglasiana	Douglas Ins	N	E		1 Gel		18	18	18	L	1 gat - Bay netives nursery
Ma	Mirrorkis aurentiacus	Sticky Monkey Flower	N	8	_	1 Get	-	42	42	42	L	1 gal - Bay natives nursery
Map	Mimulus aurantiacus var puniceus	Red Monkey Flower	N	Ē		1 Get	-	42	42	42		1 gal - Bay natives nursery
Ln	L-opie nodifiore		A	C		1 Get	-	24	24	24	L	1 gel - Bay netires nursery
		Common Lippia				1 Gai		48	36	36	M	1 gai - Monterey bey nursery
Am	Acanthus mories  Cave ministe	Oak Leaf Acanthus	A	3		1 GB	-	-		24		
Apr		Orange Cinta Giant Chain Fern	A	E		1 Gai	-	48	48	36	M	1 gas - Monterey bay nursery
	Woodwerdia fimbriata Ademisia californica 'Montara'		M	E				24		36		1 gal - Bay netires nursery
Ac .		Montara Sagebrush Sonoma Coest Yarrow	N	2		1 Gal	-		48	18	VL	1 gal - Bay natives nursary
An .	Achillea millefolium 'Sonome Coast' Asclepias speciosa	Showy Milkweed	A	0		1 Gal		12	48	1.192	L	1 get - Bay netives nursery 1 get - Bay netives nursery
Ne Nu	Alium unifolium	One Leaf Onion	N.	0		1 Gal		24	18	12	M	
Bc .	To be a second of the second o	California Fuchsia	4		_	1 Gai	-				4-	1 gal - Bay natives nursery 1 gal - Bay natives nursery
	Egilobium carium		M	0			-	18	36	36	L	
er	Eriogonum fesciculatum	Carifornia Buckwheat	N	6		1 (3a)		36	48	36	L	1 gal - Bay natives nursery
Eac	Eschecholzia californica	Caritomia Poppy	N	0		1 Gel	-	18	18	18	VL	1 gal - Bay natives nursery
Lia	Lavendula x intermedia 'Alba'	White Linender	A	E		1 Gal		38	36	24	L	
Mv	Monardella vilosa	Coyote Mint	N	E		1 Gal		18	18	18/24	VL	1 gal - Bay natives nursery
Vi	Verbene lilecine 'De la Mina'	Lilac Verbena	A	8		1 Gat	-	24	36	24	L	1 gai - Bay nathes nursery
Vo	Verbene hipinnatifide	Valley Launder Plains Verbena	A	3		1 Gat		12	18	12	L	
												1
Granus Sedges /							-	-	-	100		
Clb	Carex barbarae	Santa Barbara Sadge	N	3		1 Gal	-	24	12	12		1 gal - Bay neives nursary
Cel	Carex divuisa	Berkeley Sedge	A	0		1 Gat		24	24	24	L	1 get - Soquel nursery growers
OI .	Chongropetalum tectorum	Smell Cape Rush	A	8		1 Gar		30	36	36	L	
His	Helictotrichon sampenirans	Blue Oat Grass	A.	3		1 Gat		18	18		L	
Ap Mic	Juncus petiens	Californis Grey Ruen	N	8		1 Gai		24	12	12	L	1 gai - pacific nursery
	Muhlenbergia capitlaris	Pink Muhly Grass	A	3		1 Gal		48	42	42	L	1 & 5 gai - pacific nursery
p .	Stipa pulchra	Purple Needlegrass	N	8		1 Gar		48	48	48	L	1 gal - Bay natives nursery
De	Deschampsia cespitosa	Tulted Hair Grees	A	E		1 Gai		24	24	24	L	1 gal - pacific nursery
· Op	Hordeum brachyantherum	Meadow Barley	M	6	-	3 Gail		30	30		L	
.b	Lomandra longifolia 'Breeze'	Dwarf Mat Rush	A	E		1 Gai		36	36	36/48	L	1 gal - Monterey bay nursery
de .	Muhlenbergia rigens	Deergrass	N	8		1.Gat		48	48	48	L	1 & 5 gal - pacific nursery
PLANT MIX 1 (DR	OP SEEDED APPLICATION)			17,745 SF		-			4			
	Boulelous gracilis	Blue Garrima Grass	IN-			Seed		112	12		L	E&E Seeds
				-	_		+			-		The state of the s
						25 20 0025		112	1365		II.	
	Citia captata	Silver Lupine Blue Thirnble Fluver	N			Seed	_	12	36	_	L	S&S Seeds S&S Seeds



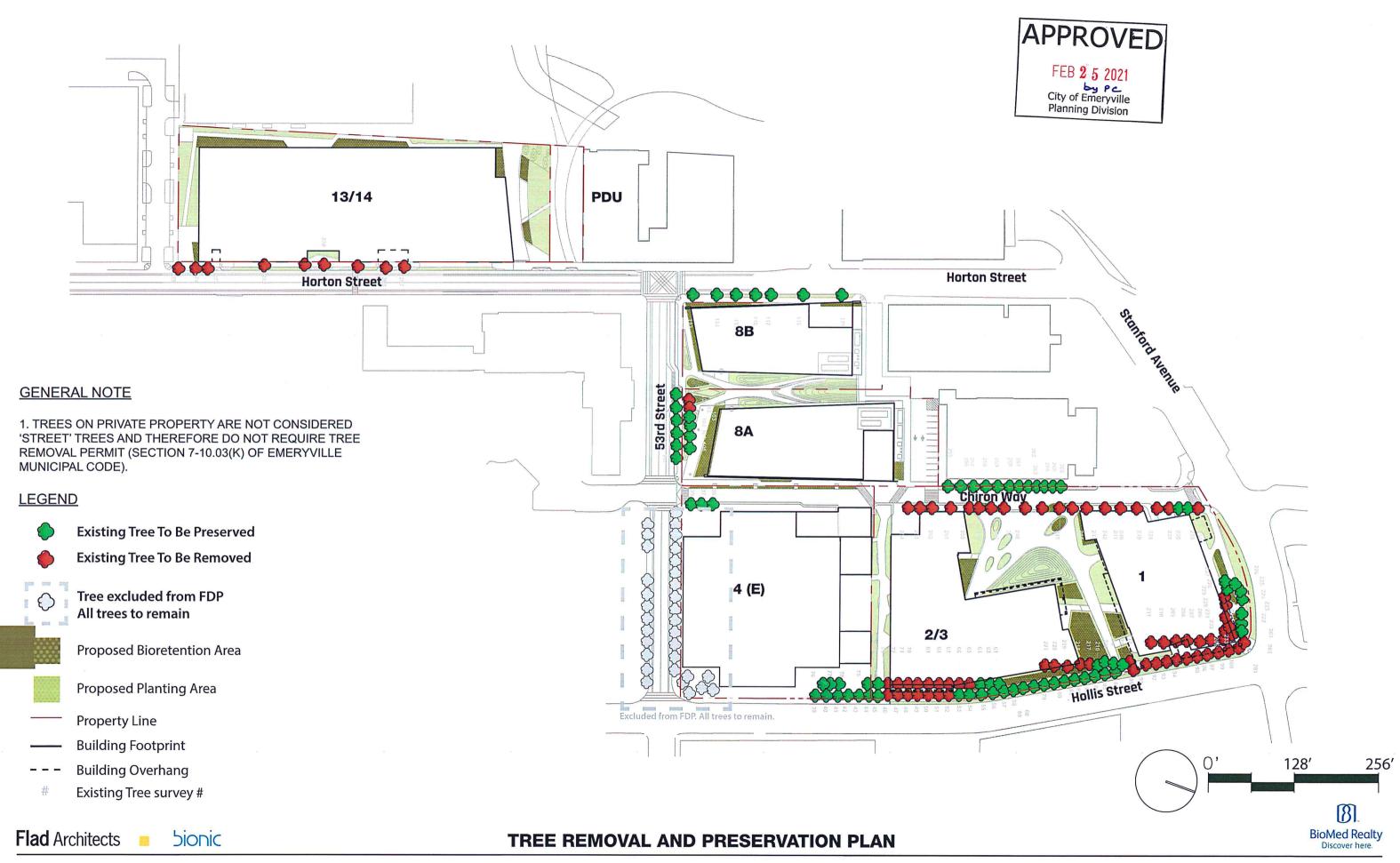




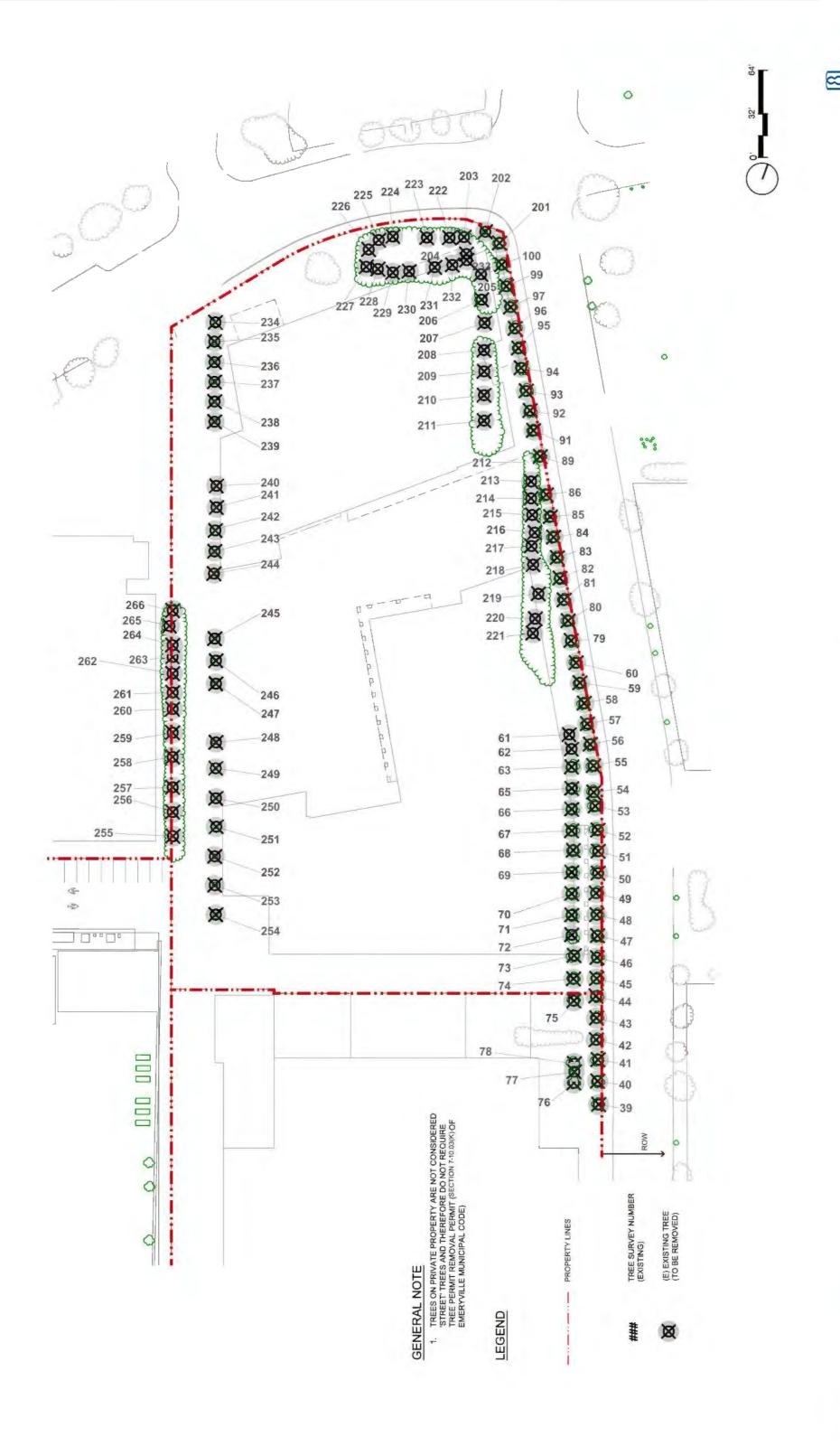


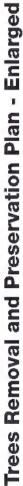


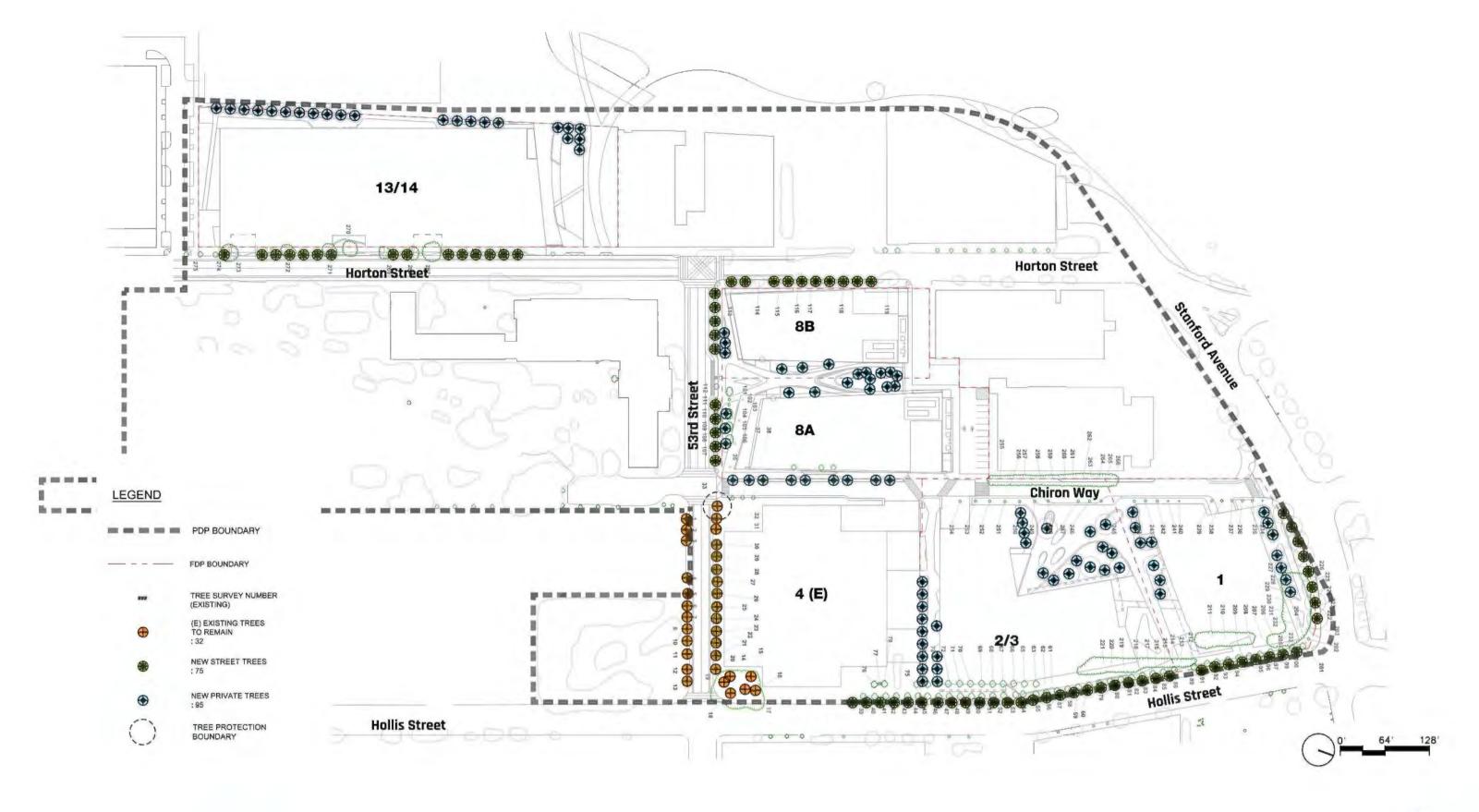




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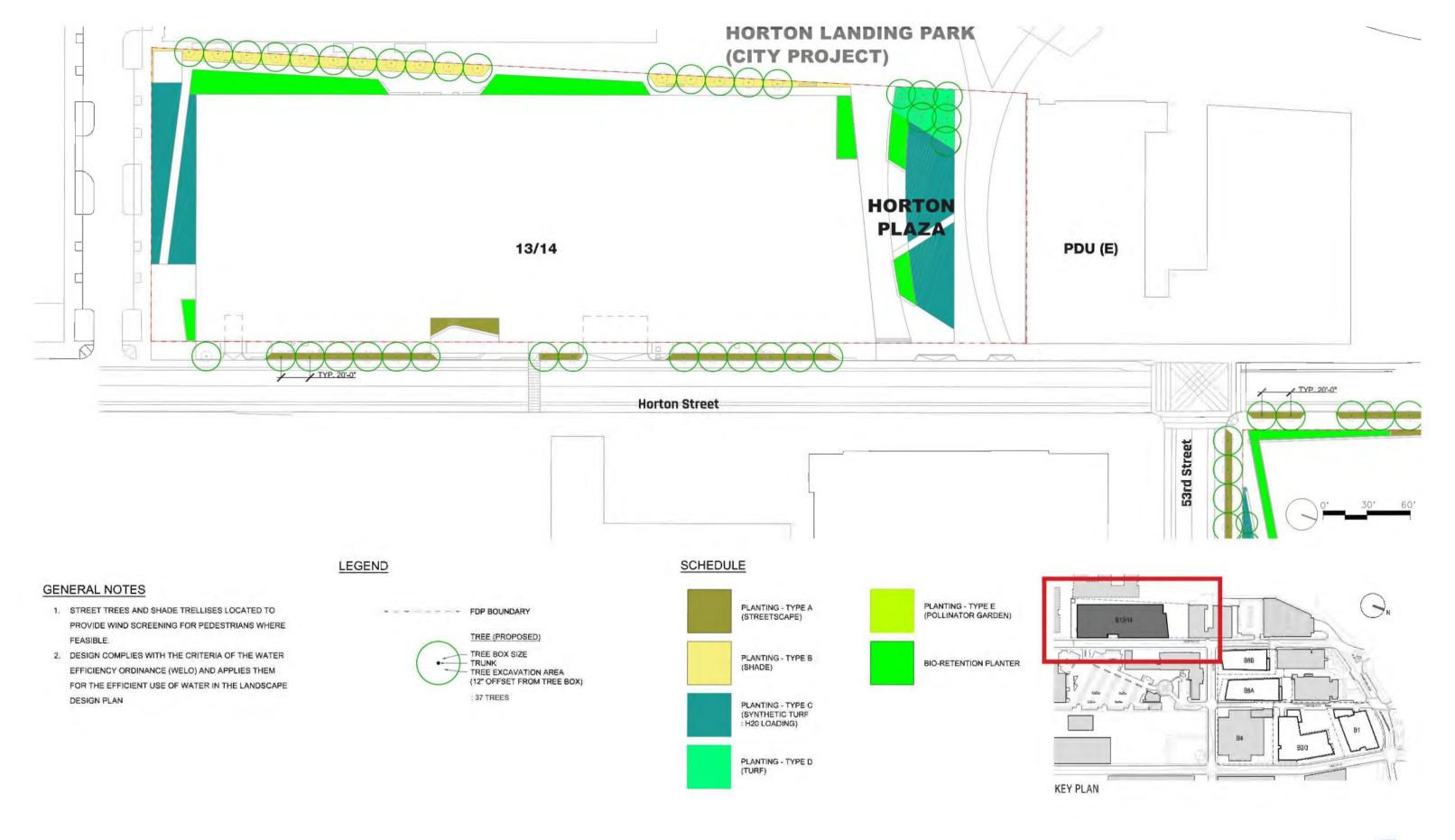
- STREET TREES AND SHADE TRELLISES LOCATED TO PROVIDE WIND SCREENING FOR PEDESTRIANS WHERE FEASIBLE.
- DESIGN COMPLIES WITH THE CRITERIA OF THE WATER EFFICIENCY ORDINANCE (WELO) AND APPLIES THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN

## LEGEND SCHEDULE PLANTING - TYPE A (STREETSCAPE) - - FDP BOUNDARY ---- SHADE STRUCTURE PLANTING - TYPE B (SHADE) PLANTING - TYPE C TREE (PROPOSED) (MEADOW) TREE BOX SIZE TREE EXCAVATION AREA (12" OFFSET FROM TREE BOX) PLANTING - TYPE E (POLLINATOR GARDEN) : 83 TREES **KEY PLAN** EXISTING TREE BIO-RETENTION PLANTER

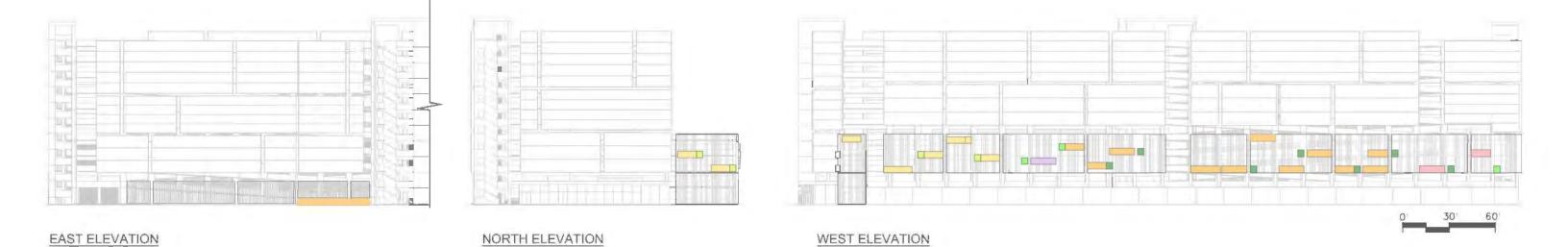




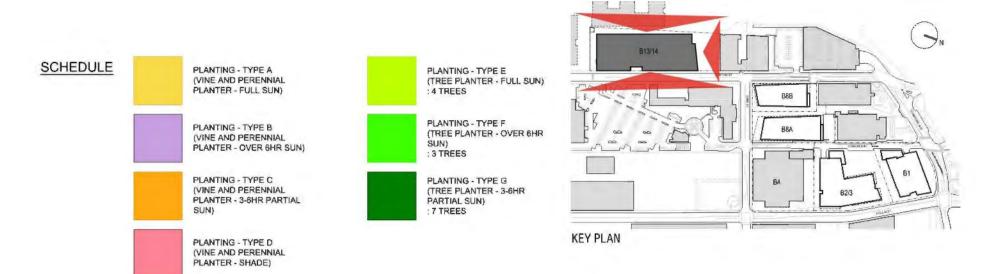








- STREET TREES AND SHADE TRELLISES LOCATED TO
   PROVIDE WIND SCREENING FOR PEDESTRIANS WHERE
  FEASIBLE:
- DESIGN COMPLIES WITH THE CRITERIA OF THE WATER
   EFFICIENCY ORDINANCE (WELO) AND APPLIES THEM
   FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE
   DESIGN PLAN
- PARKING GARAGE OPENINGS SHALL COMPLY WITH CBC 406.5.2 FOR NATURAL VENTILATION

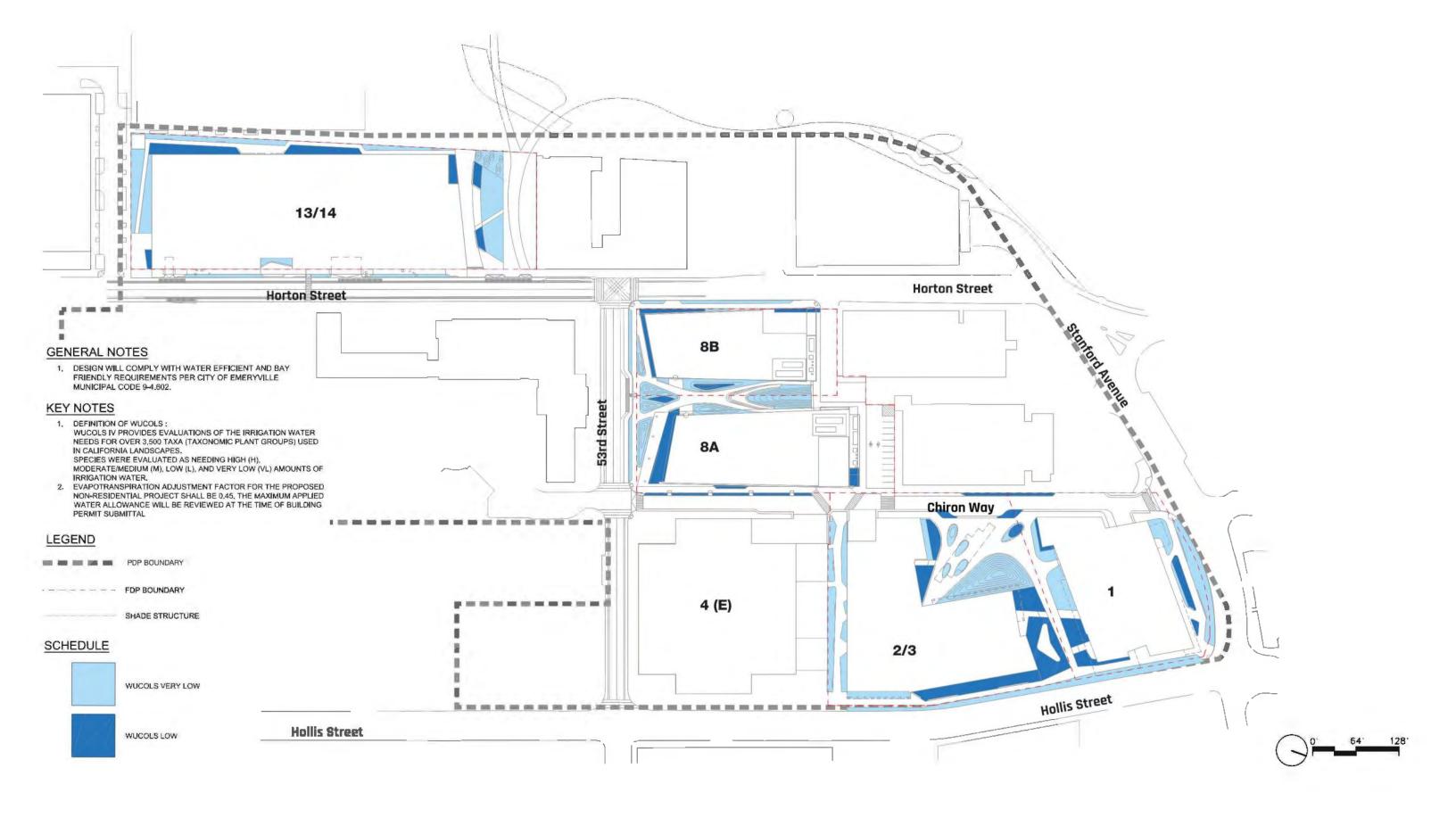




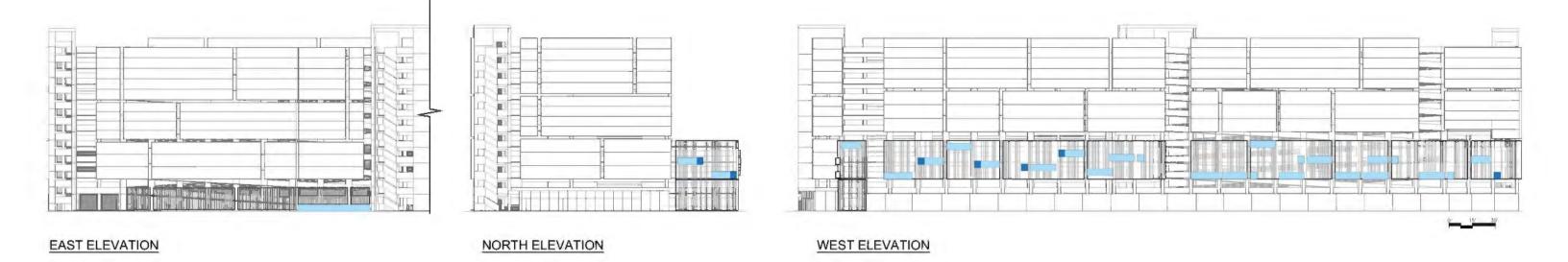




Preliminary Planting Plan - B13/14 (Elevation)



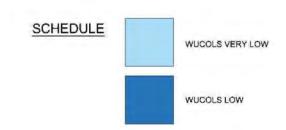


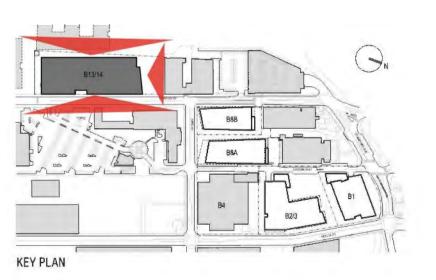


 DESIGN WILL COMPLY WITH WATER EFFICIENT AND BAY FRIENDLY REQUIREMENTS PER CITY OF EMERYVILLE MUNICIPAL CODE 9-4.602.

