MXD CENTER PLAZA CRA/CDD Update

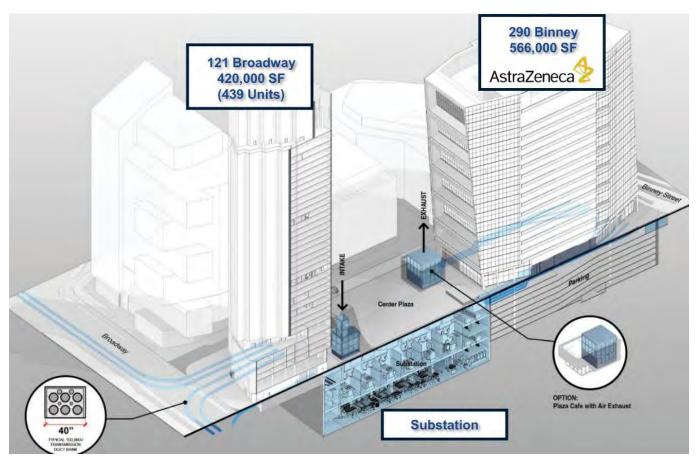


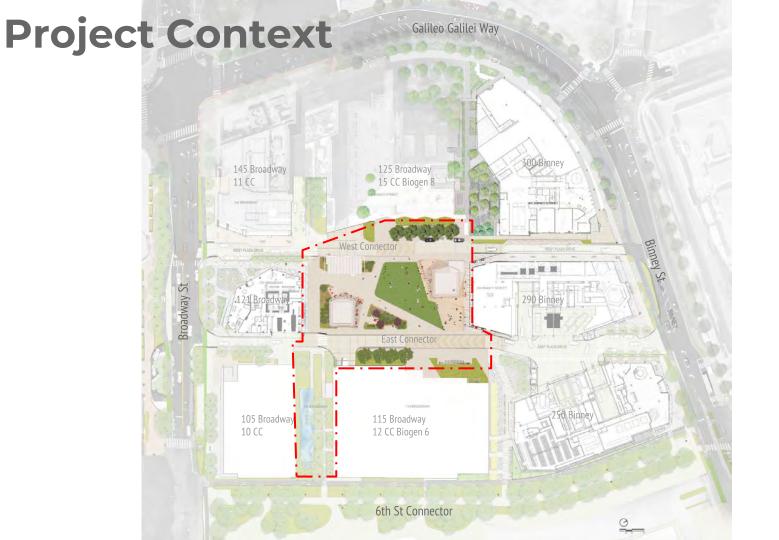
Table of Contents

- Project Context
- Constraints and Studies
- Previous CRA/CDD and Public Comments
- Addressing CRA/CDD and Public Comments
- Design Vision
- Current Design Framework
- Approach Views
- Planting
- Programing Studies
- Signage / Art
- Lighting
- Sections
- Next Steps
- Appendix



Project Context

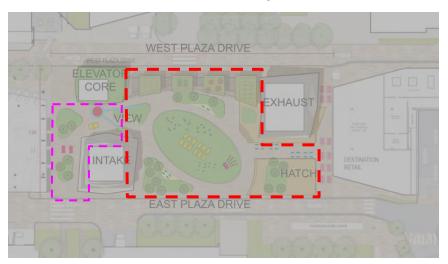




MXD Center Plaza

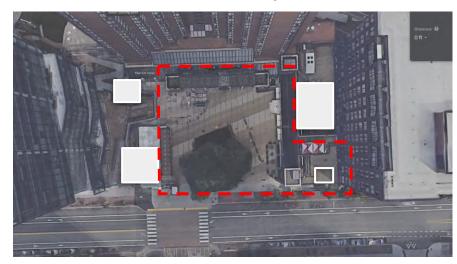
Constraints and Studies

Urban Wild option



Elevated planter separates space creating feeling of plaza enclosure

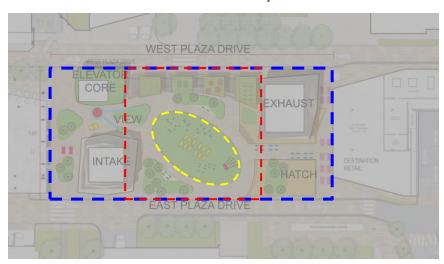
Kendall Square



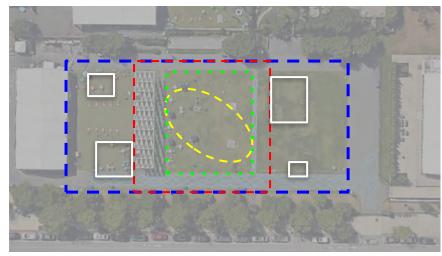


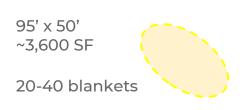


Urban Wild option



Lawn on D, Boston







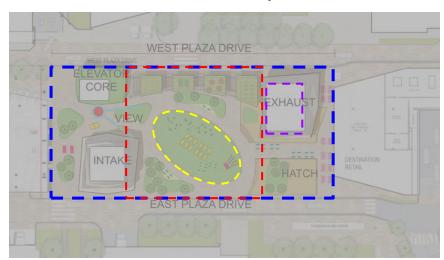
98' x 82' 8,000 SF

50-100 blankets



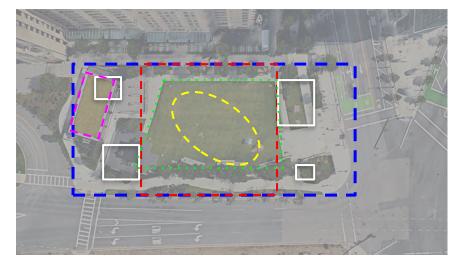


Urban Wild option



95' x 50' ~120' x 84' ~10,000 SF 20-40 blankets 60-120 blankets

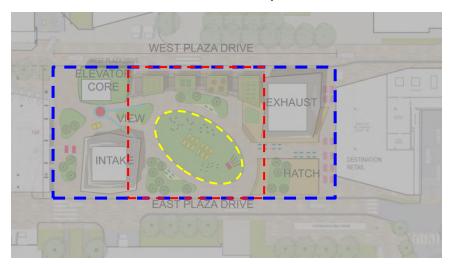
Landmark Center (Trillium), Boston



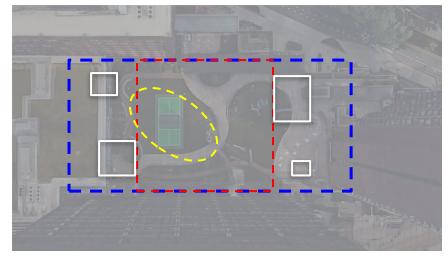




Urban Wild option



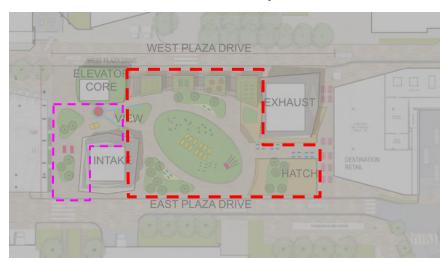
Green Garage Roof, Cambridge





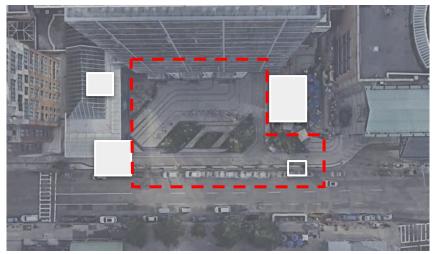


Urban Wild option



Most of the plaza dedicated to circulation and open seating, but connecting circulation too narrow

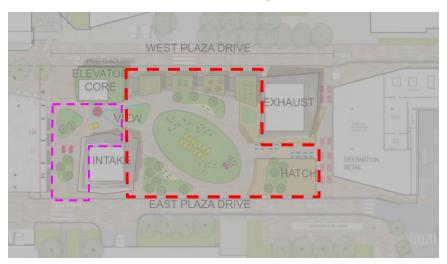
Prudential Center





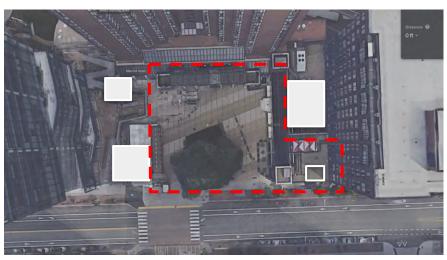


Urban Wild option



Elevated planter separates space creating feeling of plaza enclosure

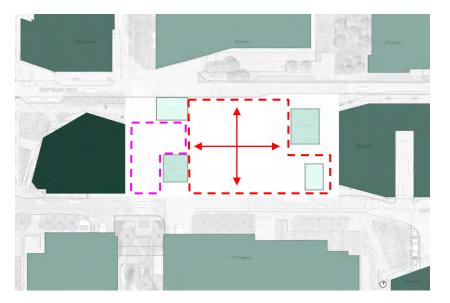
Kendall Square

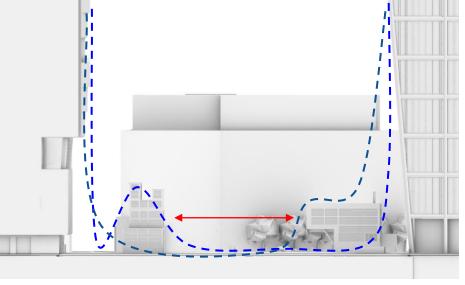






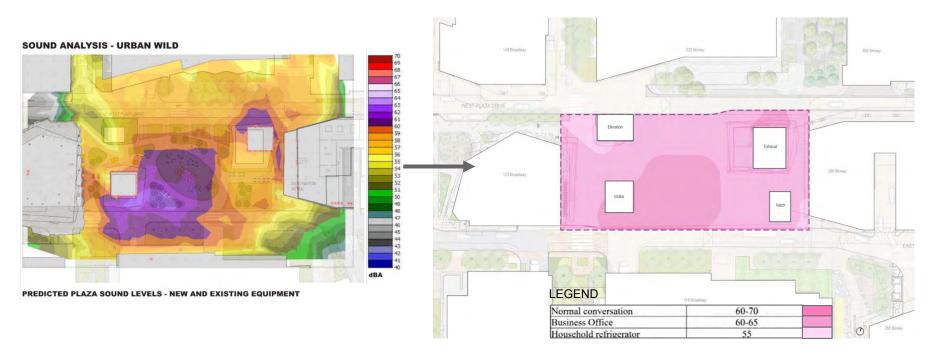
Analysis: Volume





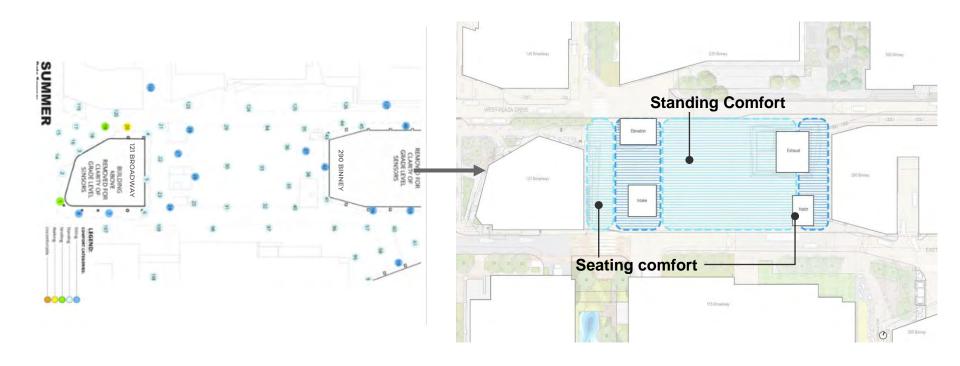
Volumes: The vault buildings create a sense of enclosure that defines the plaza space, and could be balanced with canopy on north end

Analysis: Sound



Sound: Generally comfortable throughout despite variations from analysis

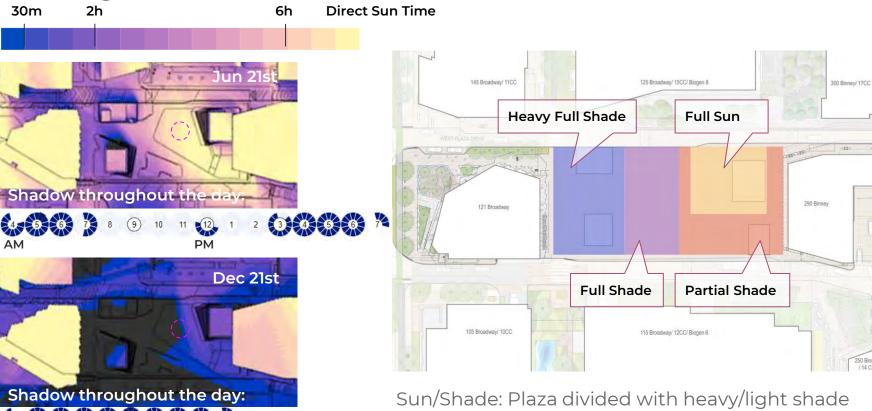
Analysis: Wind



Wind: Generally comfortable, but best conditions around buildings / structures (model does not include wind breaks provided by plaza structures)

Analysis: Solar

AM



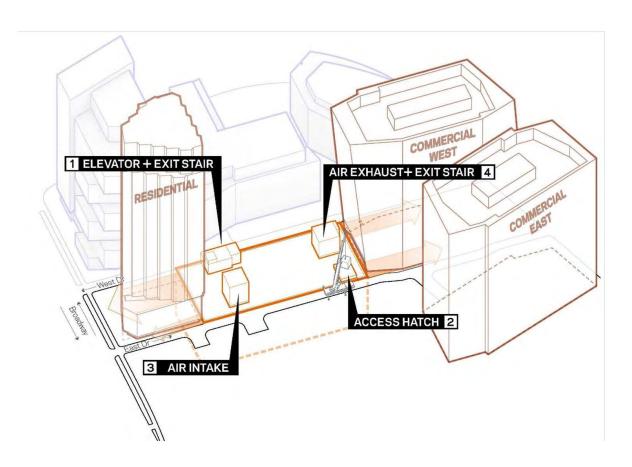
Sun/Shade: Plaza divided with heavy/light shade nearly equally on north/south







Easements



MXD Center Plaza

Previous CRA/CDD and Public Comments







Previous Design CRA/CDD Feedback

Meeting 12/7/22 Comments Received 2/2/23

"Urban Wild" option with elements of the "urban rooms" scheme

- Grass center, strong feature
- Softer shapes preferred
- Appreciate vertical green walls
- Over-reliance on programming
- Play can be broader
- Liked swings from "rooms"
- Liked trellis/canopy feature
- Down-size architecture
- Retail at exhaust not recommended
- Consider desire lines
- Bathrooms appreciated

Previous Design Public Feedback



Meeting 10/18/22

Public Goals:

- CREATE A ROBUST, YEAR-ROUND PROGRAMMING WITH FOCUS ON AFFORDABLE FOOD AND SPORTS
- CREATE A UNIQUE AND LESS FORMAL IDENTITY FOR THE PLAZA
- RETURN TO THE URBAN WILD: ADD MORE REAL AND VARIED GREENERY
- MORE COVERAGE IN THE EXPOSED AREA/DESIRED LINES

MXD Center Plaza

Addressing Public and CRA/CDD Feedback

CRA/CDD Feedback

Meetings 05/25/2023 06/05/2023

Key Takeaways

- Additional trees and landscaping is desired
- Less pavement, more lawn space
- Approaches to plaza from streets need to feel inviting & open to the public
- There should be flexibility for community programming
- Grass is preferred over turf
- Bollards should be placed to protect pedestrians from traffic
- Power/USB outlets in seating areas should be provided
- Desire for increased bench area, benches with backs are preferred
- Blue bike locations should be shown and coordinated with plaza design

