

*nbbj* SASAKI

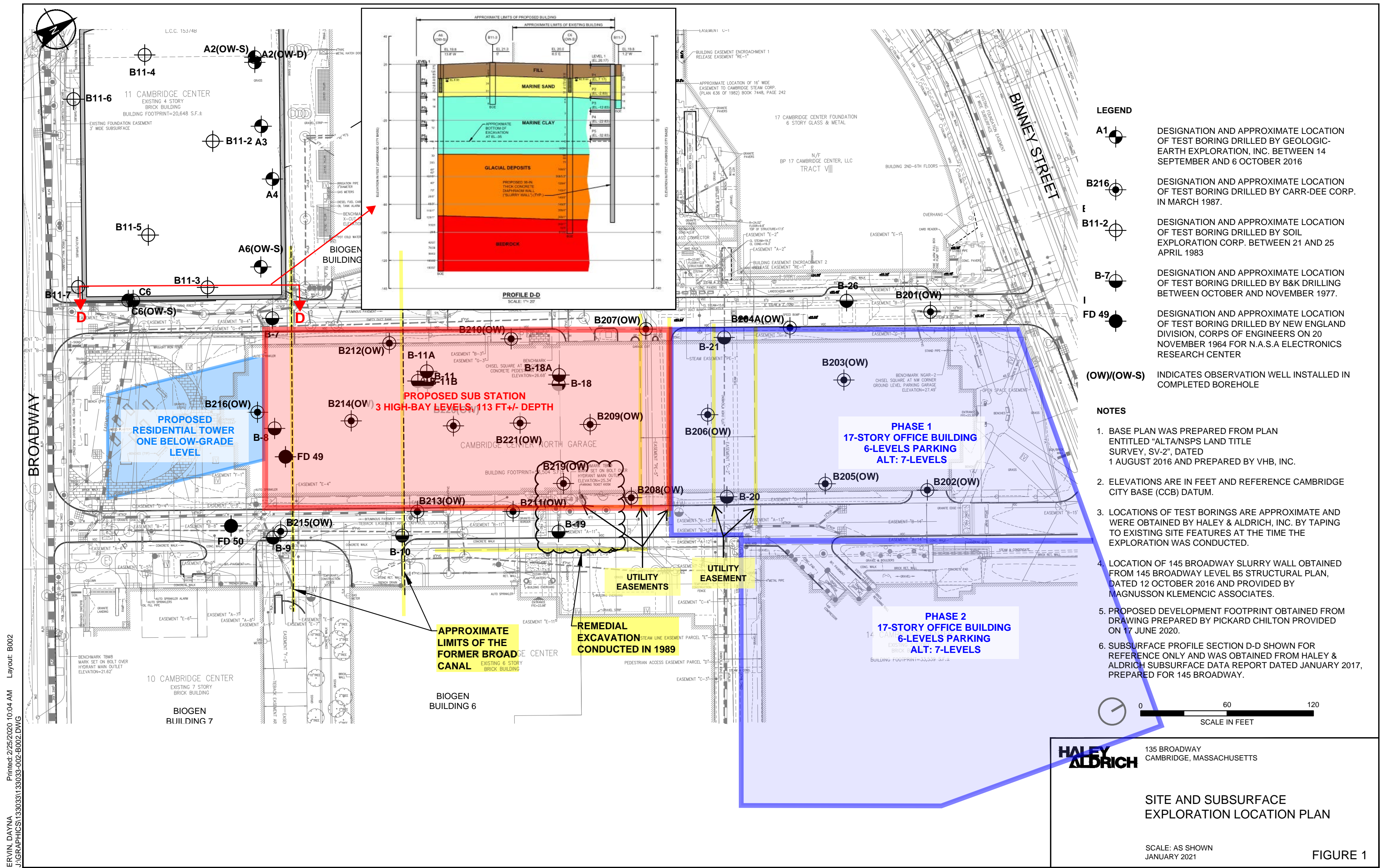
# BXP Central Open Space



# 01 Site Analysis

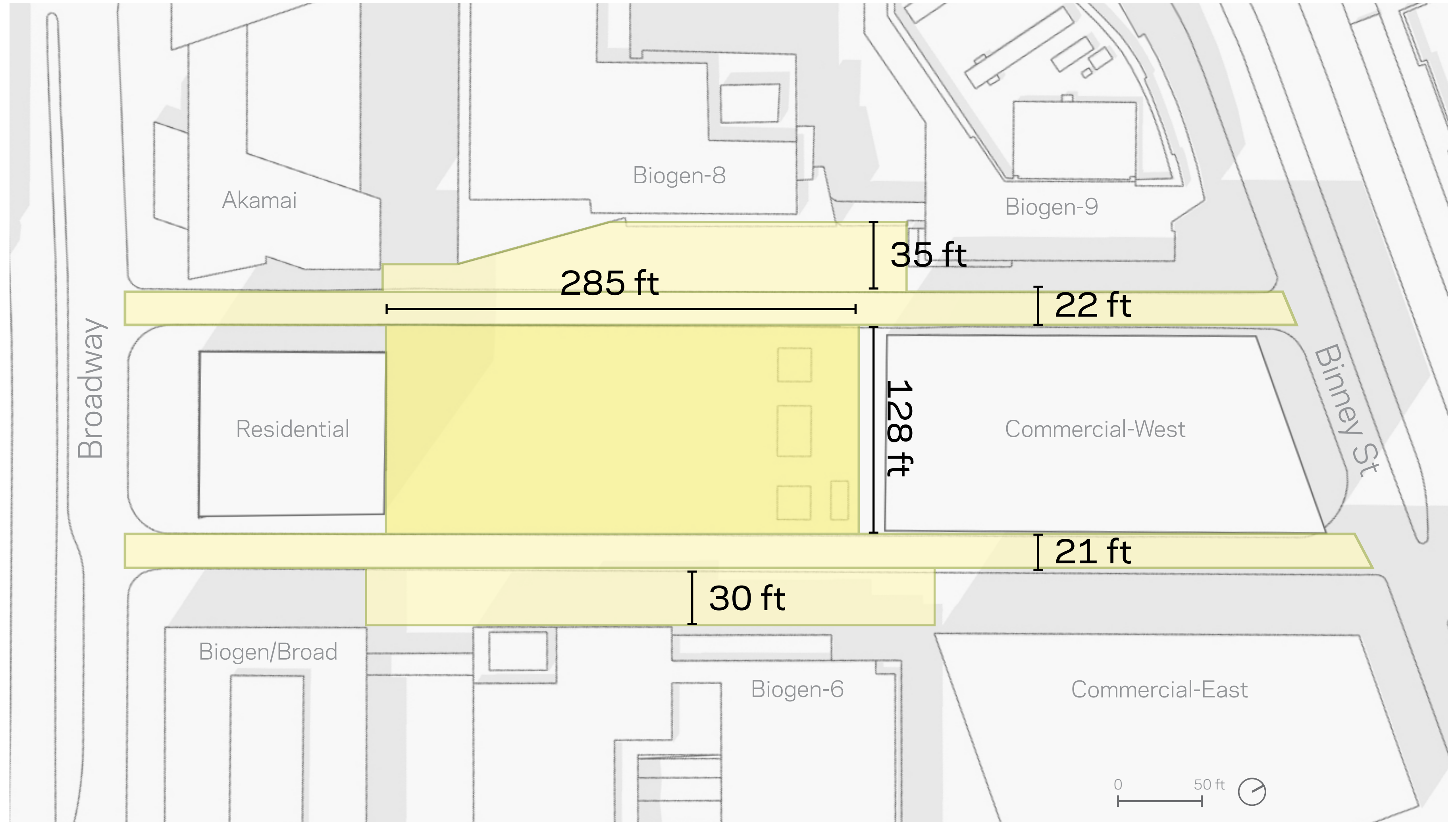
Context, Constraints,  
and Opportunities

# MXD Rezoning



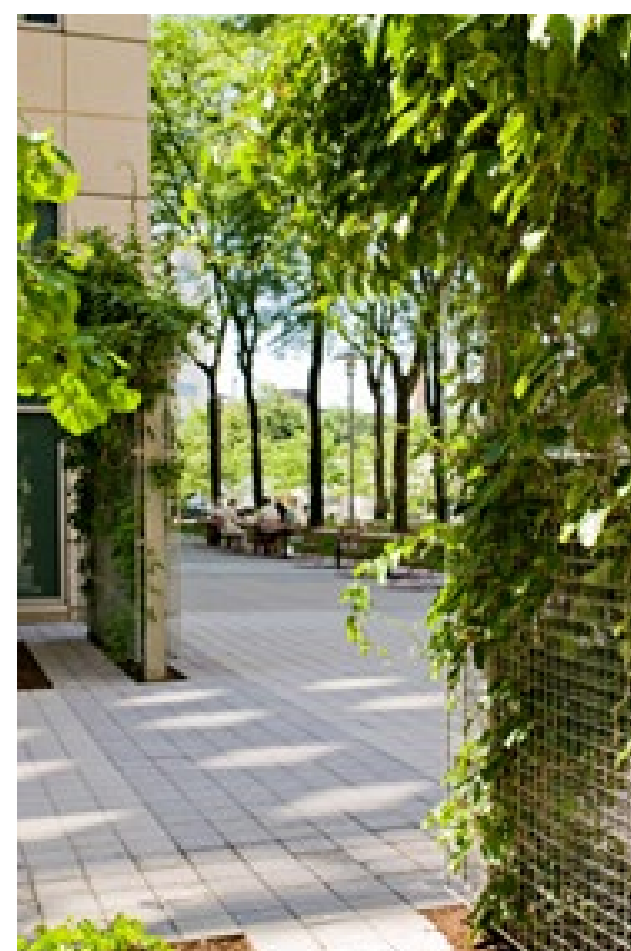
ERVIN, DAVNA  
 J:\GRAPHICS\1330331\33033-002-B002.DWG  
 2/25/2020 10:04 AM  
 Layout: B002