### **KEY NOTES**

1. DEFINITION OF WUCOLS :



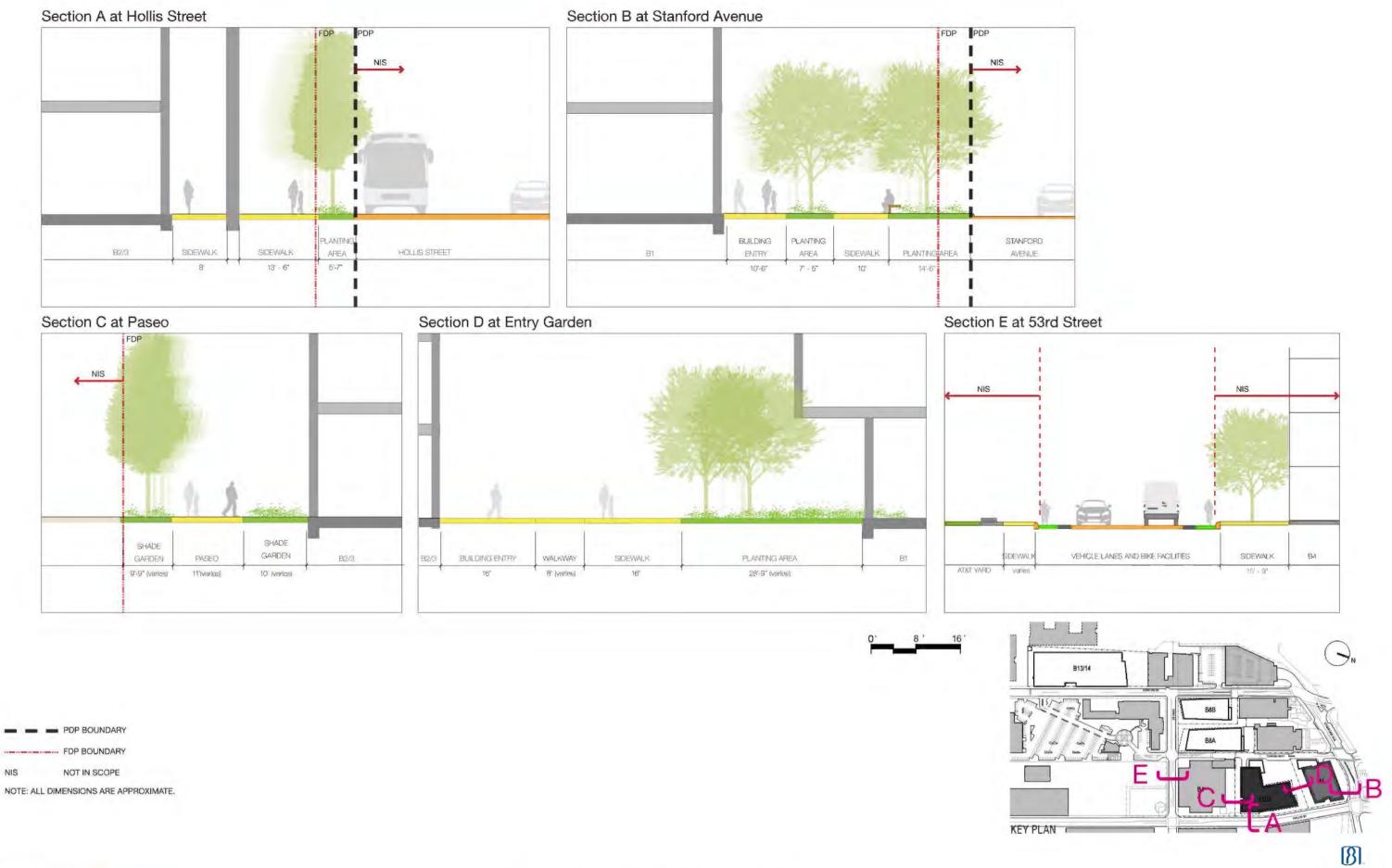


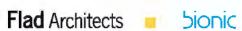




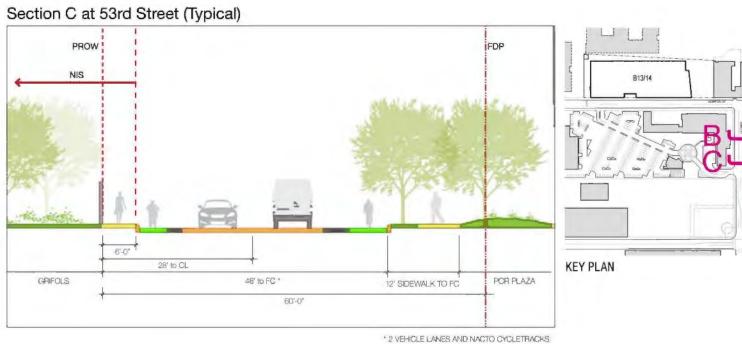
Hydrozone Plan - B13/14 (Elevation)





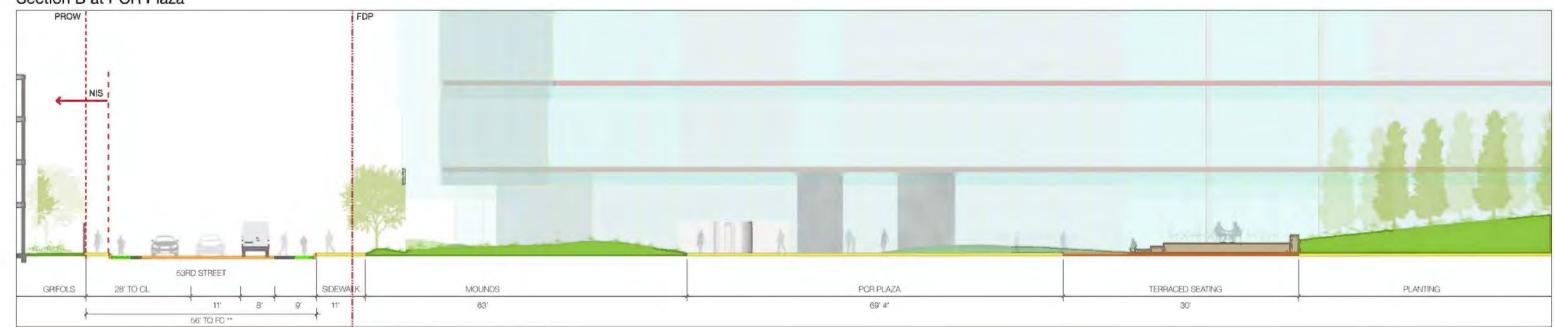






0' 8' 1

### Section B at PCR Plaza



" 2 VEHICLE LANES. LOADING ZONE AND NACTO CYCLETRACKS

FDP BOUNDARY

NOT IN SCOPE

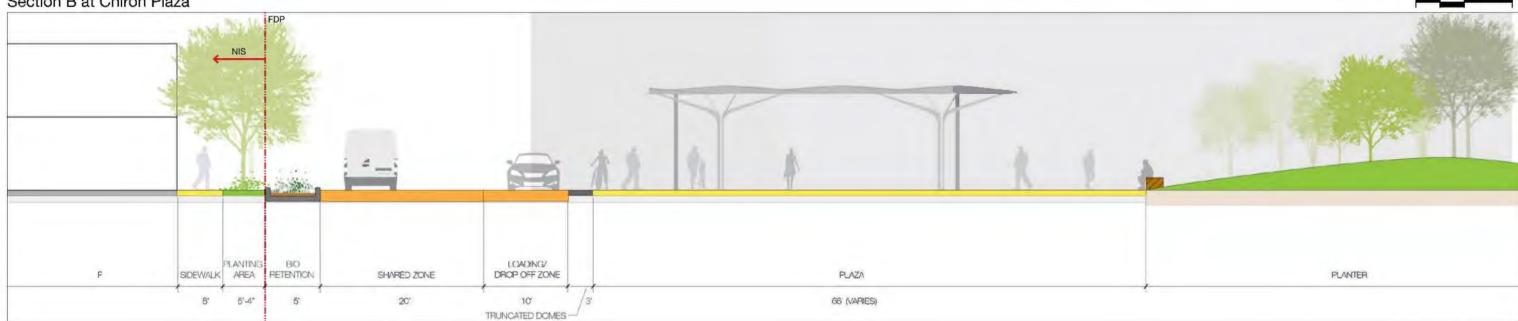
NOTE

1, PROPOSED BIKE FACILITIES WILL BE NACTO COMPLIANT ONE-WAY CYCLETRACKS (SOFT BUFFERED, HARDSCAPE BUFFERED OR RAISED)





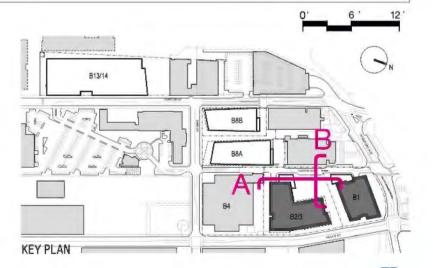
# Section A at Chiron Plaza 1 PLANTING AREA PLAZA PLANTING & SEATING PLAZA PLANTING PLA



NIS NOT IN SCOPE

NOTE: ALL DIMENSIONS ARE APPROXIMATE.

**Sionic** 

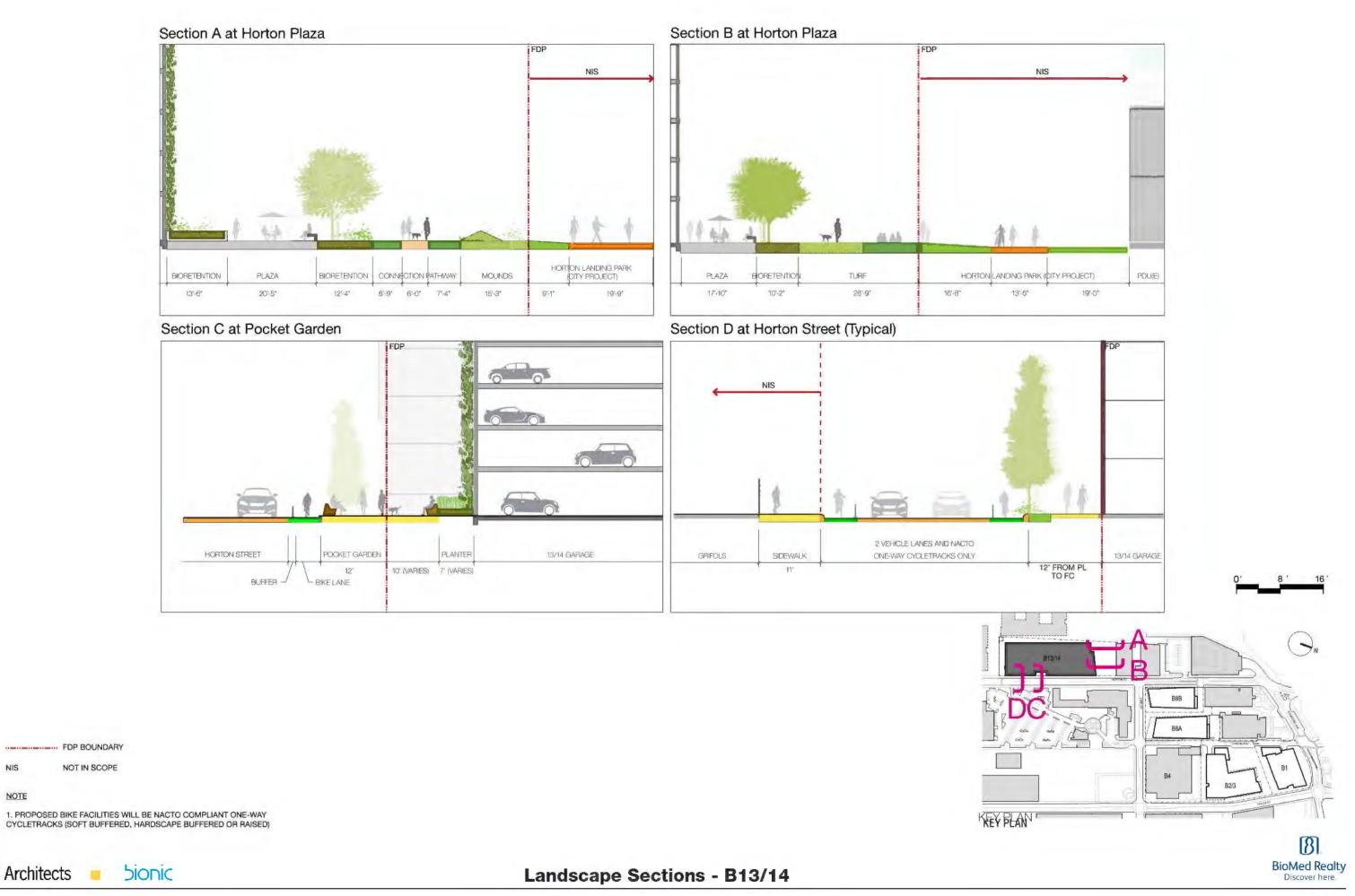


SERVICE

42

12'-2

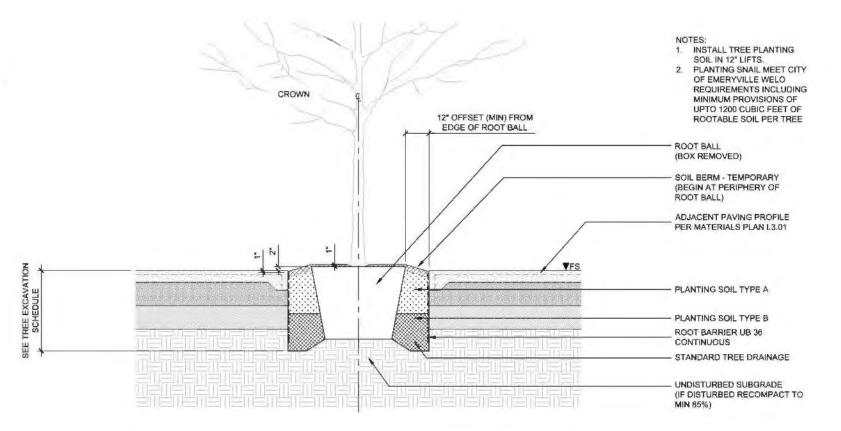




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NOTE

PLANTING DETAILS ARE TYPICAL
AND PLANTING DETAILS WILL BE
INCLUDED IN ACCORDANCE WITH
THE REQUIREMENTS INCLUDED IN
DOCUMENT DATED NOVEMBER 4,
2020 ENTITLED "CITY COMMENTS
ON PLAN SET DATED OCTOBER
19, 2020."



STANDARD TREE PLANTING - CONSTRAINED CONDITION
SECTION

SCALE: 1/2" = 1" - 0"

D

PLAN

ROOTBALL
PLANTING SOIL

4" DIA. SCH40 RIGID PERF PIPE, INSPECTION RISER AT L.P. OF SUB-DRAIN

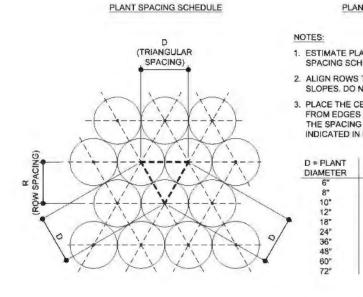
MIRAFI 140N
FILTER FABRIC

4" DIA. FLEXIBLE PERF PIPE
ASTM NO. 57
DRAIN ROCK

STORMDRAIN
CONNECTION, S.C.D.

UNCOMPACTED SUBGRADE
TREE PEDESTAL





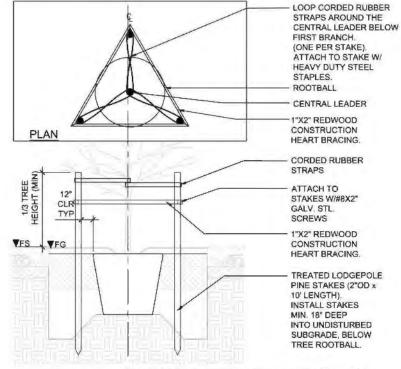
PLANT SPACING SCHEDULE

 ESTIMATE PLANT QUANTITIES ON TRIANGULAR SPACING SCHEDULE SHOWN BELOW.

- ALIGN ROWS TO BE HORIZONTAL ACROSS SLOPES. DO NOT PITCH.
- PLACE THE CENTER OF ALL PLANTS AWAY FROM EDGES AND WALLS 1/2 DIAMETER OF THE SPACING PLUS 6", UNLESS OTHERWISE INDICATED IN PLANTING PLAN.

D = PLANT	R = ROW	AREA, PER PLANT
DIAMETER	SPACING	(SQ.FT.)
6"	5"	0.22
8"	7*	0.39
10"	9"	0.60
12"	10"	0.87
18"	16"	1.95
24"	21"	3.46
36"	31"	7.80
48"	42"	13.84
60"	52"	21.65
72"	62"	31.20

CONTAINER PLANT SPACING SCALE: NTS

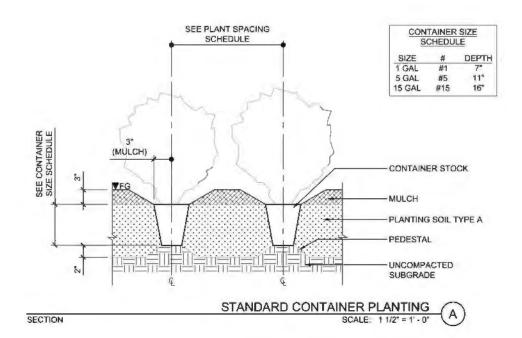


SECTION/ELEVATION/PLAN

STANDARD TREE TRIPLE STAKING

SCALE: 1/2" = 1'-0"

B



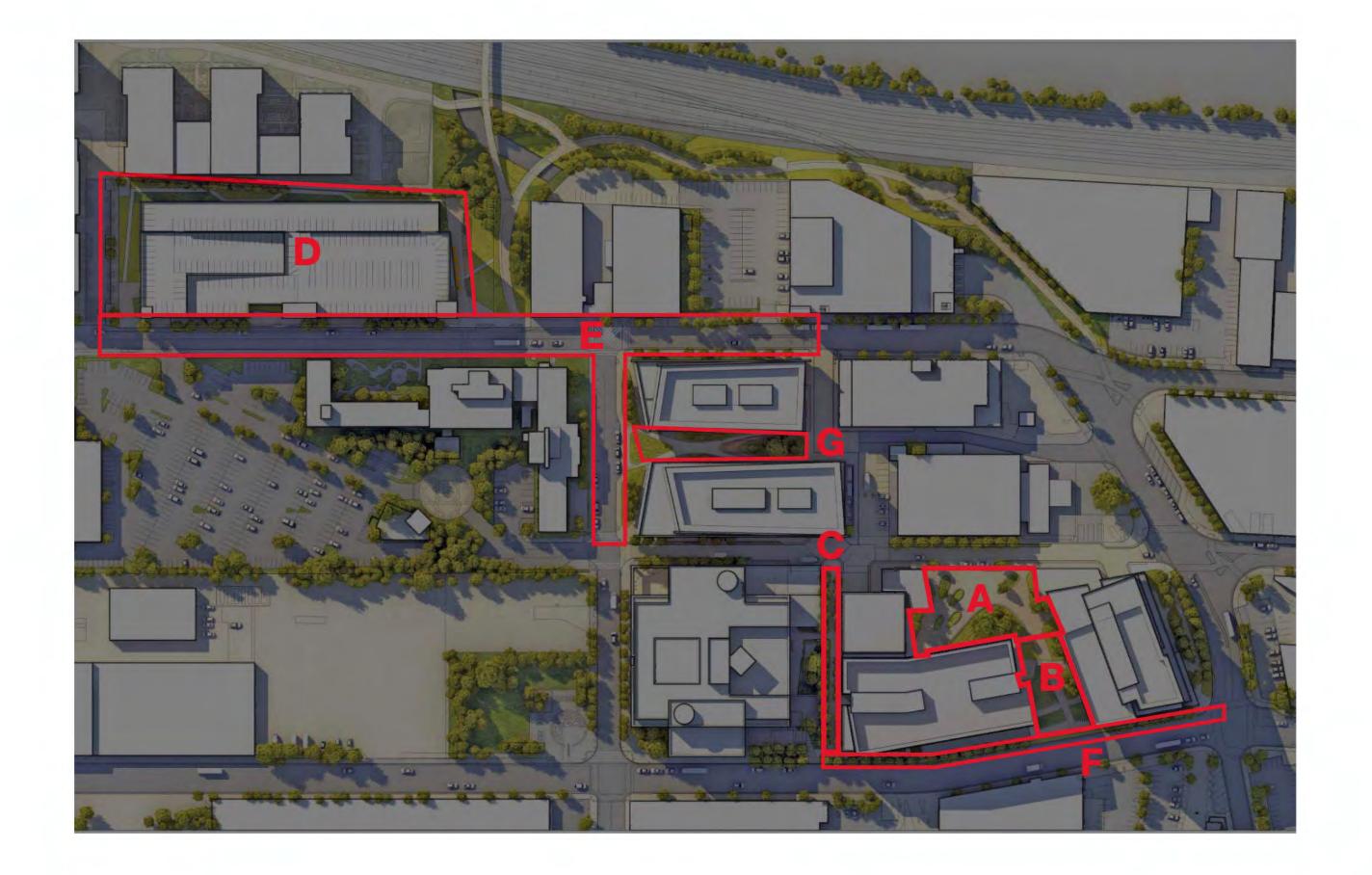
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**Sionic** 

**Planting Details** 

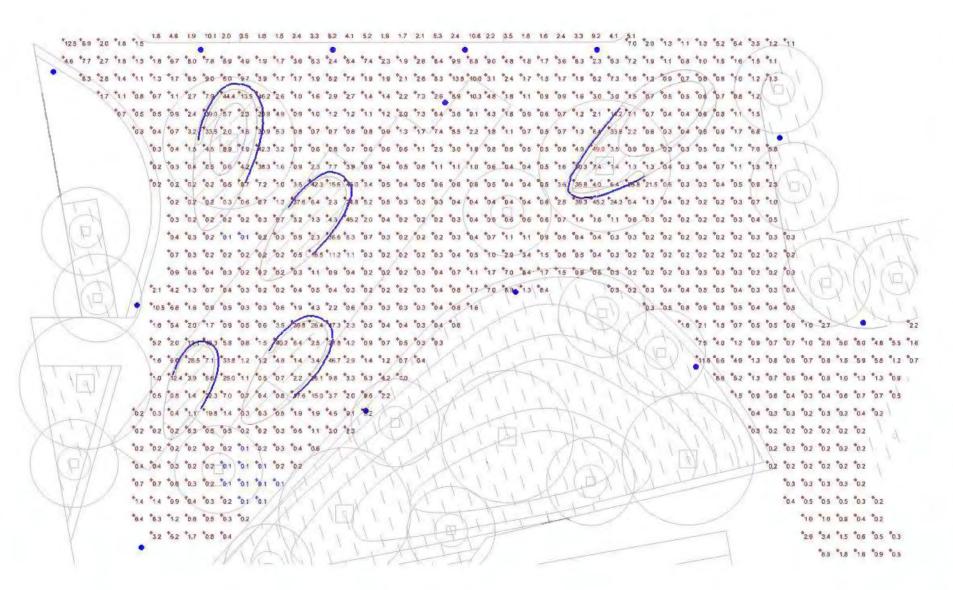
3. SITE LIGHTING







# Lighting Zone A



FULL CUTOFF 10-12' PEDESTRIAN POLE-MOUNTED LUMINARIES

VERTICAL ILLUMINANCE FOR FACIAL RECOGNITION AND INCREASED SENSE OF SECURITY

CHANNEL-MOUNTED STRIPS UNDER BENCHES

ILLUMINANCE AT PAVEMENT\*:

0.5FC AVG AT GRADE IN MEDIUM CONFLICT AREAS 
11-100 PEDESTRIANS PER HOUR

\*ILLUMINATING ENGINEERING SOCIETY (IESNA)
RECOMMENDED PRACTICE FOR ROADWAY AND
STREET LIGHTING (RP-8)



Kev Plan





LIGHTING LEVEL PLAN (FOOT-CANDLES)

# Lighting Zone B

FULL CUTOFF 10-12' PEDESTRIAN POLE-MOUNTED **LUMINARIES** 

VERTICAL ILLUMINANCE FOR FACIAL RECOGNITION AND INCREASED SENSE OF SECURITY

ILLUMINANCE AT PAVEMENT\*: 0.5FC AVG AT GRADE IN MEDIUM CONFLICT AREAS -11-100 PEDESTRIANS PER HOUR

\*ILLUMINATING ENGINEERING SOCIETY (IESNA) REC-OMMENDED PRACTICE FOR ROADWAY AND STREET LIGHTING (RP-8)



Key Plan







# \*03 \*03 \*03 \*03 \*02 \*0.5 \*0.6 \*0.6 \*0.5 \*0.3 \*0.2 \*1.1 \*1.1 \*0.9 \*0.5 \*0.3 \*3.0 \*3.4 \*1.6 \*0.7 \*0.5 \*0.3 \*8.6 \*1.8 \*1.6 \*0.9 \*0.5 1.6 \*8.6 \*3.7 \*1.2 \*0.6 \*7.4 \*3.4 \*1.3 \*0.7 \*0.4 \*2.7 \*1.5 \*1.0 \*0.6 \*0.5 \*22 \*25 \*4.3 \*7.7 \*40.3 \*2.0 \*6.7 \*2.5 \*21 \*46 \*9.0 \*0.7 \*1.0 \*1.0 \*0.8 \*0.5 \*0.2 \*0.2 \*2.0 \*2.5 \*2.5 \*1.0 \*0.7 \*0.6 \*0.5 \*24 \*24 \*25 \*0,9 \*0.9 \*0.8 \*0.6 \*0.4 \*7.5 \*7.1 \*2.2 \*1.4 \*1.4 \*0.9 \*0.5 \*8.0 \*1.8 \*5.7 \*5.2 \*1.2 \*0.7 \*0.5 \*3.9 \*5.0 \*1.5 \*08 \* †11.2 \*7.4 \*2.0 \*0.9 \*5.0 \*1.5 \*0.8 \*0.5 \*1.2 \*0.7 \*0.6 \*0.4 \*0.5 \*0.4 \*0.3 \*0.3 \*0.6 \*0.6 \*0.6 \*0.5 \*0.6 \*0.8 \*1.1 \*5.6 \*7.0 \*4.4 \*1.0 \*1.0 \*1.0 \*0.9 \*0.7 \*0.8 \*1.4 \*5.3 \*1.8 \*11.0 \*3.0 \*4.4 \*1.1 \*2.3 \*2.5 \*1.3 \*0.8 \*1.0 \*1.6 \*6.3 \*9.5 \*5.4 \*1.5 \*0.5 \*0.7 \*0.9 \*0.7 \*0.9 \*1.2 \*1.5 \*7.3 \*7.8 \*1.8 \*1.4 \*1.6 \*5.4 \*9.7 \* 6.4 \*1.5 \*0.9 \*0.8 \*1.0 \*2.0 \*7.2 \*2.1 \*1.8 \*7.9 \*30 \*1.3 2.0 1.5 0.8 \*1.9 \*42 \*25 \*10.5 \*1.8 \*4.7 \*1.4 \*0.9 \*0.8 \*1.0 \*7.7 \*29 \*12 \*2.4 \*3.1 \*5.0 \*6.6 \*4.9 \*1.2 \*0.9 \*0.7 17 12 09 \*8.5 \*8.3 \*3.4 \*2.5 \*2.0 \*08 \*08 \*0.7

LIGHTING LEVEL PLAN (FOOT-CANDLES)

10.9 8.5

\*0.5 \*0.4 \*0.5 \*0.8 \*1.4 \*4.3 \*1.9 \*9.8 \*1.8 \*0.3 \*0.4 \*0.5 \*0.7 \*0.9 \*4.1 \*5.4 \*3.1 \*0.2 \*0.2 \*0.3 \*0.3 \*0.7 \*1.2 \*1.2 \*1.1 \*0.5 

# \*2.1 \*2.4 \*2.3 \*1.9 \*2.4 \*2.8 \*2.6 \*2.1 \*2.6 \*3.0 \*2.9 \*2.3 \*2.0 \*3.0 ° 2.9 \*2.3 \*2.7 \*3.0 \*2.9 \*2.4 \*2.8 \*3.1 \*3.0 \*2.4 \*2.8 \*3.2 \*3.0 \*2.5 \*2.8 \*3.1 \*3.0 \*2.5 \*2.0 \*3.1 0\*3.0 \*2.4 \*2.7 \*3.1 \*3.0 \*2.4 \*2.8 \*3.2 \*3.1 \*2.5 +2.8 +3.2 +3.1 +2.5 \*28 \*32 \*3.0 \*25 \*2.0 \*3.1 \*\* 3.0 \*\*2.4 \*2.8 \*3.1 \*3.0 \*2.4 +2.8 \*3.2 \*3.1 \*2.5 \*2.8 \*3.2 \*3.0 \*2.5 \*2. \*3.1 \*3.0 \*2.4 \*2.8 \*3.1 \*3.0 \*2.4 \*2.8 \*3.2 \*3.1 \*2.5 22 \*28 \*32 \*3.0 \*25 12.1 12.0 13.1013.0 12.4 22 28 31 29 24 23 29 32 30 24 24 30 31 29 23 \*2.5 \*3.0 \*3.0 \*2.7 \*2.1 \*28 \*3,1 \*2.9 \*24 \*1.8 \*2.9 \*3.2 \*3.0 \*2.4 \*1.7 \*29 \*32 \*30 \*24 \*17 \*2.9 \*3.2 \*2.9 \*2.3 \*1.6 \*3.0 \*2.8 \*2.2 \*1.6 \*28 \*3.1 \*28 \*29 \*3.1 \*29 \*2.9 \*3.2 \*2.9 \*28 \*3.0 \*28 \*20 \*2.7 \*2.6 \*2.8 \*2.5

# Lighting Zone C

FULL CUTOFF CATENARY SYSTEM
SHIELDING SOURCES FOR DARK SKY REQUIREMENTS
BUILDING AND/OR POLE MOUNT
DEFINES PEDESTRIAN AREA, PLAYFUL, INVITING

ILLUMINANCE AT PAVEMENT\*:

0.2FC AVG AT GRADE FOR LOW ACTIVITY PROMENADE

\*ILLUMINATING ENGINEERING SOCIETY (IESNA)
HANDBOOK 10TH EDITION



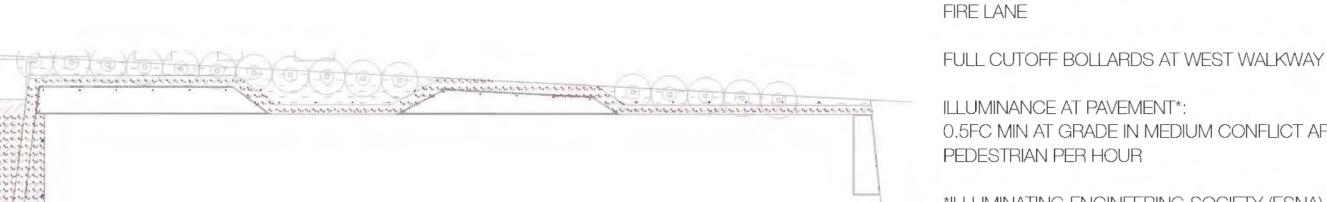
Key Plan





LIGHTING LEVEL PLAN (FOOT-CANDLES)

# Lighting Zone D



0.5FC MIN AT GRADE IN MEDIUM CONFLICT AREAS - 11-100

FULL CUTOFF WALL-MOUNTED LUMINARIES AT SOUTH WALL

\*ILLUMINATING ENGINEERING SOCIETY (ESNA) RECOMMENDED PRACTICE FOR ROADWAY AND STREET LIGHTING (RP-8)



Key Plan

PIV TAL

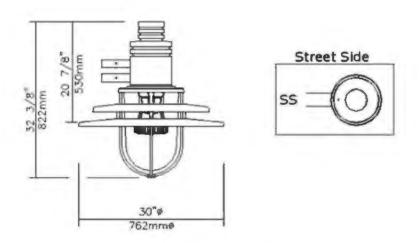


LIGHTING LEVEL PLAN (FOOT-CANDLES)

Flad Architects

bionic

**Lighting Zone D** 



EPA: 1.85 sq ft / weight: 44 lb (20 kg)

Qty 1	Type Luminaire	Single config – aimed towards pole [CAND2-013]-65W42LED4K-R-PC-C-RLE3-120-HS-GN4TX
-------	-------------------	--

#### **Description of Components:**

Guard: In a round shape, this guard is made of bent 6063-T5 aluminum 1/2" (13mm) rods mechanically assembled to the access-mechanism.