Public Feedback collected by CRA

Meetings

ECPT-07/14/2023

Washington Elms Game Nights (5)

Proto Tabeling 07/11/2023

Online Survey (106 responses)

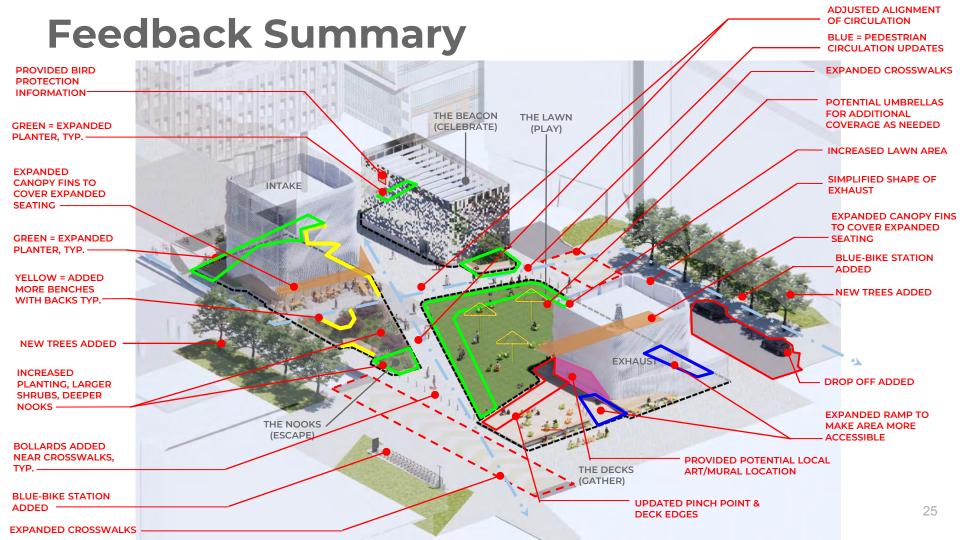
Public Meeting 08/09/2023

Key Takeaways

- People want to a place and reason to gather
- Greenery and Sustainability is a high priority
- People want to feel enclosed
- The Beacon is least compelling area

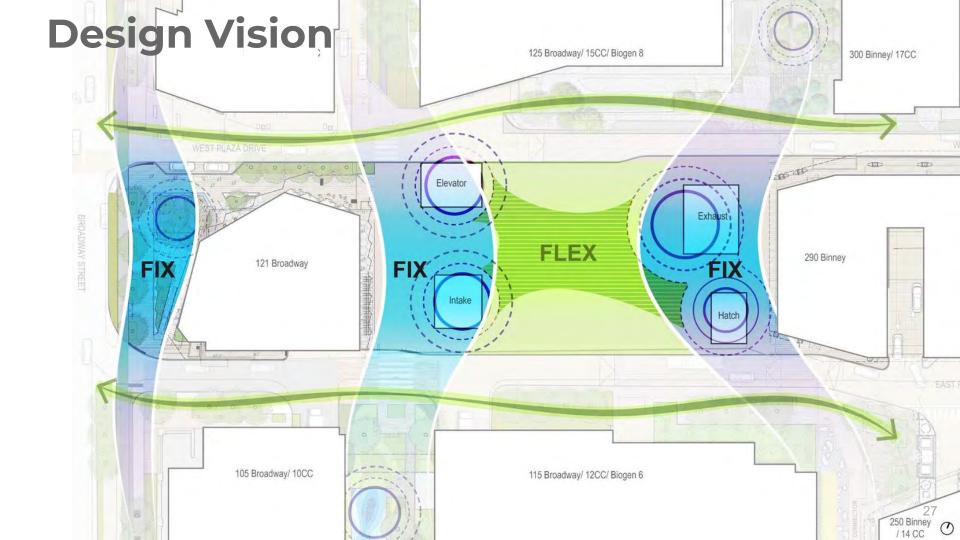
CRA Recommendations

- Create a unique and less formal identity for plaza
- Create Robust, year-round programming, with a focus on affordable food and sports/lawn games
- Return to urban wild: more robust and varied greenery
- More coverage in exposed areas/desire lines

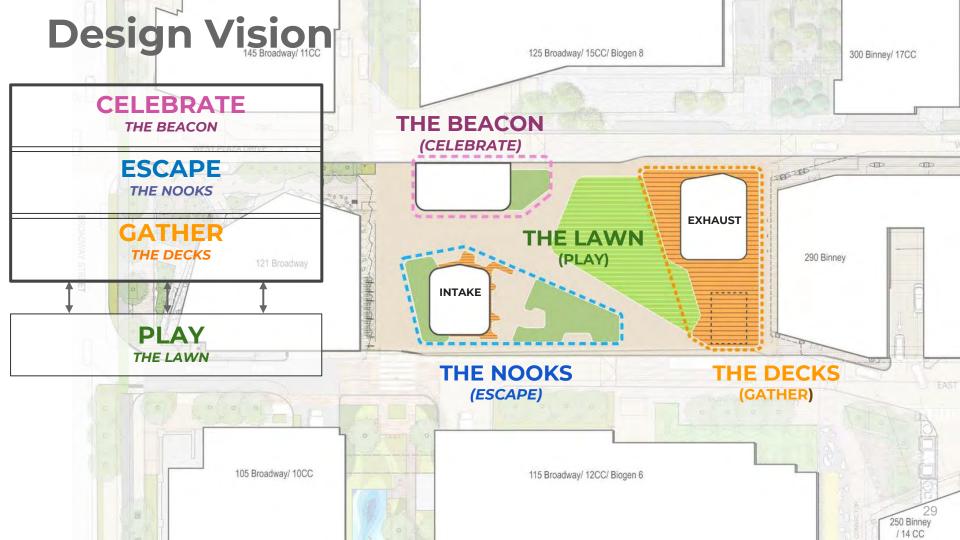


MXD Center Plaza

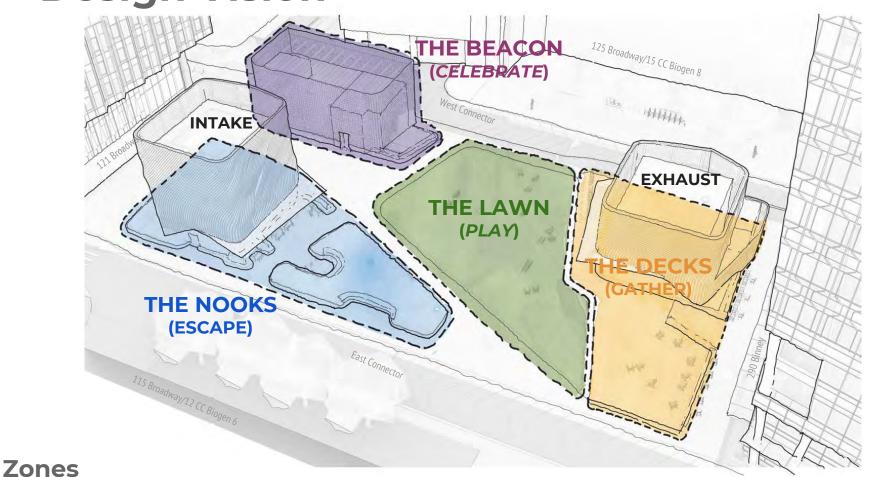
Design Vision



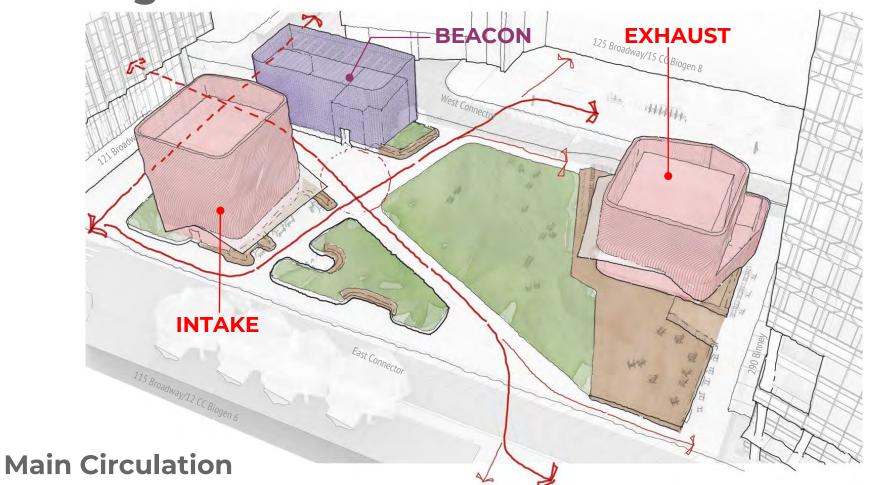




Design Vision

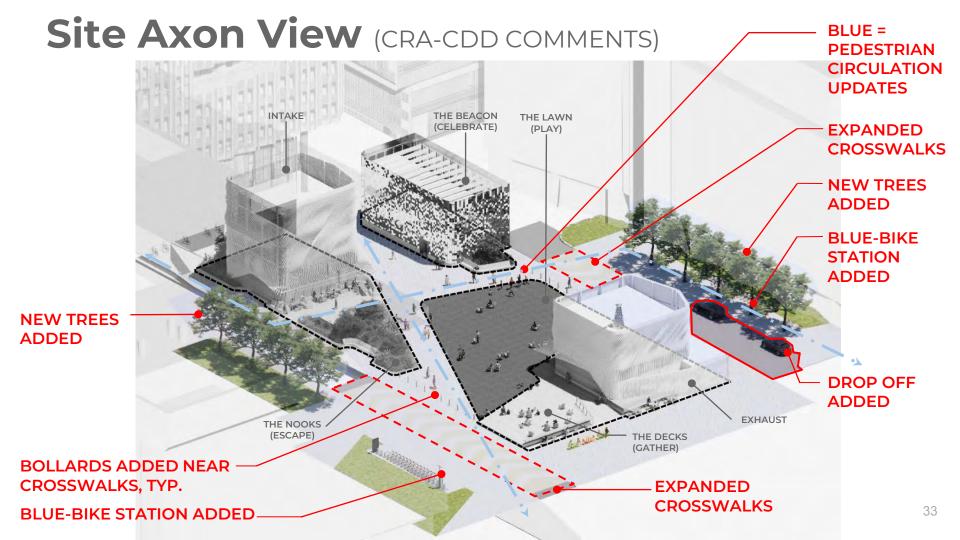


Design Vision

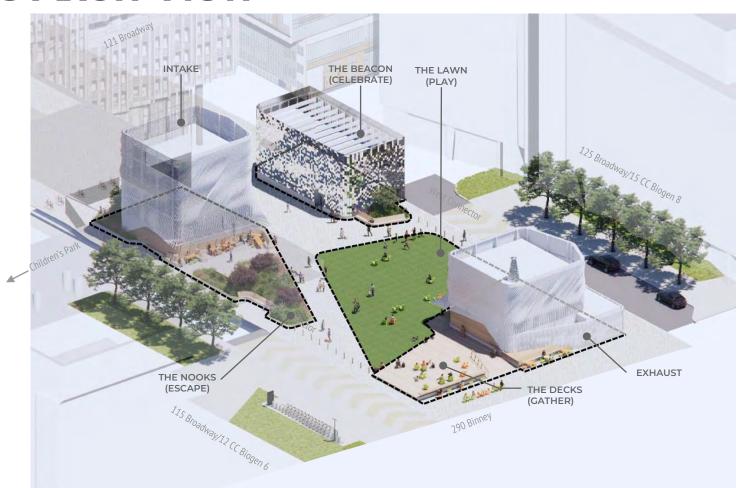


MXD Center Plaza

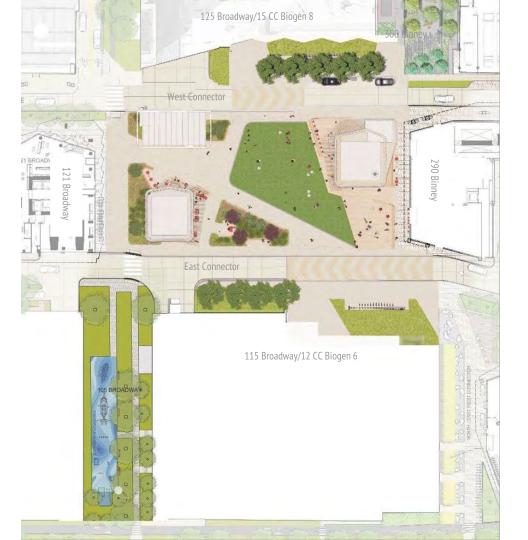
Current Design Framework



Site Axon View



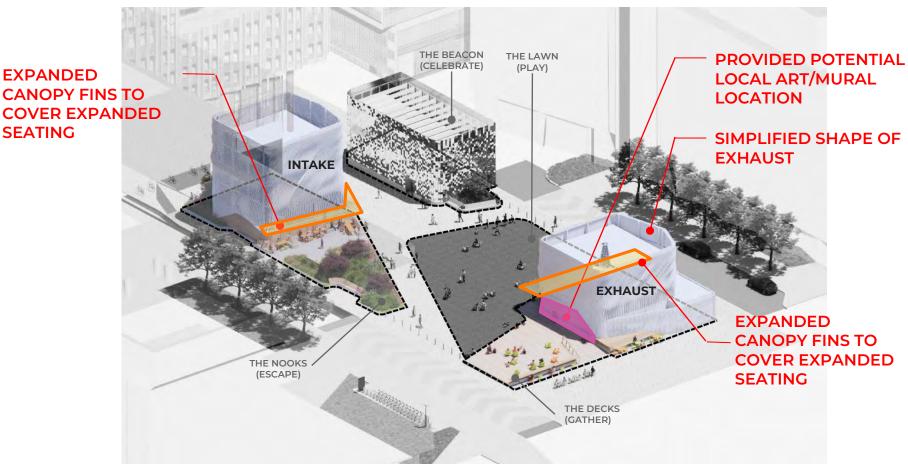
Site Plan



The Ventilation Structures (CRA-CDD COMMENTS)