# Open Space Study Area



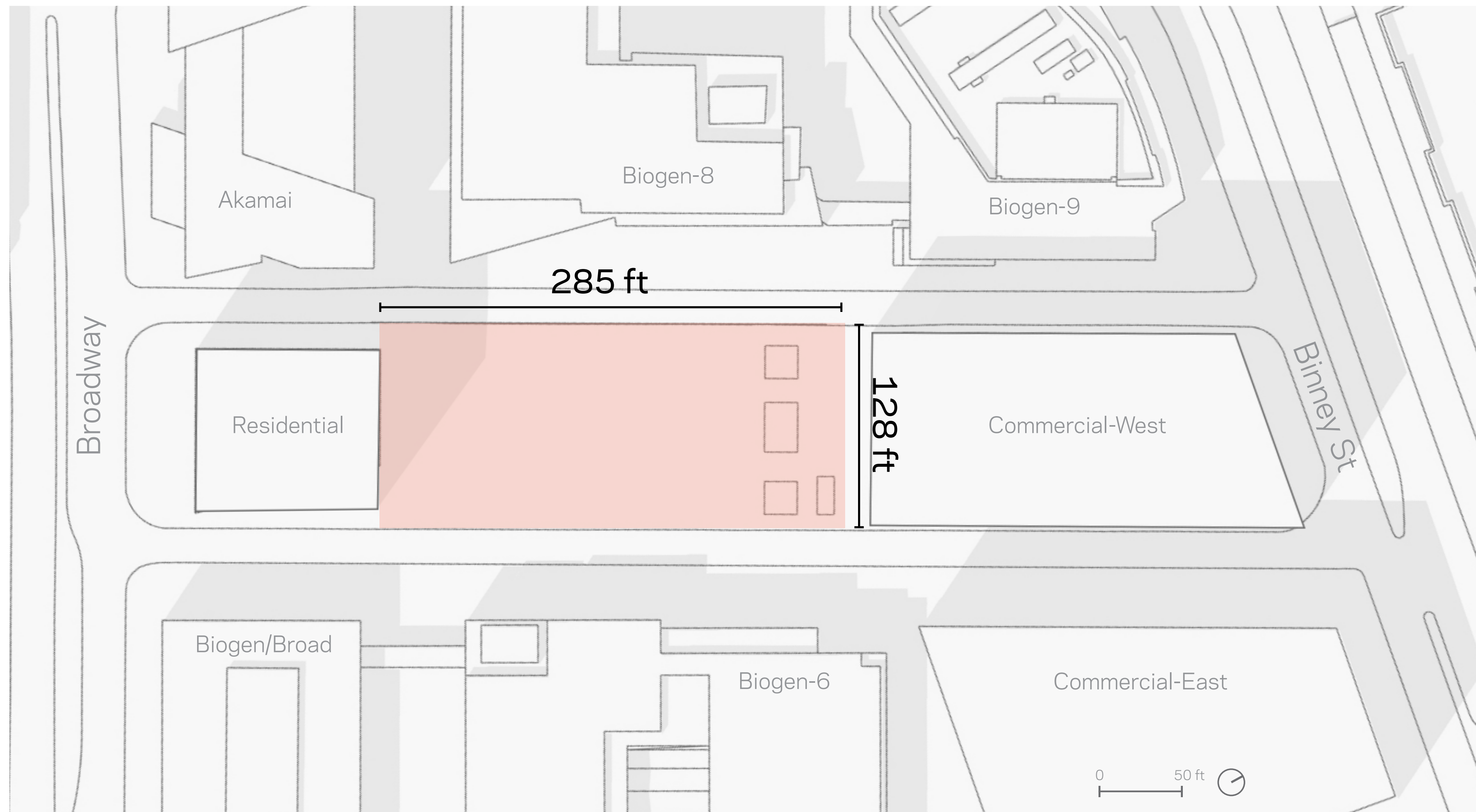
# Scale Comparison | Tech Square

Courtesy of Sasaki



# Substation Vault Extents

No overlap between vault volume and building footprints






# Vertical Access Locations

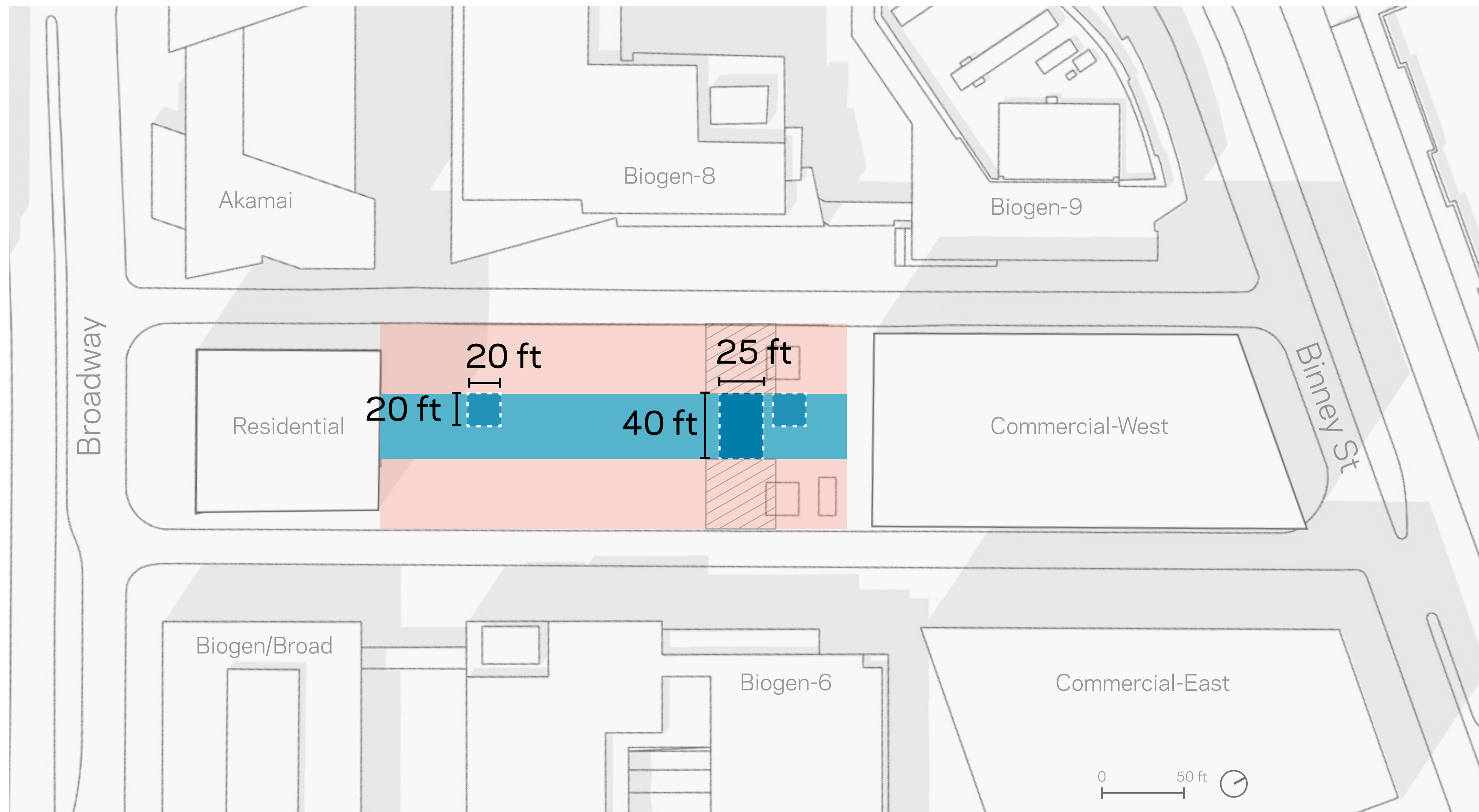
Hatch location is flexible, but preference is for center aisle