Skirt: Spun 1100-0 aluminum, mechanically assembled on the luminaire.

Housing: In a round shape, this housing is made of cast 356 aluminum, mechanically assembled to the bracket.

Access-Mechanism: Rotomatic, die-cast A360 aluminum quarter-turn mechanism with constant-pressure spring-loaded points. The mechanism shall offer tool-free access to the inside of the luminaire. An embedded memory-retentive gasket shall ensure weatherproofing. A red key on the unit shall indicate point of engagement.

Light Engine: Eco Swap Rotomatic tool-free system composed of 4 main components: LED lamp / Optical System / Heat Sink / Driver

Electrical components are RoHS compliant.

Globe: (PC-C), Made of one-piece seamless injected-moulded clear polycarbonate. The globe is assembled on the access-mechanism.

Lamp: LED Module (Included), LED type Philips Lumileds LUXEON R. Composed of 42 high-performance white LEDs, 65w lamp wattage. Color temperature of 4000 Kelvin nominal, 70 CRI. Operating lifespan based on TM-21 extrapolation to get results after which 50% of LEDs still emits over 70% (L70) of its original lumen output. Use of metal core board ensures greater heat transfer and longer lifespan of the light engine.

Optical System: (RLE3), IES type III (asymmetrical). Composed of high-performance acrylic refractor lenses to achieve optimized distribution and get maximum spacing, target lumens will create a perfect lighting uniformity. Performance shall be

single-wbanner-rotatedoptic DOC 06-12-2020 Page 1 / 7



# Flad Architects



# **Lighting Zone E and F**

# Lighting Zone E and F

# EXISTING STREET LIGHTS, AS REQUIRED:

- TO REMAIN
- BE RELOCATED
- REMOVE
- PROTECT
- REPLACE

# FOR NEW STREET LIGHTS, TARGET ILLUMINANCE AND UNIFORMITY PER IESNA GUIDELINES:

- PLAZA: 0.6FC AVERAGE, 5:1 AVG/MIN
- ROADWAY: 0.6 CD/SQM, 10:1 MAX/MIN
- BICYCLE PATH: 0.2FC AVERAGE, 4:1 AVG/MIN
- PEDESTRIAN PATH: 0.5FC AVERAGE, 4:1 MAX/AVG

Note 1: Illuminance and lighting suggestions selected from IESNA Lighting Handbook: Reference and Application. 10th Edition. Chapter 26

Note 2: Proposed streetlights will comply with current city standards and specifications



Key Plan





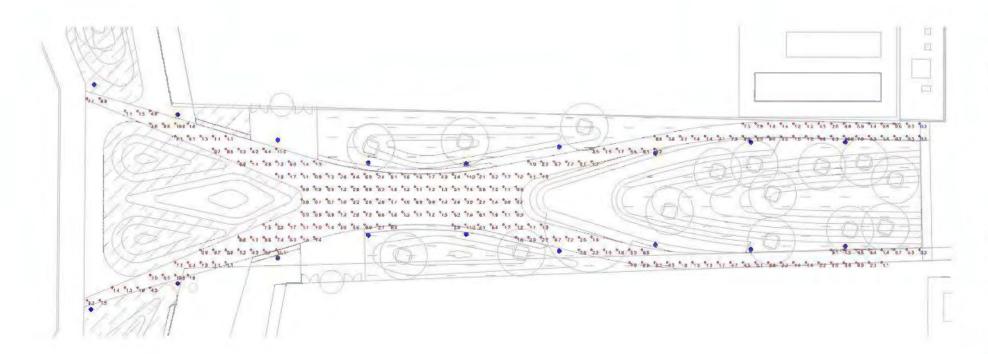
# Lighting Zone G

FULL CUTOFF 10-12' PEDESTRIAN POLE-MOUNTED LUMINARIES

VERTICAL ILLUMINANCE FOR FACIAL RECOGNITION AND INCREASE SENSE OF SECURITY

ILLUMINANCE AT PAVEMENT\*:
0.5FC AVG AT GRADE IN MEDIUM CONFLICT AREAS 11-100 PEDESTRIANS PER HOUR

\*ILLUMINATING ENGINEERING SOCIETY (IESNA)
RECOMMENDED PRACTICE FOR ROADWAY AND
STREET LIGHTING (RP-8)





Key Plan

LIGHTING LEVEL PLAN (FOOT-CANDLES)

Flad Architects

**Sionic** 

**Lighting Zone G** 









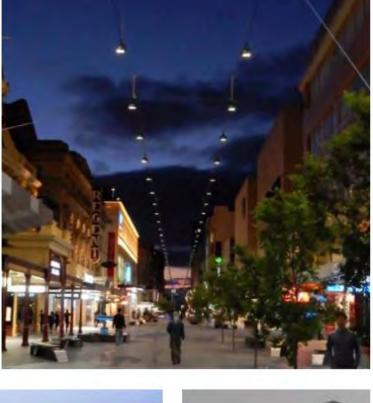




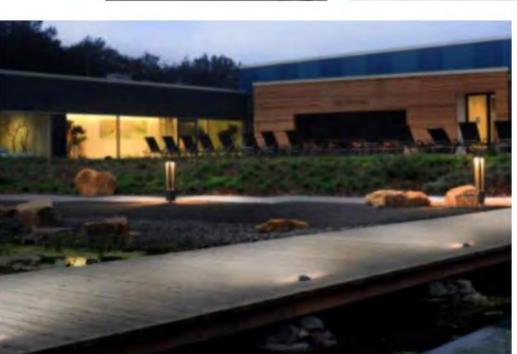
















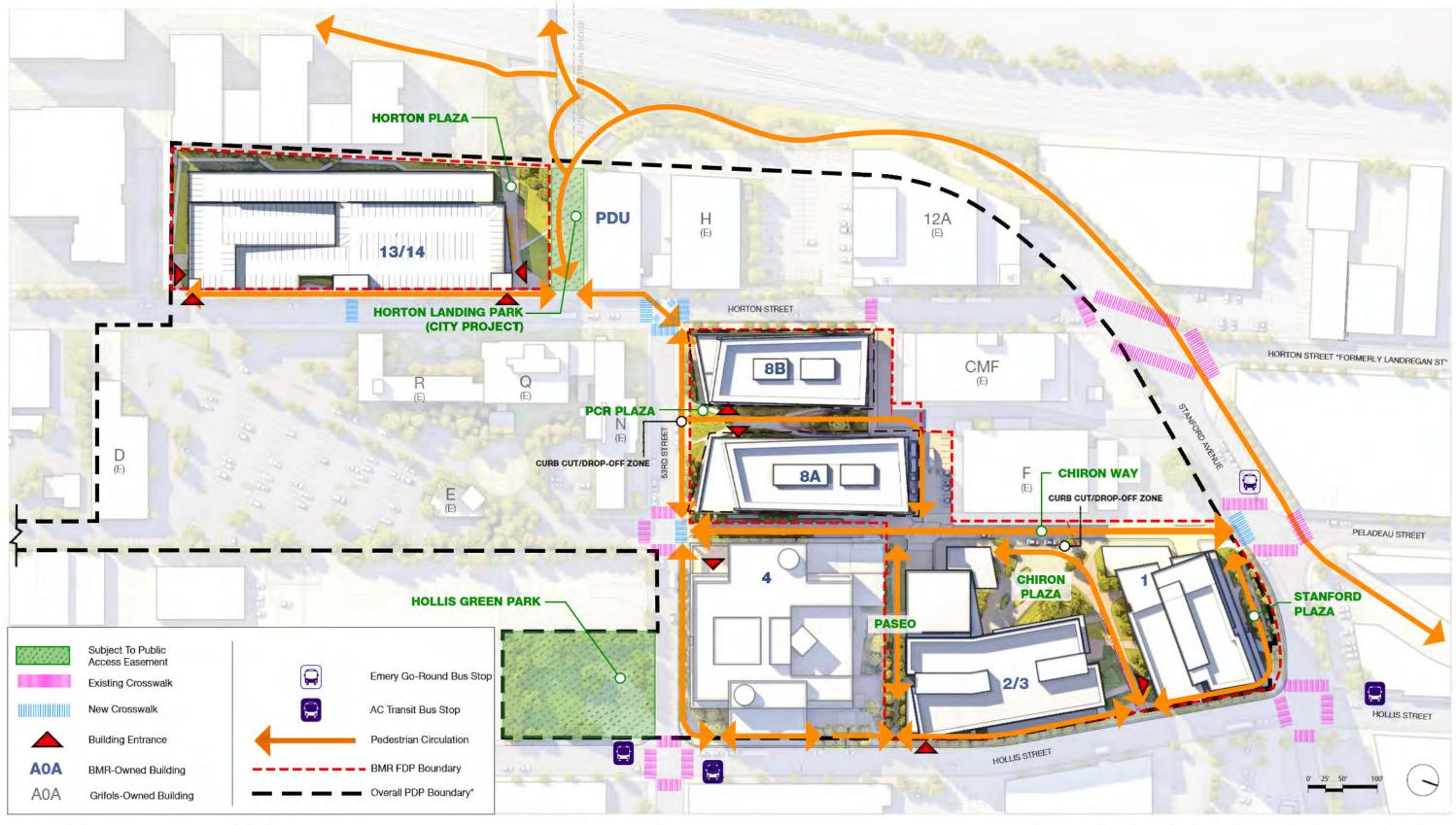








# 4. CIRCULATION & ACCESS



\*Per Preliminary Development Plan Figure 2-5 & 2-6 \*\*Per 2016 General Plan, Figure 4-1

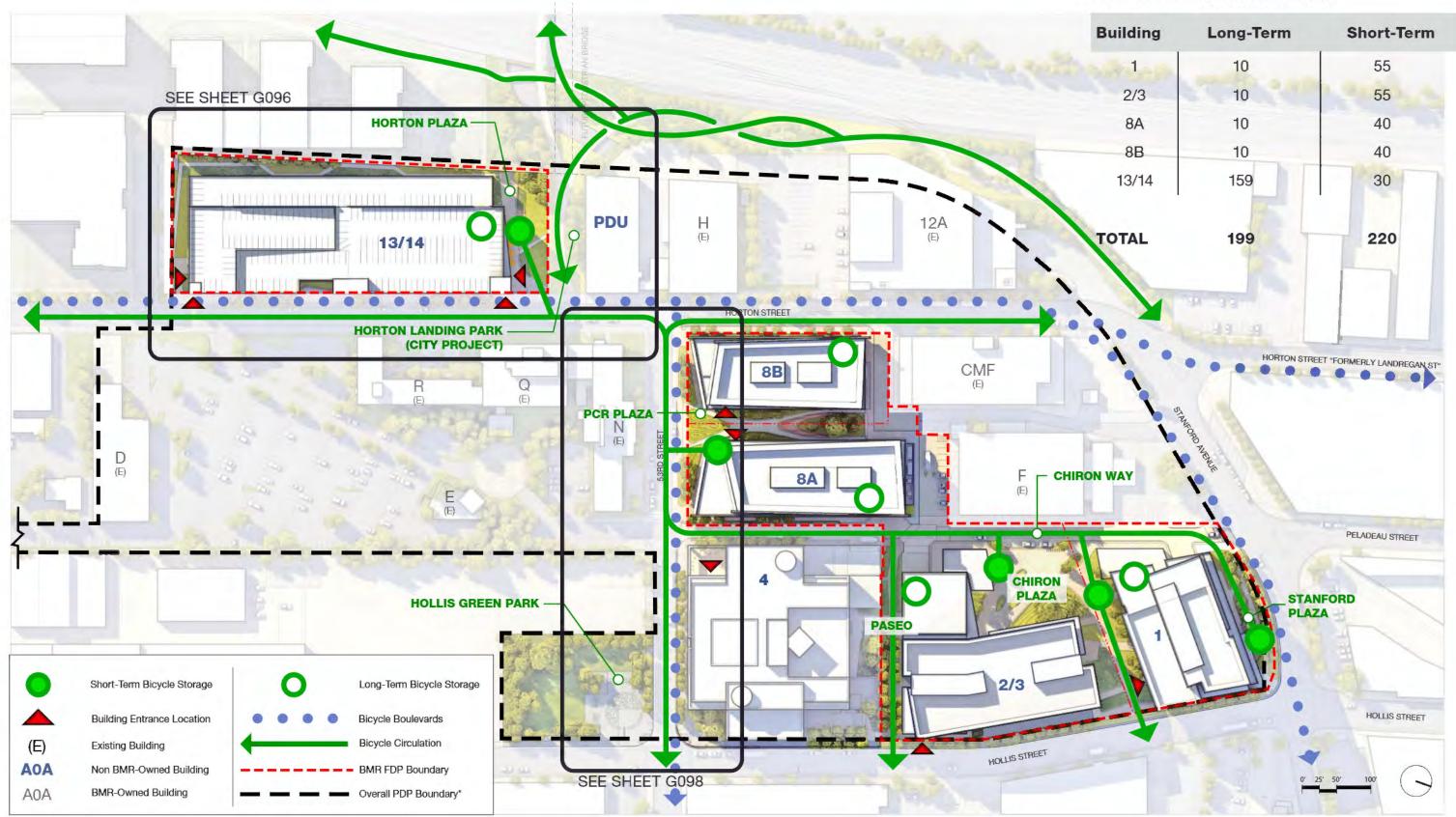
**Sionic** 

Note 1: Sidewalk along Horton Street will be minimum 8-feet width, and sidewalk along Stanford Street will be minimum 10-feet width; both open to the sky, per condition Design 90

Note 2: Refer to sheet G062, G063, and G064 for paving materials



#### PROPOSED BICYCLE PARKING

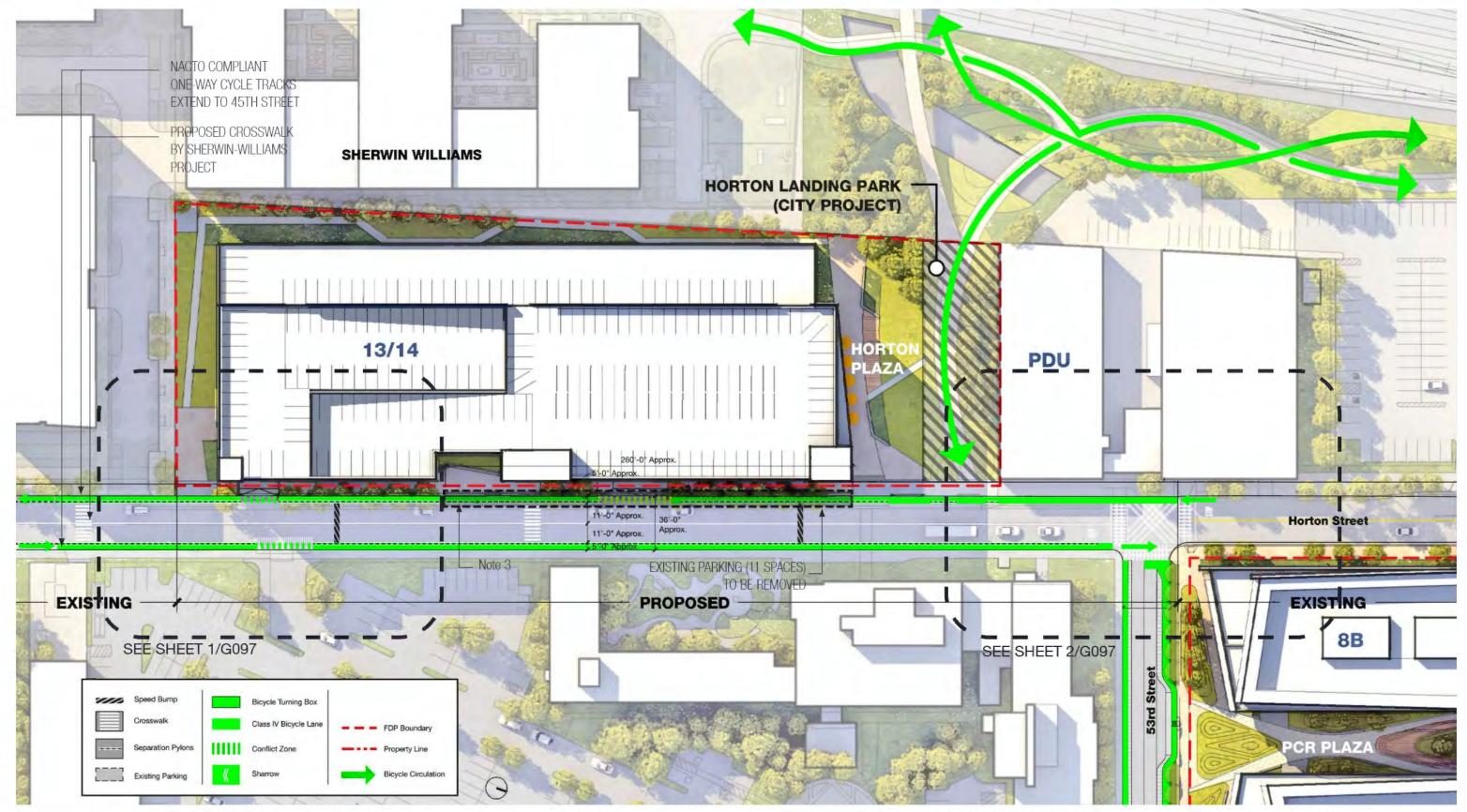


\*Per Preliminary Development Plan Figure 2-5 & 2-6

Note 1: Number of Parking counts per buildings are preliminary. Final count to be provided in permit phase

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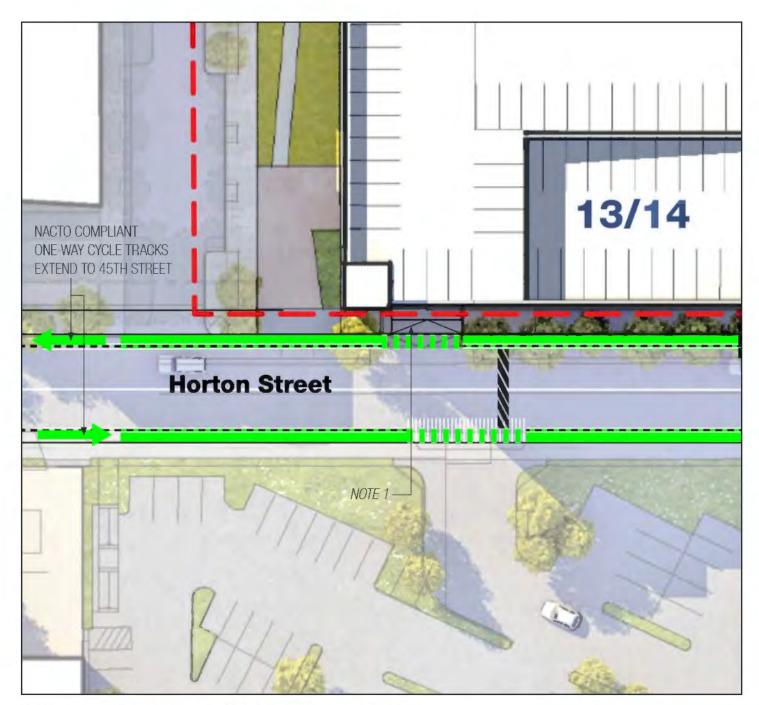




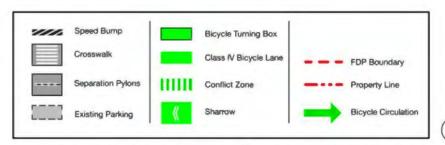
Note 1: Audio and visual warning devices at the junctions of sidewalk with automobile and truck access to garage. Alert system for project garage detects bicyclists and pedestrians and warns drivers existing the garage to yield. "Do Not Block" signage referring to the bicycle lane and sidewalk that activates when vehicle stacking beyond the limits of the parking structure is detected.

Note 2: Proposed bike facilities will be NACTO compliant one-way cycle tracks (soft buffered, hardscape buffered, or raised) Note 3: Jaywalking deterrent



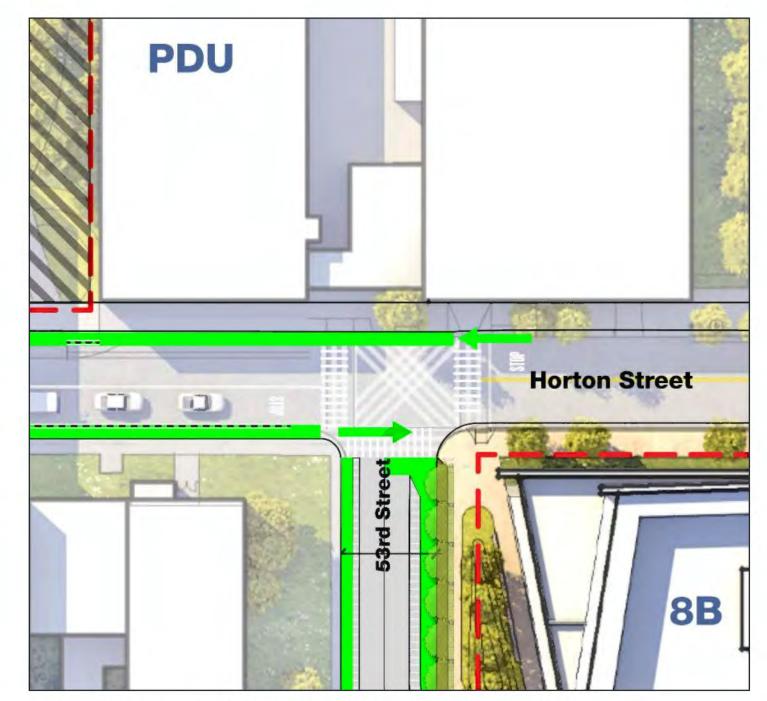


1) ILLUSTRATIVE PLAN - HORTON STREET - SOUTH



Note 1: Tactile Warning Surfaces will be used at sidewalk/driveway intersections. Refer to sheet G064

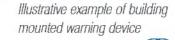
Note 2: Audio and visual warning devices at the junctions of sidewalk with automobile and truck access to garage. Alert system for project garage detects bicyclists and pedestrians and warns drivers existing the garage to yield. "Do Not Block" signage referring to the bicycle lane and sidewalk that activates when vehicle stacking beyond the limits of the parking structure is detected.



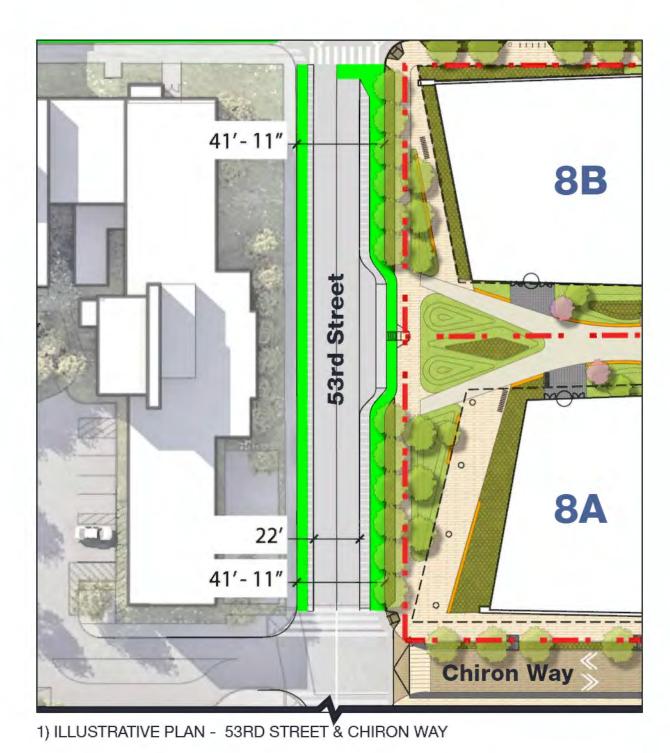
2) ILLUSTRATIVE PLAN - HORTON STREET & 53RD STREET INTERSECTION



Note 3: Proposed bike facilities will be NACTO compliant one-way cycle tracks (soft buffered, hardscape buffered, or raised)



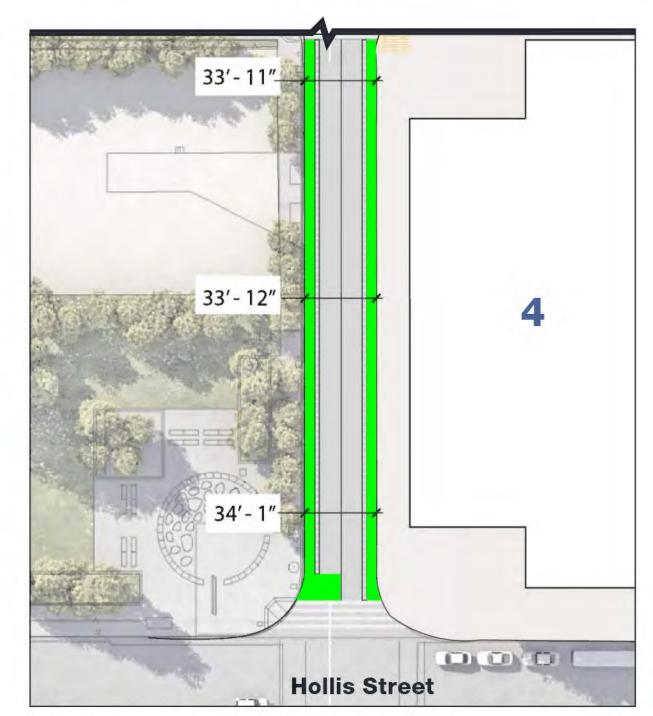




**Bicycle Turning Box** - FDP Boundary

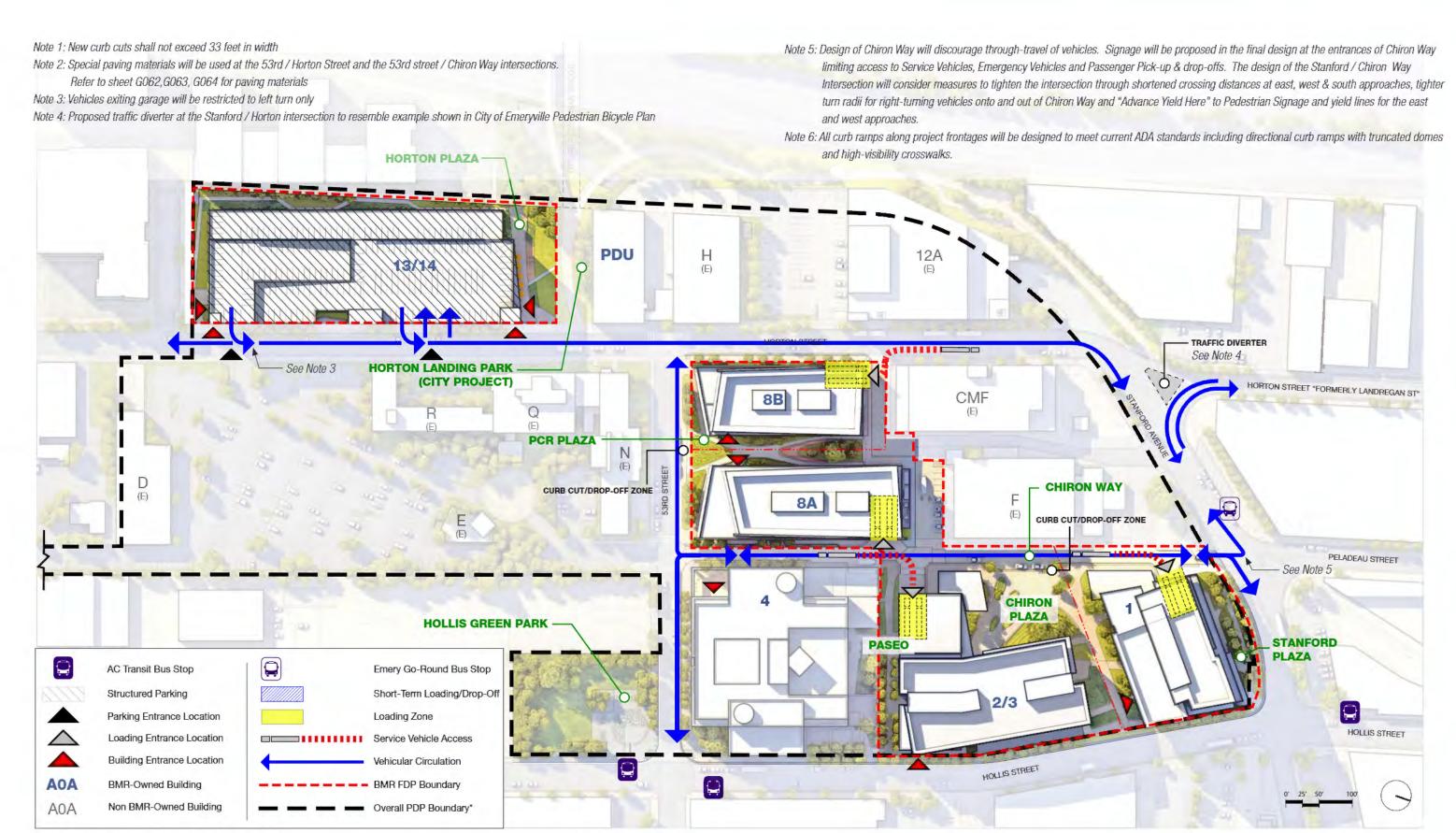
Conflict Zone - Property Line

Note 1: Proposed bike facilities will be NACTO compliant one-way cycle tracks (soft buffered, hardscape buffered, or raised)