EXPANDED

SEATING



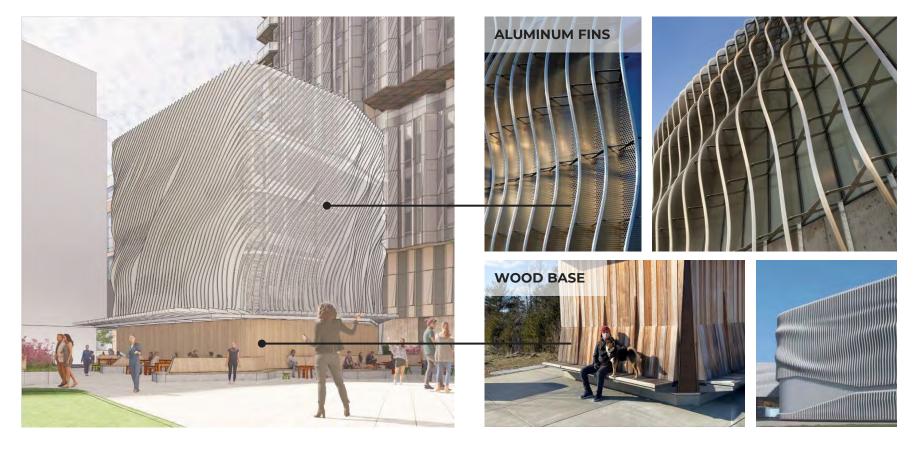
The Ventilation Structures







The Ventilation Structures



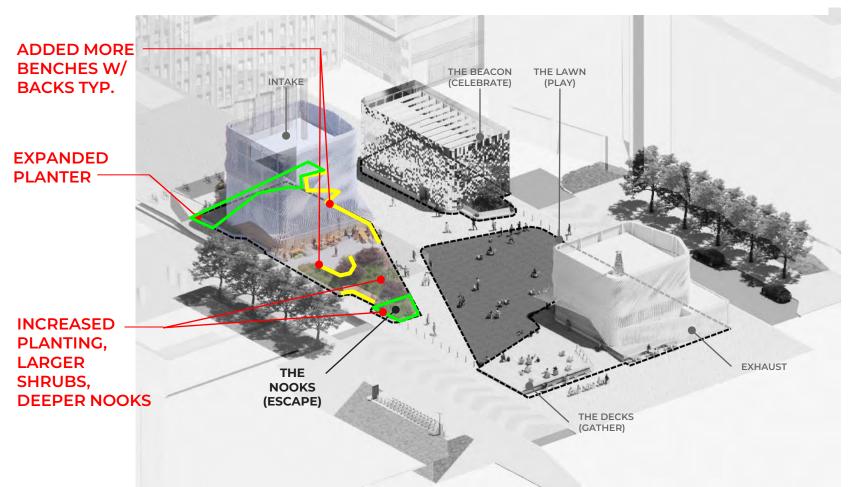








The Nooks (CRA-CDD Comments)



Inspiration

"ESCAPE"

Intimate spaces at the INTAKE structure with various degree of enclosure that offer a sense of urban wilderness as a respite for small group socializing and individual unwinding









Concept Banquet-like nook wrapping three sides of the intake Small Nook Deep Nook



Standard working tables and stools



Concept

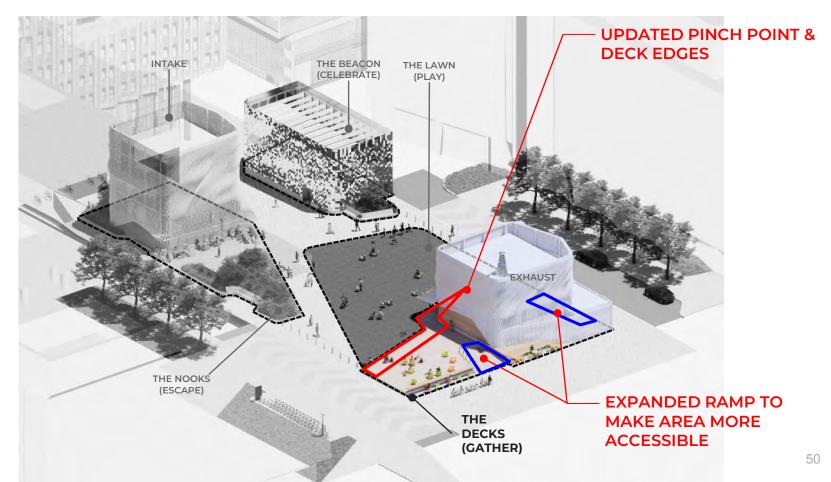


Concept





The Decks (CRA-CDD Comments)



The Decks Inspiration

"GATHER"

Open, flexible use areas at the EXHAUST + HATCH structures with a variety of fixed and moveable furnishings that overlook the center of the plaza to allow gathering of all types

Exhaust



Combination of fixed and moveable furniture for gathering and working options



Opportunities for playful elements such as swings that face towards the open lawn area

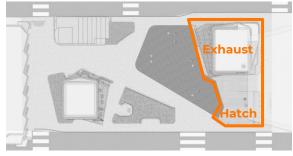
Hatch



Sun deck with synthetic lawn for flexible daily uses or for special events



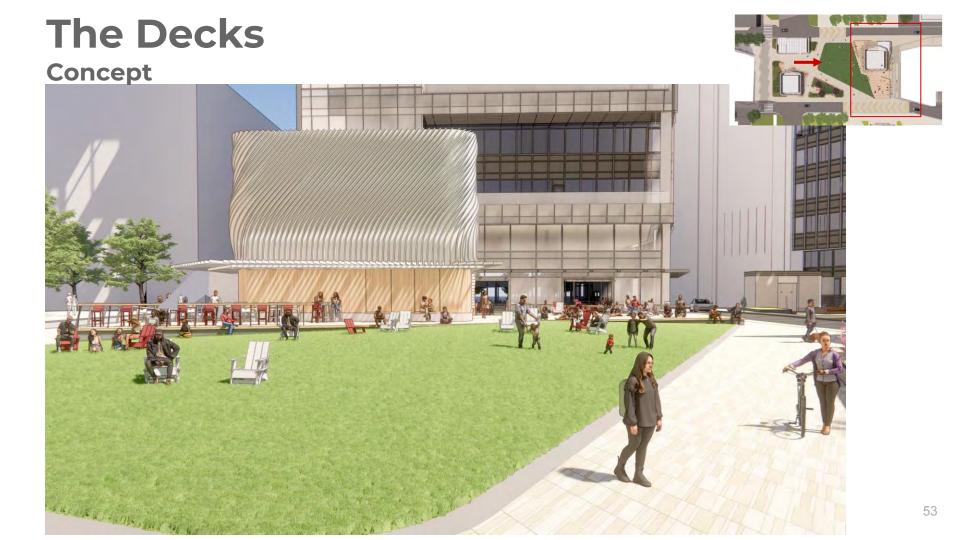
Various seating arrangements along each sides of the deck

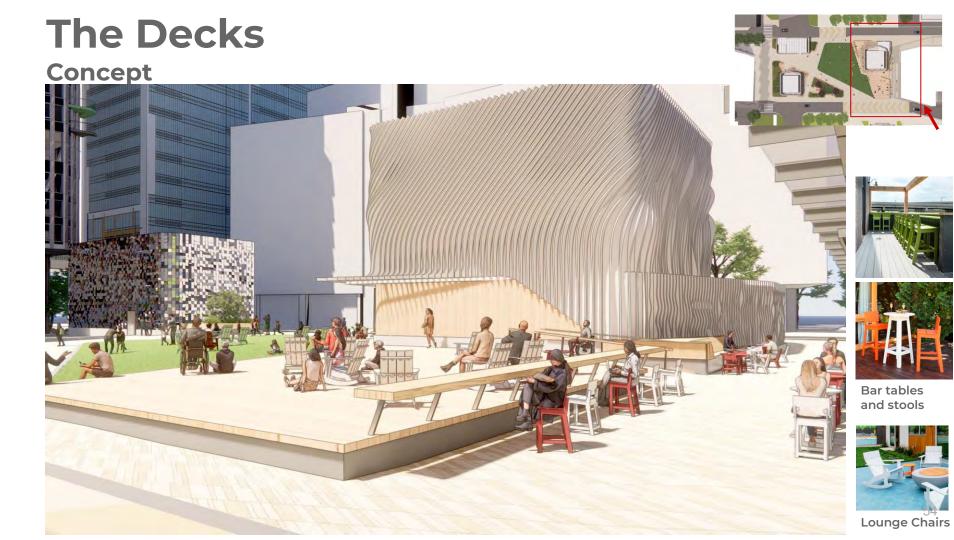


The Decks

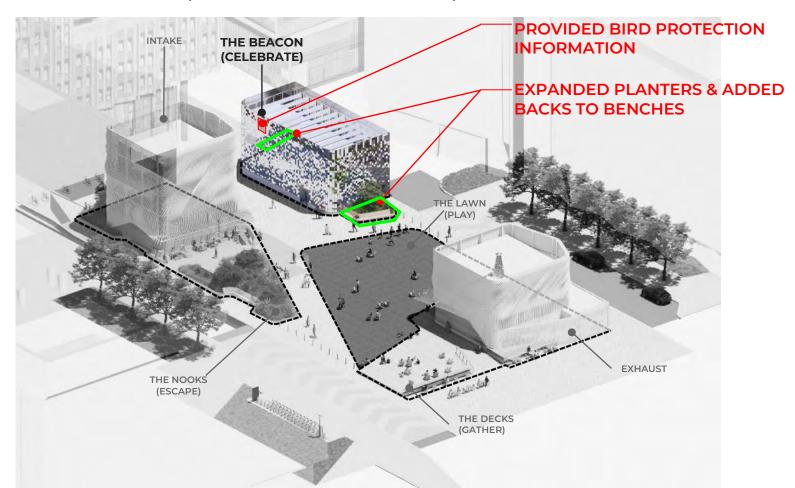
Concept







The Beacon (CRA-CDD Comments)



Inspiration











Reflection/Pixelation - Mosaic



Reflection/Pixelation - Mosaic



Mosaic - 12" Tiles

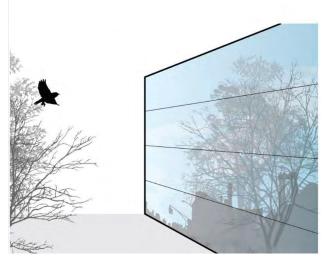
Bird Safety Study

Problem

Glass Reflectivity: Mirror Effect

From Outside most buildings, glass often appears highly reflective, increasingly so when seen from an oblique angle. Almost every type

of architectural glass under the right conditions reflects the sky, clouds, or nearby trees and vegetation, reproducing habitat familiar and attractive to birds.



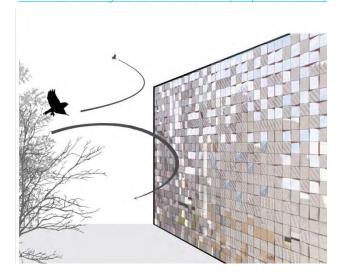


Solution

Aluminum PlatesTapered aluminum plates to create visual noise

To create a bird-safe environment in the plaza, we propose using small tapered plates that will create visual noise, effectively steering the birds away from the service building (the beacon).

Reference: Bird-Safe Building Guidelines
Bird-Safe Building Guidelines - SCAPE (scapestudio.com)





Solution: Glass Tilted Downwards



Solution: Visual Noise



Reflection/Pixelation - Mosaic



Broadway Approach View - Mosaic

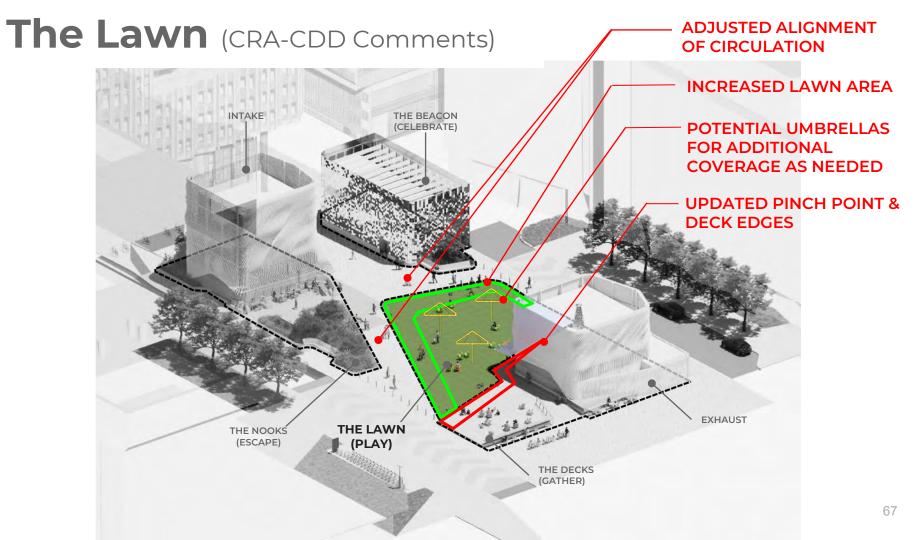


South East Approach View - Mosaic

South East Approach View - Mosaic



North Approach View - Mosaic



The Lawn

Concept

"PLAY"

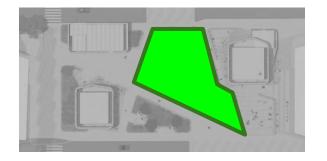
Open zone designed for different scales of programming throughout the year







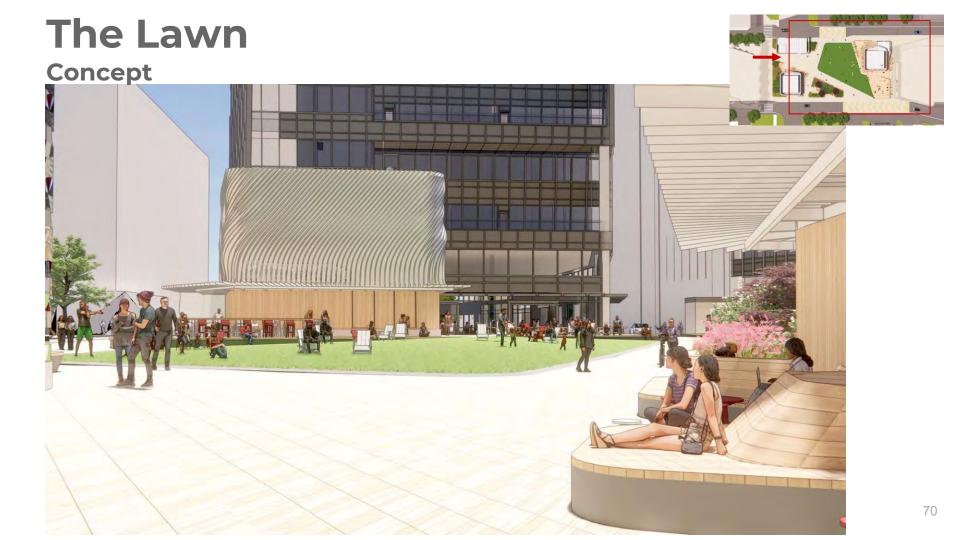










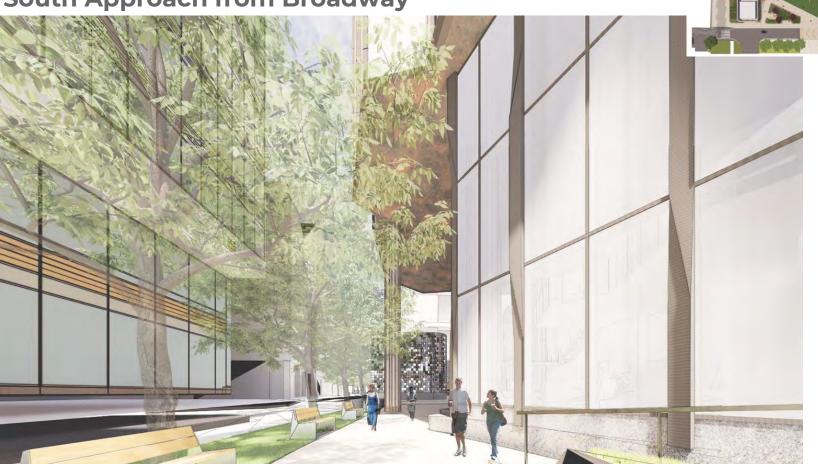


The Lawn Concept

MXD Center Plaza

Approach Views

South Approach from Broadway



East Approach from Play Area



North Approach from Binney St



North Approach from Binney St



MXD Center Plaza

Planting

Planting - Lawn Types

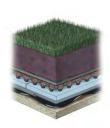
Preferred Option

Lawn (Sod - bluegrass/fescue) +

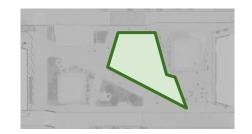
- Natural product
- Familiar to all
- Slightly cooler than turf under direct sunlight