Laydown area required adjacent to hatch

2 human access points (stairwells) also needed

All vertical access points are subject to change dimension and location

-  Main access hatch
-  Vertical access point (stairwell)
-  Laydown area



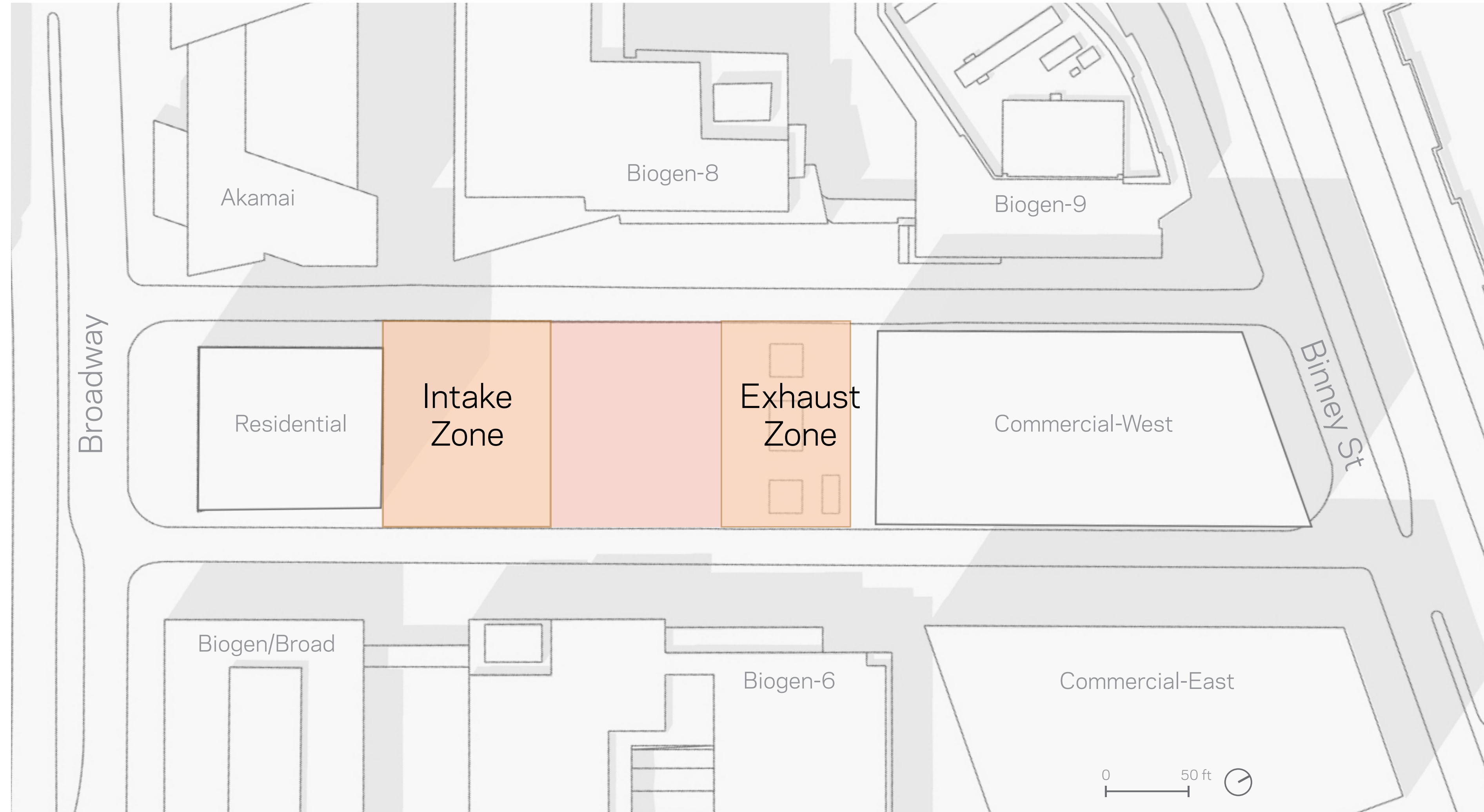
# Air Intake & Exhaust Locations

Expected to be at opposite ends of the space

Exhaust to the north

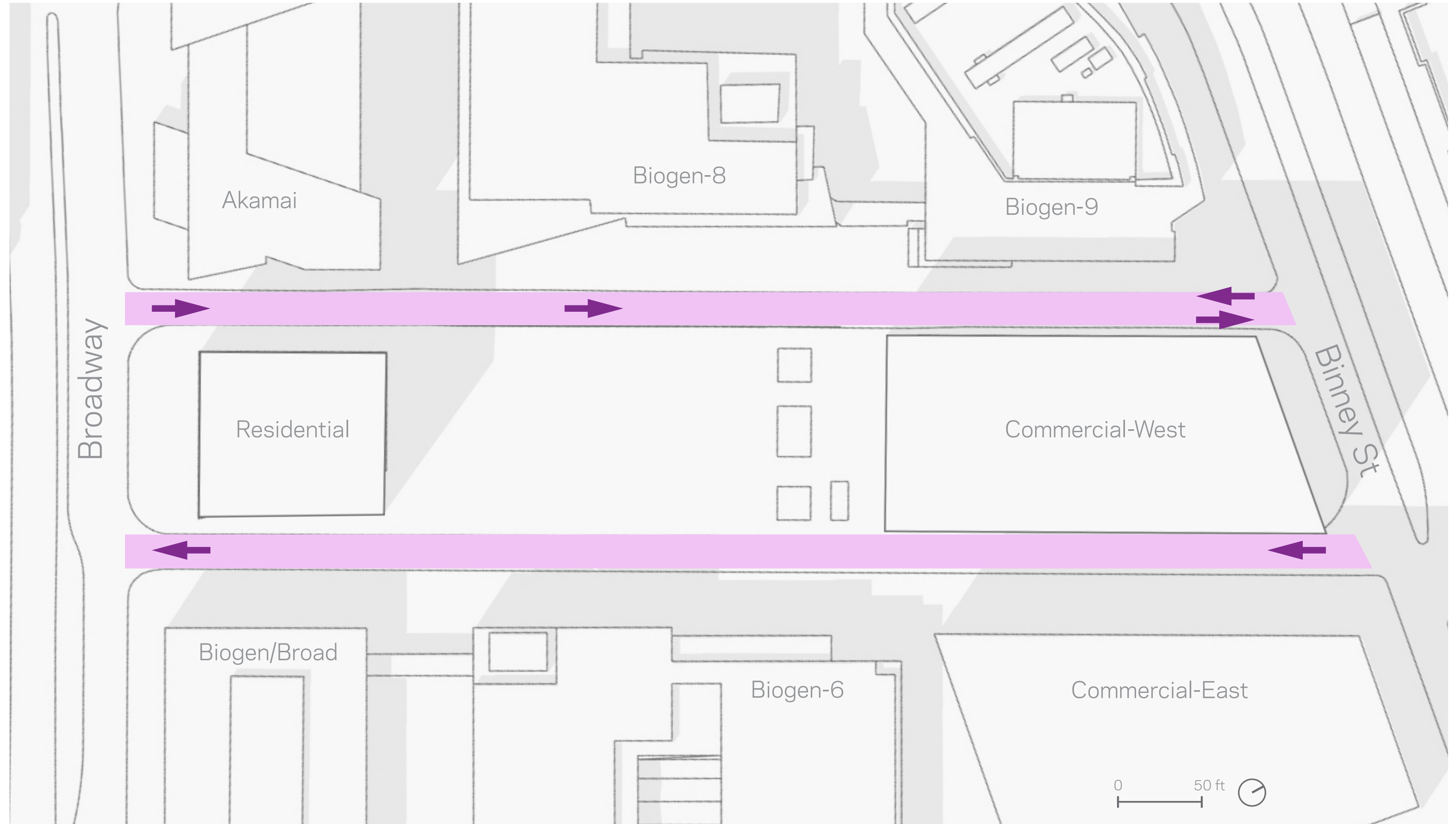
Intake to the south

Exact locations and dimensions of ventilation shafts still to be determined - these two zones represent areas under consideration for ventilation