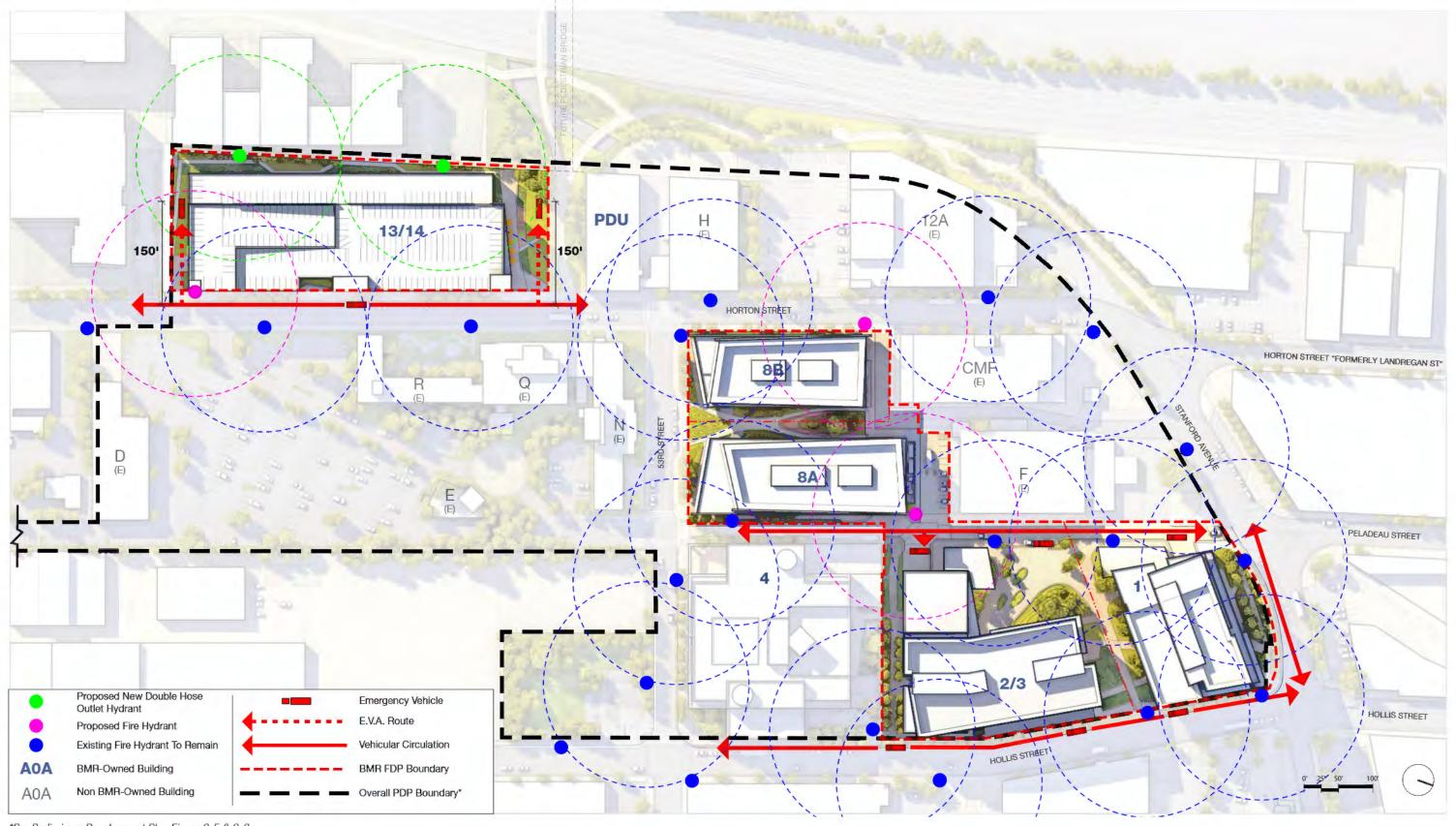
2) ILLUSTRATIVE PLAN - 53RD STREET & HOLLIS STREET





\*Per Preliminary Development Plan Figure 2-5 & 2-6





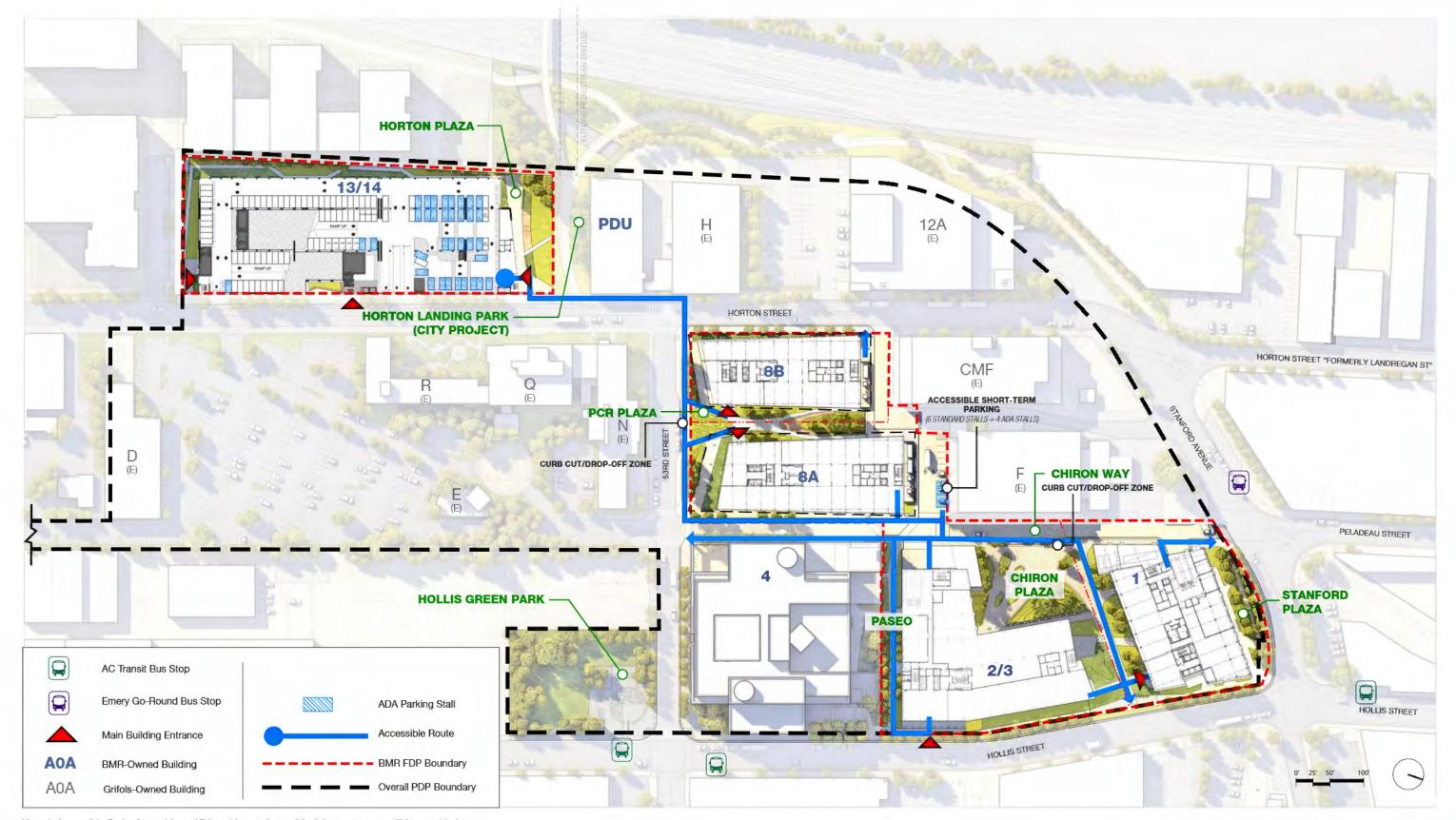
\*Per Preliminary Development Plan Figure 2-5 & 2-6 Note1: Project will comply with conditions related to fire suppression





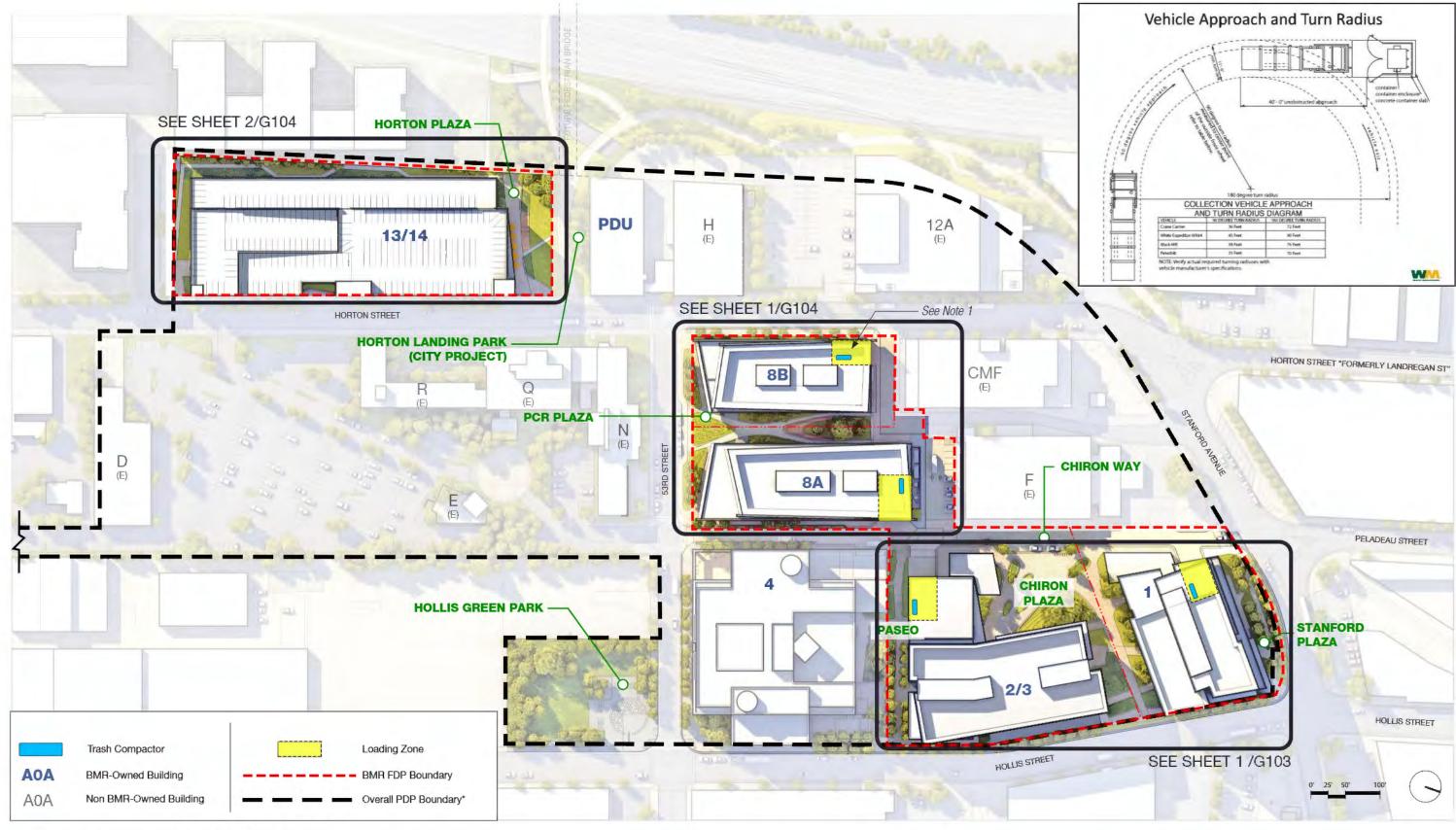


G100



Note 1: Accessible Path of travel from ADA parking stalls to all building entrances will be provided





\*Per Preliminary Development Plan Figure 2-5 & 2-6

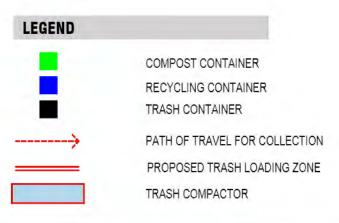
Note 1: All trash compactors are located within enclosed loading dock inside building

Note 2: Audio and visual warning devices at the junctions of sidewalk with automobile and truck access to loading docks

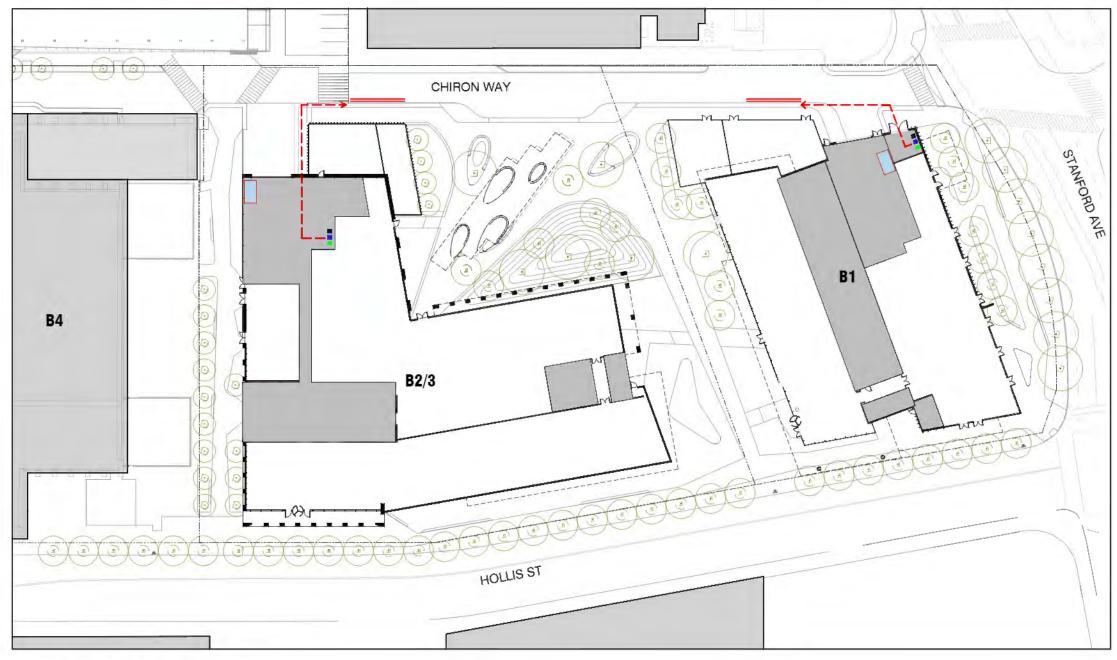






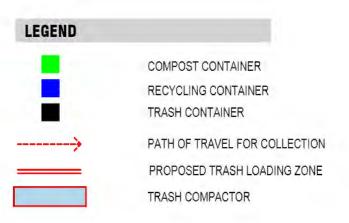


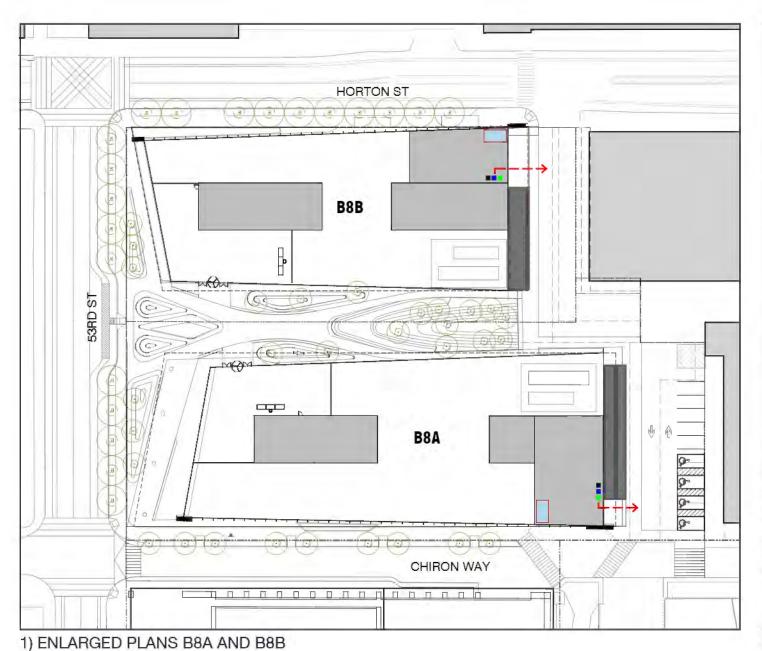
Note 1: All trash compactors are located within enclosed loading dock inside building



1) ENLARGED PLANS B1 AND B2/3







Note 1: All trash compactors are located within enclosed loading dock inside building B13/14 RAMP UP HORTON ST

2) ENLARGED PLANS B13/14

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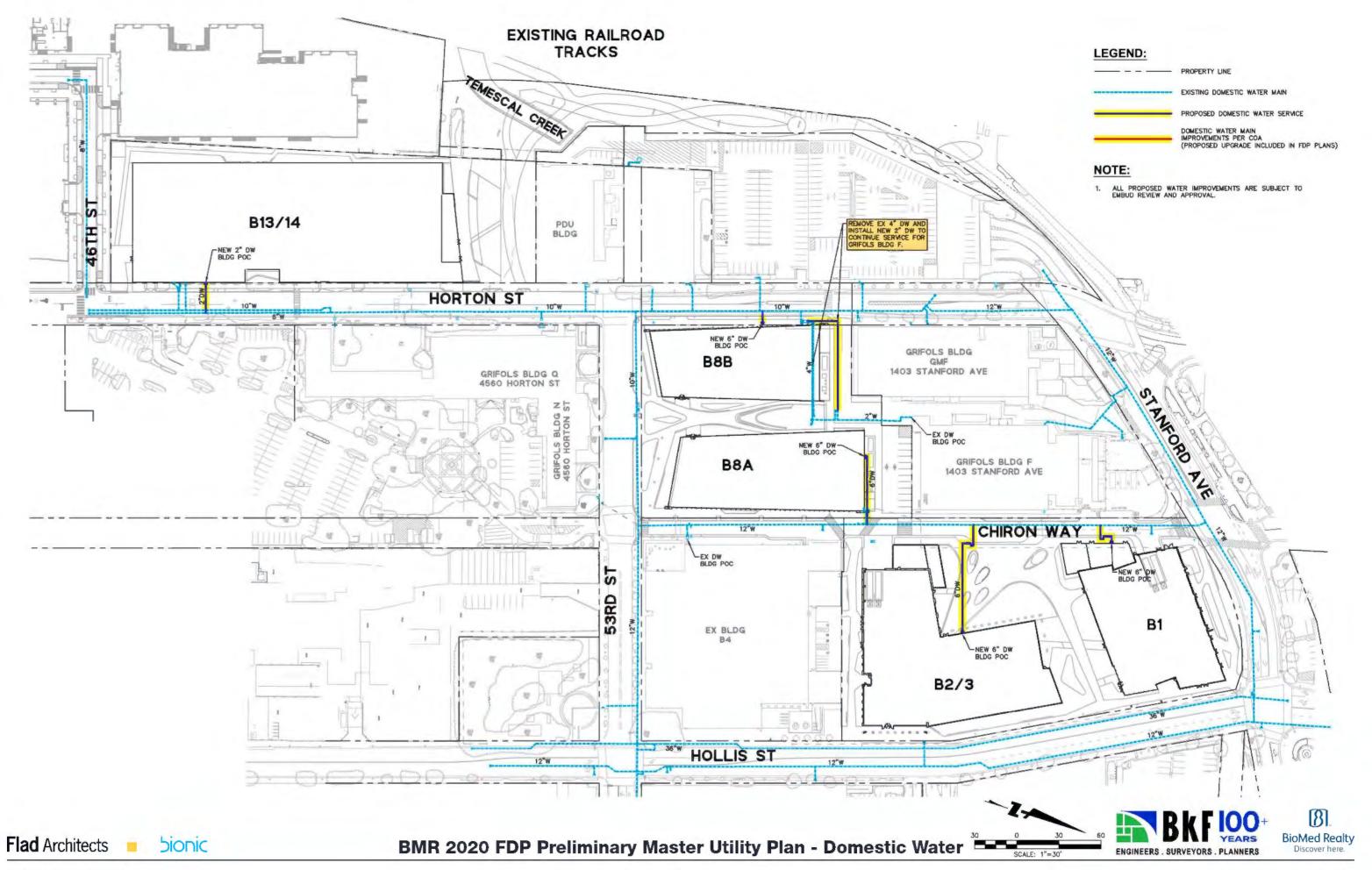
Discard Collection Diagram - B8A, B8B, and B13/14

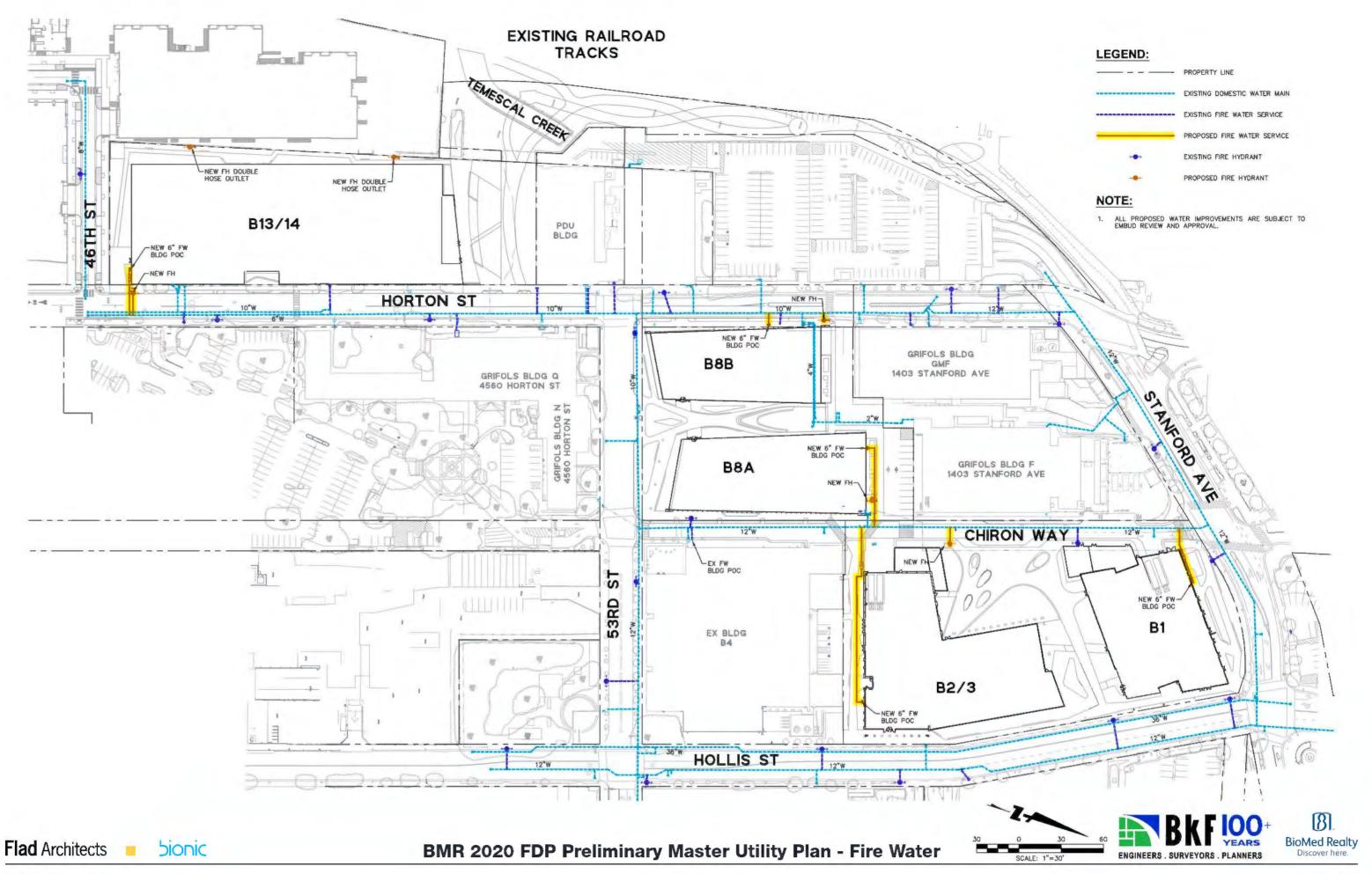


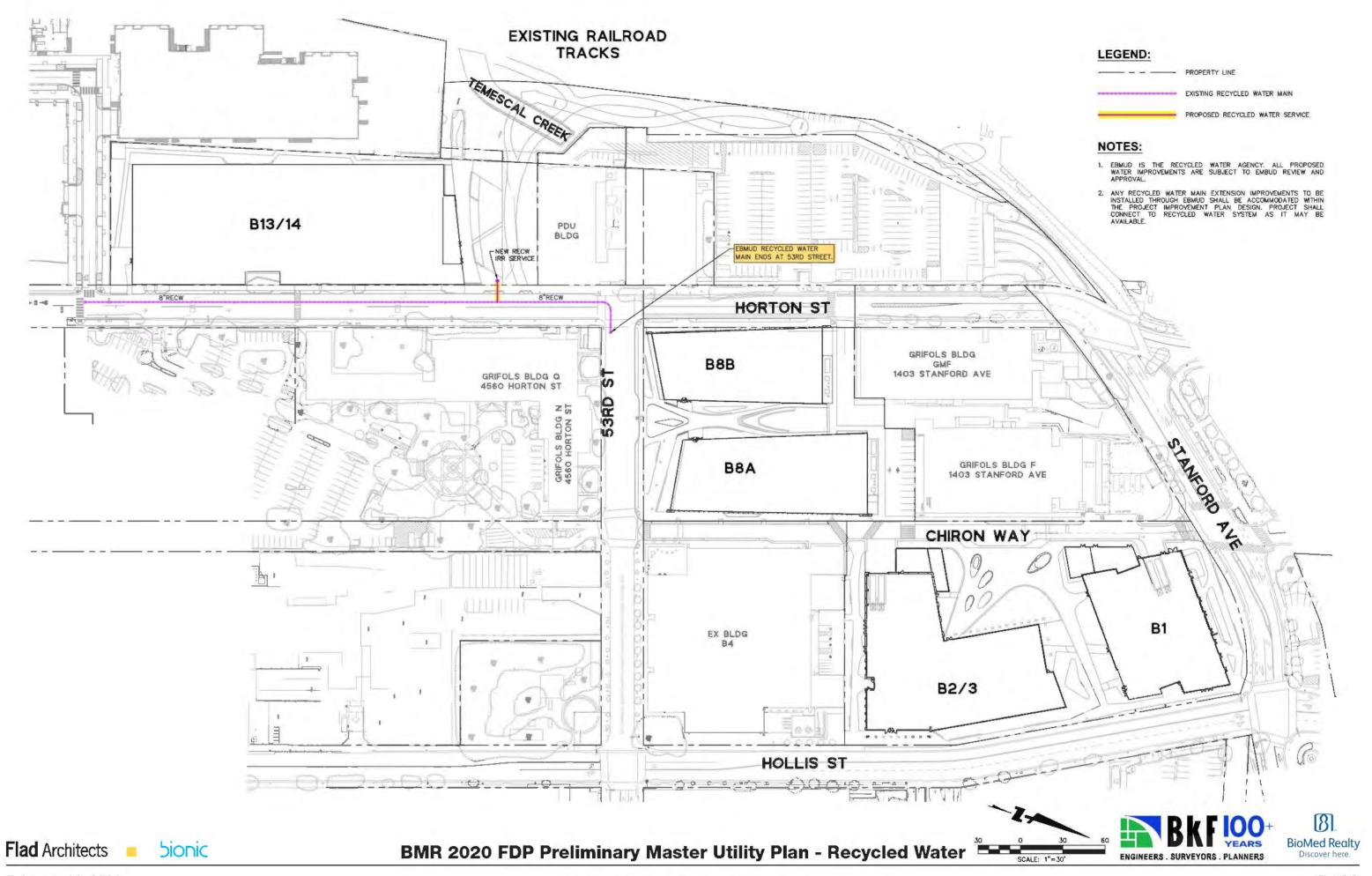
# 5.CIVIL

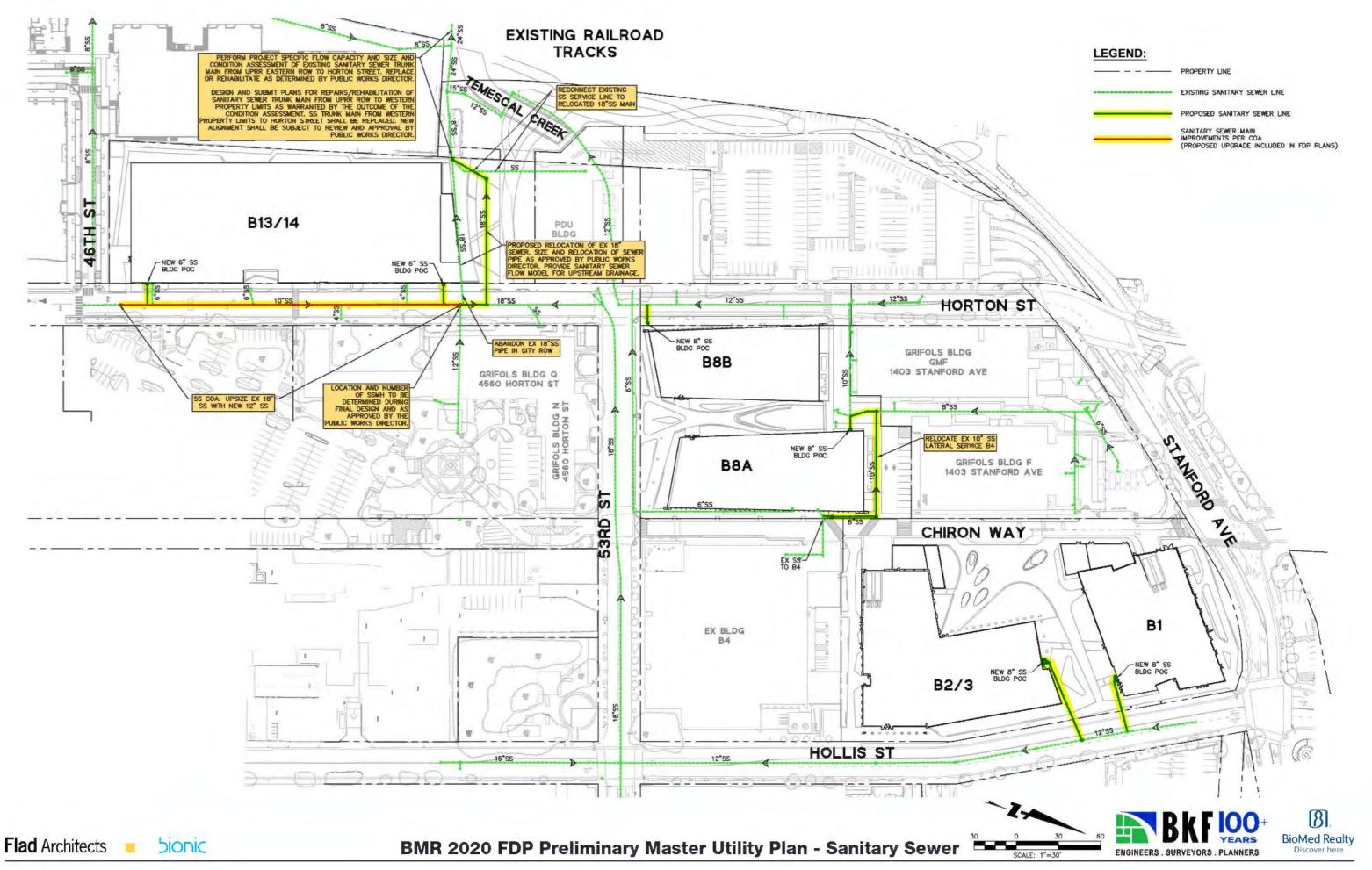
Note 1: Actual utility sizes and locations shall be determined by utility providers and the City of Emeryville Public Works Department. Existing condition surveys and hydraulic analysis to be performed in the design phase.