Lawn (Sod - bluegrass/fescue) -

- Requires irrigation (potable water?)
- Requires routine/weekly maintenance
- Higher long term maintenance costs
- Susceptible to cowpaths and wearing







Alternate

SynLawn +

- Does not require irrigation
- Does not require routine/weekly maintenance
- Durable, less susceptible to cowpaths
- Could be made from plant-based materials

SynLawn -

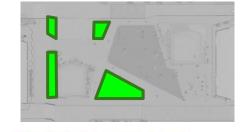
- Potentially non-natural materials
- Artificial surfaces more prone to bacteria?
- Slightly hotter than lawn under direct sunlight





Planting - Planter Beds

Perennials











Planting - Planter Beds

Ferns + Grasses









common lady fern

Ostrich Fern

Northern Maidenhair







long beaked sedge

carex appalachia carex pensylvanica

carex morrowii

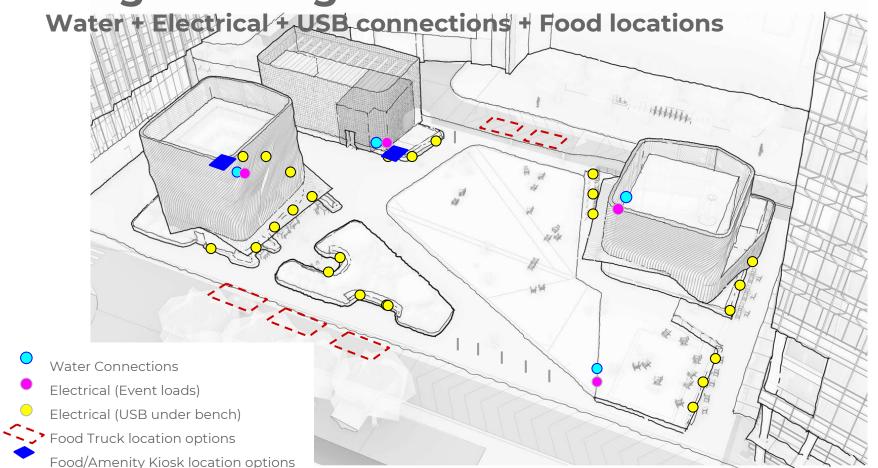
Planting - Planter Beds Shrubs





MXD Center Plaza

Programming Studies



Variety of Seasonal Events *



Lawn Game Day



Concerts



Yoga / Wellness Events



Badminton Courts: 3 (18' x 36')



Summer/Winter Markets



4 v 4 Soccer Field: 1 (32'x75')

^{*} NOTE: Space designed to allow for flexible programming that will evolve and adapt with future trends

Daily conditions / Lawn seating





Food Kiosk - location option





Food Kiosk - location option





Concert - South Orientation at Plaza Center





Concert - North orientation at Hatch





Lawn Game Day







Farmer's Market

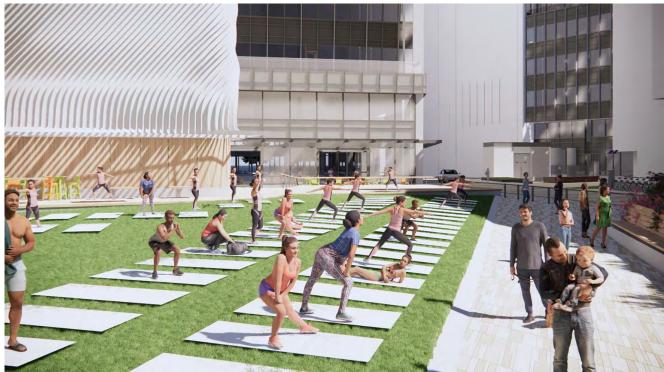






Morning Yoga





Badminton Court

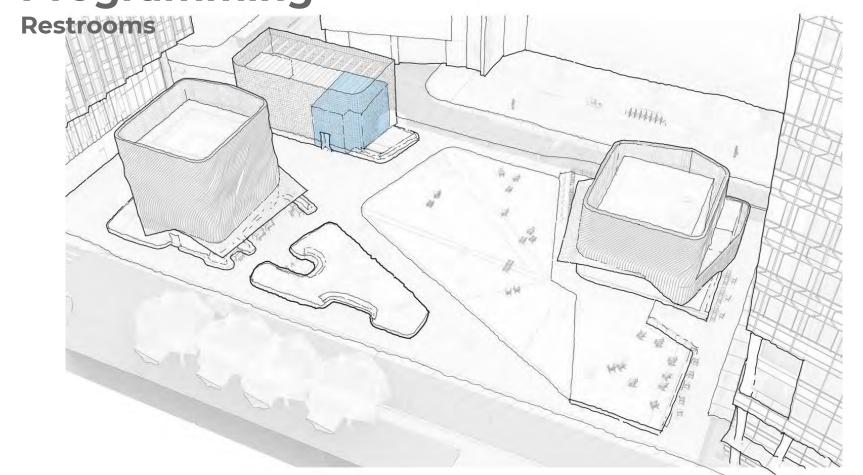




4 v 4 Soccer



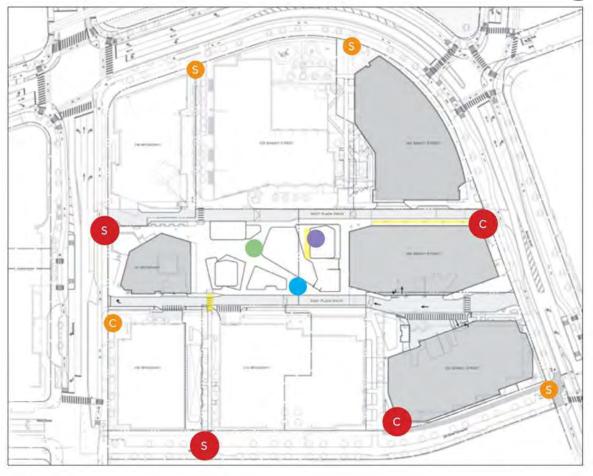




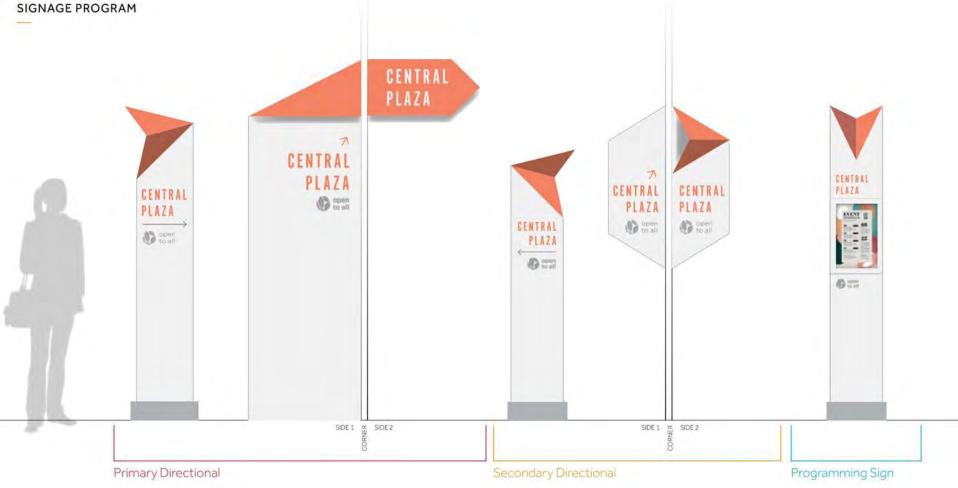
MXD Center Plaza

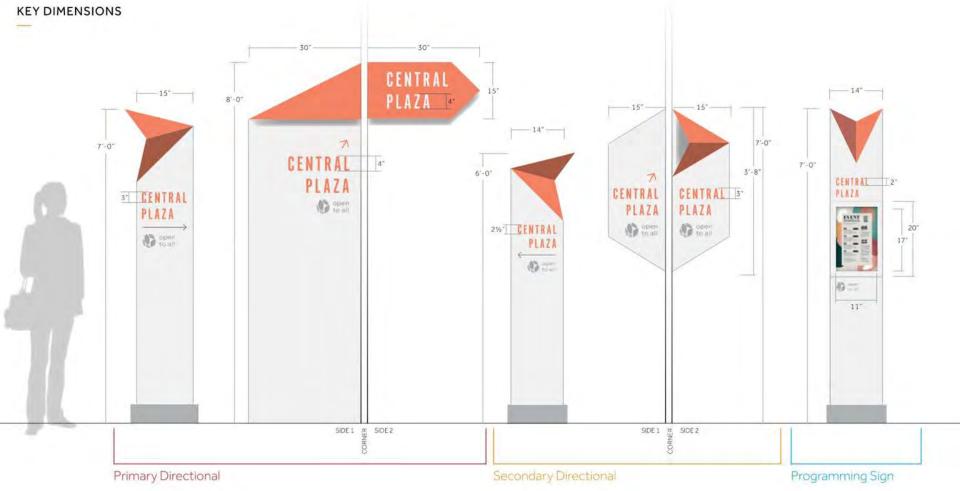
Signage / Art

Signage / Art



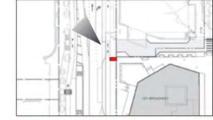
- Primary Directional
 (S = Standing sign, C = Column sign)
- Secondary Directional (S = Standing sign, C = Column sign)
- Programming Sign (Location TBD)
- Canopy Identification
- Ground Identification
- Art Opportunities





VIEW - 121 BROADWAY

Primary Directional, free-standing

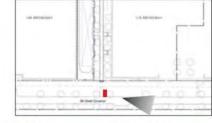






VIEW - 6TH ST CONNECTOR (BTW 105 & 115)

Primary Directional, free-standing





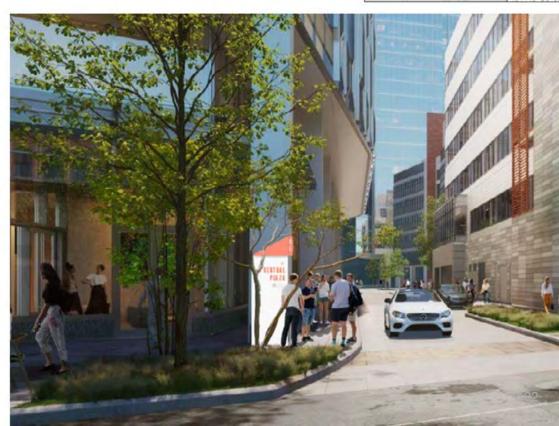


VIEW - 290 BINNEY - N/W CORNER

Primary Directional, column-mounted







VIEW - 250 BINNEY - S/E CORNER

Primary Directional, column-mounted





VIEW - 300 BINNEY

Secondary Directional, free-standing

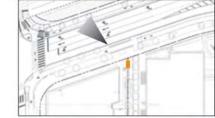




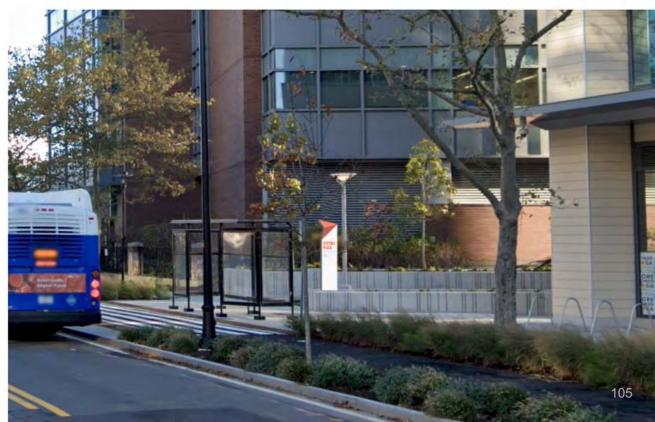


VIEW - 225 BINNEY

Secondary Directional, free-standing (within existing planter)