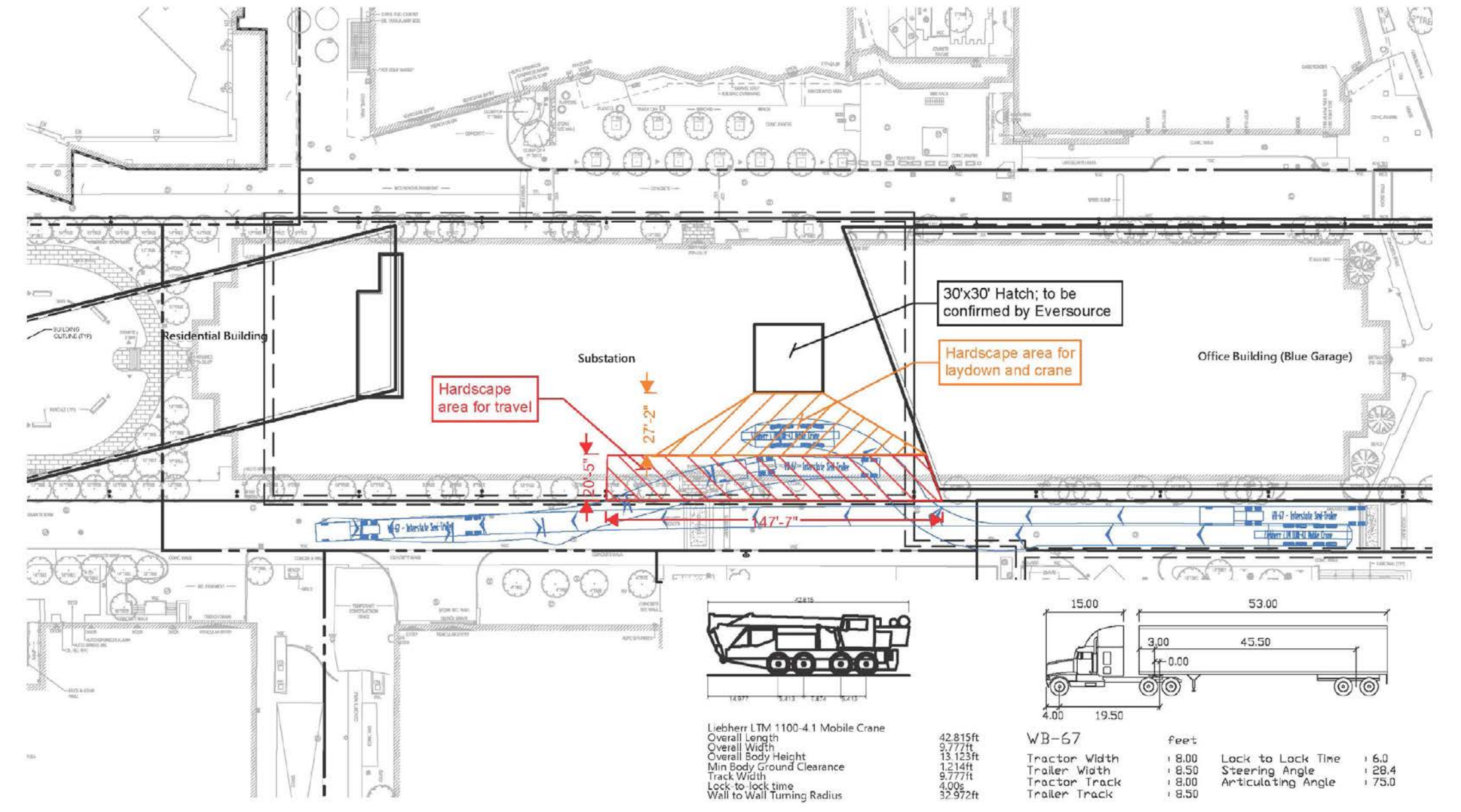


# Existing Vehicular Access

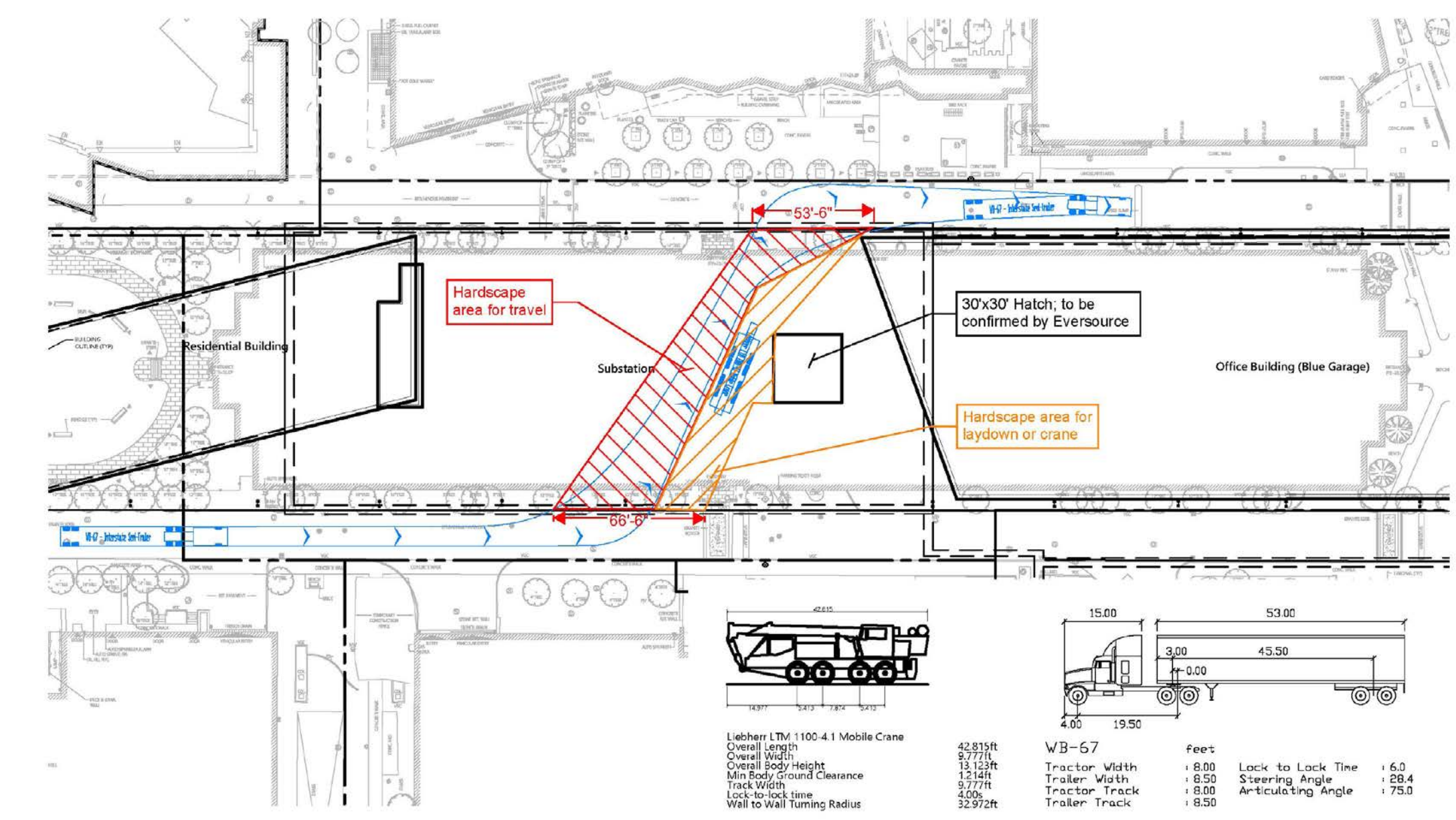


# Truck Turning Analysis

\\vhb\hgh\proj\Boston\12959.04\135 Broadway\Cad\AP\Plan\sc\Substation Turns\12959.04 Substation Turns.dwg



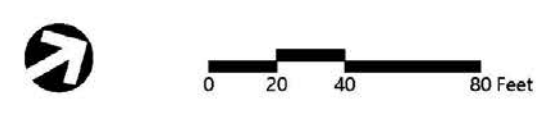
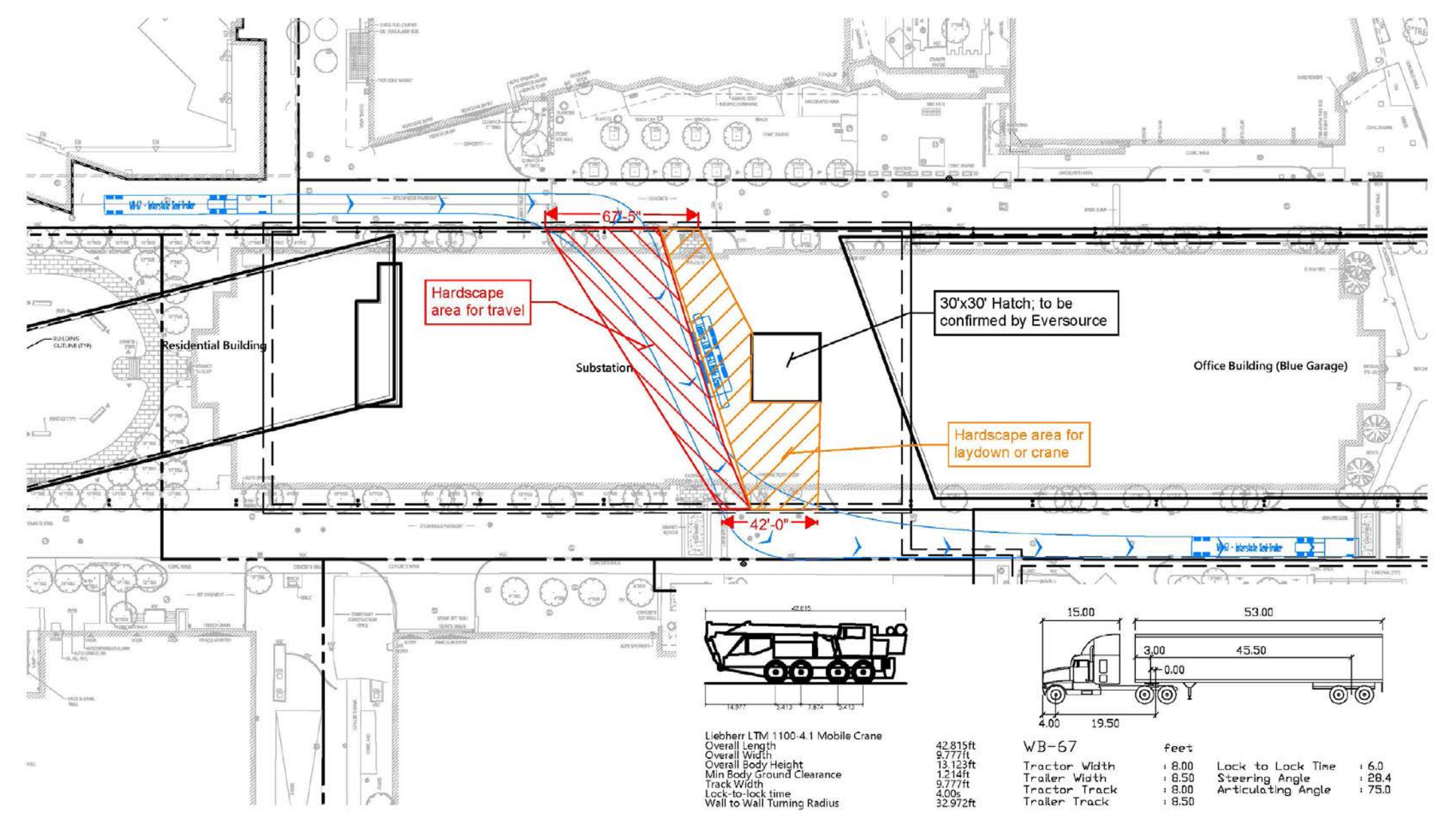
\\vhb\hgh\proj\Boston\12959.04\135 Broadway\Cad\AP\Plan\sc\Substation Turns\12959.04 Substation Turns.dwg



vhb  
WB-67 - Option 1  
Central Park  
Cambridge, MA

Figure 1  
March 2021

\\vhb\hgh\proj\Boston\12959.04\135 Broadway\Cad\AP\Plan\sc\Substation Turns\12959.04 Substation Turns.dwg