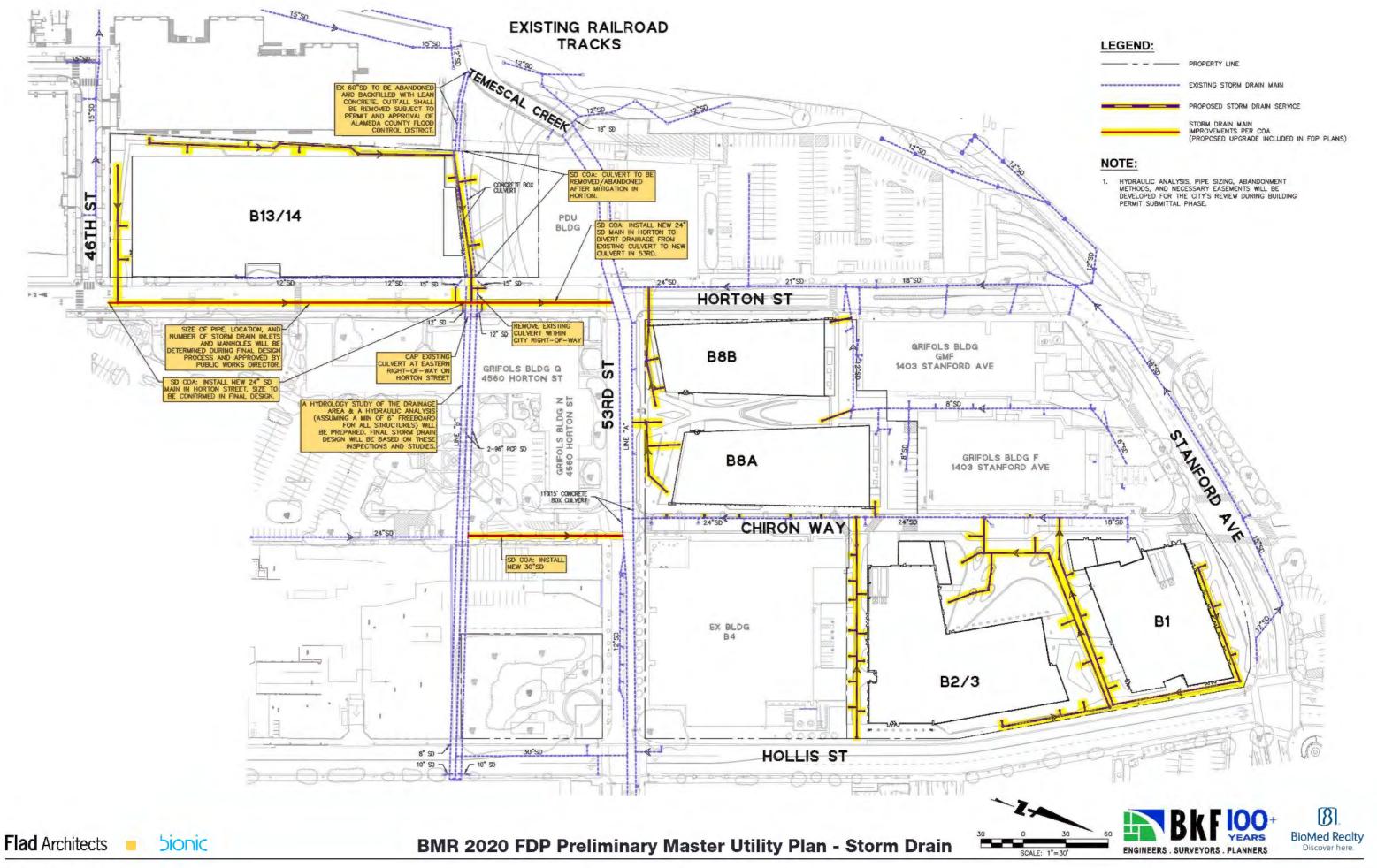
Access easements for maintenance of existing and proposed public utilities shall be recorded for overall public utilities within the project site.