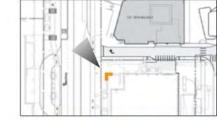






VIEW - 105 BROADWAY - S/W CORNER

Secondary Directional, column-mounted





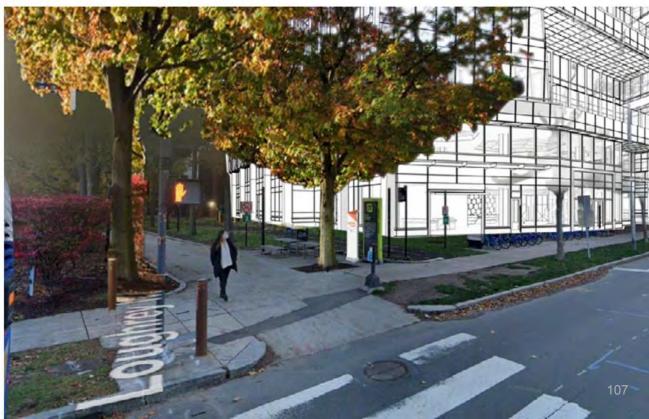


VIEW - 250 BINNEY - N/E CORNER

Secondary Directional, free-standing

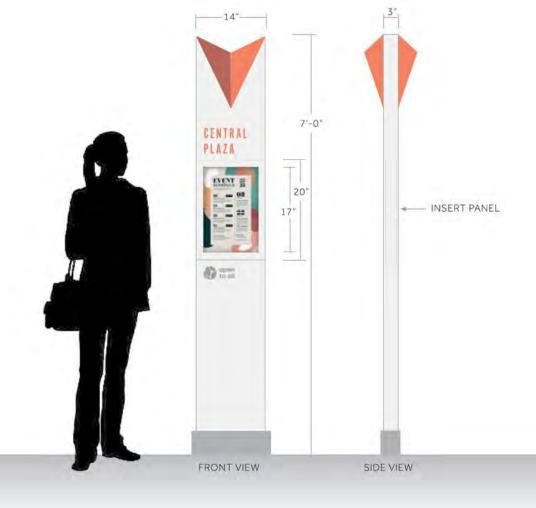




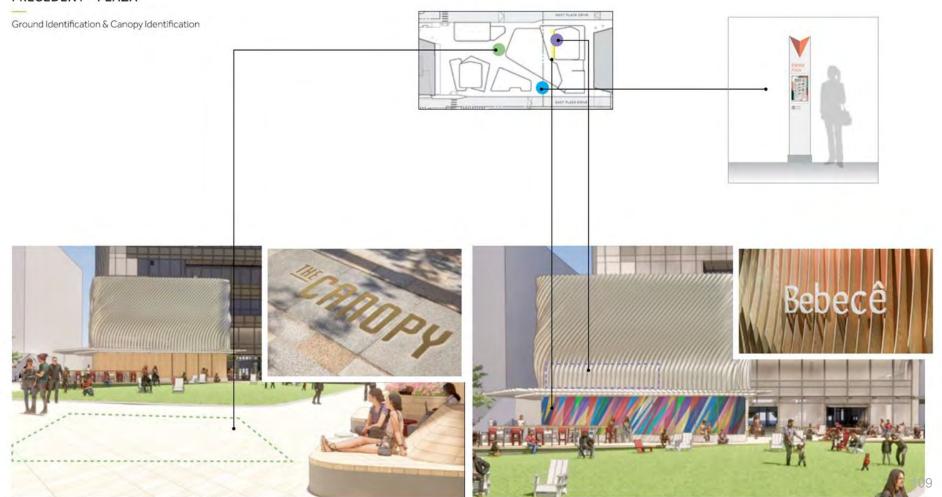


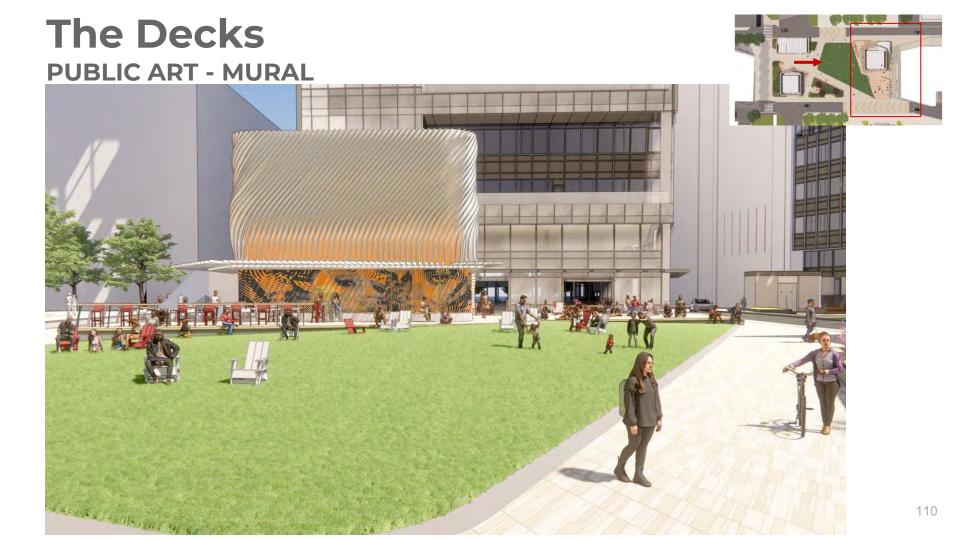
PROGRAMMING SIGN

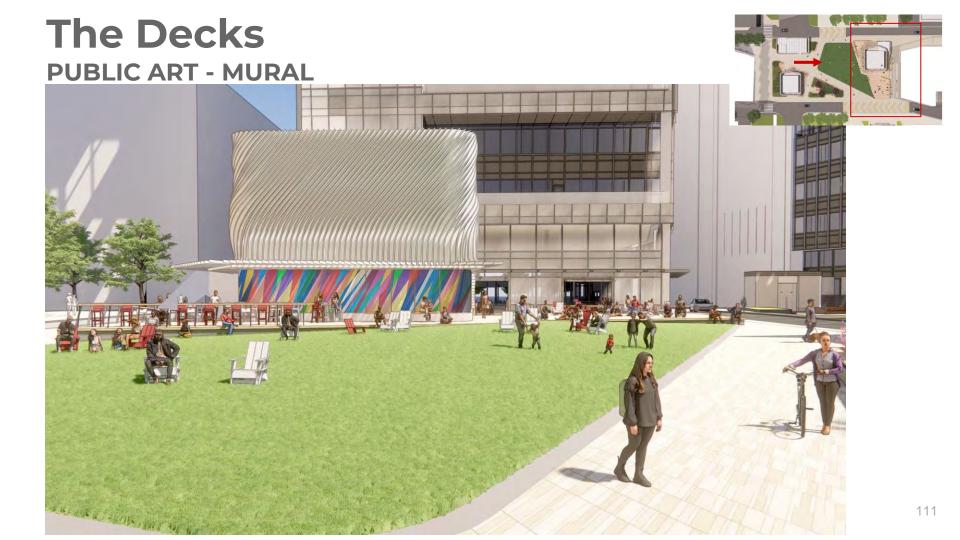
Free-standing sign with integrated insert panel. Panel can be loaded with tabloid-size (11" x 17") poster to feature programming within the Plaza or other news/events.

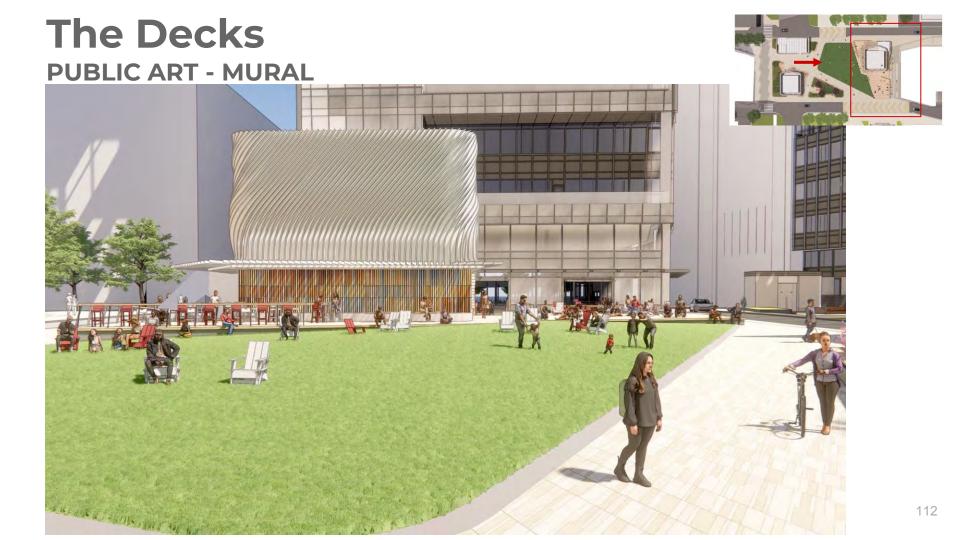


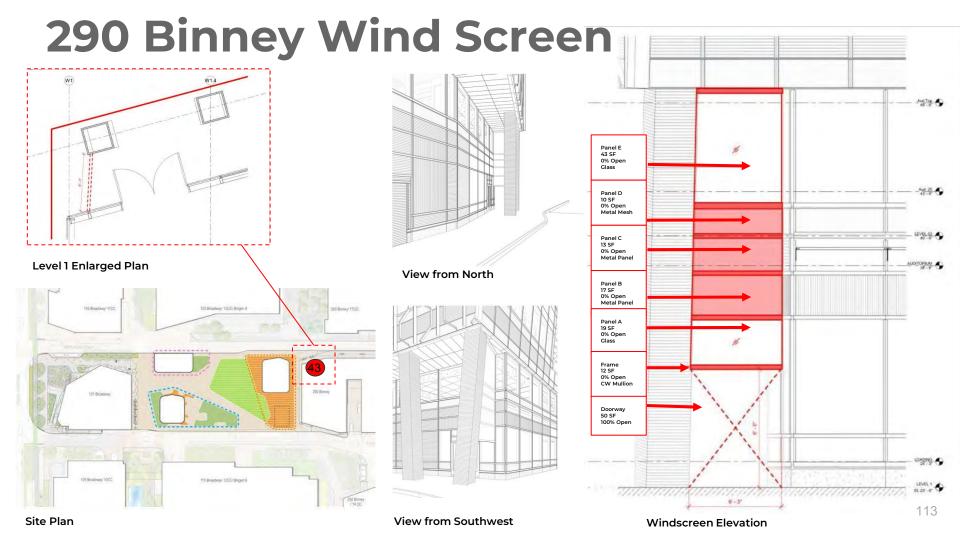
PRECEDENT - PLAZA











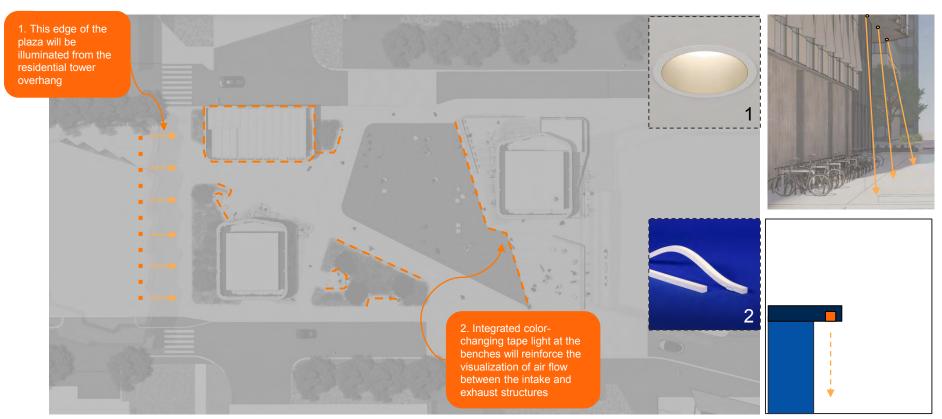
MXD Center Plaza

Lighting

Pole Lighting 1.Shorter Multi-head pole fixtures along the sidewalks of East and West Plaza drives illuminate the driveways and key crossings 2.Taller Multi-head pole fixtures tucked within the planters pool light on the path and provide a layer of soft ambient glow

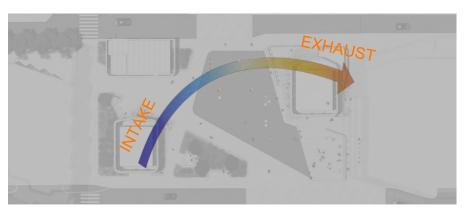
General ambient layer for egress and safety

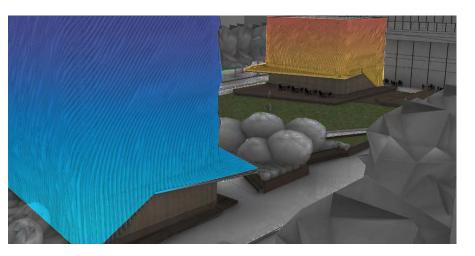
Accent Lighting



Accent Lighting to create intimate zones within the expanse

Concept Lighting



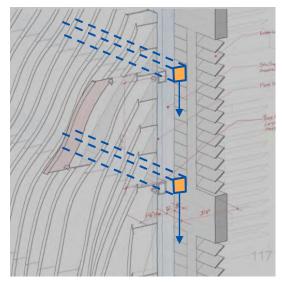


A Whimsical experience of movement in the space

CONCEPT: The dynamic lighting in the space can create subtle yet memorable play of light mimicking the movement of air in the plaza between the structures.

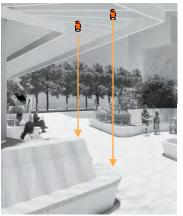
STRATEGY: Concealed linear fixtures mounted behind the exterior fins light the surfaces behind which will then reflect and allow indirect light to filter out through the gaps





Specialty Lighting





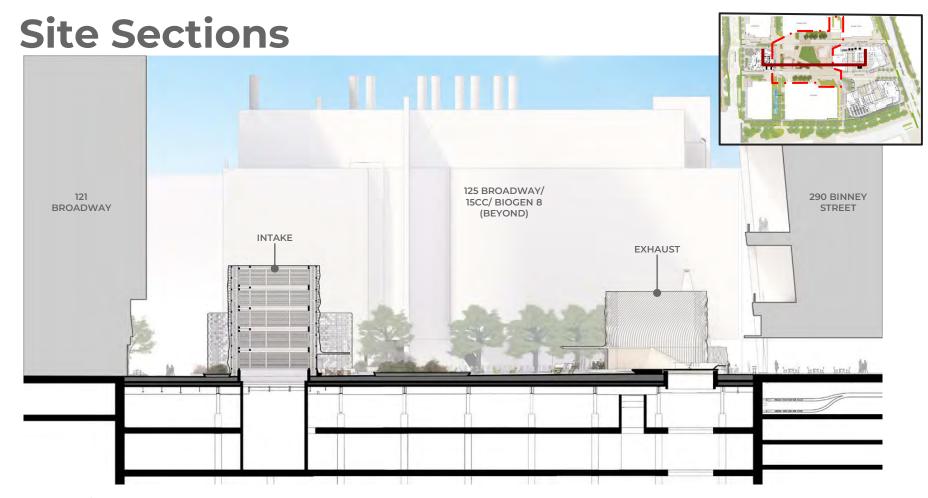




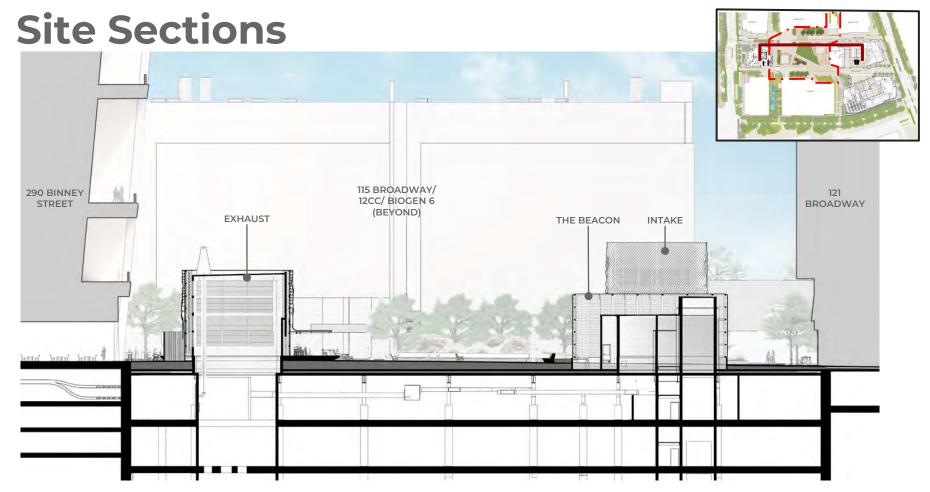


MXD Center Plaza

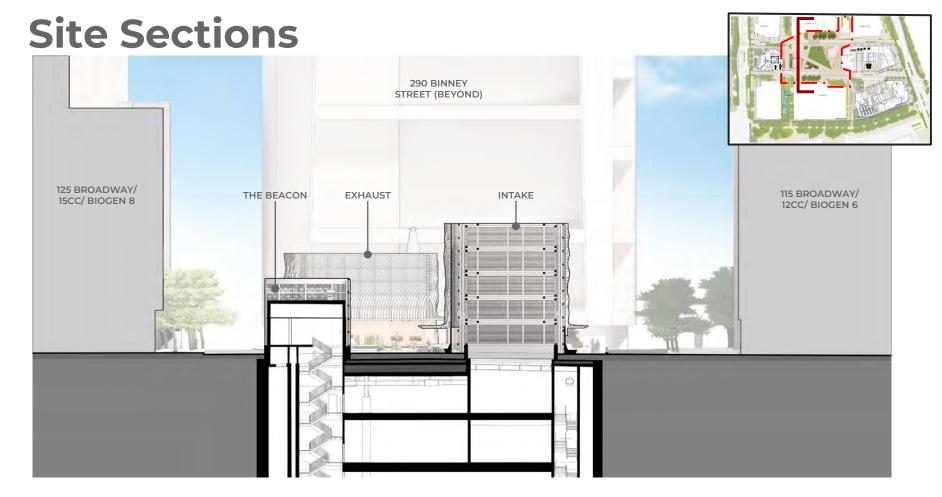
Sections



Looking West - Through Intake, Lawn and Hatch



Looking East - Through Exhaust, Lawn, and Beacon



Looking North - Through Beacon and Intake



Looking South - Through Exhaust Bldg, Hatch and Decks



MXD Center Plaza

Next Steps

Next Steps

Permitting:

- City Review Period (Estimated): 12/4/2023 2/6/2024
- Joint Committee Meeting (Estimated): 1/15/2024
- Building Permit: TBD

Design:

- Schematic Design Wrap Up: 10/27/2023
- IDCP Book Production: 10/30/2023-11/23/2023
- Design Development & Construction Documents: TBD

Construction:

Plaza Construction (Estimated): 2030-2031

MXD Center Plaza

Appendix

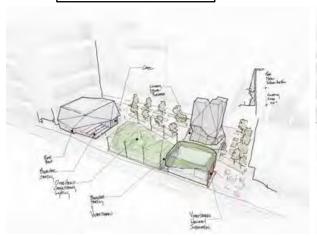


CENTER PLAZA TABLING AND ONLINE SURVEY RESPONSES

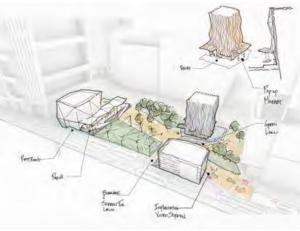


CENTER PLAZA INITIAL CONCEPTS AND FLEXIBILITY MAGNITUDE

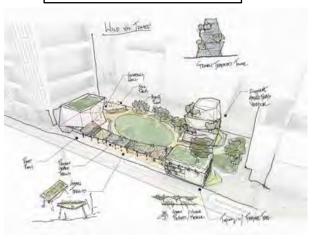
PLAY FOR ALL AGES



OUTDOOR / COZY ROOMS



THE URBAN WILD



PROVIDES THE ULTIMATE FLEXIBLITY
WITH PROGRAMMING AND SPACE ADAPTABLITY

PROVIDES MEDIUM FLEXIBLITY WITH PROGRAMMING AND SPACE ADAPTABLITY

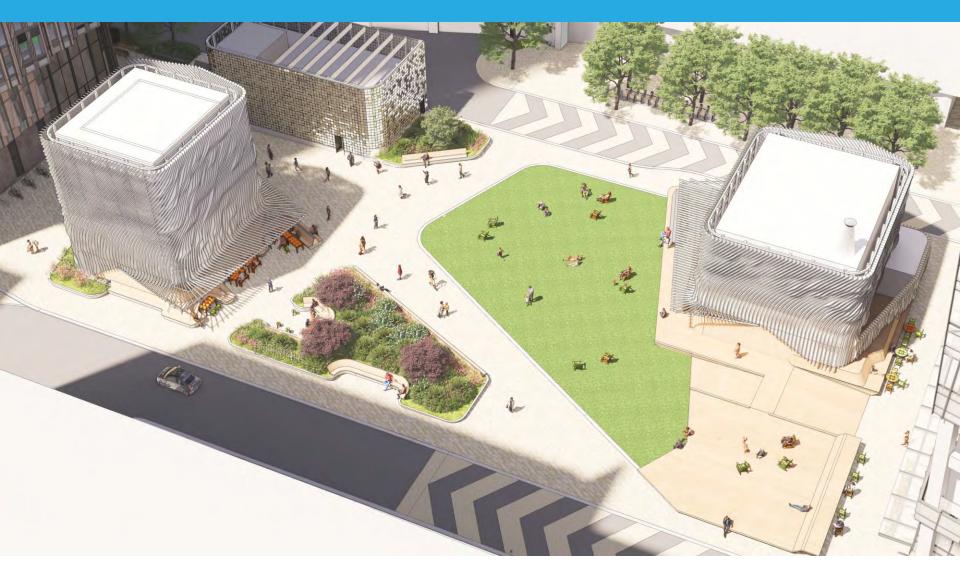
PROVIDES MODEST FLEXIBLITY WITH PROGRAMMING AND SPACE ADAPTABLITY

THE CENTRAL PLAZA

DESIGN REVIEW SUBMISSION SEPTEMBER 2022



AERIAL VIEW OF CENTER PLAZA





METHODOLOGY OF OUTREACH

- ECPT
 - June 14, 2023
- Washington Elms / Newtowne
 Court Game Nights (48 Comments)
 - July 10th
 - July 17th
 - July 24th
 - July 31st
 - August 7th
- Proto Tabling (12 comments)
 - Tuesday, July 11, 2023
- Online Survey (106 Responses)
 - July 1st August 12, 2023
- Public Meeting (12 Participants)
 - August 9, 2023





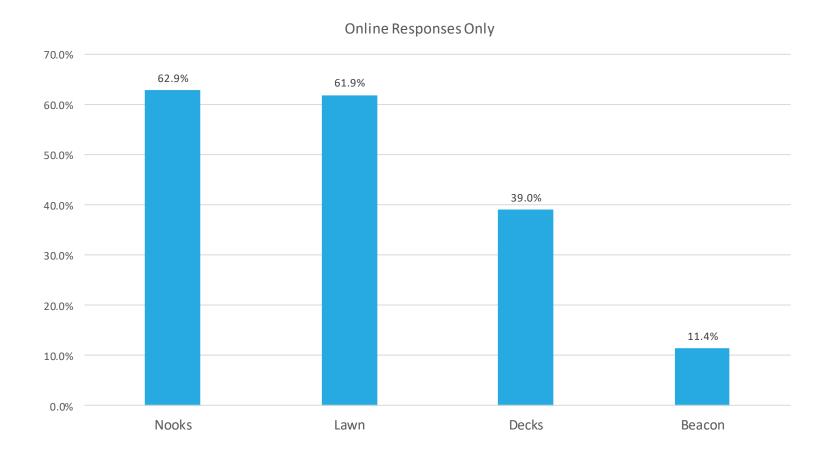
TABLING IN ACTION



QUESTIONS PRESENTED IN TABLING EVENTS AND ONLINE SURVEYS:

- 1. Which of these four types of spaces (beacon, decks, nooks, lawn) in the Center Plaza would you be most interested in using or seeing?
- 2. What changes would you make to the design of the center plaza spaces identified above? If none, leave blank.
- 3. How would you use the Center Plaza space?
- 4. What would bring you to Center Plaza in the winter? (e.g. winter markets, igloo tent seating with heater, etc.)
- 5. What else would you like to see in the Center Plaza?
- 6. Do you live in the City of Cambridge?
- 7. If you live or work/attend school in Cambridge, what neighborhood?
- 8. What age range applies to you?

WHICH OF THESE FOUR TYPES OF SPACES (BEACON, DECKS, NOOKS, LAWN) IN THE CENTER PLAZA WOULD YOU BE MOST INTERESTED IN USING OR SEEING?





HOW WOULD YOU USE THE CENTER PLAZA SPACE?

Tabling Responses Only

Playing / use space for water play

Sit and read outside

Have a picnic/cookout

Movie night

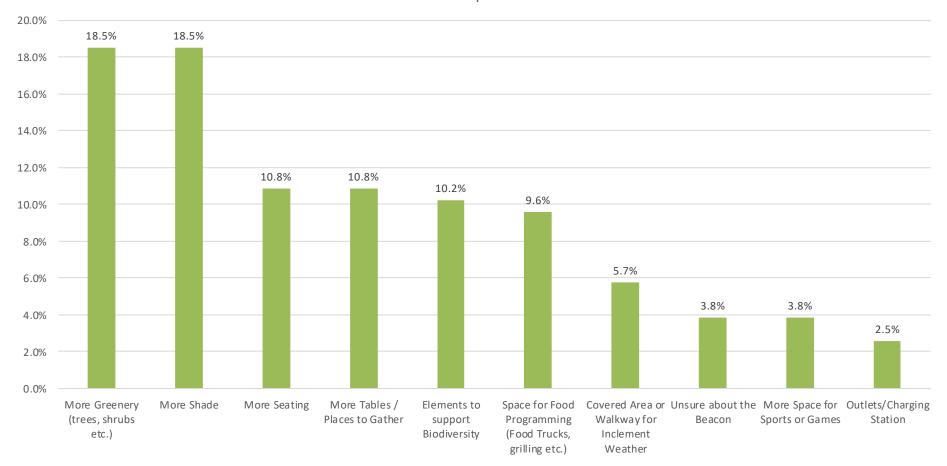
Musical events/ use for concerts

Invite the local community to use the space for events



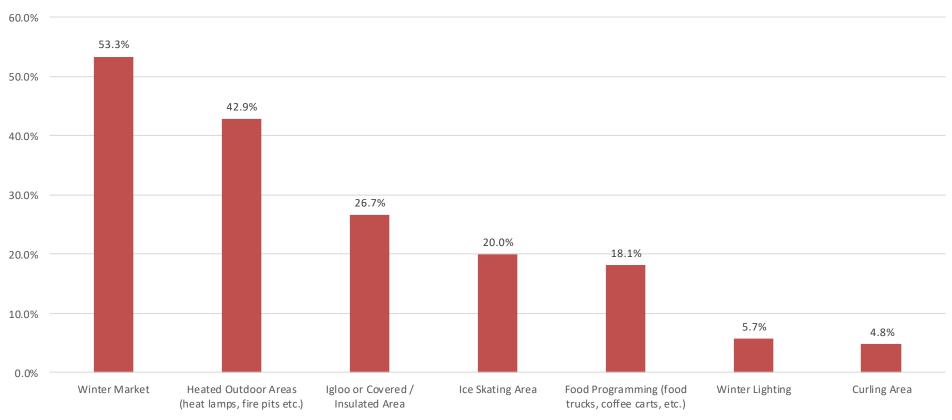
WHAT CHANGES WOULD YOU MAKE TO THE DESIGN OF THE CENTER PLAZA SPACES IDENTIFIED ABOVE? IF NONE, LEAVE BLANK.

All Responses



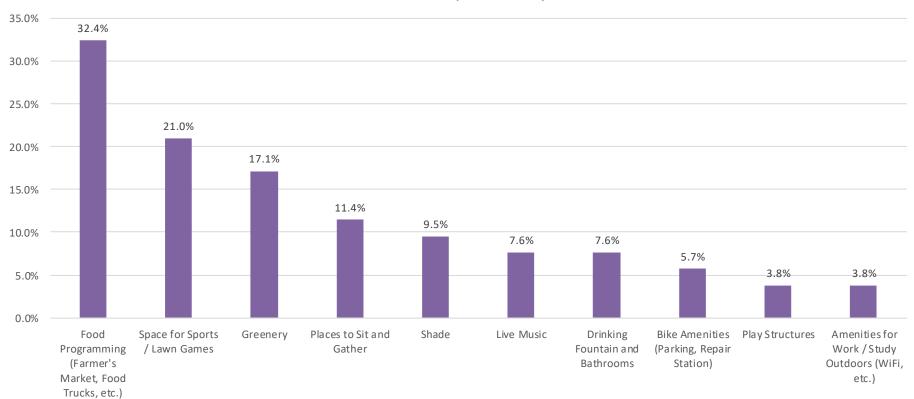


WHAT WOULD BRING YOU TO CENTER PLAZA IN THE WINTER? (E.G. WINTER MARKETS, IGLOO TENT SEATING WITH HEATER, ETC)



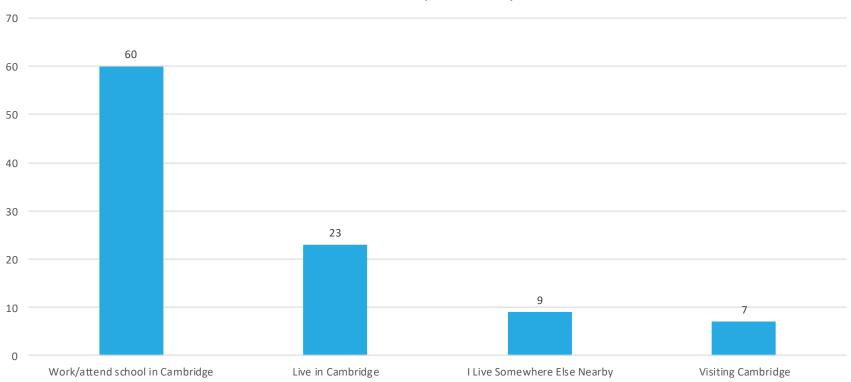


WHAT ELSE WOULD YOU LIKE TO SEE IN THE CENTER PLAZA?





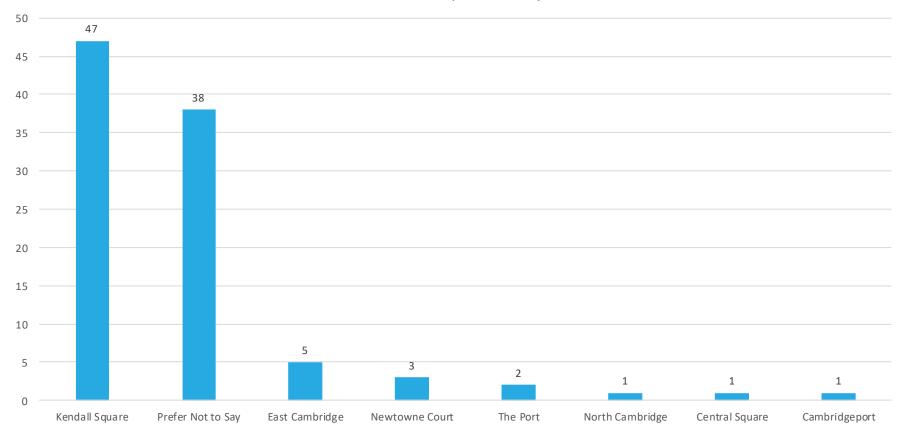
DO YOU LIVE IN CAMBRIDGE?





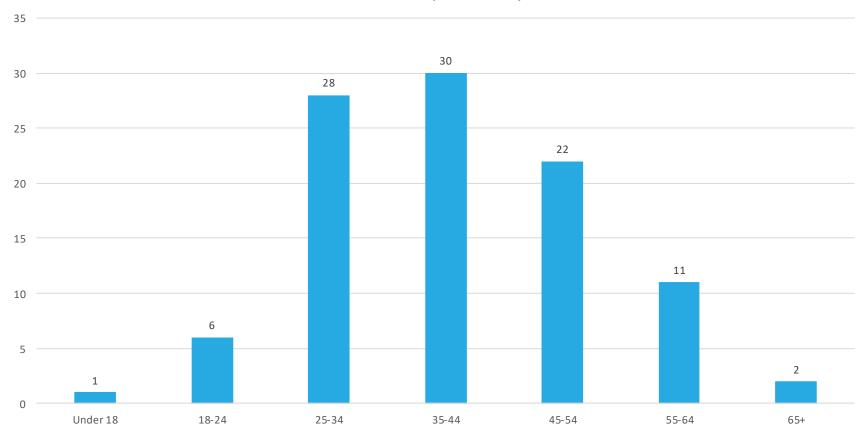
IF YOU LIVE OR WORK/ATTEND SCHOOL IN CAMBRIDGE, WHAT NEIGHBORHOOD?







WHAT AGE RANGE APPLIES TO YOU?





TAKEAWAYS FROM COMMUNITY FEEDBACK

PEOPLE WANT A PLACE AND REASON TO GATHER

"Will there be lawn games available for the lawn? That would bring people out in nice weather."

Farmer's markets would be great, maybe the ability to do food truck (or food market) events too? I know when I was in Philadelphia themed night markets and art walks were always super popular."

"Winter markets, igloo tent seating with heater, ice curling events for team meetings (bocce in the summer)."



TAKEAWAYS FROM COMMUNITY FEEDBACK

GREENERY AND SUSTAINABILITY IS A HIGH PRIORITY

"Have berries growing out of the nooks area. The joy in seeing people's faces because they have found berries in a bush is delightful, and it adds pop to the public space."

"A pollinator garden with native plants. I'd like the materials used for construction to be as sustainable as possible. A rainwater capture system and small wind/solar energy systems would be nice. The top of the Beacon should have solar on it if it can."

"Having greenery, flower gardens and tall trees would be great along with lots of outdoor seating/workspaces with indoor options - such as an arboretum for natural light to come in during the winter."



TAKEAWAYS FROM COMMUNITY FEEDBACK

PEOPLE WANT TO FEEL ENCLOSED

"Lawn with some pergolas for shaded areas added, and more cut through paths so in winter there are more routes through the area."