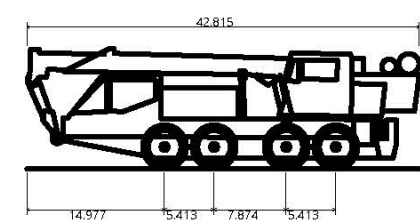


vhb  
WB-67 - Option 2  
Central Park  
Cambridge, MA

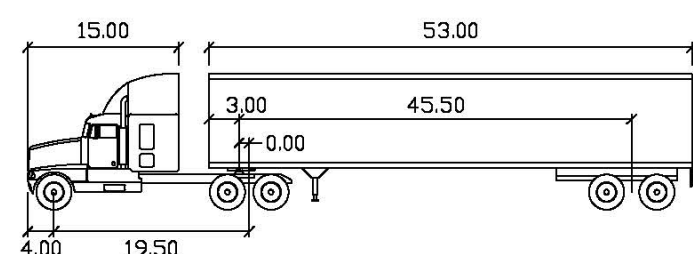
Figure 2  
March 2021

# Truck Turning Analysis

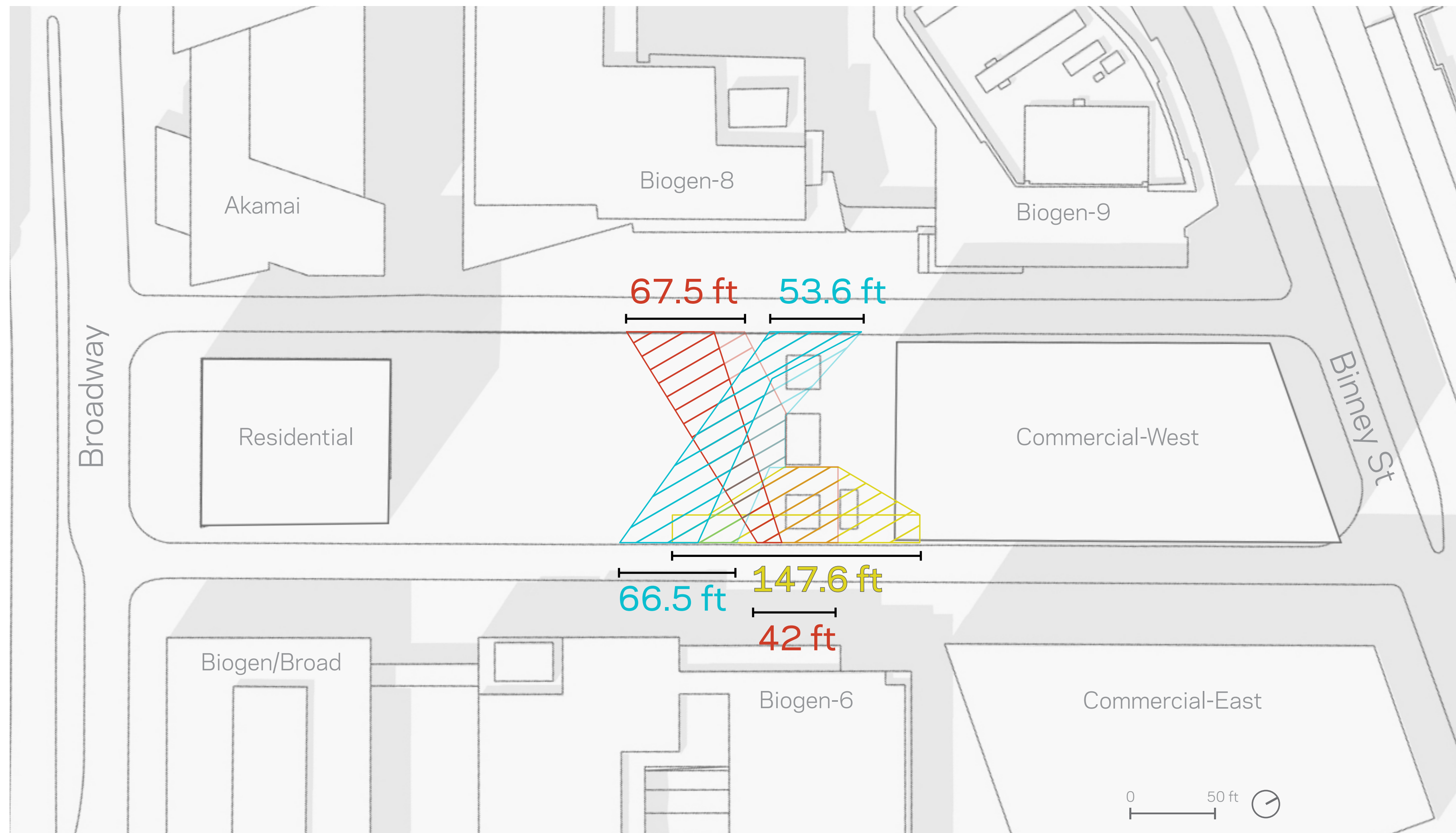
Multiple vehicle types will need direct access to the area immediately surrounding the hatch



Liebherr LTM 1100-4.1 Mobile Crane  
 Overall Length : 42.815ft  
 Overall Width : 9.777ft  
 Overall Body Height : 13.123ft  
 Min Body Ground Clearance : 1.214ft  
 Track Width : 9.777ft  
 Lock-to-lock time : 4.00s  
 Wall to Wall Turning Radius : 32.972ft

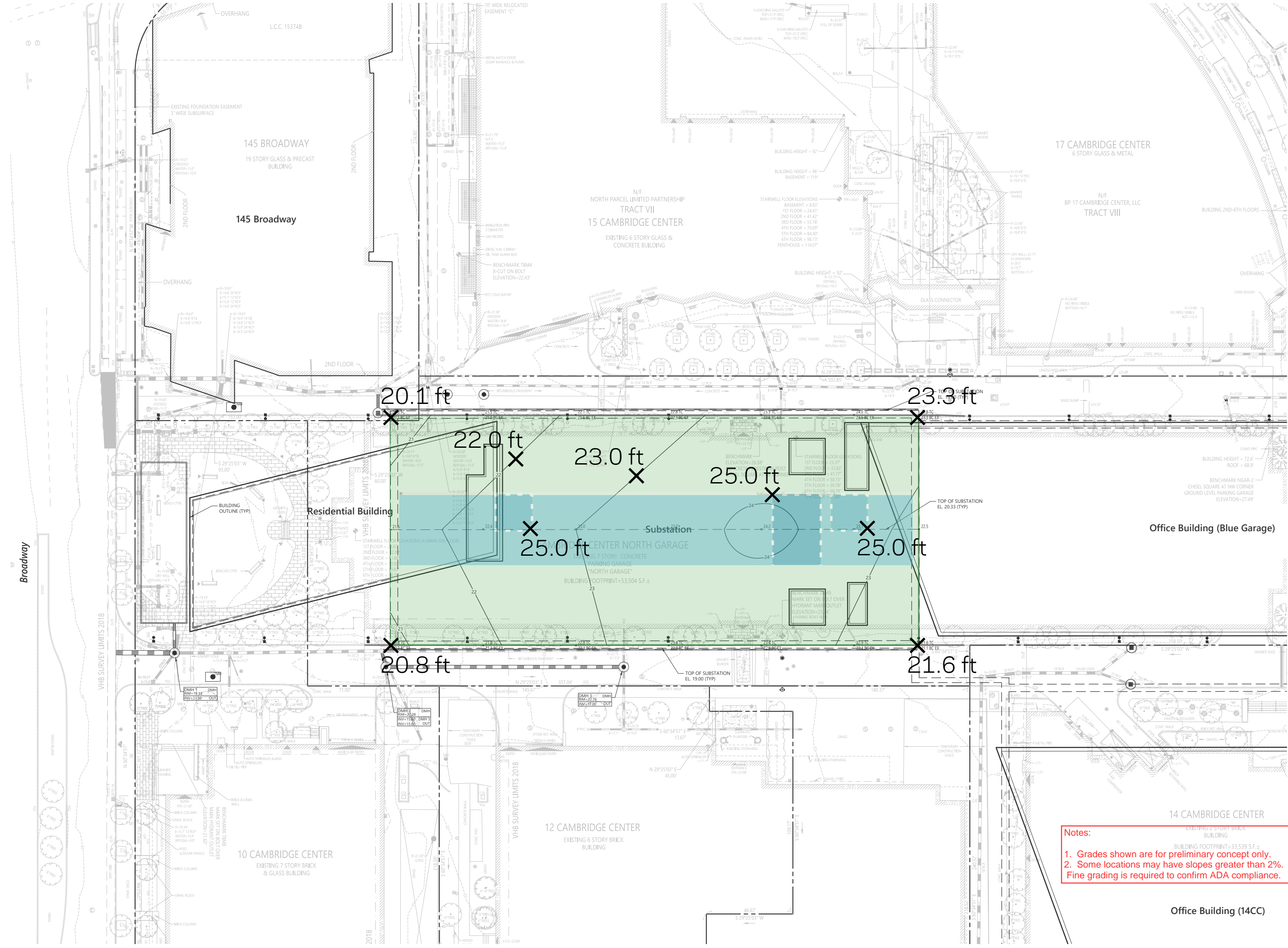


WB-67  
 feet  
 Tractor Width : 8.00  
 Trailer Width : 8.50  
 Tractor Track : 8.00  
 Trailer Track : 8.50  
 Lock to Lock Time : 6.0  
 Steering Angle : 28.4  
 Articulating Angle : 75.0



# Site Grading

All vault access points - infrastructure hatch and human access - must be above flood elevation 21+4 ft



Project Name  
Cambridge, MA

Owner  
Boston Properties  
800 Boylston Street, Suite 1900  
Boston, Massachusetts 02199  
tel. 617.236.3300  
www.bostonproperties.com

Design Consultant  
Pickard Chilton  
990 Chapel Street  
New Haven, Connecticut 06510  
tel. 203.786.8600 fax. 203.786.8611  
www.pickardchilton.com

Civil Engineer  
VHB  
99 High Street, 10th Floor  
Boston, Massachusetts 02110  
tel. 617.228.7777  
www.vhb.com

Geotechnical Engineer  
Haley & Aldrich  
465 Medford Street, Suite 2200  
Boston, Massachusetts 02129  
tel. 617.868.7400  
www.haleyaldrich.com

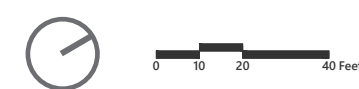
Structural Engineer  
Magnusson Klemencic As  
111 South Wacker Drive, Suite 3390  
Chicago, Illinois 60606  
tel. 312.683.1200  
www.mka.com

REVISIONS  
  
**Draft Pri**  
02/19/2021 1:48:01 F

Notes:  
1. Grades shown are for preliminary concept only.  
2. Some locations may have slopes greater than 2%.  
Fine grading is required to confirm ADA compliance.