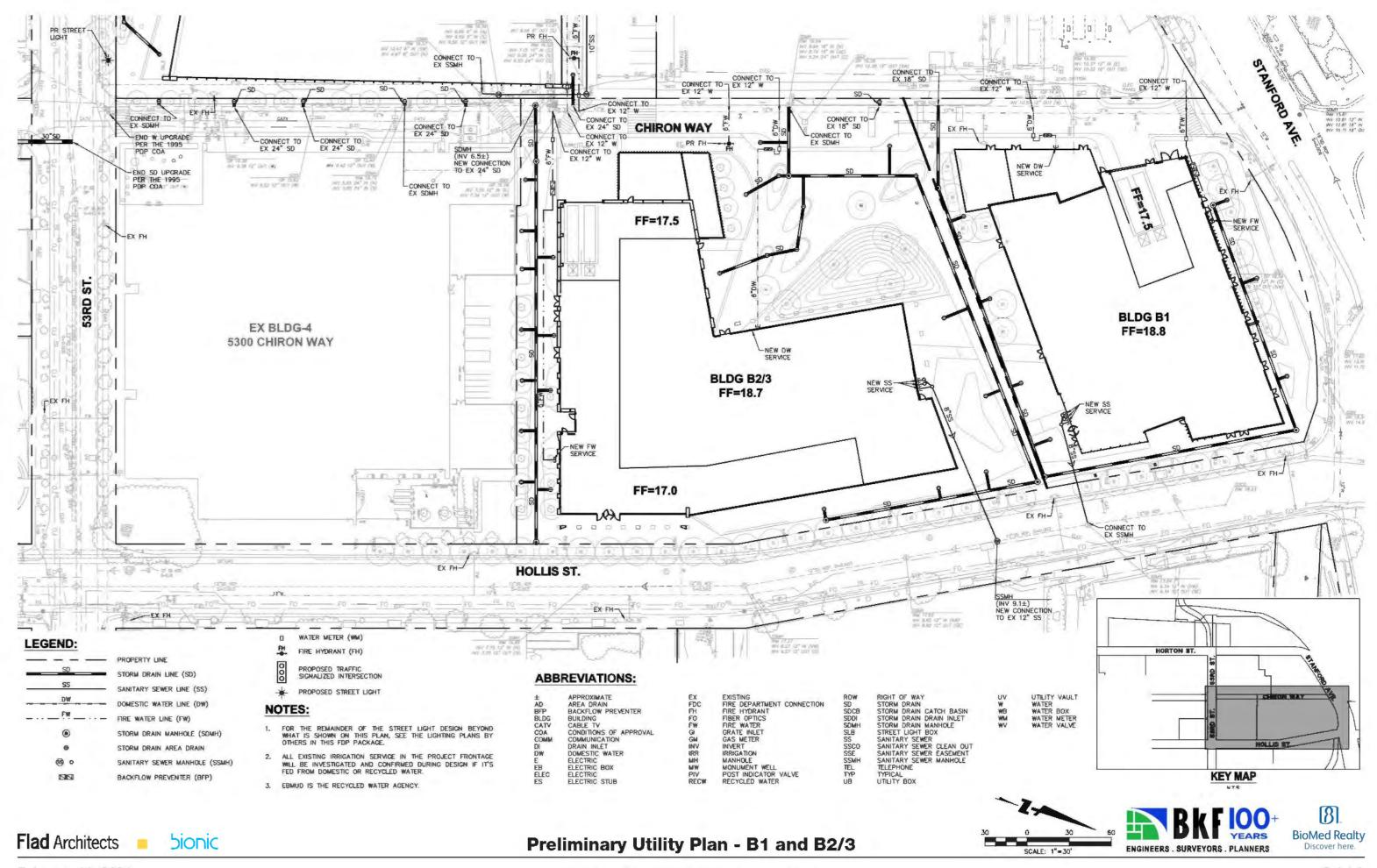


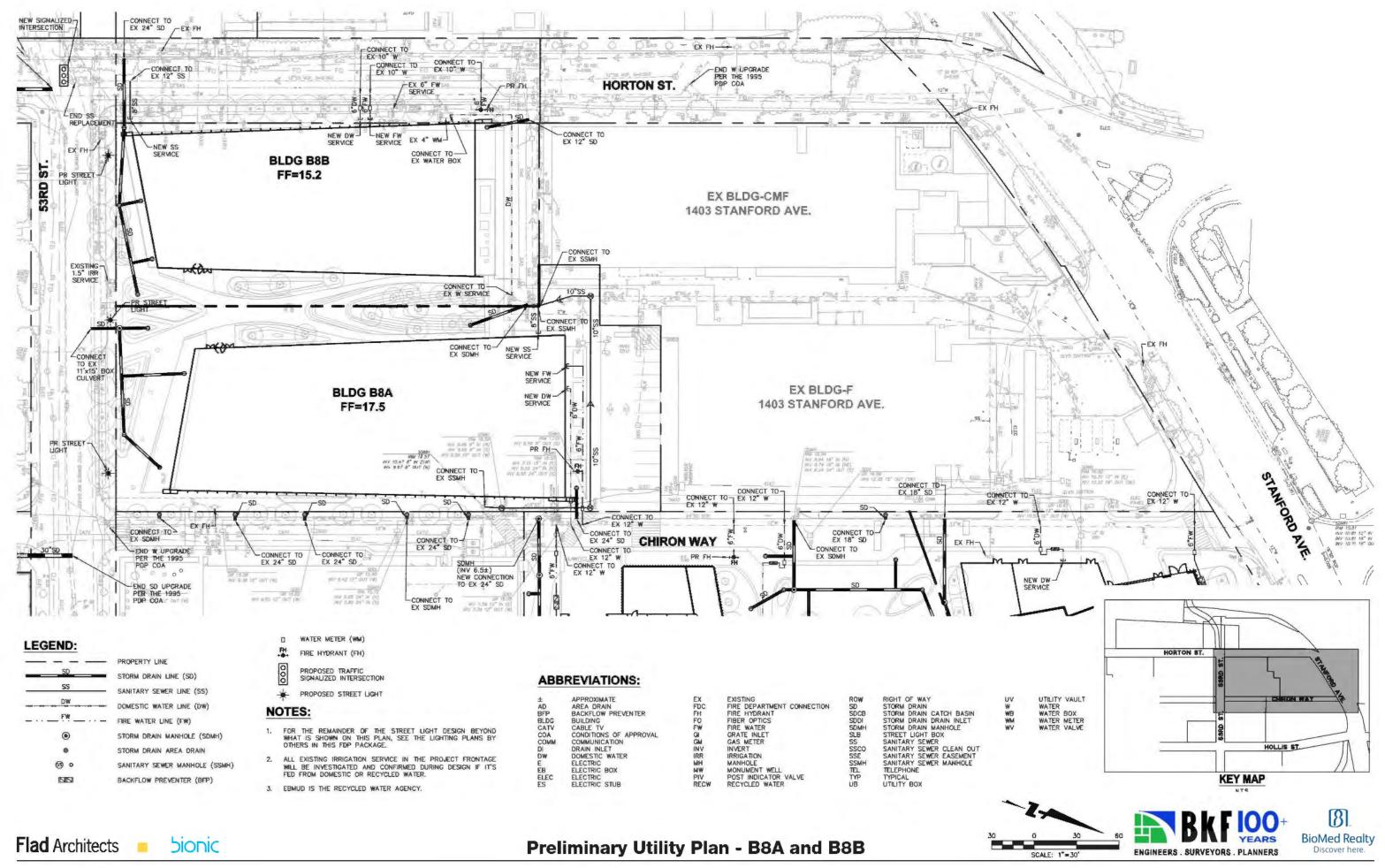


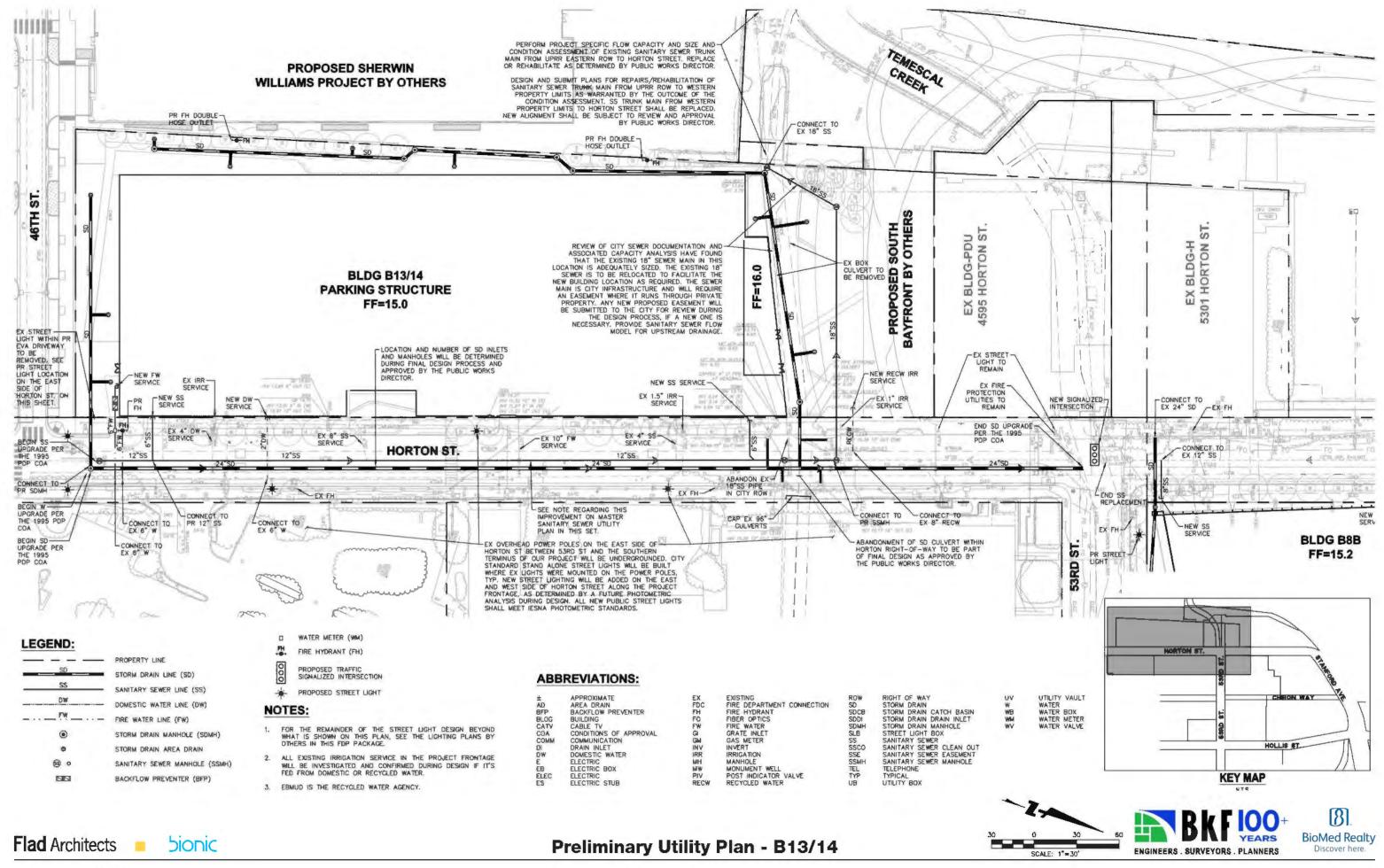


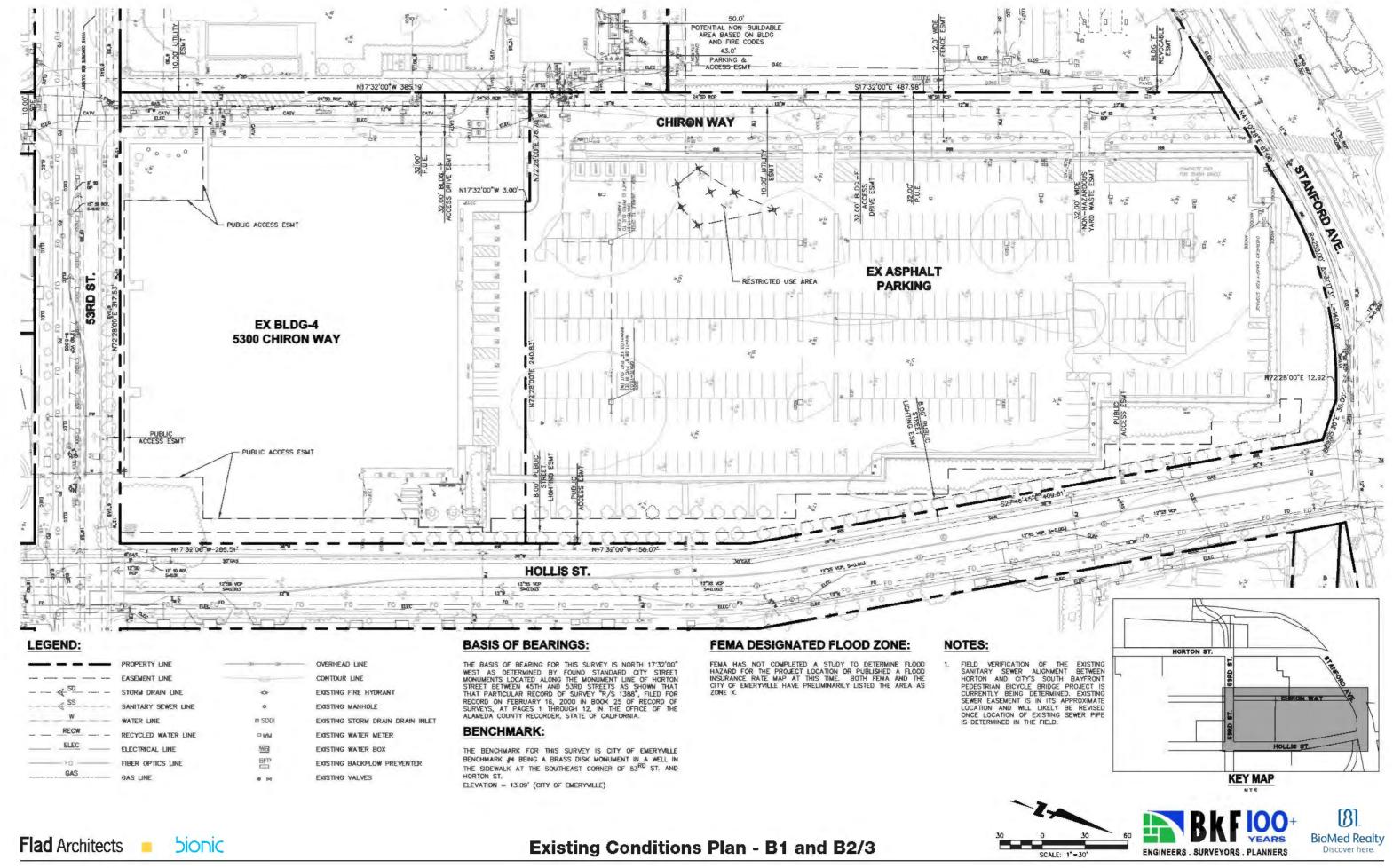


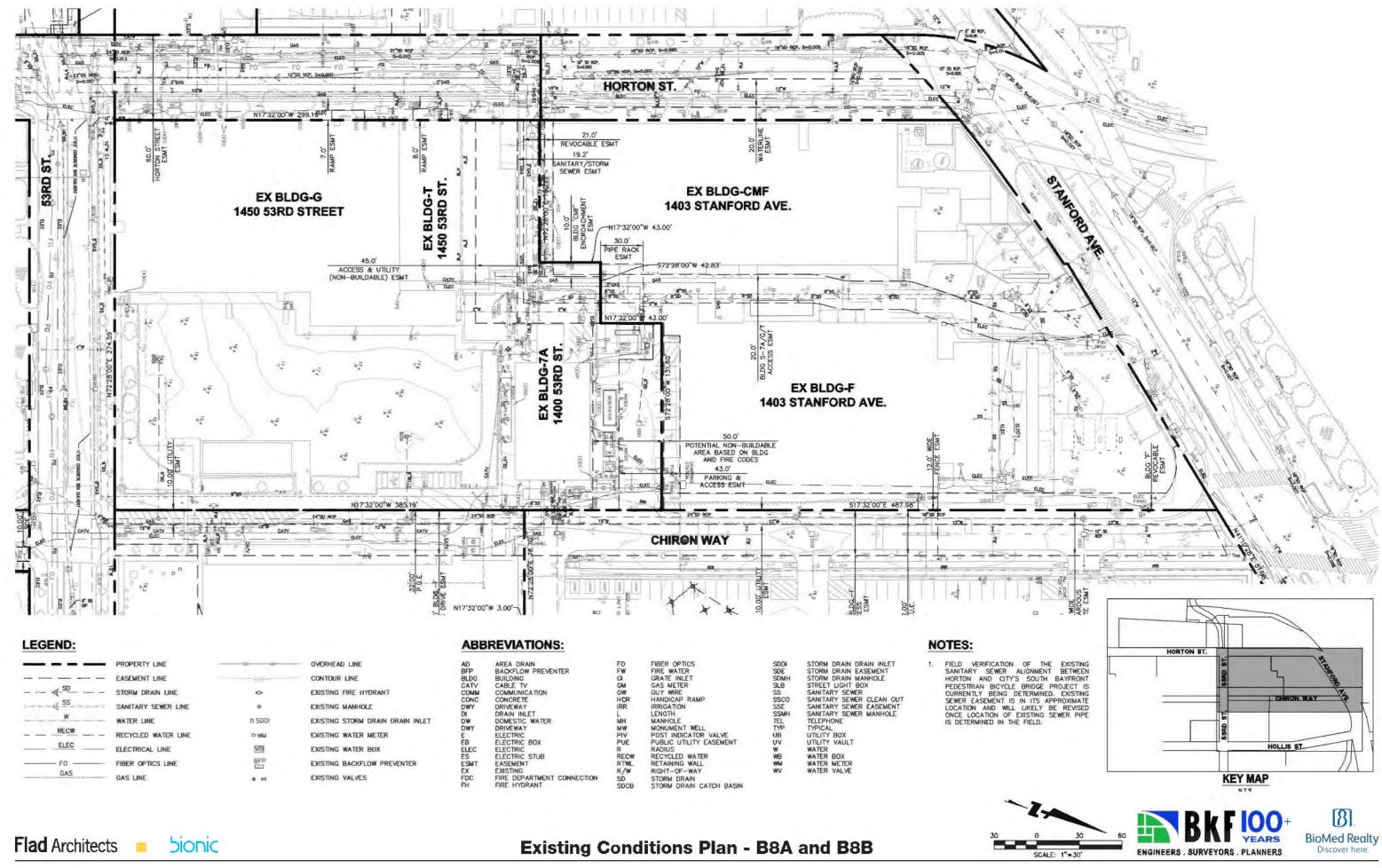


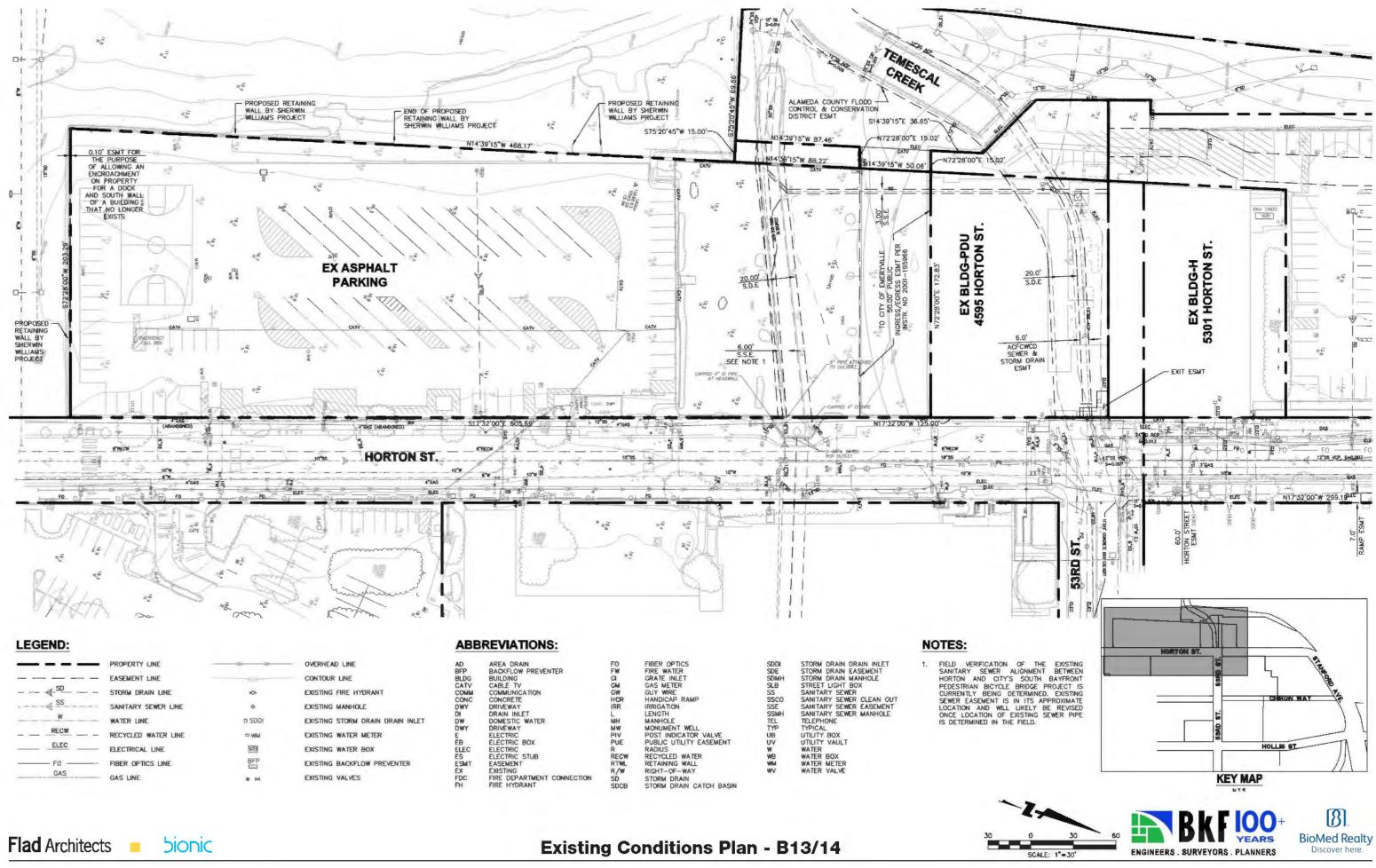


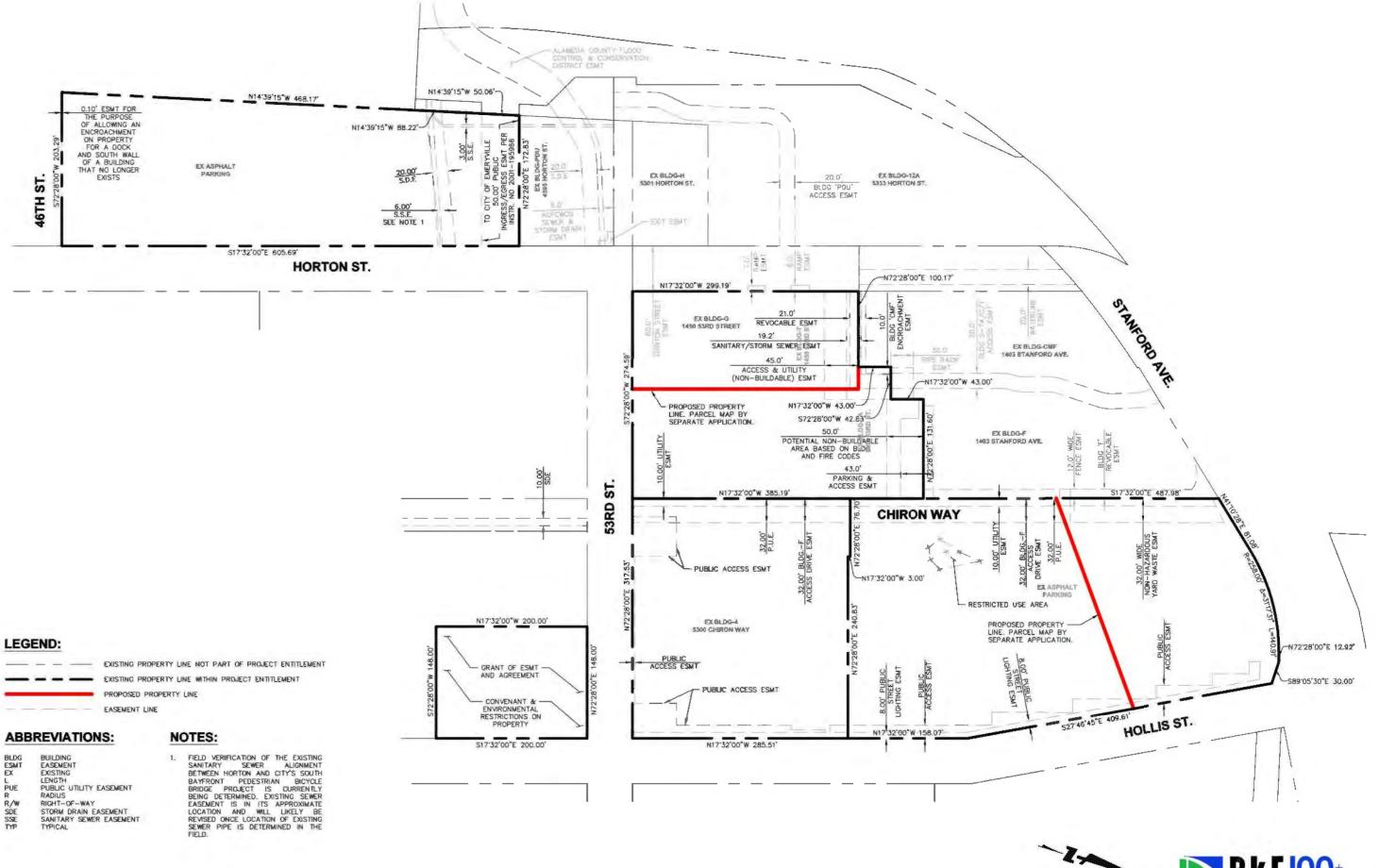




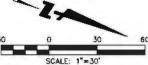






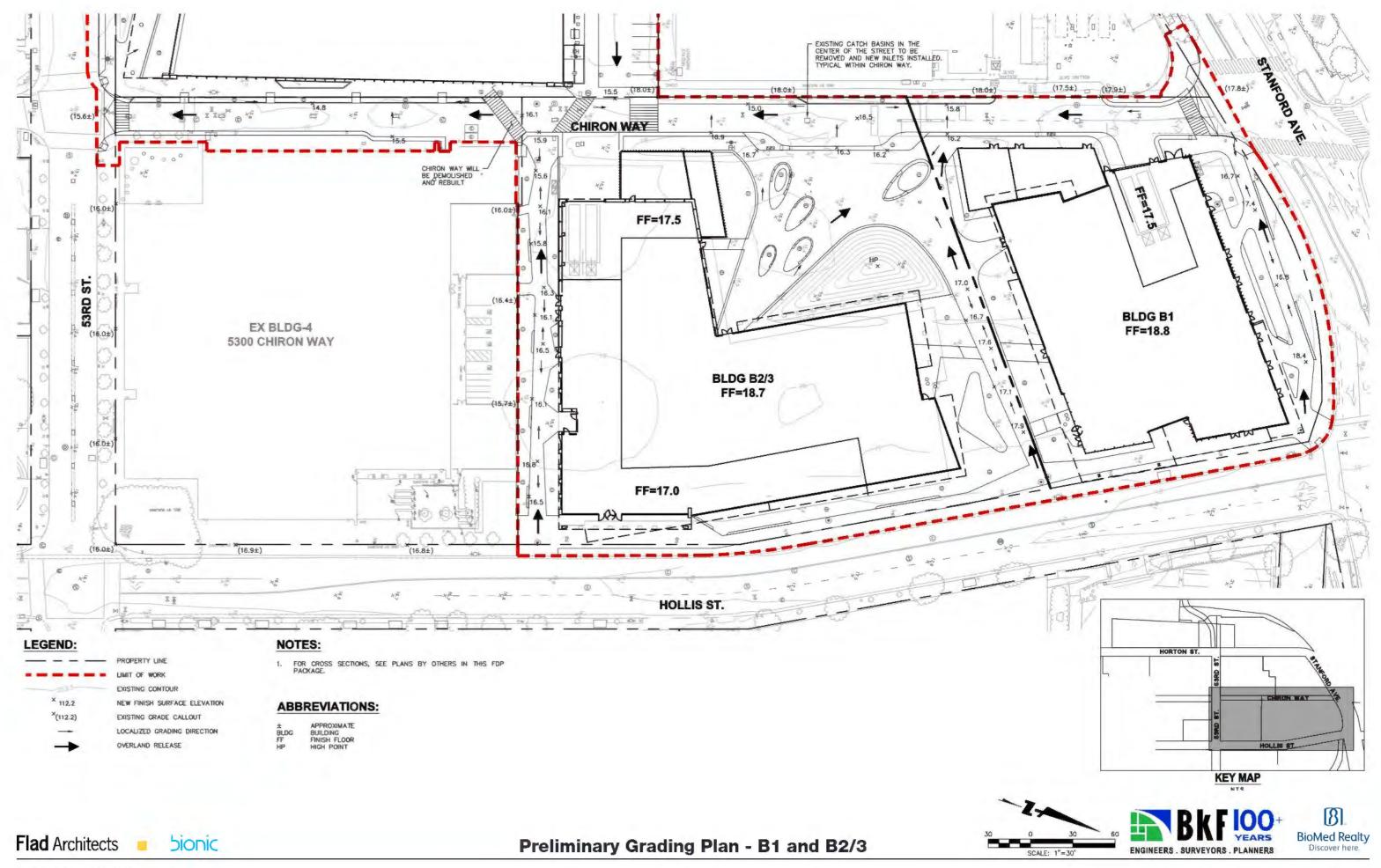


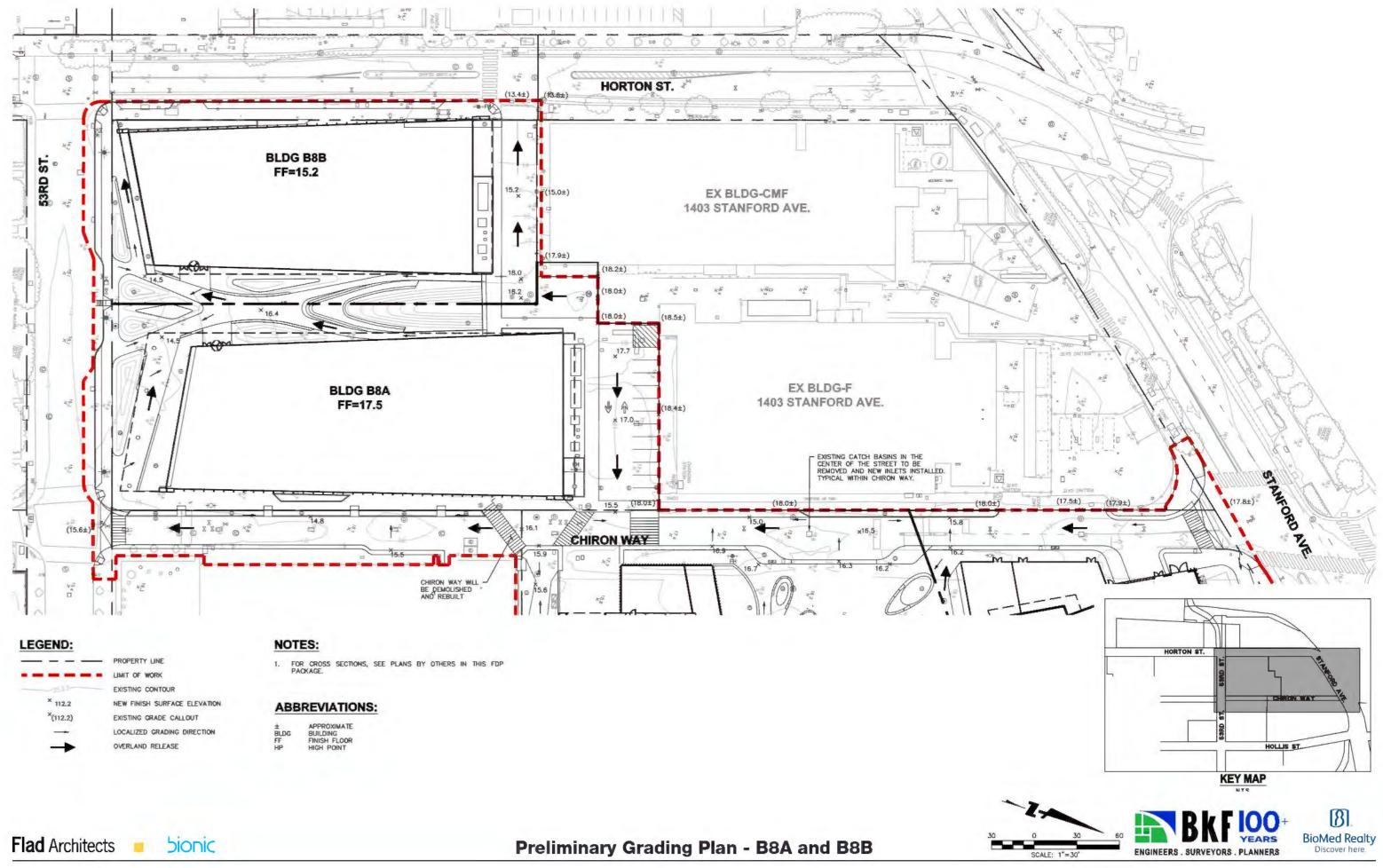


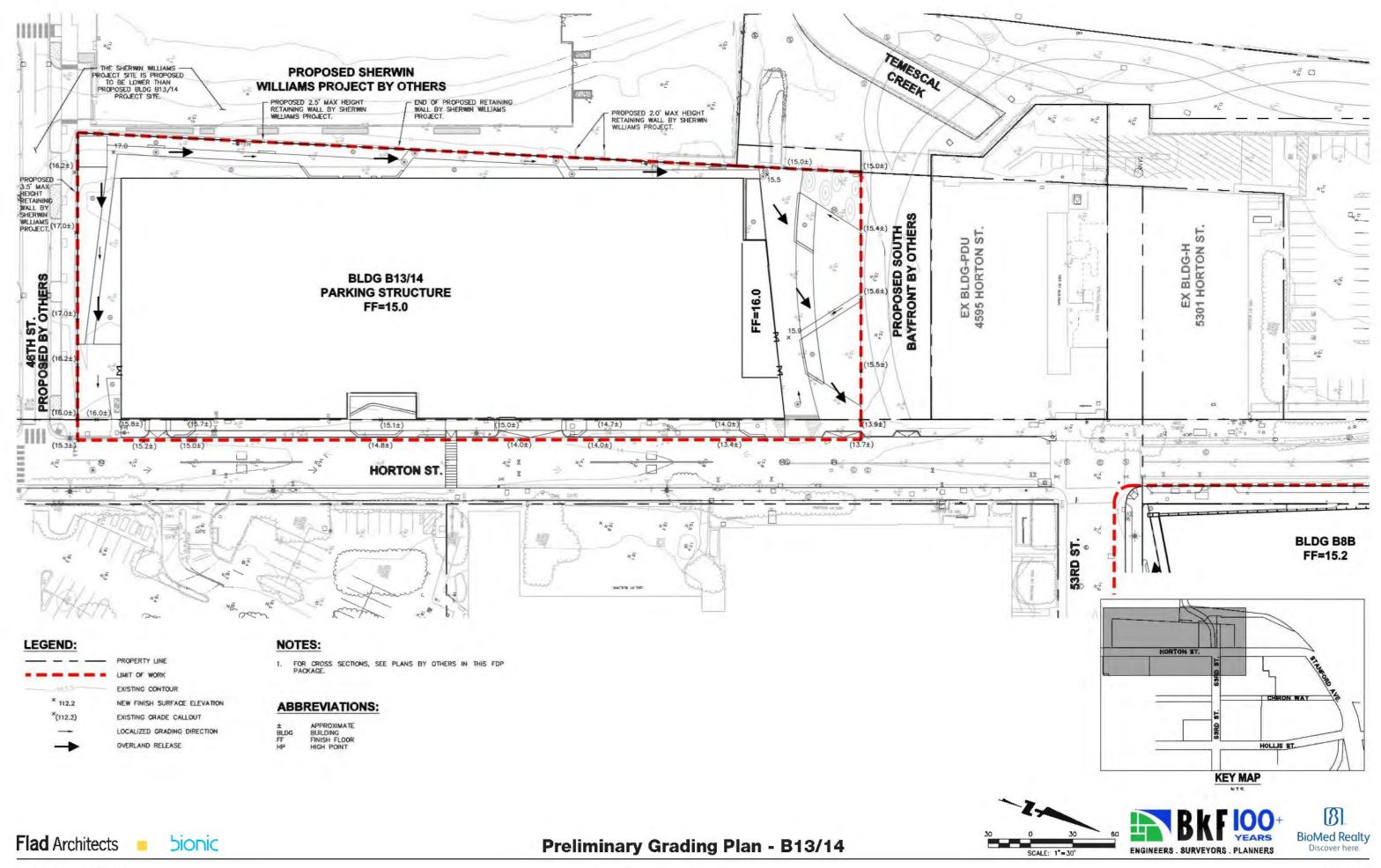


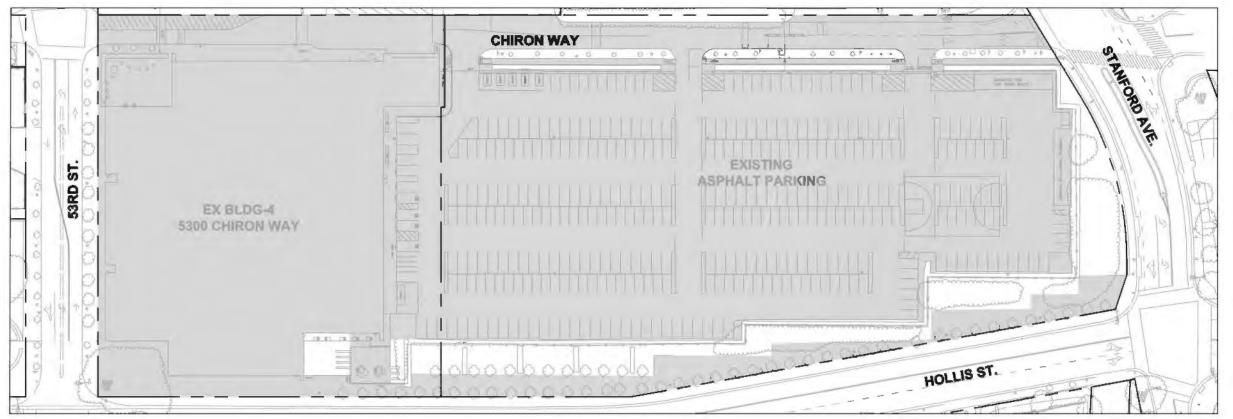




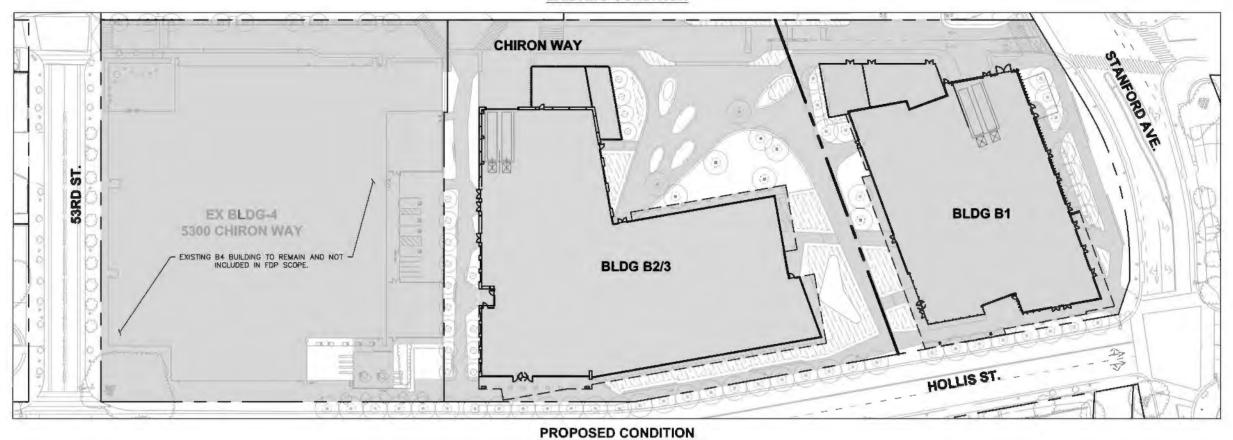






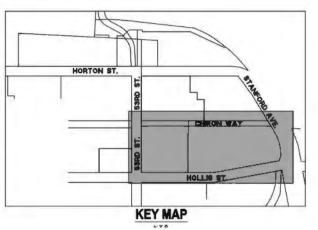


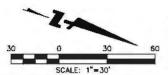




LEGEND:	
	PROPERTY LINE
	BUILDING ROOF LINE
	IMPERVIOUS AREA

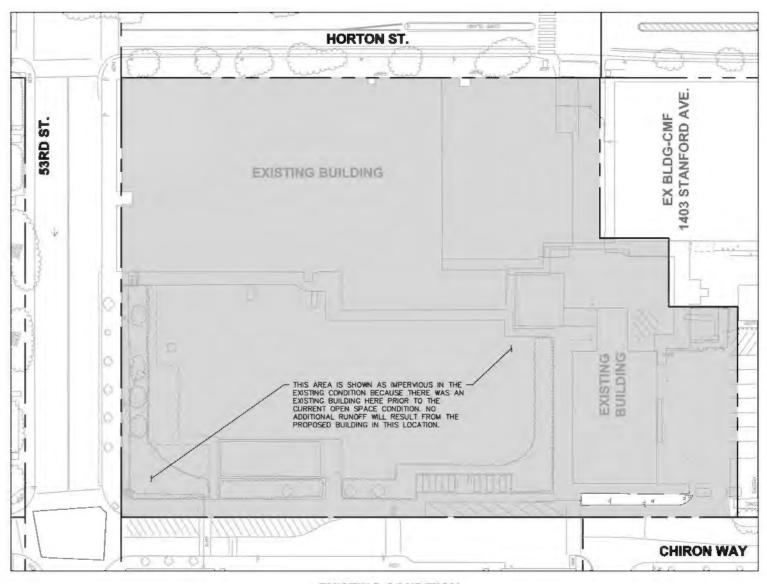
	TOTAL PERMOUS AREA (SF)	TOTAL IMPERVIOUS AREA (SF)	TOTAL AREA (SF)
EXISTING CONDITION	27,421	223,244	250,665
PROPOSED CONDITION	31,636	219,029	250,665
PARCEL B1	8,887	49,658	58,545
PARCEL B2/3	19,633	81,599	101,232
PARCEL B4	3,116	87,772	90,888

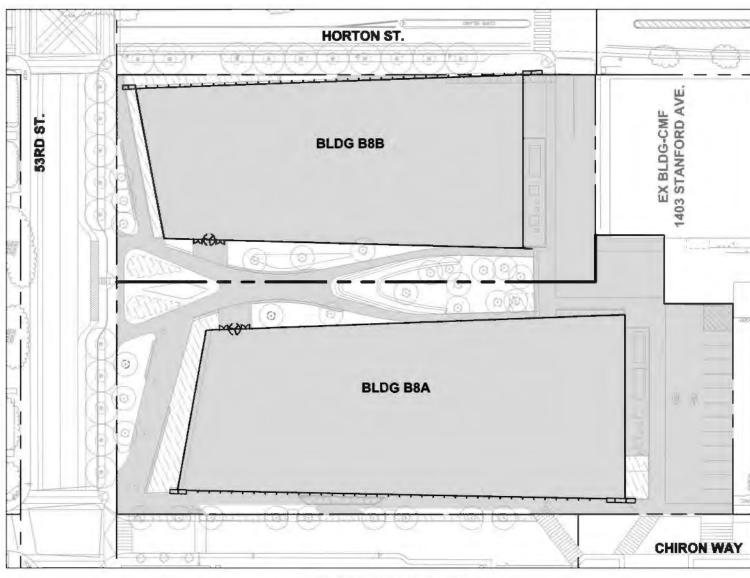






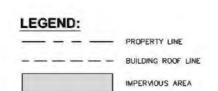




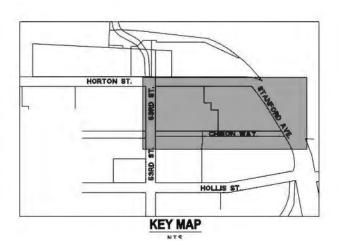


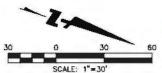
**EXISTING CONDITION** 

PROPOSED CONDITION



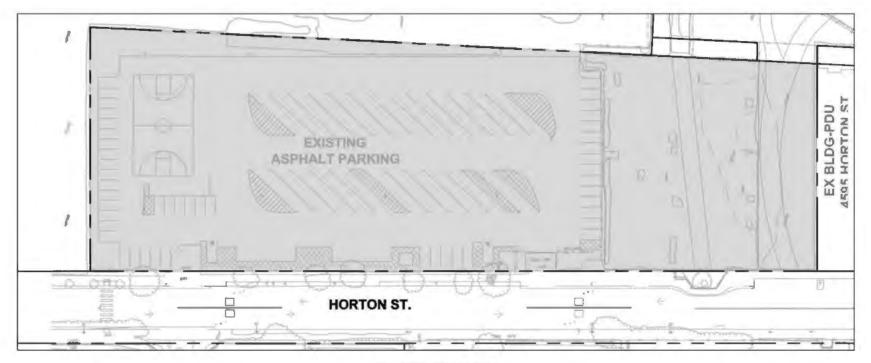
BUILDING B8A AND B8B PERVIOUS AND IMPERVIOUS AREA									
	TOTAL PERVIOUS AREA (SF)	TOTAL IMPERVIOUS AREA (SF)	TOTAL AREA (SF)						
EXISTING CONDITION	760	94,554	95,314						
PROPOSED CONDITION	14,299	81,015	95,314						
PARCEL B8A	8,269	48,329	56,598						
PARCEL B8B	6,030	32,686	38,716						



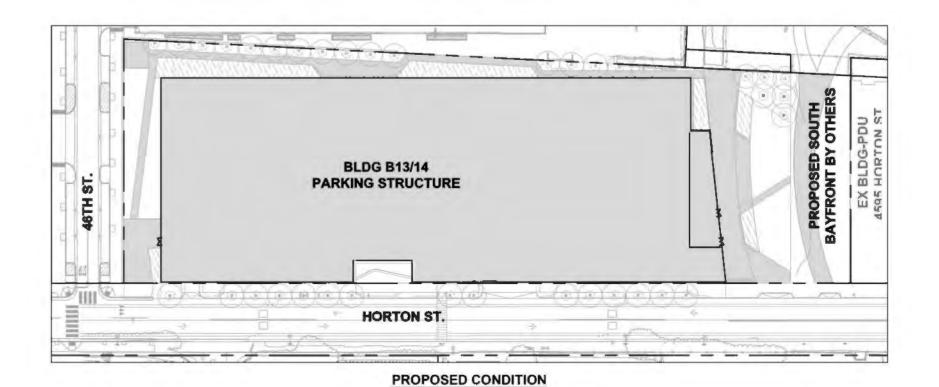


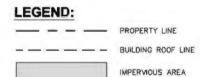




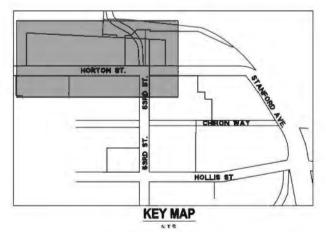


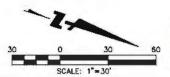
**EXISTING CONDITION** 





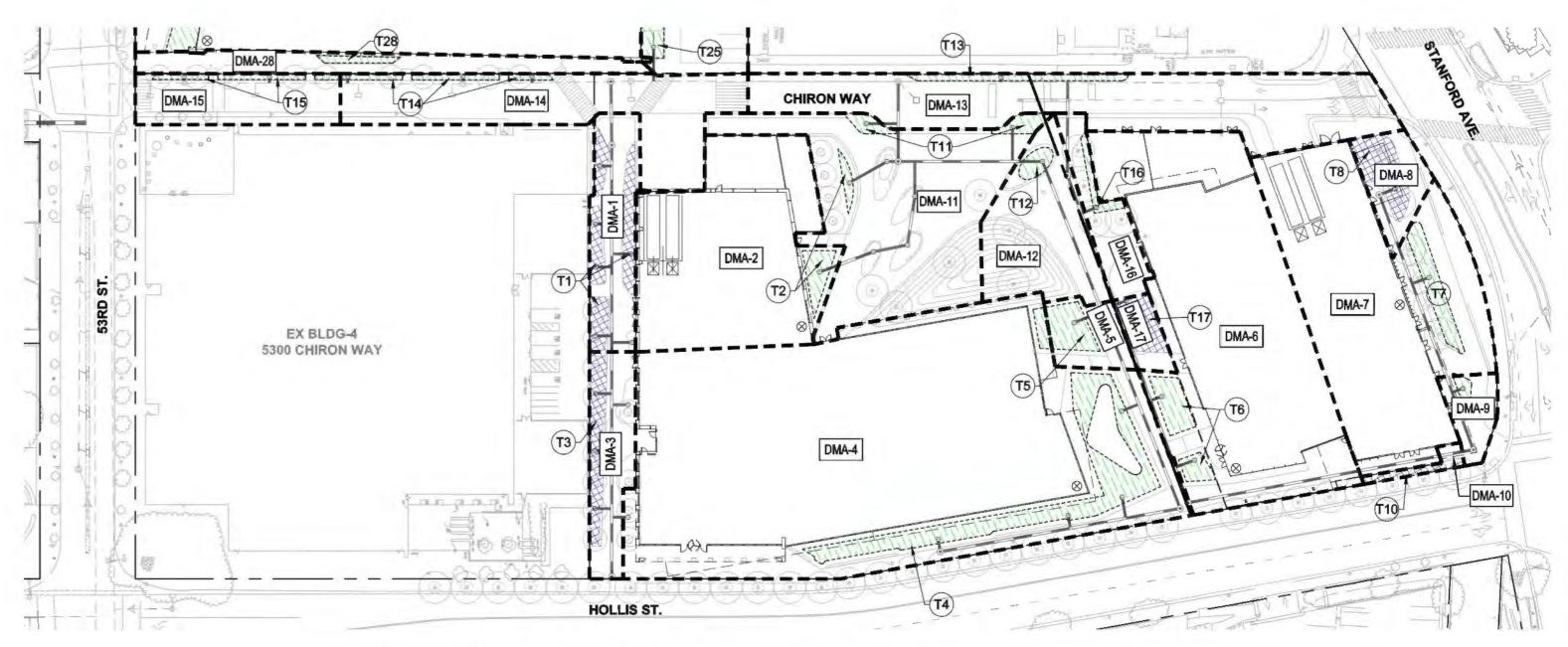
BUILDING B13	14 PERVIOUS	AND IMPERV	IOUS AREA	
	TOTAL PERVIOUS AREA (SF)	TOTAL IMPERVIOUS AREA (SF) TOTAL AREA		
EXISTING CONDITION	0	113,907	113,907	
PROPOSED CONDITION	22,443	91,464	113,907	

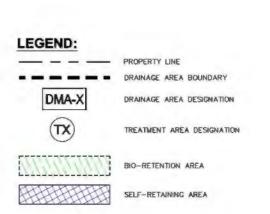




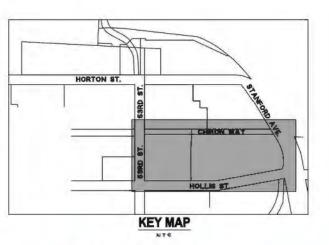








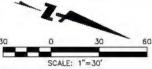
DMA AREA	TREATMENT ID	TOTAL TRIBUTARY AREA (SF)	TOTAL IMPERVIOUS AREA (SF)	TREATMENT MEASURE IMPLEMENTED	SELF RETAINING TREATMENT AREA REQUIRED (2:1) (SF)	BIORETENTION TREATMENT AREA REQUIRED (4%) (8F)	TREATMENT AREA PROVIDED (SF)	EXCESS TREATMENT AREA (SF)							
DMA-1	T-1	4,330	2,462	SELF-RETAINING	1,231		1,810	579							
DMA-2	T-2	14,072	13,080	BIORETENTION	-	523	622	99							
DMA-3	T-3	3,685	2,074	SELF-RETAINING	1,037		1,105	68							
DMA-4	T-4	47,352	41,929	BIORETENTION	_	1,677	3,777	2,100							
DMA-5	T-5	1,979	959	BIORETENTION	AMA	38	935	897							
DMA-6	T-6	23,345	22,006	BIORETENTION - 880	BIORETENTION - 880 9	BIORETENTION - 880 903	D6 BIORETENTION - 880	BIORETENTION - 880 903	2,006 BIORETENTION - 880	BIORETENTION - 880	BIORETENTION -	- 880	BIORETENTION - 880	903	23
DMA-7	T-7	18,301	15,638	BIORETENTION	- 626 481 -	626	817	191							
DMA-8	T-8	2,266	962	SELF-RETAINING		ALL.	1,052	571							
DMA-9	T-9	1,470	1,074	BIORETENTION		43	159	116							
DMA-10	T-10	454	197	BIORETENTION	99	-	215	117							
DMA-11	T-11	14,502	9,349	BIORETENTION		374	559	185							
DMA-12	T-12	6,031	3,112	BIORETENTION	_	124	288	164							
DMA-13	T-13	13,833	13,291	BIORETENTION	486	532	542	10							
DMA-14	T-14	9,467	8,998	BIORETENTION	_	360	469	109							
DMA-15	T-15	4,134	3,840	BIORETENTION	486	154	295	141							
DMA-16	T-16	2,488	788	BIORETENTION	-	32	311	279							
DMA-17	T-17	1,152	391	SELF-RETAINING	196	-	714	519							