"Something to provide some shade over parts of the open space, e.g., suspended pieces of fabric-like material, or trees (unless the surrounding buildings already provide sufficient shade)"

"A clear and defined route, preferably covered, between 115 and 125
Broadway for people and equipment. I work on this site and we are in the different buildings several times a day."



TAKEAWAYS FROM COMMUNITY FEEDBACK

THE BEACON IS THE LEAST COMPELLING AREA

"It is unclear from the survey description what the Beacon is." "I would change the outside of the Beacon -- there's already a ton of glass and reflective surfaces around the area, and I worry that light bouncing off the mirrors could be distracting or painful to look at."

"I don't know what a beacon is?"



CREATE A UNIQUE AND LESS FORMAL IDENTITY FOR THE PLAZA

"How will this space be different from all the other corporate plazas in the area?"

Recommendation: Leverage the
Beacon as an opportunity for local art
and consider adding an interior space
that can tell the story of the substation
beneath.





CREATE ROBUST, YEAR-ROUND PROGRAMMING, WITH A FOCUS ON AFFORDABLE FOOD AND SPORTS/LAWN GAMES

- Food Ideas
 - Coffee Cart
 - Beer Garden
 - Pop-up Bar
 - Food Trucks
 - Hot Cocoa
 - Farmer's and Winter Market





CREATE ROBUST, YEAR-ROUND PROGRAMMING, WITH A FOCUS ON AFFORDABLE FOOD AND SPORTS/LAWN GAMES

Lawn Activities

- Volleyball Court
- Bocce Ball
- Cricket
- Ice Skating
- Curling
- Board Games
- Chess
- Holiday Light Show





RETURN TO THE URBAN WILD: ADD MORE REAL AND VARIED GREENERY

- Greenery Ideas
 - Wildflower Garden
 - Choose a natural alternative to grass for the lawn: clover or moss
 - Shrubbery
 - Amenities for birds(e.g., bird feeder, bird bath, etc.)







MORE COVERAGE IN THE EXPOSED AREA/DESIRED LINES

- Greenery Ideas
 - Coverage for residents who are parked
 - Coverage(and seasonal heaters) for some tabled seating areas to allow for year-round use

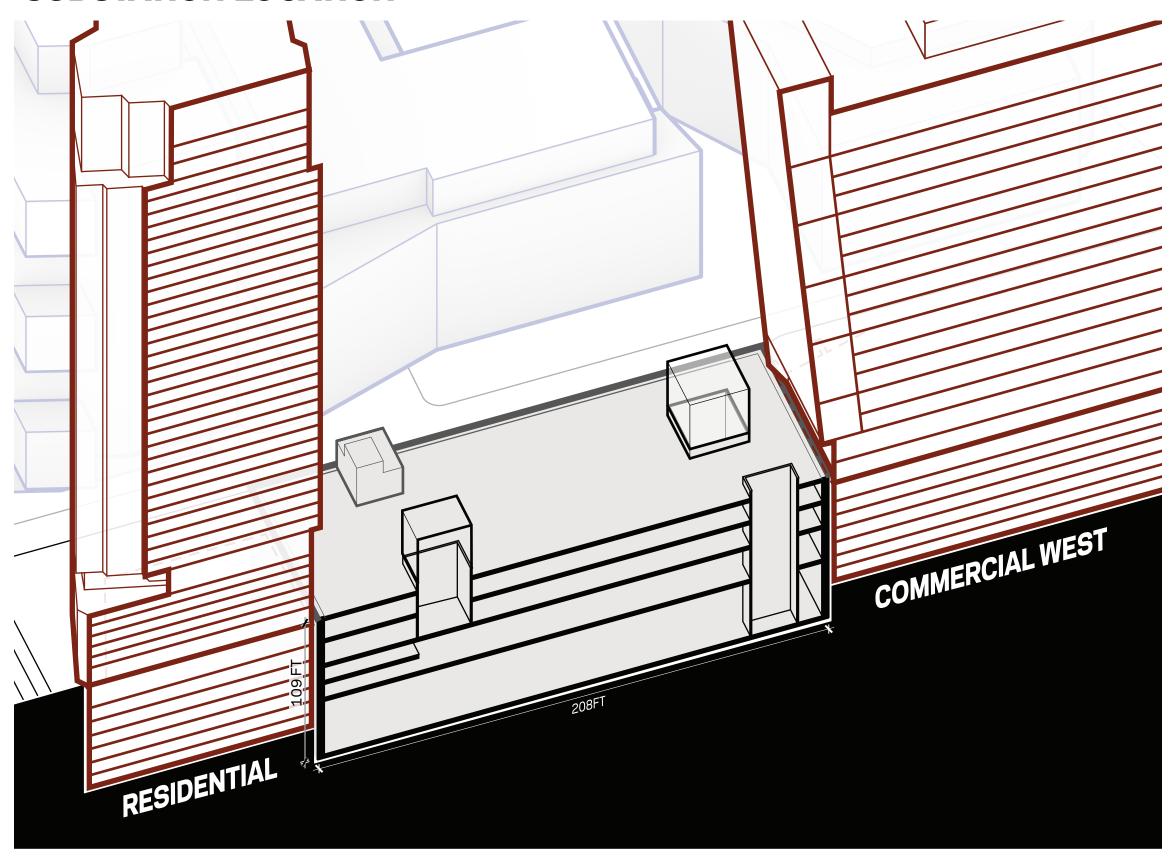




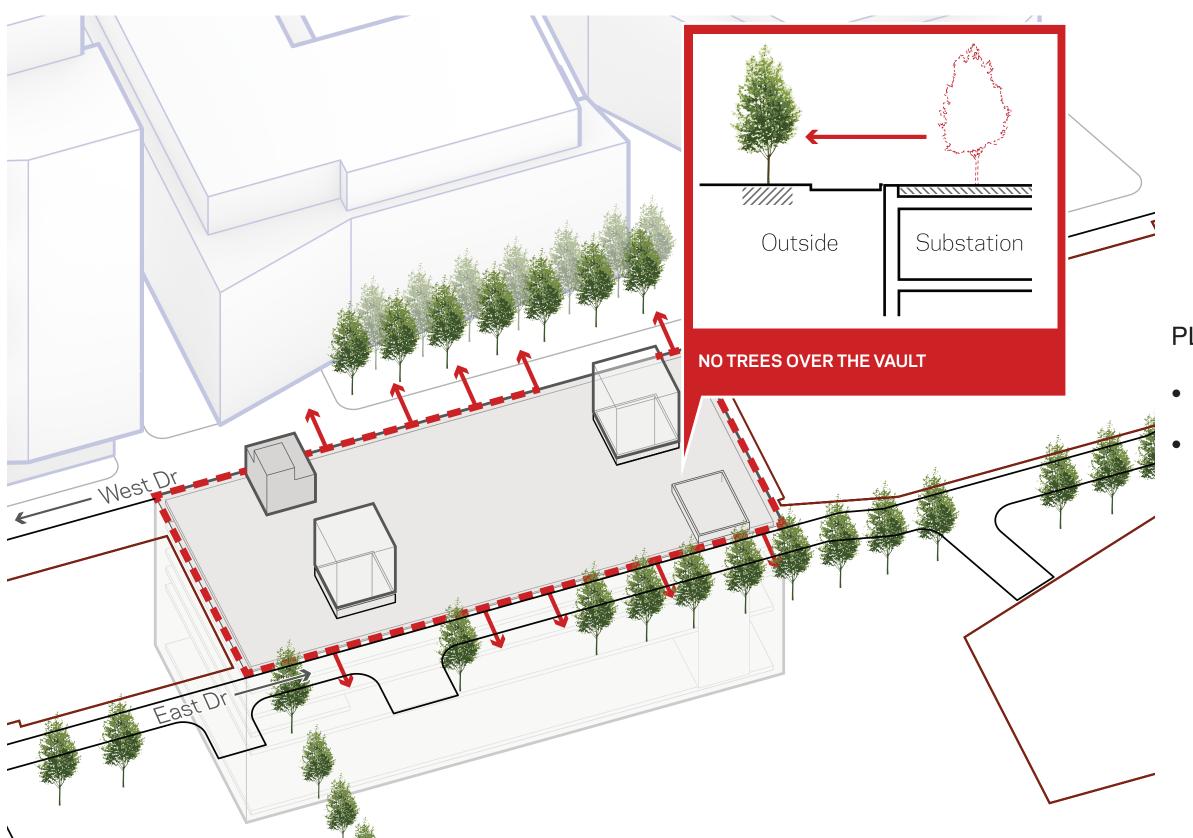


cambridgeredevelopment.org

SUBSTATION LOCATION



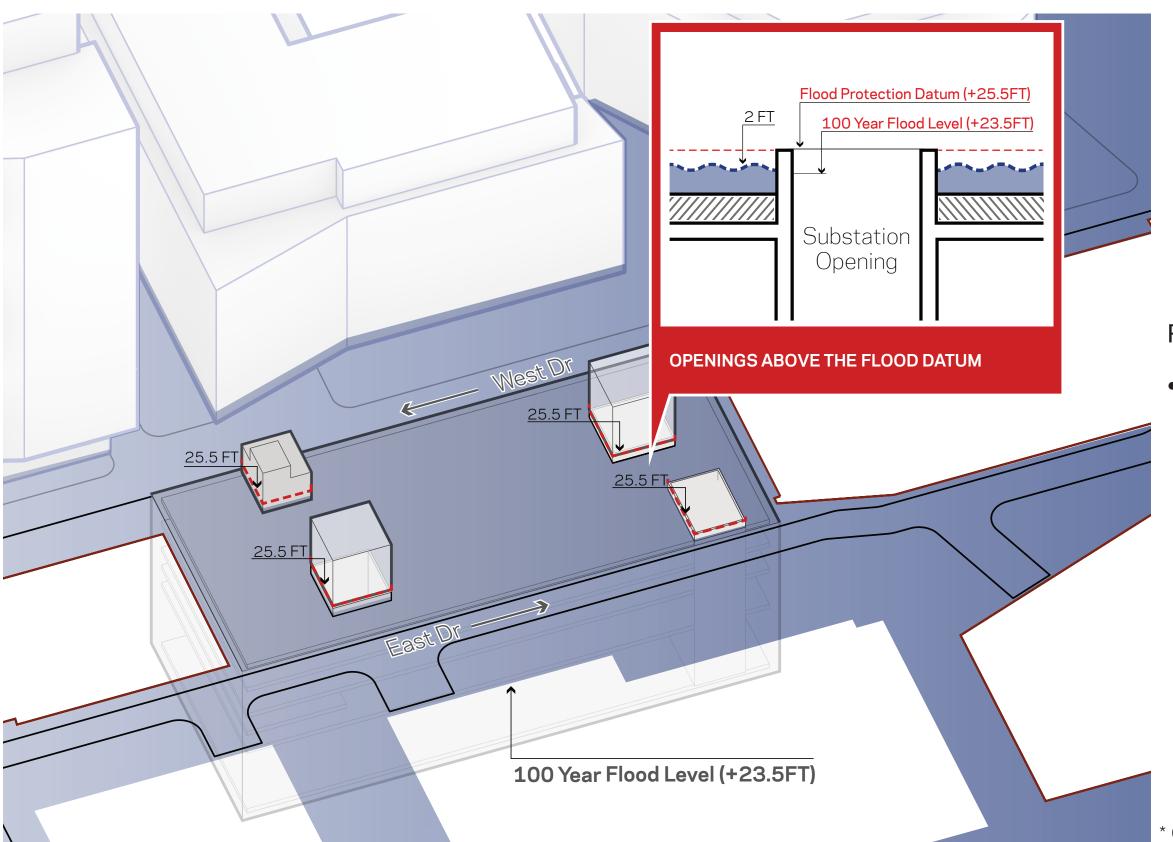
NO TREES OVER THE SUBSTATION VAULT



PLAZA CONSTRAINTS

- No deep penetrating roots on substation roof
- No deep roots or water features on substation roof

FLOOD PROTECTION DATUM



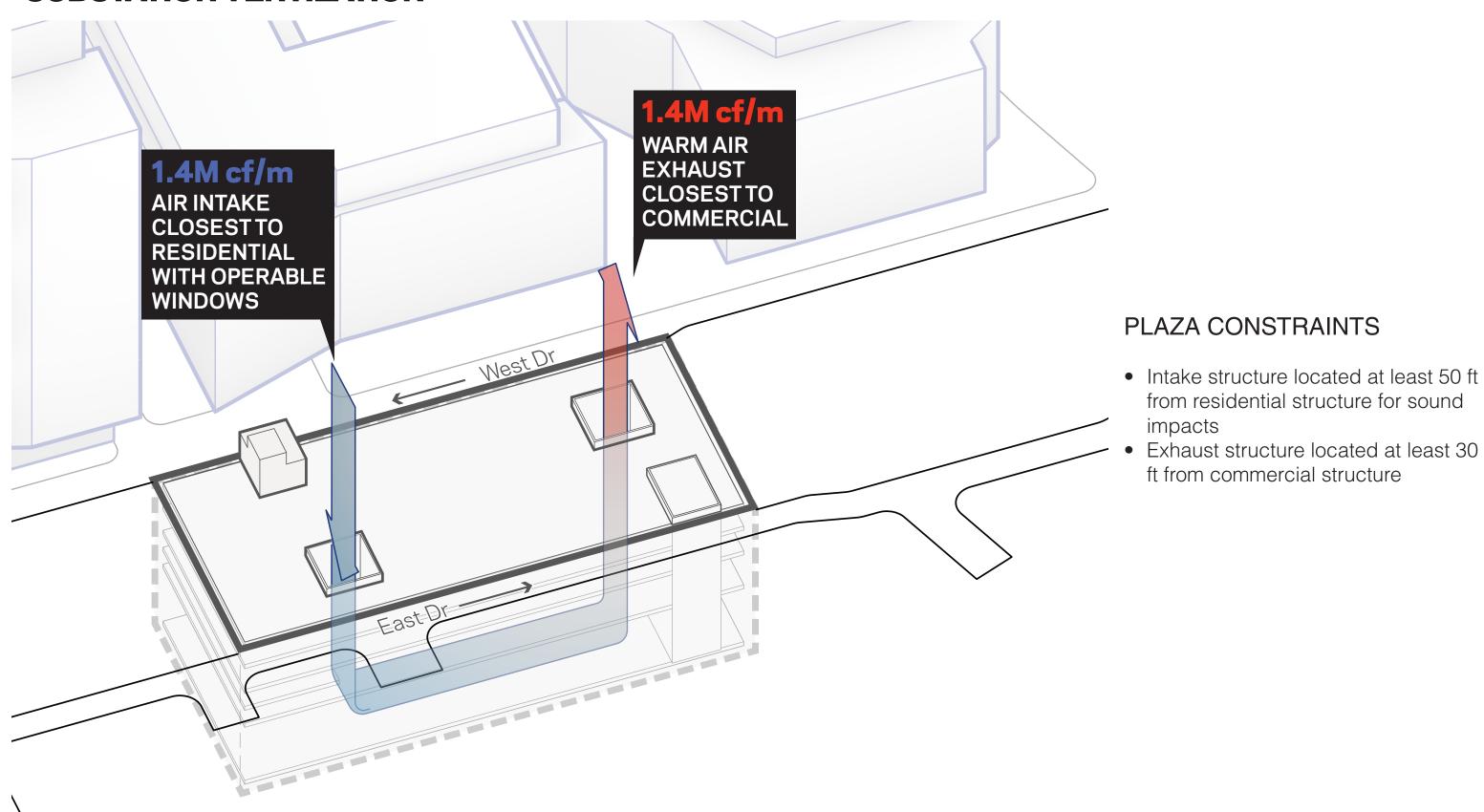
PLAZA CONSTRAINTS

 No openings in roof below 100 year flood level + 2ft safety margin = flood datum of +25.5ft*