Concept Pricing Set  
This drawing is not for construction or bidding. It is for informational purposes only. Pickard Chilton Inc. is not the Architect of Record and therefore is not responsible for any errors or omissions. Pickard Chilton Inc. is not responsible for any errors or omissions in any drawings or documents prepared by other disciplines. NOT FOR CONSTRUCTION

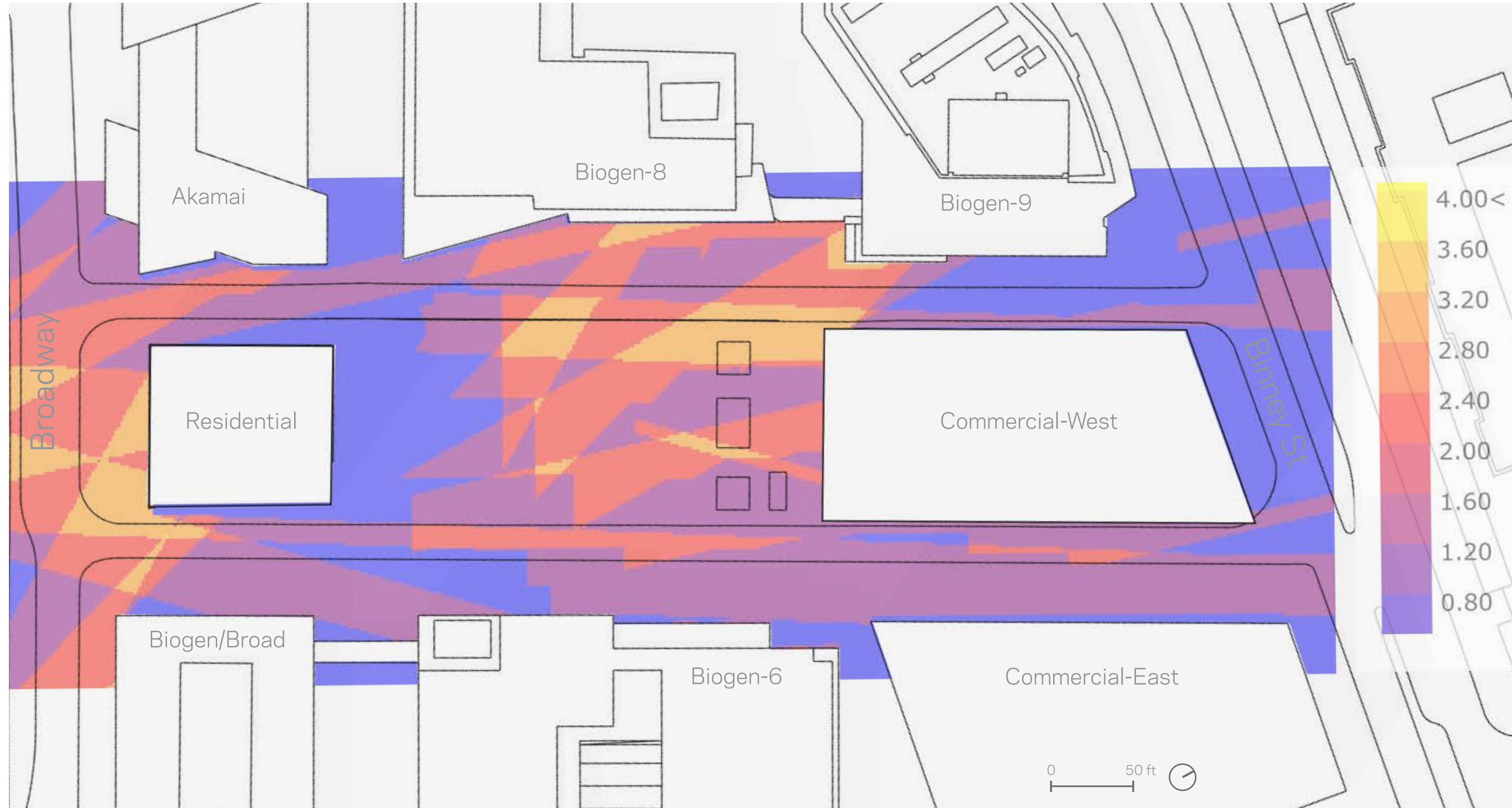
PROJECT: 1923  
DATE: 15 January 2021  
SCALE: 1" = 20'-0"  
SHEET NUMBER:  
**C2.00**  
Copyright 2020 by Pickard Chilton Architects, Inc. reserved.