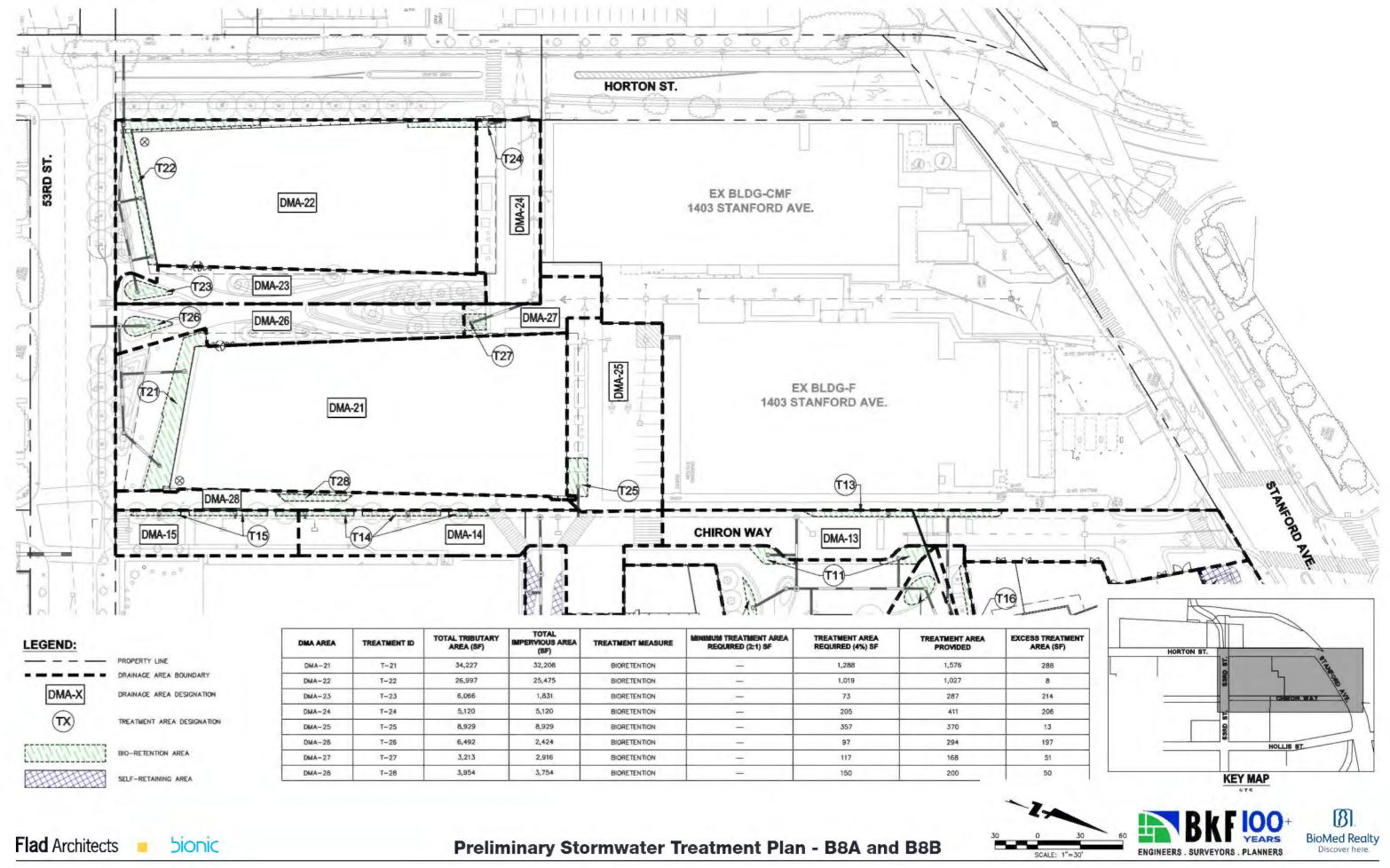


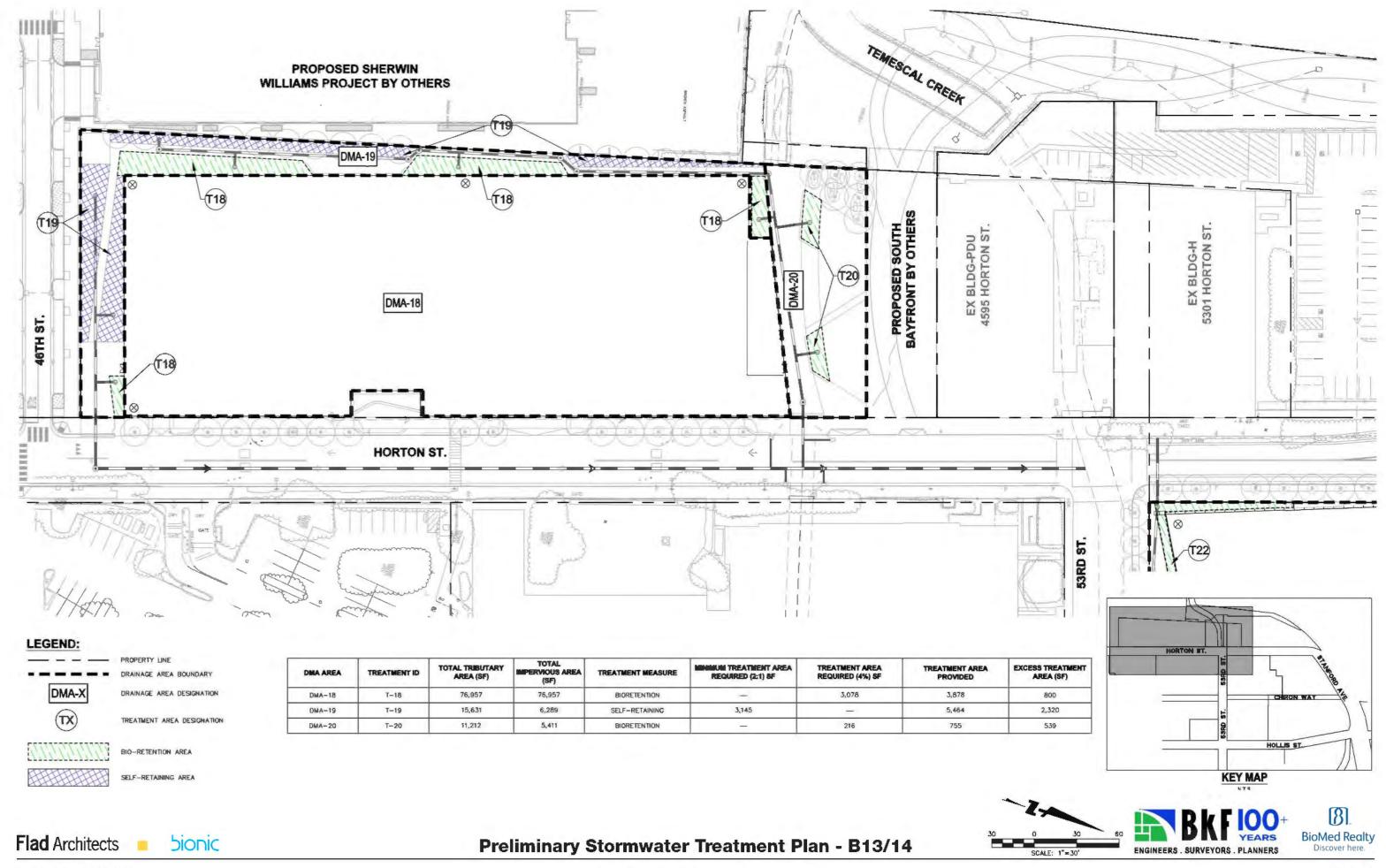
Preliminary Stormwater Treatment Plan - B1 and B2/3

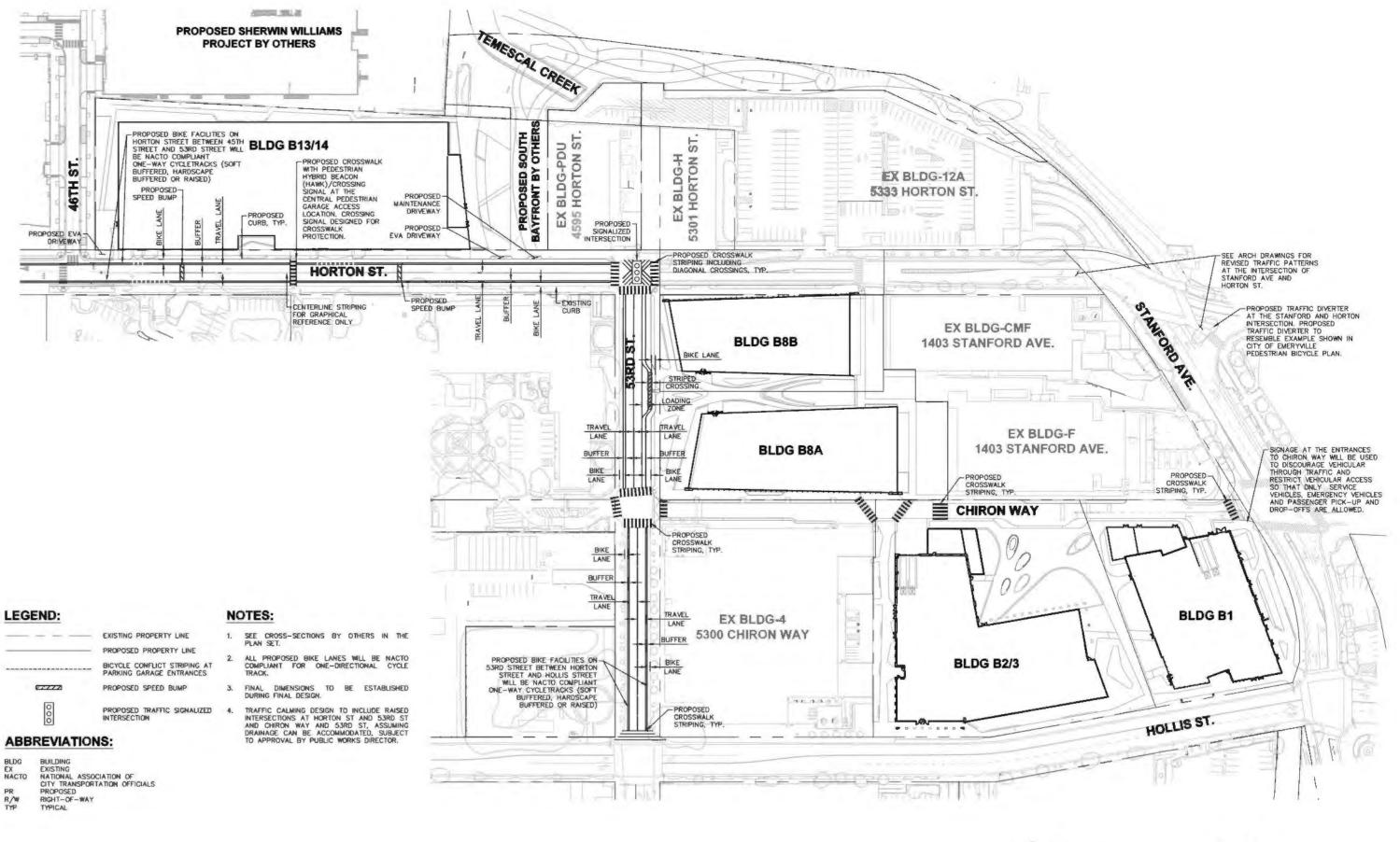








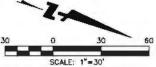














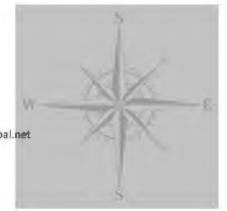


6. REPORTS

### Ellyn Shea, Consulting Arborist

ISA Certified Arborist # WE-5476A - ISA Qualified Tree Risk Assessor ASCA Registered Consulting Arborist #516

2085 Hayes Street, Suite 10\* San Francisco, CA 94117\* Phone: 415/846-0190 \* E-Mail: ellyn.shea@sbcglobal.net



Ethan Warsh BioMedRealty 601 Gateway Blvd Suite 1145 South San Francisco CA 94080

January 27, 2021

**Project:** BioMed Realty (BMR) campus at 5300 Chiron in Emeryville tree removal report Masterplan (111300-EL1952)

#### **Assignment**

Provide an arborist report for street trees that are being removed as per Emeryville Municipal code Chapter 10, Urban Forestry Ordinance, including the following:

- Location, species, trunk diameter measured at four and one half feet (4-1/2') above natural grade, canopy size, and condition of all street trees identified in the plan to be removed.
- The replacement value fee (as defined in Section 7-10.03): an appraisal prepared by a certified arborist by using the most current edition of the "Guide for Plant Appraisal" published by the Council of Tree and Landscape Appraisers. All trees four inches (4") and greater in diameter at four and one-half feet (4-1/2') above natural grade level shall be evaluated using the trunk formula method of appraisal. All other trees shall be evaluated using the replacement cost method of appraisal.
- Report shall include and reference a PDF copy of site plan showing trees to be removed, provided by client.

#### Background

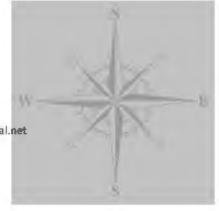
The City of Emeryville requires an arborist report documenting street trees to be removed to accompany the BMR development plan submission. Street trees are protected from removal without a permit as per Emeryville Municipal Code Chapter 10, Urban Forestry Ordinance.

### Ellyn Shea, Consulting Arborist

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ASCA Registered Consulting Arborist #516

2085 Hayes Street, Suite 10° San Francisco, CA 94117° Phone: 415/846-0190 ° E-Mail: ellyn.shea@sbcglobal.net



#### **Supporting Documents**

Included in this report are:

- Site plans showing trees to be removed and preserved and proposed trees to be planted.
- Table showing the entire tree inventory, updated to show trees to be removed and preserved based on the provided site plan.
- Table showing all street trees to be removed with required information.
- Appraisal worksheet using the Trunk Formula Technique, from the 10th edition of the Guide to Plant Appraisal. Note: replacement costs listed in the worksheet assume that all elements including soil prep, drainage testing, root barrier and tree grates are required by the City.

#### Summary

- 186 trees are included in the inventory.
- 54 of these trees are street trees, located on 53<sup>rd</sup> Street and Horton Street.
- Of the 54 street trees, 22 are to be removed due to proposed development, and 32 are to be preserved.
- Of the 22 street trees to be removed, 6 are on 53rd Street, and 16 are on Horton Street.
- The proposed replacement species on 53<sup>rd</sup> Street is Pistacia chinensis 'Keith Davey' and on Horton Street, Acer rubrum 'Bowhall,' both in 24-inch-box size.

#### Recommendations

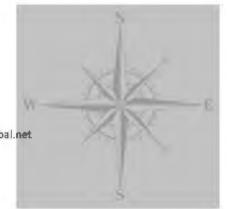
- Include this tree inventory with the development plan submittal to the City of Emeryville.
- If required by the City, have a qualified arborist write a tree protection plan based on the information in this inventory and development plans.



### Ellyn Shea, Consulting Arborist

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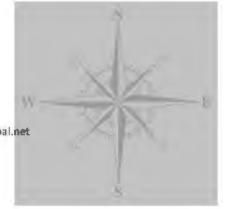
#### **Assumptions and Limiting Conditions**

- Any legal description provided to the consultant is assumed to be correct. Title and ownership of all
  property considered are assumed to be good and marketable. No responsibility is assumed for matters
  legal in character. Any and all property is appraised or evaluated as though free and clear, under
  responsible ownership and competent management.
- It is assumed that any property is not in violation of any applicable codes, ordinances, statutes or other governmental regulations.
- Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible. The consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
- 4. Various diagrams, sketches and photographs in this report are intended as visual aids and are not to scale, unless specifically stated as such on the drawing. These communication tools in no way substitute for nor should be construed as surveys, architectural or engineering drawings.
- 5. Loss or alteration of any part of this report invalidates the entire report.
- 6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior written or verbal consent of the consultant.
- 7. This report is confidential and to be distributed only to the individual or entity to whom it is addressed. Any or all of the contents of this report may be conveyed to another party only with the express prior written or verbal consent of the consultant. Such limitations apply to the original report, a copy, facsimile, scanned image or digital version thereof.
- This report represents the opinion of the consultant. In no way is the consultant's fee contingent upon a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
- The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule, an agreement or a contract.
- 10. Information contained in this report reflects observations made only to those items described and only reflects the condition of those items at the time of the site visit. Furthermore, the inspection is limited to visual examination of items and elements at the site, unless expressly stated otherwise. There is no expressed or implied warranty or guarantee that problems or deficiencies of the plants or property inspected may not arise in the future.

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#### **Disclosure Statement**

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. An arborist cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate the trees.



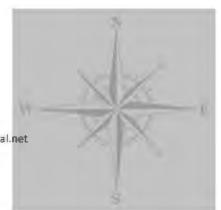




### Ellyn Shea, Consulting Arborist

ISA Certified Arborist # WE-5476A - ISA Qualified Tree Risk Assessor ASCA Registered Consulting Arborist #516

2085 Hayes Street, Suite 10 • San Francisco, CA 94117 • Phone: 415/846-0190 • €-Mail: ellyn.shea@sbcglobal.net



#### **Certification of Performance**

#### I, Ellyn Shea, Certify:

- That I have personally inspected the trees and/ or property evaluated in this report. I have stated my
  findings accurately, insofar as the limitations of my Assignment and within the extent and context identified
  by this report;
- That I have no current or prospective interest in the vegetation or any real estate that is the subject of this
  report, and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions and conclusions stated herein are my own and are based on current scientific procedures and facts and according to commonly accepted arboricultural practices;
- That no significant professional assistance was provided, except as indicated by the inclusion of another professional report within this report;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.
- I am a member in good standing, Certified Arborist (#WE-5476A), and a Qualified Tree Risk Assessor with the International Society of Arboriculture, and a Registered Consulting Arborist (#516) with the American Society of Consulting Arborists.

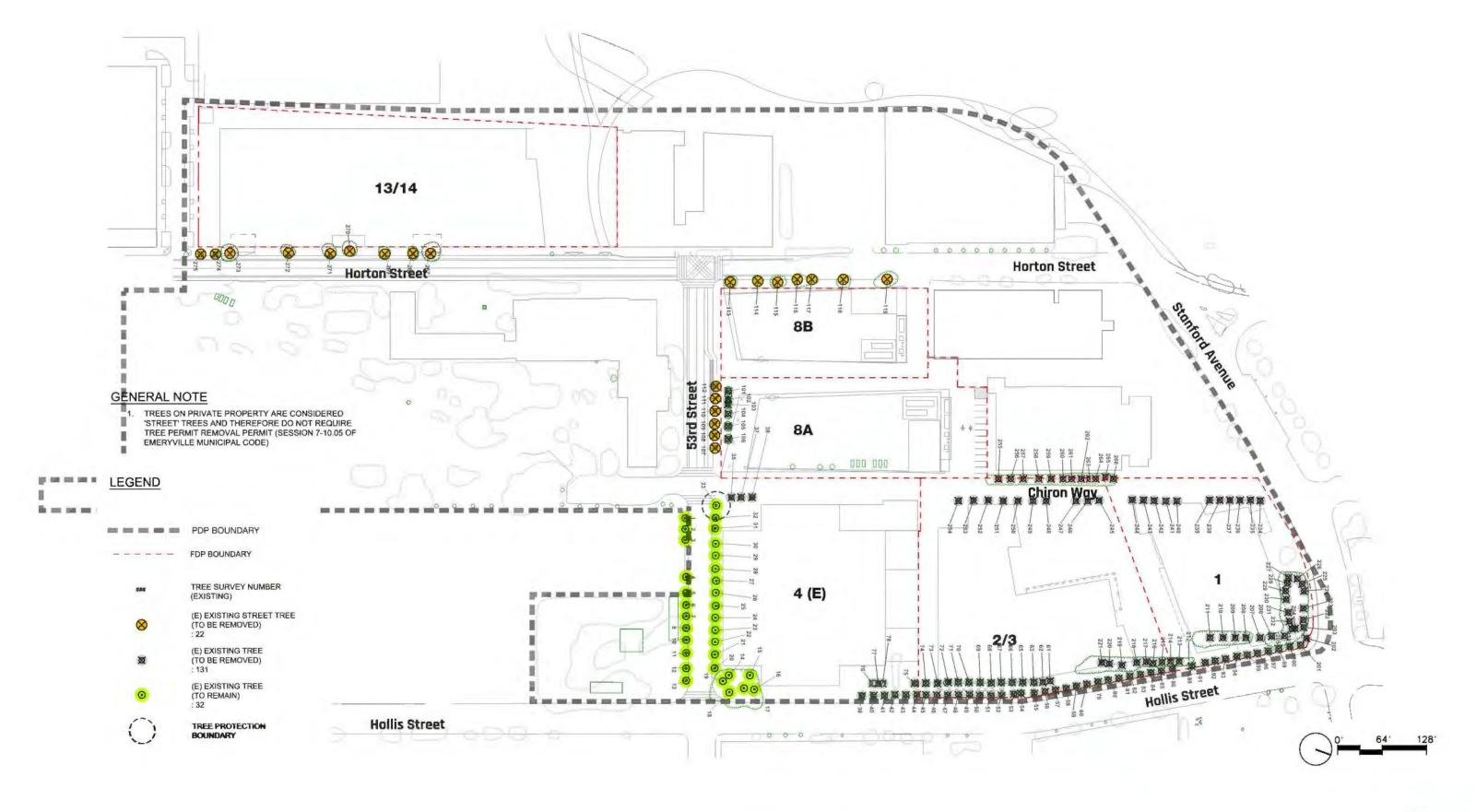
I have attained professional training in all areas of knowledge asserted through this report by completing relevant college courses, routinely attending pertinent professional conferences and by reading current research from professional journals, books and other media.

I have rendered professional services in a full-time capacity in the field of horticulture and arboriculture for more than 20 years.

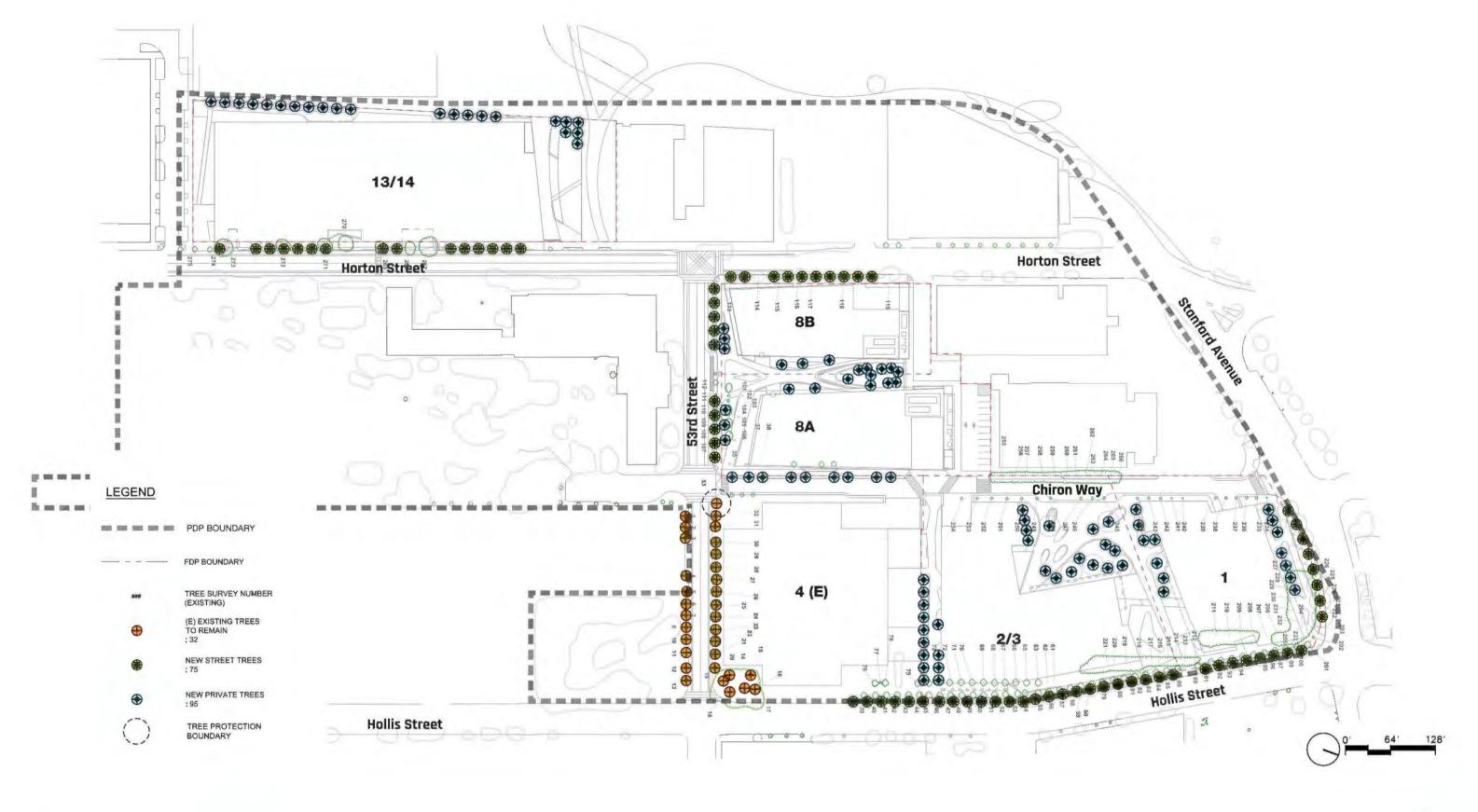
Signature:

Date: January 27, 2021











Tree #	Location	Species	DBH	Protected Status	Suitability for Preservation	Preserve/ Remove
1	53rd Street	Carpinus betulus - European Hornbeam	5.3	Street tree	Good	Preserve
2	53rd Street	Carpinus betulus - European Hornbeam	5.7		Good	Preserve
3	53rd Street	Carpinus betulus - European Hornbeam	4.7	Street tree	Good	Preserve
4	53rd Street	Carpinus betulus - European Hornbeam	4.4	Street tree	Good	Preserve
5	53rd Street		3.4	Street tree	Good	1
6	53rd Street	Carpinus betulus - European Hornbeam Carpinus betulus - European Hornbeam	6.0	Street tree	Good	Preserve
7	53rd Street	Carpinus betulus - European Hornbeam	5.4	Street tree	Good	Preserve
8	53rd Street	Carpinus betulus - European Hornbeam	5.3	Street tree	Good	Preserve
9	193ru street	NOT USED	2.3	ou eet u ee	GOOG	rieserve
10	53rd Street	Carpinus betulus - European Hornbeam	6.5	Stroot too	Good	Orococuo
11	53rd Street	Carpinus betulus - European Hornbeam	7.0	Street tree	Good	Preserve
12	53rd Street		6.0	1.	Good	Preserve
13	53rd Street	Carpinus betulus - European Hornbeam  Carpinus betulus - European Hornbeam	5.0	Street tree	Good	1.
14	Hollis x 53rd		8.3	Street tree Private tree	Good	Preserve
15	1	Platanus x hispanica - London Plane				
16	Hollis x 53rd	Platanus x hispanica - London Plane	8.7 12.4	Private tree	Good	Preserve
17	Hollis x 53rd	Platanus x hispanica - London Plane	7.5	Private tree	Good	Preserve
18	1	Platanus x hispanica - London Plane	10.3	Private tree		Preserve
19	Hollis x 53rd	Platanus x hispanica - London Plane		Private tree	Good	Preserve
	Hollis x 53rd	Platanus x hispanica - London Plane	12.1	Private tree	Good	Preserve
20	53rd Street	Carpinus betulus - European Hornbeam	3.4	Street tree	Good	Preserve
21	53rd Street	Carpinus betulus - European Hornbeam	3.4	Street tree	Good	Preserve
22	53rd Street	Carpinus betulus - European Hornbeam	6.0	Street tree	Good	Preserve
23	S3rd Street	Carpinus betulus - European Hornbeam	7.3	Street tree	Good	Preserve
24	53rd Street	Carpinus betulus - European Hornbeam	7.9	Street tree	Good	Preserve
25	53rd Street	Carpinus betulus - European Hornbeam	7.5	Street tree	Good	Preserve
26	53rd Street	Carpinus betulus - European Hornbeam	6.8	Street tree	Good	Preserve
27	53rd Street	Carpinus betulus - European Hornbeam	6.8	Street tree	Good	Preserve
28	53rd Street	Carpinus betulus - European Hornbeam	7.0	Street tree	Good	Preserve
29	53rd Street	Carpinus betulus - European Hornbeam	7.0	Street tree	Good	Preserve
30	53rd Street	Carpinus betulus - European Hornbeam	7.6	Street tree	Good	Preserve
31	53rd Street	Carpinus betulus - European Hornbeam	7.0	Street tree	Good	Preserve
32	53rd Street	Carpinus betulus - European Hornbeam	7.6	Street tree	Good	Preserve
33	53rd Street	Carpinus betulus - European Hornbeam	7.9	Street tree	Good	Preserve
34	E2 15	NOT USED				
35	53rd Street	Carpinus betulus - European Hornbeam	4.9	Street tree	Good	Remove
36	ED LO	NOT USED			0 1	
37	53rd Street	Carpinus betulus - European Hornbeam	4.4	Street tree	Good	Remove
38	53rd Street	Carpinus betulus - European Hornbeam	4.7	Street tree	Good	Remove
39	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	7.9	Private tree	Good	Remove
40	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.1	Private tree	Good	Remove
41	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	15.4	Private tree	Good	Remove
42	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	10.7	Private tree	Good	Remove
43	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	10.5	Private tree	Good	Remove
44	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	7.8	Private tree	Good	Remove
45	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	8.5	Private tree	Good	Remove
46	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	11.8	Private tree	Good	Remove
47	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	9.3	Private tree	Good	Remove

Tree #	Location	Species	DBH	Protected Status	Suitability for Preservation	Remove
48	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.0	Private tree	Good	Remove
49	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	8.4	Private tree	Good	Remove
50	Hollis Street	Populus nigro 'Italica' - Lombardy Popular	9.5	Private tree	Good	Remove
51	Hollis Street	Populus nigra 'Italica' - Lombardy Popular	12.2	Private tree	Fair	Remove
52	Hollis Street	Populus nigra 'Italica' - Lombardy Popular	16.3	Private tree	Good	Remove
53	Hollis Street		<u> </u>	Private tree	1	
54	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.5	Private tree	Good	Remove
55	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar		1	Good	Remove
		Populus nigra 'Italica' - Lombardy Poplar	8.1	Private tree	+	Remove
56 57	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	8.2	Private tree	Good	Remove
	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	8.3	Private tree		Removi
58	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	7.5	Private tree	Good	Remove
59	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	6.1	Private tree	Fair	Remov
60	Hollis Street	Populus nigro "Italica" - Lombardy Poplar	9.1	Private tree	Good	Remove
61	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	6.5	Private tree	Fair	Remov
62	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.2	Private tree	Good	Remov
63	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	16.8	Private tree	Good	Remov
64		NOT USED		1 .		
65	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	15.8	Private tree	Good	Remov
66	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	13.2	Private tree	Good	Remov
67	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	13.3	Private tree	Good	Remov
68	Hollis Street	Populus nigro 'Italica' - Lombardy Poplar	13.7	Private tree	Good	Remov
69	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	12.4	Private tree	Good	Remov
70	Hollis Street	Populus nigro 'Italica' - Lombardy Poplar	14.2	Private tree	Good	Remov
71	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	13.8	Private tree	Good	Remov
72	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	15.3	Private tree	Good	Remov
73	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	15.7	Private tree	Good	Remov
74	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	15.0	Private tree	Good	Remov
75	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	15.7	Private tree	Fair	Remov
76	Hollis Street (inside fence)	Populus nigra "Italica" - Lombardy Poplar	14.4	Private tree	Good	Remov
77	Hollis Street (inside fence)	Populus nigra 'Italica' - Lombardy Poplar	10.5	Private tree	Good	Remov
78	Hollis Street (inside fence)	Populus nigra 'Italica' - Lombardy Poplar	18.1	Private tree	Good	Remov
79	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	11.3	Private tree	Good	Remov
80	Hollis Street	Populus nigro 'Italica' - Lombardy Poplar	19.0	Private tree	Good	Remov
81	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	11.3	Private tree	Good	Remov
82	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	11.4	Private tree	Good	Remov
83	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	12.4	Private tree	Good	Remov
84	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.8	Private tree	Good	Remov
85	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.3	Private tree	Good	Remov
86	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.5	Private tree	Good	Remov
87		NOT USED				
88		NOT USED				
89	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.5	Private tree	Good	Remov
90		NOT USED	1		1	
91	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	10.0	Private tree	Good	Remov
92	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	16.0	Private tree	Good	Remov
93	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.3	Private tree	Good	Remov
94	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	15.5	Private tree	Good	Remov