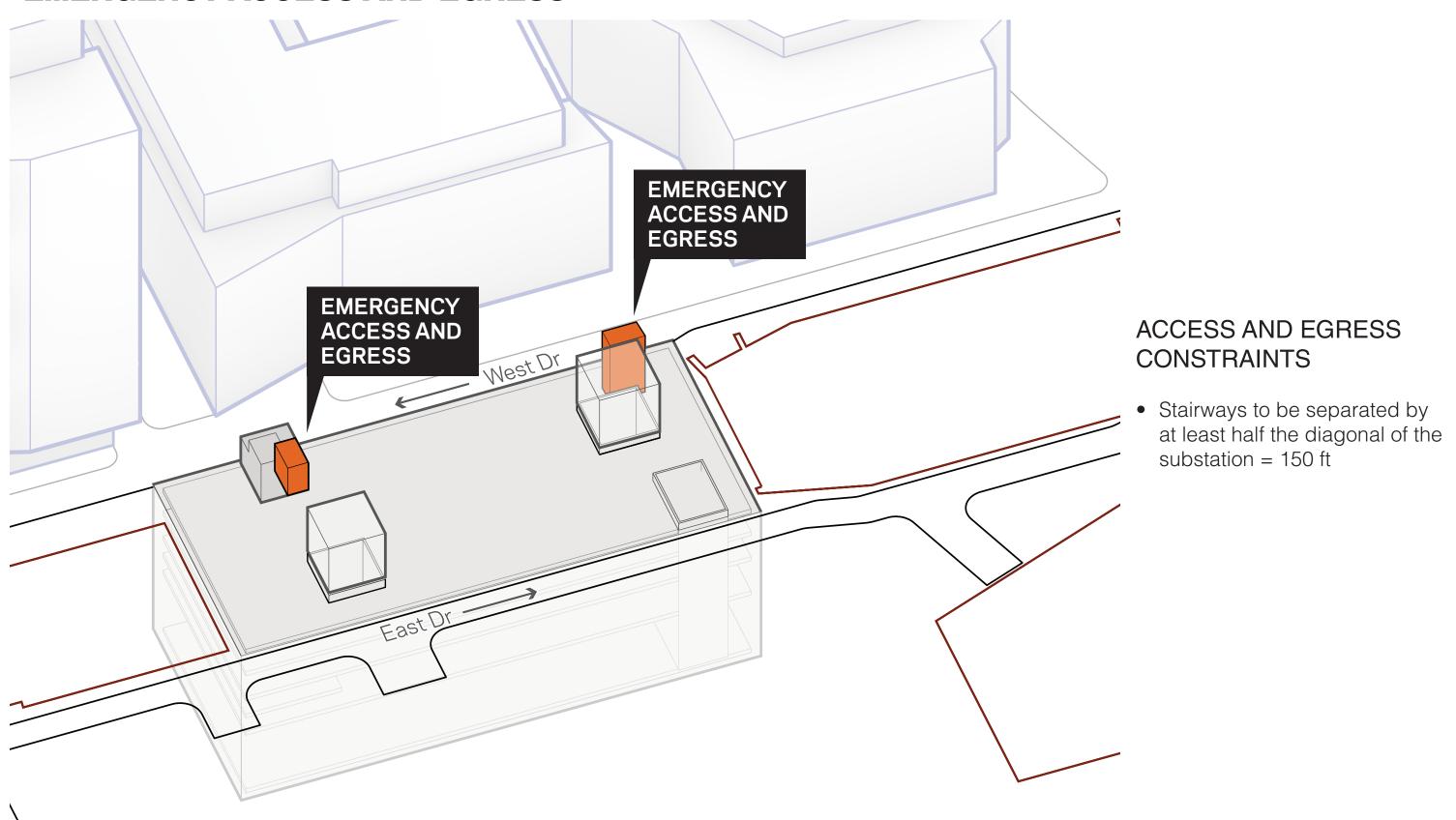
* Cambridge city base

nbbj

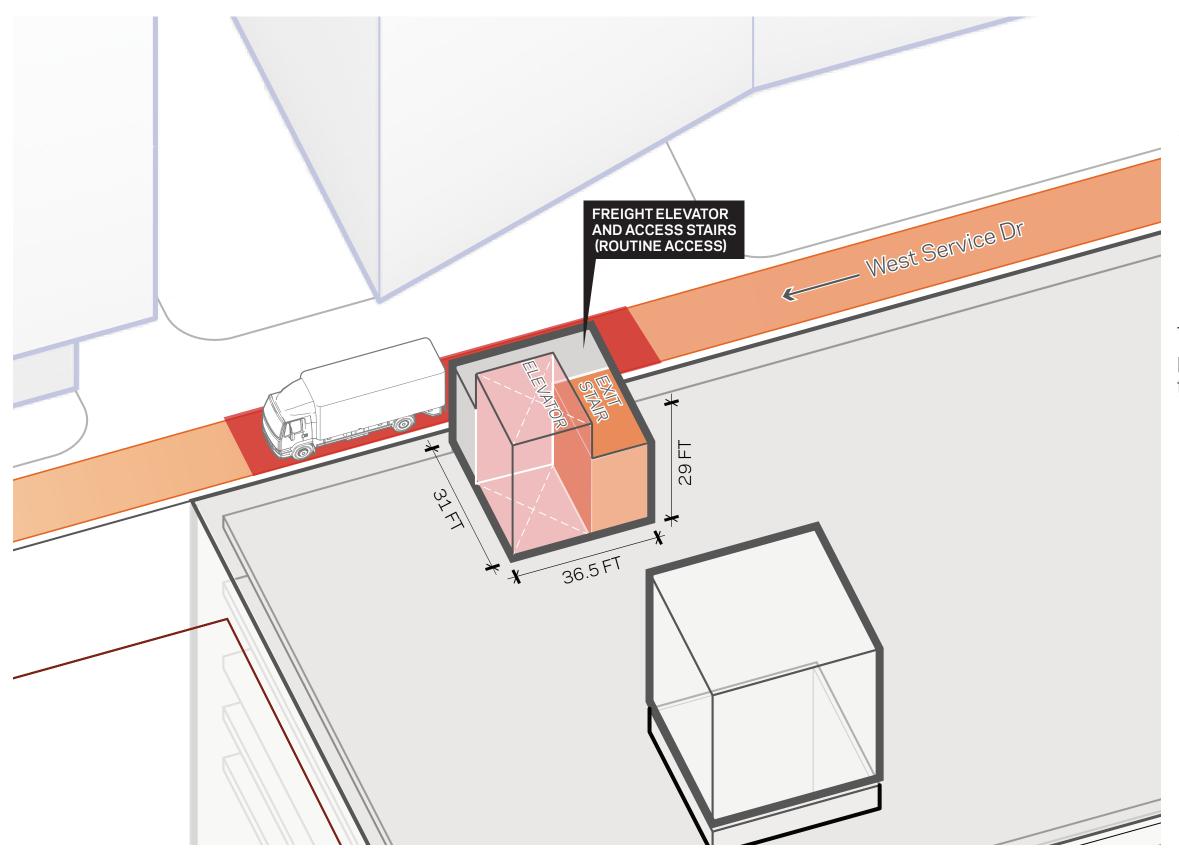
SUBSTATION VENTILATION

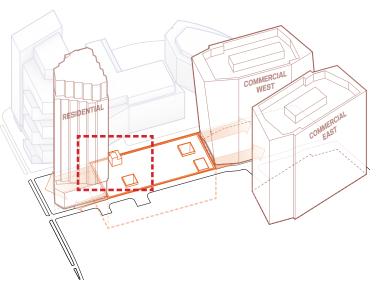


EMERGENCY ACCESS AND EGRESS



1 ELEVATOR + STAIR

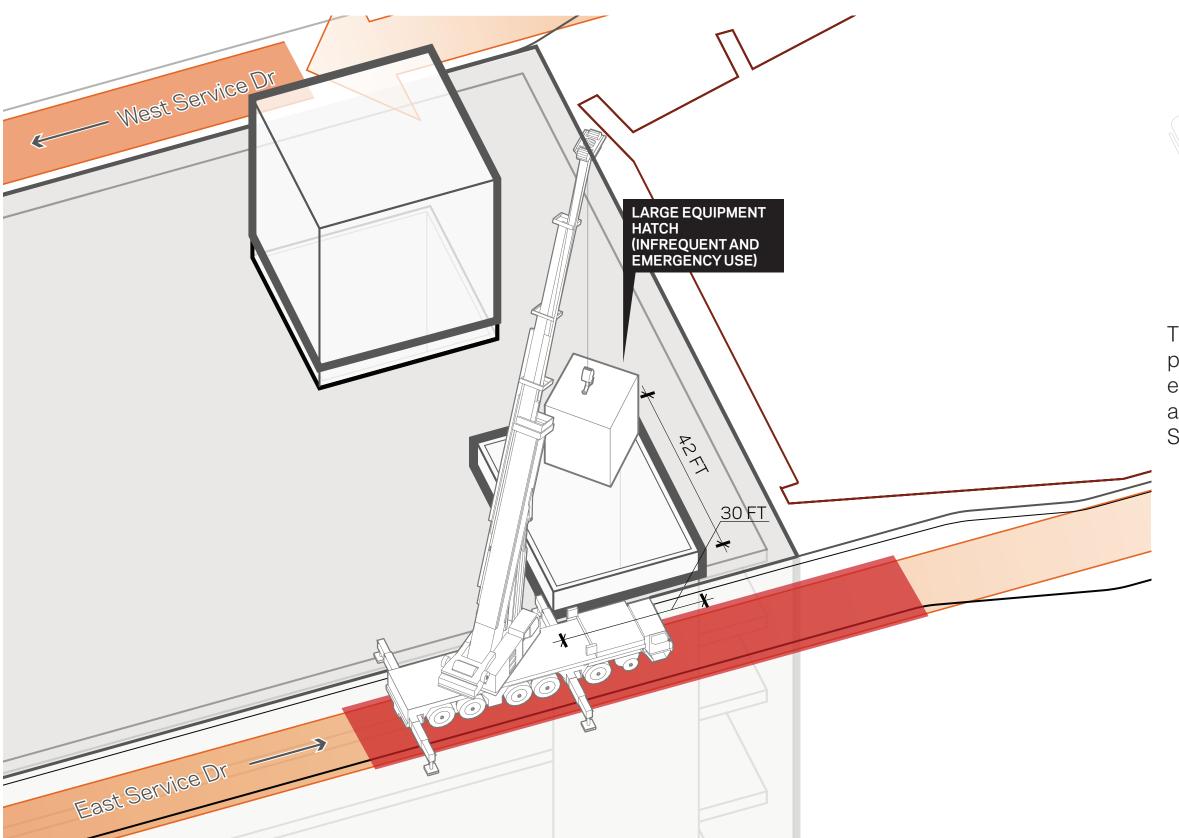


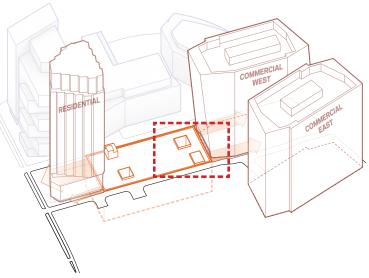


The substation has two servicing points. The routine access occurs on the West Service Drive.



2 ACCESS HATCH

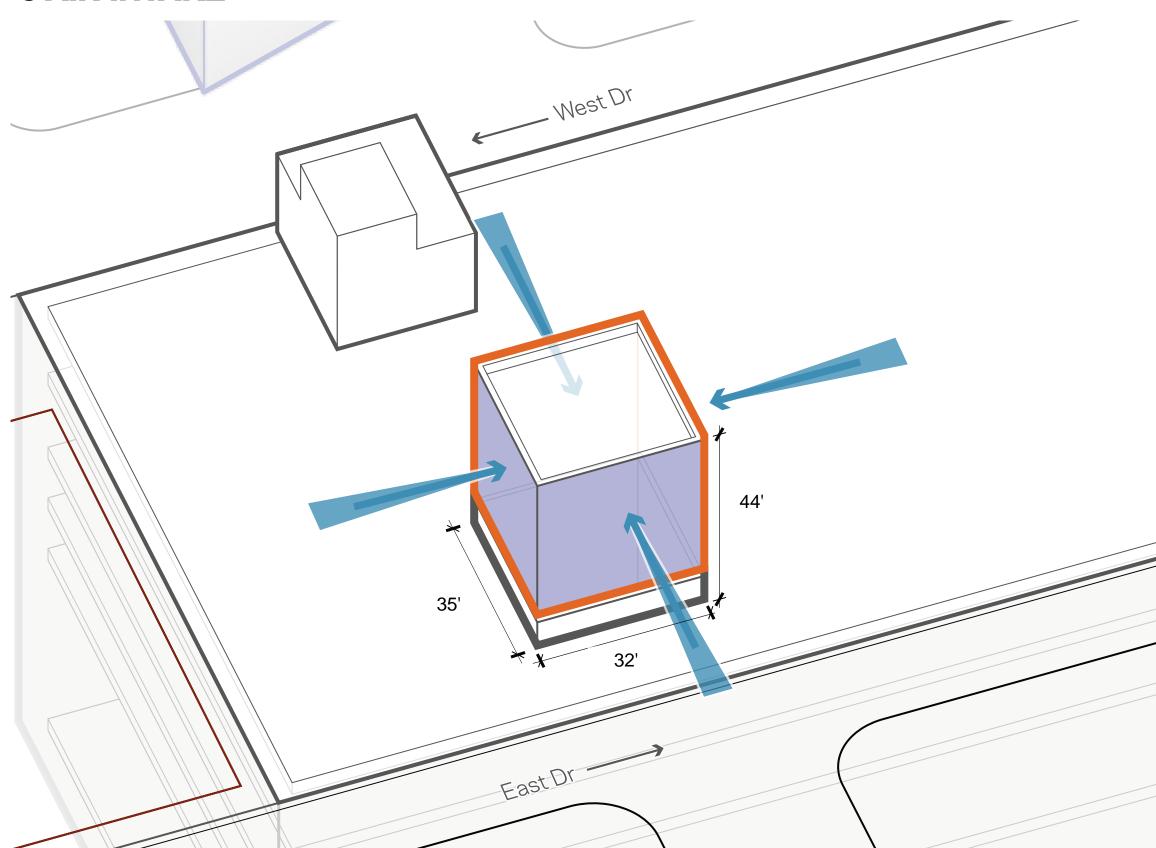


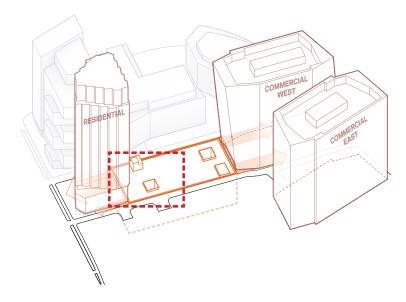


The substation has two servicing points. The larger equipment and emergency loading occurs using the access hatch located on the East Service drive.



3 AIR INTAKE





AIR INTAKE REQUIREMENTS

- Shaft size is 35'x32'
- Min free area: 2,000sf
- Lowest elevation = +25.5 ft
- Approximate height 44 ft

4 AIR EXHAUST + EXIT STAIR