# Solar Access

January

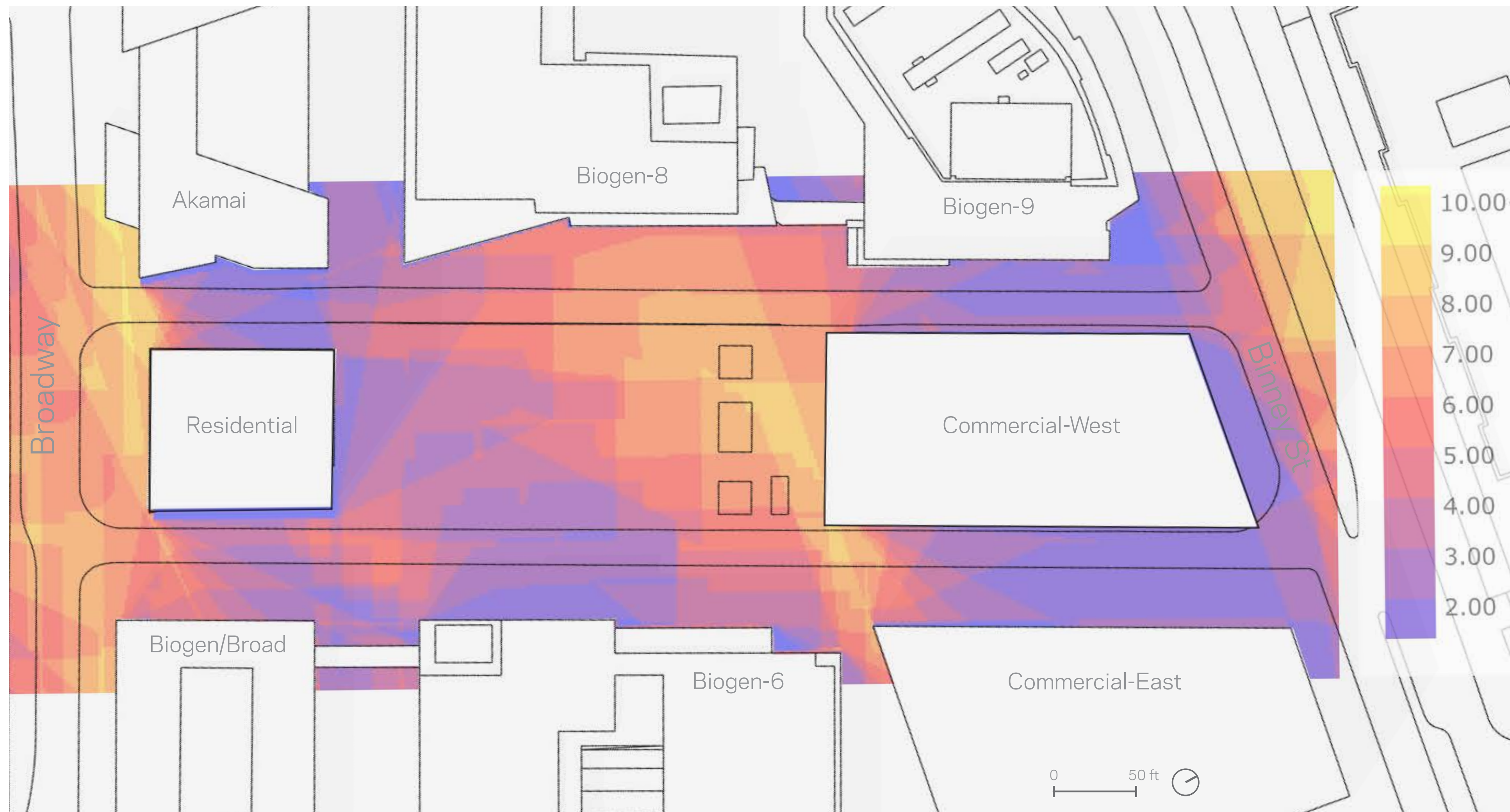
hours/day



# Solar Access

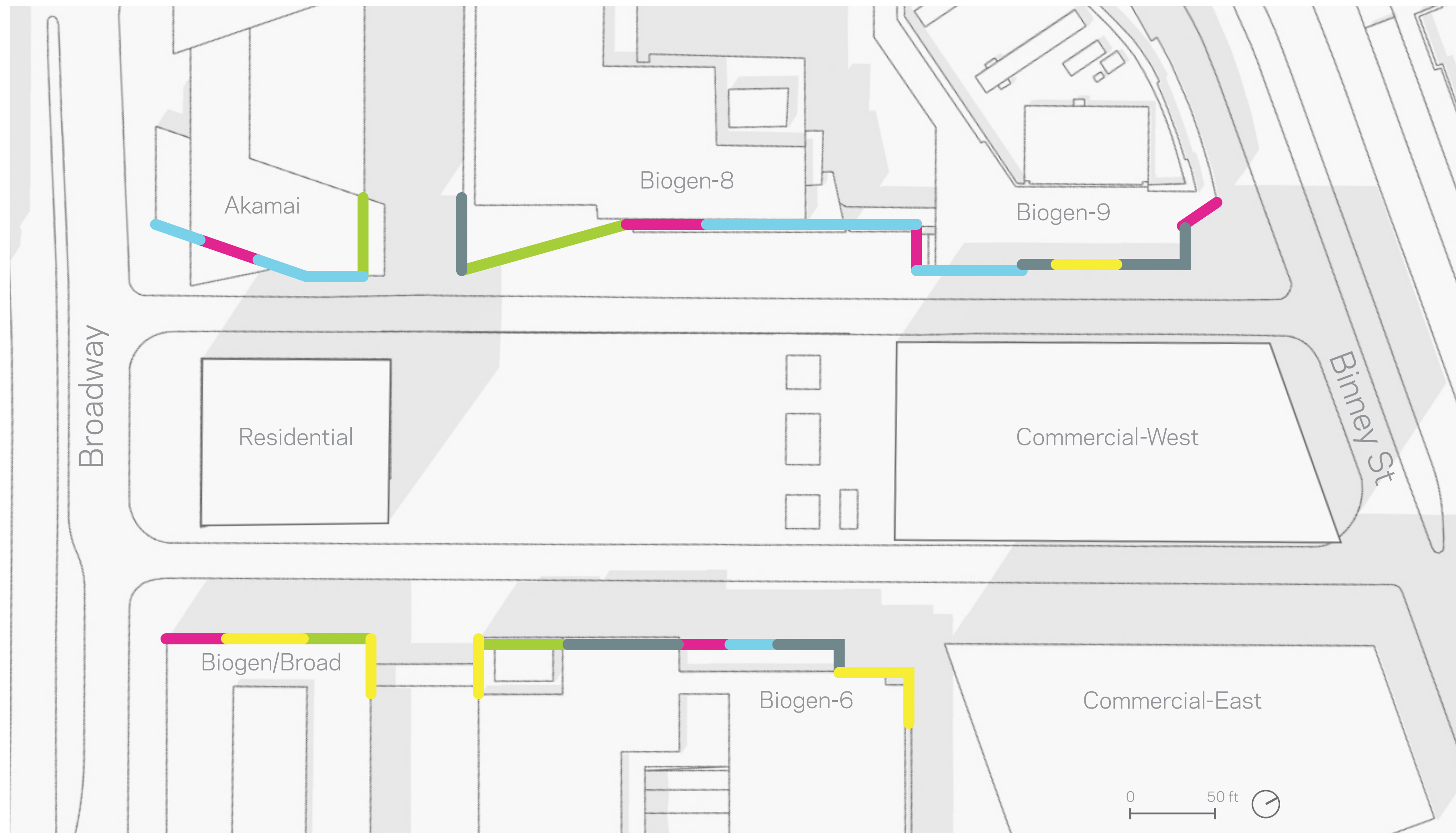
August

hours/day



# Site Perimeter Analysis

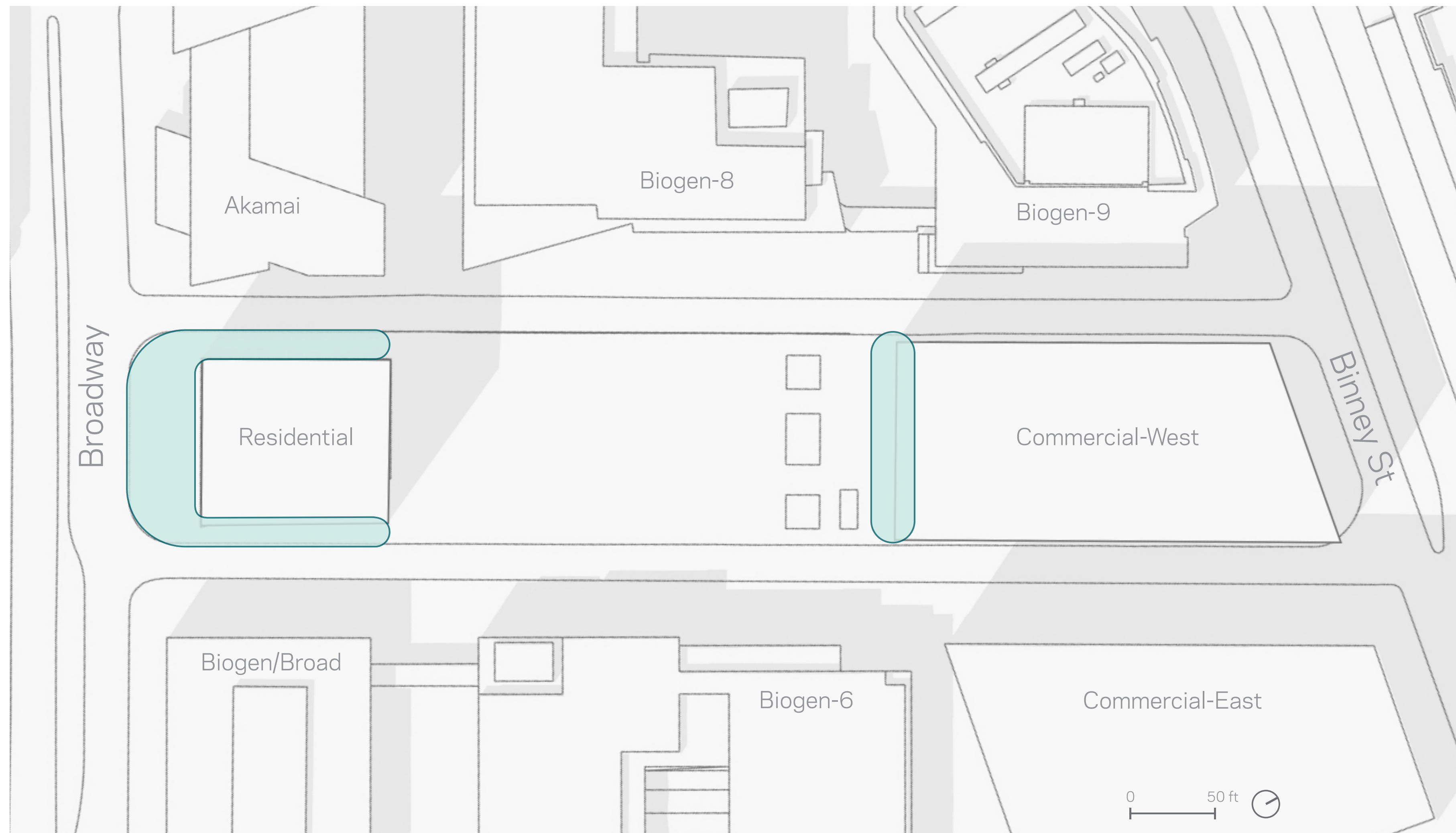
-  Building entrance
-  Glazed wall
-  Solid/blank wall
-  Mechanical/vent
-  Loading/service



# Water Feature Zones

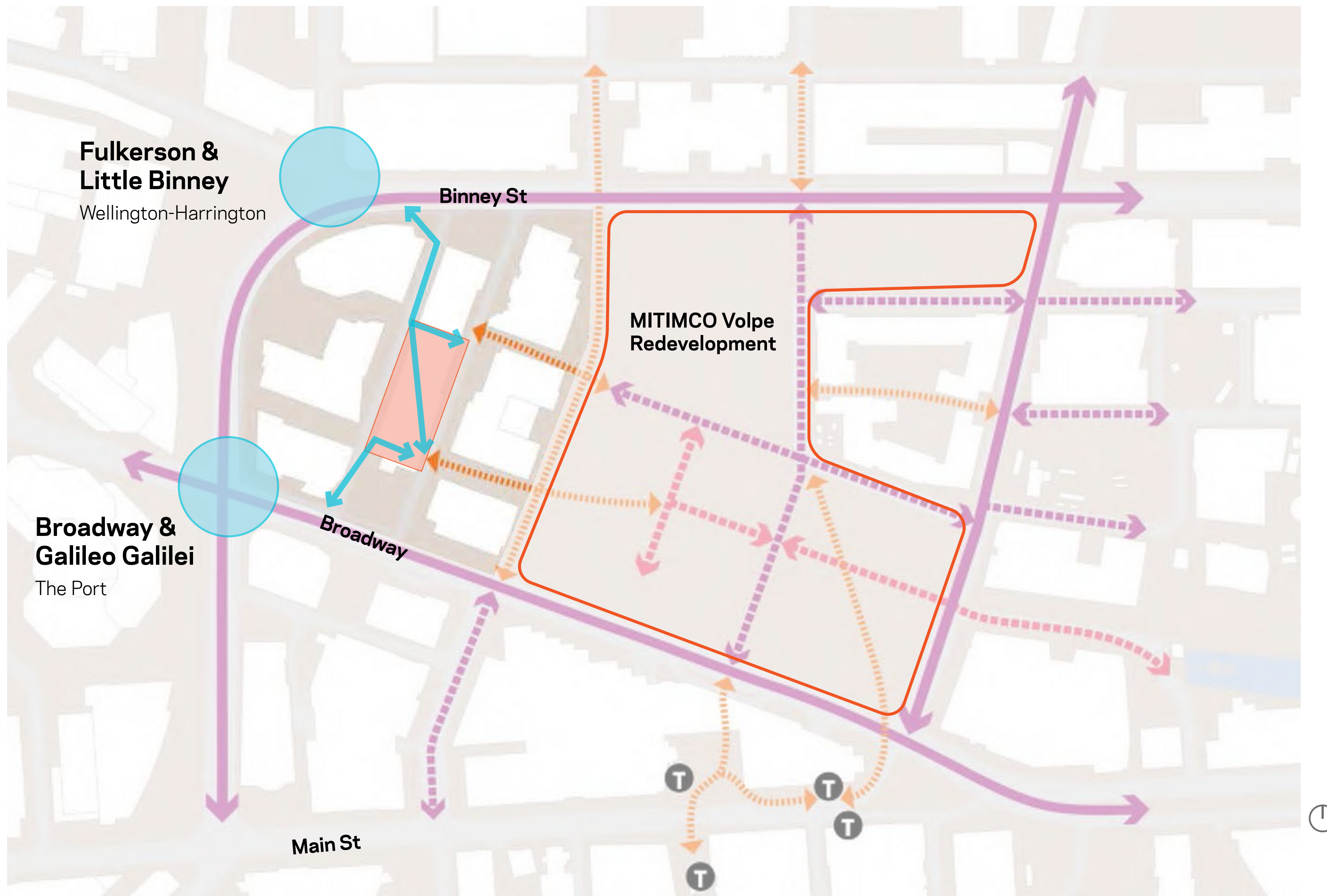
Should be low-volume

Should not overlap vault footprint





# Pedestrian Desire Lines



# Site Constraints

## Summary

### Dimensions

- Substation vault (285' x 128')
- Flood elevation 21'+4'