				Protected	Suitability for	1
Tree #	Location	Species	DBH	Status	Preservation	Remove
95	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	15.7	Private tree	Good	Remove
96	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	15.5	Private tree	Good	Remove
97	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	11.2	Private tree	Good	Remove
98		NOT USED				
99	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	10.2	Private tree	Good	Remove
100	Hollis Street	Populus nigro 'Italica' - Lombardy Poplar	9.4	Private tree	Good	Remove
101		Geijero parviflora - Australian Willow	7.3	Private tree	Good	Remove
102		Geijera parviflora - Australian Willow	0.8	Private tree	Fair	Remove
103		Geijera parviflora - Australian Willow	1.1	Private tree	Good	Remove
104		Geijero parviflora - Australian Willow	5.4	Private tree	Dead	Remove
105	1	Geyero parviflora - Australian Willow	8.9	Private tree	Good	Remove
106		Geijero parviflora - Australian Willow	7.5	Private tree	Good	Remove
107	53rd Street	Carpinus betulus - European Hornbeam	5.8	Street tree	Good	Remove
108	53rd Street	Carpinus betulus - European Hornbeam	5.8	Street tree	Good	Remove
109	53rd Street	Carpinus betulus - European Hornbeam	8.0	Street tree	Good	Remove
110	53rd Street	Carpinus betulus - European Hornbeam	9.0	Street tree	Good	Remove
111	53rd Street	Carpinus betulus - European Hornbeam	4.5	Street tree	Good	Remove
112	53rd Street	Carpinus betulus - European Hornbeam	7.5	Street tree	Good	Remove
113	Horton Street	Acer rubrum - Red Maple	10.9	Street tree	Good	Remove
114	Horton Street	Acer rubrum - Red Maple	7.5	Street tree	Fair	Remove
115	Horton Street	Acer rubrum - Red Maple	12.7	Street tree	Fair	Remove
116	Horton Street	Acer rubrum - Red Maple	11.0	Street tree	Fair	Remove
117	Horton Street	Acer rubrum - Red Maple	6.7	Street tree	Good	Remove
118	Horton Street	Acer rubrum - Red Maple	12.5	Street tree	Good	Remove
119	Horton Street	Acer rubrum - Red Maple	13.8	Street tree	Good	Remove
120-200		NOT USED				
201	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	12.7	Private tree	Good	Remove
202	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	16.1	Private tree	Good	Remove
203	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	5.6	Private tree	Good	Remove
204	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	8.9	Private tree	Good	Remove
205	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	15.6	Private tree	Good	Remove
206	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	12.7	Private tree	Good	Remove
207	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	14.0	Private tree	Good	Remove
208	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	12.7	Private tree	Good	Remove
209	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	12.0	Private tree	Good	Remove
210	Hollis Street	Populus nigro 'Italica' - Lombardy Poplar	13.6	Private tree	Good	Remove
211	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	17.0	Private tree	Good	Remove
212	Hollis Street	Populus nigro 'Italica' - Lombardy Poplar	12.3	Private tree	Good	Remove
213	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	11.4	Private tree	Good	Remove
214	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	9.0	Private tree	Good	Remove
215	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	12.5	Private tree	Fair	Remove
216	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	11.6	Private tree	Good	Remove
217	Hollis Street	Populus nigra "Italica" - Lombardy Poplar	12.2	Private tree	Good	Remove
218	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	12.8	Private tree	Good	Remove
219	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	10.9	Private tree	Good	Remove
220	Hollis Street	Populus nigro 'Italica' - Lombardy Poplar	14.8	Private tree	Fair	Remove
221	Hollis Street	Populus nigra 'Italica' - Lombardy Poplar	18.1	Private tree	Fair	Remove

Tree #	Location	Species	DBH	Protected Status	Suitability for Preservation	Preserve Remove
222	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	16.2	Private tree	Good	Remove
223	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	13.3	Private tree	Fair	Remove
224	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	13.8	Private tree	Good	Remove
225	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	17.2	Private tree	Fair	Remove
226	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	17.9	Private tree	Fair	Remove
227	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	23.5	Private tree	Good	Remove
228	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	18.9	Private tree	Fair	Remove
229	Stanford Avenue	Populus nigro "Italica" - Lombardy Poplar	16.8	Private tree	Good	Remove
230	Stanford Avenue	Populus nigro "Italica" - Lombardy Poplar	15.6	Private tree	Fair	Remove
231	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	14.9	Private tree	Good	Remove
232	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	16.2	Private tree	Good	Remove
233	Stanford Avenue	Populus nigra "Italica" - Lombardy Poplar	15.2	Private tree	Fair	Remove
234	Chiron Way	Carpinus betulus - European Hornbeam	1.8	Private tree	Good	Remove
235	Chiron Way	Carpinus betulus - European Hornbeam	2.5	Private tree	Good	Remove
236			2.5		<del>                                     </del>	Remove
	Chiron Way	Carpinus betulus - European Hornbeam		Private tree	Good	
237	Chiron Way	Carpinus betulus - European Hornbeam	2.5	Private tree	Good	Remove
238	Chiron Way	Carpinus betulus - European Hornbeam	2.5	Private tree	Good	Remove
239	Chiron Way	Carpinus betulus - European Hornbeam	2.0	Private tree	Good	Remove
240	Chiron Way	Carpinus betulus - European Hornbeam	1.0	Private tree	Good	Remove
241	Chiron Way	Carpinus betulus - European Hornbeam	1.0	Private tree	Good	Remove
242	Chiron Way	Carpinus betulus - European Hornbeam	2.5	Private tree	Good	Remove
243	Chiron Way	Carpinus betulus - European Hornbeam	2.0	Private tree	Good	Remove
244	Chiron Way	Carpinus betulus - European Hornbeam	1.7	Private tree	Good	Remove
245	Chiron Way	Carpinus betulus - European Hornbeam	2.4	Private tree	Good	Remove
246	Chiron Way	Carpinus betulus - European Hornbeam	2.5	Private tree	Good	Remove
247	Chiron Way	Carpinus betulus - European Hornbeam	2.5	Private tree	Good	Remove
248	Chiron Way	Carpinus betulus - European Hornbeam	2.2	Private tree	Good	Remove
249	Chiron Way	Carpinus betulus - European Hornbeam	2.2	Private tree	Good	Remove
250	Chiron Way	Carpinus betulus - European Hornbeam	2.2	Private tree	Good	Remove
251	Chiron Way	Carpinus betulus - European Hornbeam	2.0	Private tree	Good	Remove
252	Chiron Way	Carpinus betulus - European Hornbeam	2.2	Private tree	Good	Remove
253	Chiron Way	Carpinus betulus - European Hornbeam	2.2	Private tree	Good	Remove
254		Carpinus betulus - European Hornbeam	2.5		<del>                                     </del>	Remove
	Chiron Way	<del></del>		Private tree	Good	
255	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	22.0	Private tree	fair	Remove
256	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	20.8	Private tree	Good	Remove
257	Chiron Way	Populus nigra 'Italica' - Lombardy Poplar	19.9	Private tree	Fair	Remove
258	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	19.4	Private tree	Good	Remove
259	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	20.0	Private tree	Good	Remove
260	Chiron Way	Populus nigra 'Italica' - Lombardy Poplar	22.5	Private tree	Fair	Remove
261	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	19.2	Private tree	Good	Remove
262	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	18.1	Private tree	Good	Remove
263	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	17.5	Private tree	Good	Remove
264	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	18.3	Private tree	Fair	Remove
265	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	19.0	Private tree	Good	Remove
266	Chiron Way	Populus nigra "Italica" - Lombardy Poplar	2.4	Private tree	Good	Remove
267	Horton Street	Schinus terebinthifolius - Brazilian Pepper	16.5	Street tree	Good	Remove
268	Horton Street	Schinus terebinthifolius - Brazilian Pepper	12.1	Street tree	Fair	Remove
269	Horton Street	Schinus terebinthifolius - Brazilian Pepper	11.8	Street tree	Fair	Remove
270	Horton Street	Schinus terebinthifolius - Brazilian Pepper	12.5	Street tree	Fair	Remove
271	Horton Street	Schinus terebinthifolius - Brazilian Pepper	13.3	Street tree	Good	Remove
272	Horton Street	Schinus terebinthifolius - Brazilian Pepper	12.8	Street tree	Fair	Remove
273	Horton Street	Pistacia chinensis - Chinese Pistache	11.5	Street tree	Good	Remove
274	Horton Street	Pistacia chinensis - Chinese Pistache	5.6	Street tree	Good	Remove
4/14	HOLLOH SUREL	r istatus timiensis - Chinese ristatule	3.0	Succented	0000	wemove







Tree #	Location	Species	DBH (inches)	Canopy diameter (ft)	Protected Status	Condition rating (from appraisal worksheet)	Appraised value (from appraisal worksheet)
107	53rd Street	Carpinus betulus - European Hornbeam	5.8	12	Street tree	73%	\$10,208.01
108	53rd Street	Carpinus betulus - European Hornbeam	5.8	13	Street tree	73%	\$10,208.01
109	53rd Street	Carpinus betulus - European Hornbeam	8.0	15	Street tree	73%	\$12,321.07
110	53rd Street	Carpinus betulus - European Hornbeam	9.0	12	Street tree	73%	\$13,504.27
111	53rd Street	Carpinus betulus - European Hornbeam	4.5	5	Street tree	85%	\$9,519.07
112	53rd Street	Carpinus betulus - European Hornbeam	<b>7.</b> 5	15	Street tree	73%	\$11,781.67
113	Horton Street	Acer rubrum - Red Maple	10.9	18	Street tree	70%	\$11,093.53
114	Horton Street	Acer rubrum - Red Maple	<b>7</b> .5	18	Street tree	75%	\$9,500.25
115			12.7	18	Street tree	78%	\$12,719.99
116	Horton Street	Acer rubrum - Red Maple	11.0	18	Street tree	70%	\$11,153.14
117	Horton Street	Acer rubrum - Red Maple	6.7	18	Street tree	80%	\$9,256.26
118	Horton Street	Acer rubrum - Red Maple	12.6	18	Street tree	78%	\$12,643.76
119	Horton Street	Acer rubrum - Red Maple	13.8	18	Street tree	70%	\$13,043.02
267	Horton Street	Schinus terebinthifolius - Brazilian Pepper	16.5	25	Street tree	73%	\$19,666.27
268	Horton Street	Schinus terebinthifolius - Brazilian Pepper	12.1	20	Street tree	60%	\$12,886.60
269	Horton Street	Schinus terebinthifolius - Brazilian Pepper	11.8	18	Street tree	63%	\$12,839.31
270	Horton Street	Schinus terebinthifolius - Brazilian Pepper	12.5	20	Street tree	50%	\$12,349.17
271	Horton Street	Schinus terebinthifolius - Brazilian Pepper	13.3	20	Street tree	63%	\$14,194.71
272	Horton Street	Schinus terebinthifolius - Brazilian Pepper	12.8	20	Street tree	55%	\$13,017.12
273	Horton Street	Pistacia chinensis - Chinese Pistache	11.6	23	Street tree	76%	\$13,678.41
274	Horton Street	Pistacia chinensis - Chinese Pistache	5.6	15	Street tree	76%	\$9,190.45
275	Horton Street	Pistacia chinensis - Chinese Pistache	5.5	15	Street tree	76%	\$9,142.18
					-		\$263,916.25



		Method used: Reproduction Method -	•				
		from the 10th edition of the Guid	de to Plant Appraisal				
		Tree Number	107	108	109	110	111
		Location	53rd Street	53rd Street	53rd Street	53rd Street	53rd Street
			Carpinus betulus - European	Carninus hetulus -	Carpinus betulus -	Carpinus betulus -	Carpinus betulus -
Subject Tree		Species	Hornbeam	European Hornbeam	European Hornbeam	European Hornbeam	European Hornbeam
	#1	Trunk Diameter	5.8	5.8	8.0	9.0	4.5
	#2	Cross-sectional Area (#1 squared x 0.7854)	26.4 in	26.4 in	50.3 in	63.6 in	15.9 in
Condition			100%	100%	100%	100%	100%
		Structure (10-100%)	60%	60%	60%	60%	80%
	#3c	Form (10-100%)	70%	70%	70%	70%	80%
		Condition Rating (weighted average; health = .25,					
	#3	structure = .5, form = .25)	73%	73%	73%	73%	85%
Limitations	#4	Functional Limitations (0-100%)	60%	60%	60%	60%	60%
	#5	External Limitations (0-100%)	100%	100%	100%	100%	100%
			Pistacia chinensis 'Keith	Pistacia chinensis 'Keith	Pistacia chinensis 'Keith	Pistacia chinensis 'Keith	Pistacia chinensis 'Keith
Replacement Tree		Species	Davey', 24" box	Davey', 24" box	Davey', 24" box	Davey', 24" box	Davey', 24" box
	#6	Trunk Diameter @ 6"	1.25	1.25	1.25	1.25	1.25
	#7	Cross-sectional Area (#6 squared x 0.7854)	1.2 in	1.2 in	1.2 in	1.2 in	1.2 in
	#8	Replacement Tree Cost, Source: Devil Mountain Nursery	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00
	#9	Unit Tree Cost (#8/#7)	\$204 / sq in	\$204 / sq in	\$204 / sq in	\$204 / sq in	\$204/sq in
	#10	Basic Reproduction Cost (#2 x #9))	\$5,382.40	\$5,382.40	\$10,240.00	\$12,960.00	\$3,240.00
	#11	Depreciated Reproduction Cost (#10 x #3 x #4 x #5)	\$2,341.3 <b>4</b>	\$2,341.34	\$4,454.40	\$5,637.60	\$1,652.40
Additional Costs	#12a	Tree removal and stump grinding	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00
	#12b	Replacement Tree Installation + root barrier	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00
	#12c	Topsoil prep	3800.00	3000.00	\$600.00	3800.00	3800.00
			\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	12d	Tree grates	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	12e	Drainage & testing	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
	12f	flagging & traffic control	\$600.00	\$600.00	\$600.00	\$600.00	\$600.00
	12g	barricades & fencing	\$466.67	\$466.67	\$466.67	\$466.67	\$466.67
	#12	Total additional costs	\$7,866.67	\$7,866.67	\$7,866.67	\$7,866.67	\$7,866.67
		Total reproduction cost (#11 + #12)	\$10,208.01	\$10,208.01	\$12,321.07	\$13,504.27	\$9,519.07
		Total appraised value-all trees	\$263,916.24				







		Method used: Reproduction Method -					
		from the 10th edition of the Gui	(				
	$\vdash$	Tree Number	112	113	114	115	116
		Location	C120 AV 620°	Horton Street	Horton Street	Horton Street	Horton Street
		Eoddion					
		Constant	Carpinus betulus -		Acer rubrum - Red	Acer rubrum - Red	Acer rubrum - Red
Subject Tree		Species	European Hornbeam	Maple	Maple	Maple	Maple
	#1	Trunk Diameter	7.5	10.9	7.5	12.7	11.0
	#2	Cross-sectional Area (#1 squared x 0.7854)	44. <b>2</b> in	93.3 in	44.2 in	<b>126</b> .7 in	95.0 in
ondition	#3a	Health (10-100%)	100%	100%	100%	100%	100%
	#3b	Structure (10-100%)	60%	50%	60%	65%	50%
	#3c	Form (10-100%)	70%	80%	80%	80%	80%
	#3	Condition Rating (weighted average; health = .25, structure = .5, form = .25)	73%	70%	75%	78%	70%
f				1			
imitations	#4	Functional Limitations (0-100%)	60%	30% 90%	30% 90%	30%	30%
	#5	External Limitations (0-100%)	100%	90%	90%	90%	90%
			Pistacia chinensis 'Keith				
Replacement Tree		Species	Davey', 24" box	Acer x freemanii, 24" box	Acer x freemanii, 24" box	Acer x freemanii, 24" box	Acer x freemanii, 24" l
	#6	Trunk Diameter @ 6"	1.25	1.25	1.25	1.25	1.25
	#7	Cross-sectional Area (#6 squared x 0.7854)	<b>1.2</b> ín	1.2 in	1.2 in	1.2 in	1.2 in
	#8	Replacement Tree Cost, Source: Devil Mountain Nursery	\$250.00	\$225.00	\$225.00	\$225.00	\$225.00
	#9	Unit Tree Cost (#8/#7)	\$204 / sq in	\$183 / sq in			
	#10	Basic Reproduction Cost (#2 x #9))	\$9,000.00	\$17,108.64	\$8,100.00	\$23,225.76	\$17,424.00
	#11	Depreciated Reproduction Cost (#10 x #3 x #4 x #5)	\$3,915.00	\$3,233.53	\$1,640.25	\$4,859.99	\$3,293.14
Additional Costs	#12a	Tree removal and stump grinding	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00
	#12b	Replacement Tree Installation + root barrier	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00
	#12c	Topsoil prep	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	12d	Tree grates	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	12e	Drainage & testing	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
	12f	flagging & traffic control	\$600.00	\$560.00	\$560.00	\$560.00	\$560.00
	12g	barricades & fencing	\$466.67	\$500.00	\$500.00	\$500.00	\$500.00
	#12	Total additional costs	\$7,866.67	\$7,860.00	\$7,860.00	\$7,860.00	\$7,860.00
	#13	Total reproduction cost (#11 + #12)	\$11,781.67	\$11,093.53	\$9,500.25	\$12,719.99	\$11,153.14







		Method used: Reproduction Method -					
		from the 10th edition of the Guid	(				
		Tuga Blumban	117	110	110	267	260
	_	Tree Number Location	117 Horton Street	118 Horton Street	119 Horton Street	267 Horton Street	268 Horton Street
	_						
			Acer rubrum - Red	Acer rubrum - Red	Acer rubrum - Red	Schinus terebinthifolius	_
		Species	Maple	Maple	Maple	Brazilian Pepper	Brazilian Pepper
	#1	Trunk Diameter	6.7	12.6	13.8	16.5	12.1
	#2	Cross-sectional Area (#1 squared x 0.7854)	35.3 in	<b>12</b> 4.7 in	149.6 in	213.8 in	115.0 in
Condition	#3a	Health (10-100%)	100%	100%	100%	90%	90%
	#3b	Structure (10-100%)	70%	65%	50%	61%	50%
	#3c	Form (10-100%)	80%	80%	80%	90%	50%
	#3	Condition Rating (weighted average; health = .25, structure = .5, form = .25)	80%	78%	70%	76%	60%
	$\vdash$				i	i	
Limitations	#4	Functional Limitations (0-100%)	30% 90%	30%	30% 90%	40%	40%
	#5	External Limitations (0-100%)	90%	90%	90%	100%	100%
						Acer rubrum 'Armstrong',	_
Replacement Tree		Species	Acer x freemanii, 24" box	Acer x freemanii, 24" box	Acer x freemanii, 24" box	24" box	24" box
	#6	Trunk Diameter @ 6"	1.25	1.25	1.25	1.25	1.25
	#7	Cross-sectional Area (#6 squared x 0.7854)	1.2 in	<b>1.2</b> in	1.2 in	<b>1.</b> 2 in	1.2 in
	#8	Replacement Tree Cost, Source: Devil Mountain Nursery	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00
	#9	Unit Tree Cost (#8/#7)	\$183 / sq in	\$183 / sq in	\$183 / sq in	\$183 / sq in	\$183 / sq in
	#10	Basic Reproduction Cost (#2 x #9))	\$6,464.16	\$22,861.44	\$27,423.36	\$39,204.00	\$21,083.04
	#11	Depreciated Reproduction Cost (#10 x #3 x #4 x #5)	\$1,396.26	\$4,783.76	\$5,183.02	\$11,839.61	\$5,059.93
Additional Costs	#12a	Tree removal and stump grinding	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00
	#12b	Replacement Tree Installation + root barrier	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00
	#12c	Topsoil prep	\$2,800.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	12d	Tree grates	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	12e	Drainage & testing	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
	12f	flagging & traffic control	\$560.00	\$560.00	\$560.00	\$560.00	\$560.00
	12g	barricades & fencing	\$500.00	\$500.00	\$500.00	\$466.67	\$466.67
	#12	Total additional costs	\$7,860.00	\$7,860.00	\$7,860.00	\$7,826.67	\$7,826.67
	#13	Total reproduction cost (#11 + #12)	\$9,256.26	\$12,643.76	\$13,043.02	\$19,666.27	\$12,886.60
		Total appraised value-all trees			1		







		Method used: Reproduction Method - from the 10th edition of the Guid					
		from the Toth edition of the Guid					
		Tree Number	269	270	271	272	273
		Location	Horton Street	Horton Street	Horton Street	Horton Street	Horton Street
Subject Tree		Species	·	Schinus terebinthifolius Brazilian Pepper	- <i>Schinus terebinthifolius -</i> Brazilian Pepper		<i>Pistacia chinensis -</i> Chinese Pistache
,	#1	Trunk Diameter	11.8	12.5	13.3	12.8	11.6
	#2	Cross-sectional Area (#1 squared x 0.7854)	109.4 in	122.7 in	138.9 in	128.7 in	105.7 in
Limitations  Replacement Tree	#3a	Health (10-100%)	90%	60%	90%	90%	100%
		Structure (10-100%)	50%	40%	50%	50%	61%
		Form (10-100%)	60%	61%	60%	30%	80%
		Condition Rating (weighted average; health = .25,					
		structure = .5, form = .25)	63%	50%	63%	55%	76%
		Functional Limitations (0-100%)	40%	40%	40%	40%	40%
	#5	External Limitations (0-100%)	100%	100% 100%		100%	100%
		Species	<u> </u>	Acer rubrum 'Armstrong', 24" box	Acer rubrum 'Armstrong', 24" box		Acer rubrum 'Armstron 24" box
		Trunk Diameter @ 6"	1.25	1.25	1.25	1.25	1.25
	#7	Cross-sectional Area (#6 squared x 0.7854)	1.2 in	1.2 in	1.2 in	1.2 in	1.2 in
		Replacement Tree Cost, Source: Devil Mountain Nursery	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00
		Unit Tree Cost (#8/#7)	\$183 / sq in	\$183 / sq in	\$183 / sq in	\$183 / sq in	\$183 / sq in
		Basic Reproduction Cost (#2 x #9))  Depreciated Reproduction Cost (#10 x #3 x #4 x #5)	\$20,050.56	\$22,500.00	\$25,472.16	\$23,592.96	\$19,376.64
			\$5,012.64	\$4,522.50	\$6,368.04	\$5,190.45	\$5,851.75
dditional Costs	#12a	Tree removal and stump grinding	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00
	#12b	Replacement Tree Installation + root barrier	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00
	#12c	Topsoil prep	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	12d	Tree grates	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
	12e	Drainage & testing	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
	12f	flagging & traffic control	\$560.00	\$560.00	\$560.00	\$560.00	\$560.00
	12g	barricades & fencing	\$466.67	\$466.67	\$466.67	\$466.67	\$466.67
	#12	Total additional costs	\$7,826.67	\$7,826.67	\$7,826.67	\$7,826.67	\$7,826.67
		Total reproduction cost (#11 + #12)	\$12,839.31	\$12,349.17	\$14,194.71	\$13,017.12	\$13,678.41
		Total appraised value-all trees					



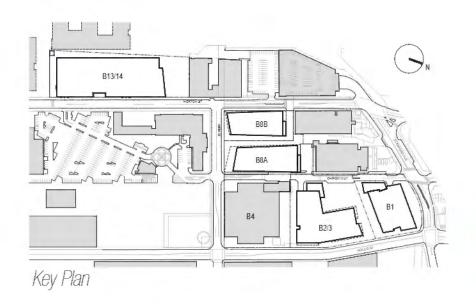




		Method used: Reproduction Method -		
		from the 10th edition of the Guid		
		Tree Number		275
		Location	Horton Street	Horton Street
			Pistacia chinensis -	Pistacia chinensis -
Subject Tree		Species	Chinese Pistache	Chinese Pistache
	#1	Trunk Diameter	5.6	5.5
	#2	Cross-sectional Area (#1 squared x 0.7854)	24.6 in	23.8 in
Condition	#3a	Health (10-100%)	100%	100%
	#3b	Structure (10-100%)	61%	61%
	#3c	Form (10-100%)	80%	80%
		Condition Rating (weighted average; health = .25,		
	#3	structure = .5, form = .25)	76%	76%
Limitations	#4	Functional Limitations (0-100%)	40%	40%
	#5	External Limitations (0-100%)	100%	100%
			Acer rubrum 'Armstrong',	Acer rubrum 'Armstrong',
Replacement Tree		Species	24" box	24" box
	#6	Trunk Diameter @ 6"	1.25	1.25
	#7	Cross-sectional Area (#6 squared x 0.7854)	1.2 in	1.2 in
	#8	Replacement Tree Cost, Source: Devil Mountain Nursery	\$225.00	\$225.00
	#9	Unit Tree Cost (#8/#7)	\$183 / sq in	\$183 / sq in
	#10	Basic Reproduction Cost (#2 x #9))	\$4,515.84	\$4,356.00
	#11	Depreciated Reproduction Cost (#10 x #3 x #4 x #5)	\$1,363.78	\$1,315.51
Additional Costs	#12a	Tree removal and stump grinding	\$800.00	\$800.00
	#12b	Replacement Tree Installation + root barrier	\$800.00	\$800.00
	#12c	Topsoil prep	\$2,500.00	\$2,500.00
	12d	Tree grates	\$2,500.00	\$2,500.00
	12e	Drainage & testing	\$200.00	\$200.00
	12f	flagging & traffic control	\$560.00	\$560.00
	12g	barricades & fencing	\$466.67	\$466.67
	#12	Total additional costs	\$7,826.67	\$7,826.67
	#13	Total reproduction cost (#11 + #12)	\$9,190.45	\$9,142.18
		Total appraised value-all trees		



7. VISUAL SIMULATIONS





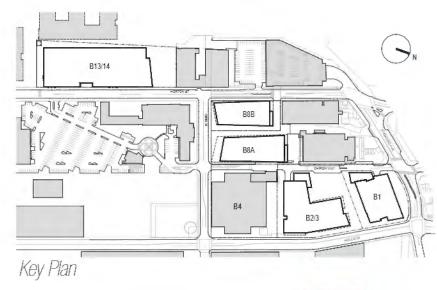
# Existing





Note 1: View does not include proposed street improvements







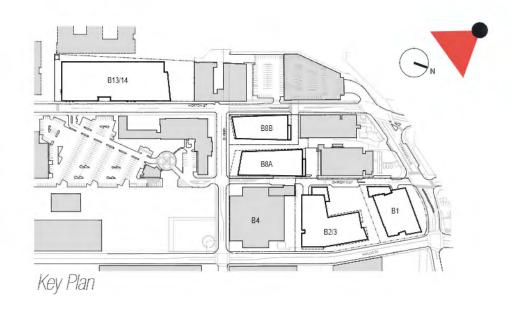
# Existing





Note 1: View does not include proposed street improvements

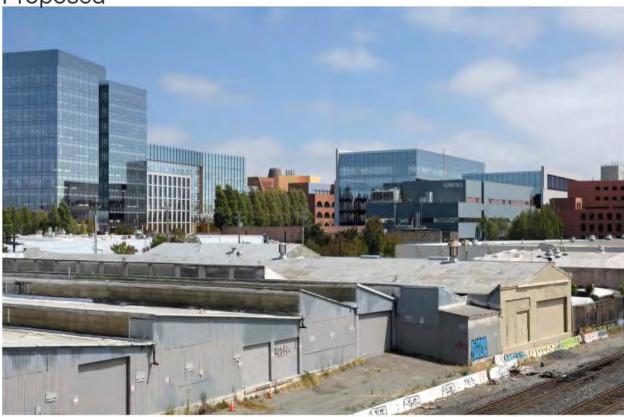






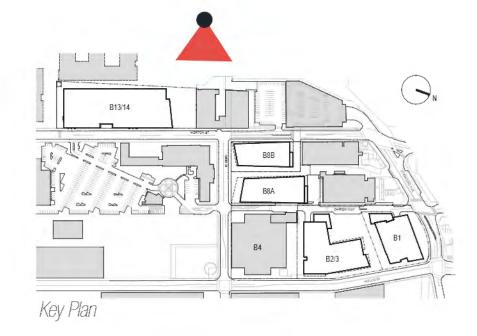






Note 1: View does not include proposed street improvements





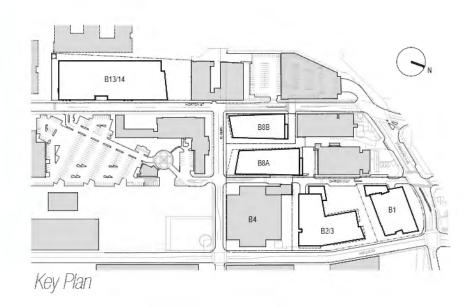




Note 1: View does not include proposed street improvements







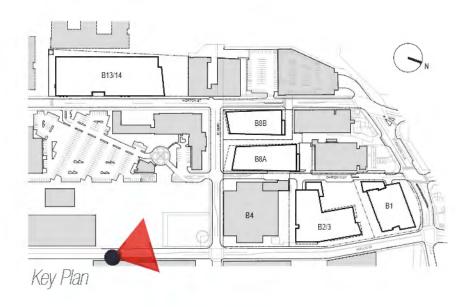






Note 1: View does not include proposed street improvements



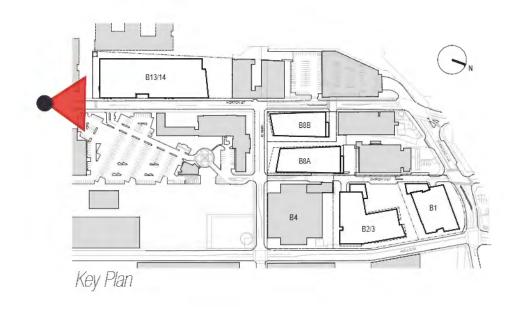






Note 1: View does not include proposed street improvements











Note 1: View does not include proposed street improvements Note 2: Includes proposed Sherwin-Williams Building 2