### Access Requirements

#### Vehicular site access

- Mobile Crane
- 18-wheeler/tanker (67' trailer)
- Emergency vehicles (fire, EMS)
- Infrastructure hatch (40' x 25')
- Equipment lift
- Backup Generator

#### Human vertical access

- Stairway (2-3)
- Human/freight elevator

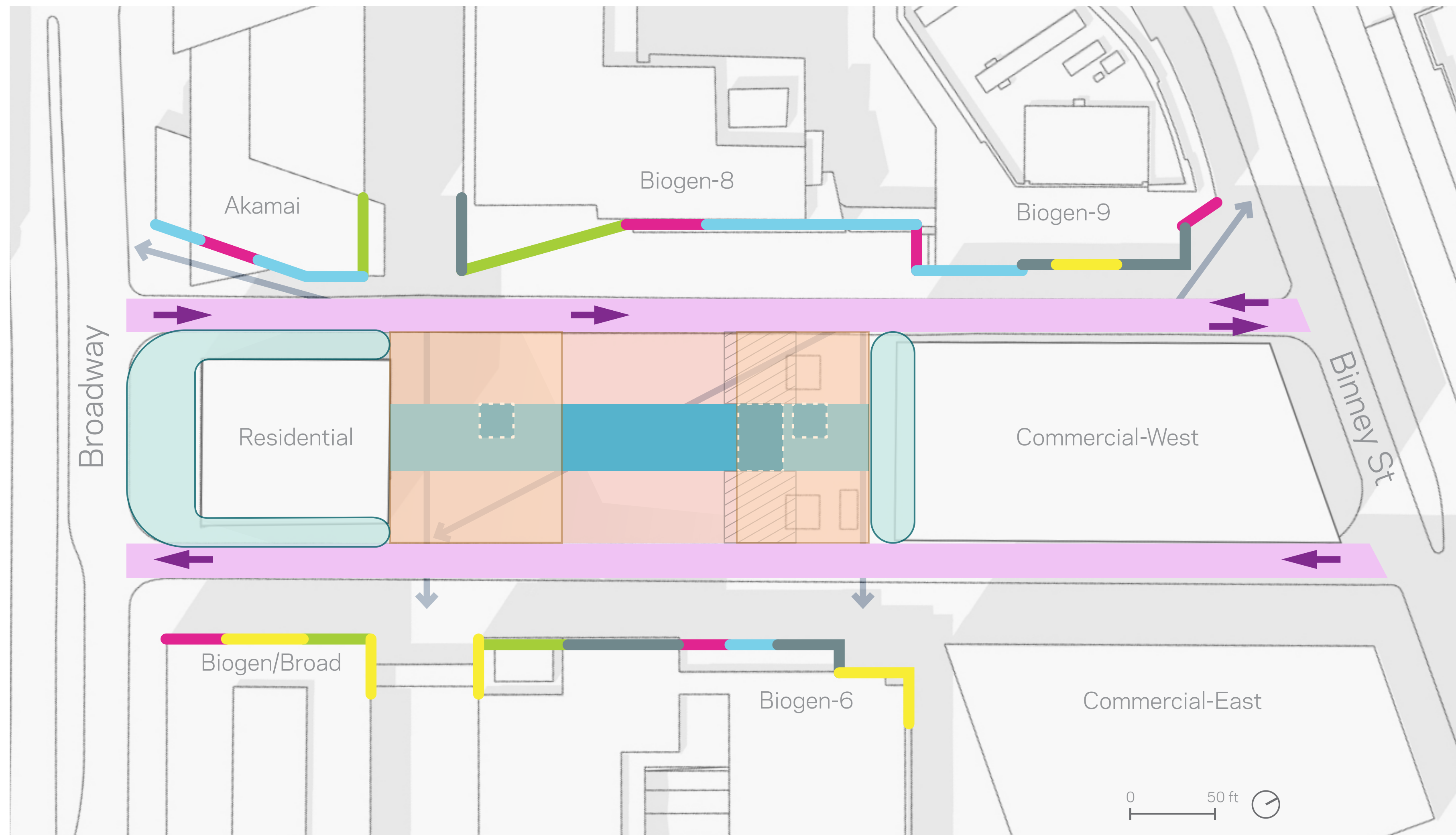
### Operational Constraints

- Air intake shaft
- Exhaust shaft
- Zero water penetration - no storm drains or high-volume flow above vault

### Surrounding Uses

- Bike parking/valet
- Retail
- Commercial (ground floor and above)
- Residential (above ground floor)

# Constraints & Opportunities Aggregated



# 02 Themes & Preliminary Concepts

Activity & Wellness

Arts Space

Urban Oasis

## Narrative Theme

### Energy Innovation: The story of energy in Kendall Square

What have past site uses been? What dramatic innovations have happened here to bring us toward a cleaner, more efficient future? What does the infrastructure we can't usually see contribute to our built environment?

## Program Concepts

### Activity & Wellness

Fitness

Performance

Interaction

### Art Environment

Light and sound

Sculpture

Verticality

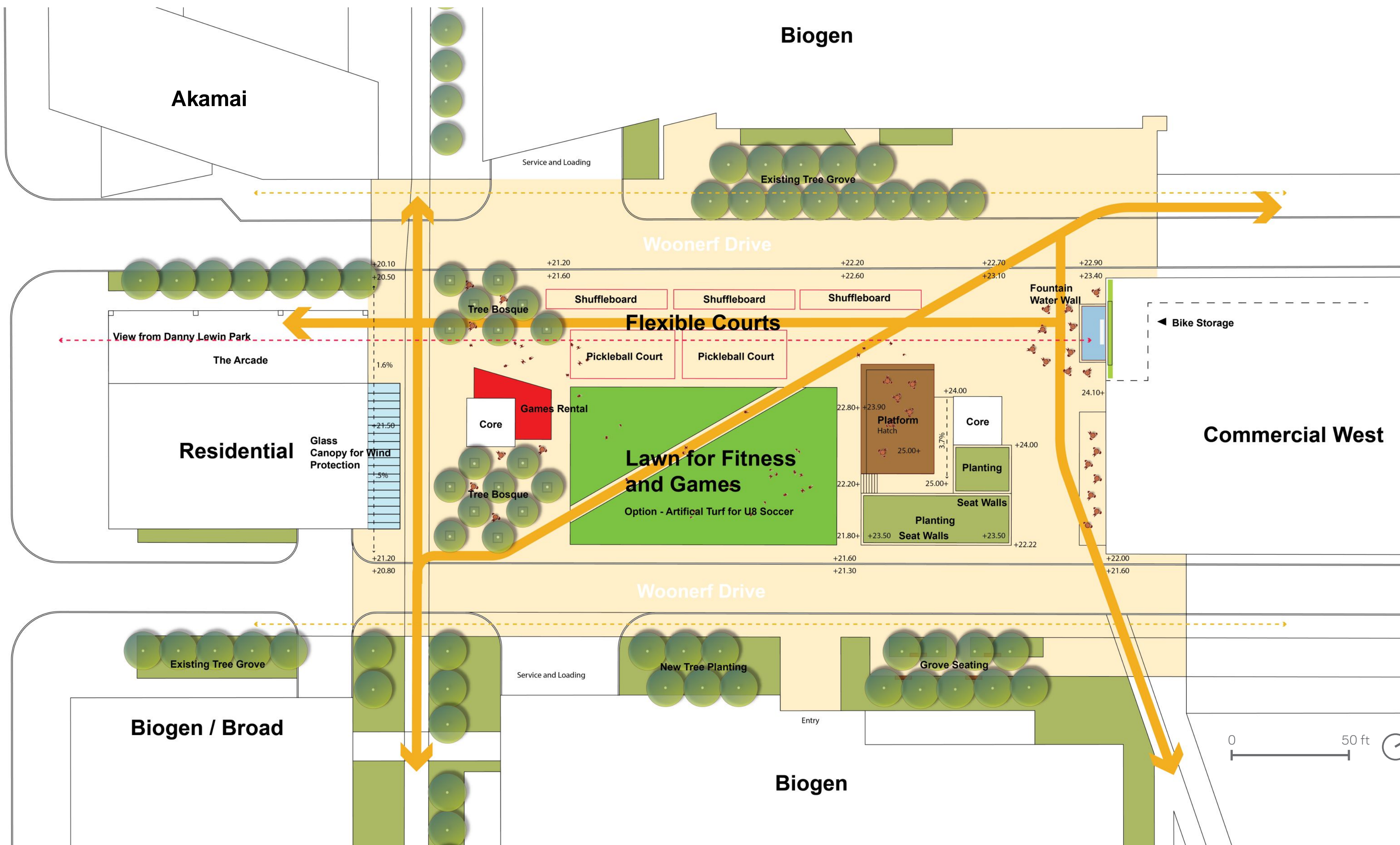
### Urban Oasis

Peace and relaxation

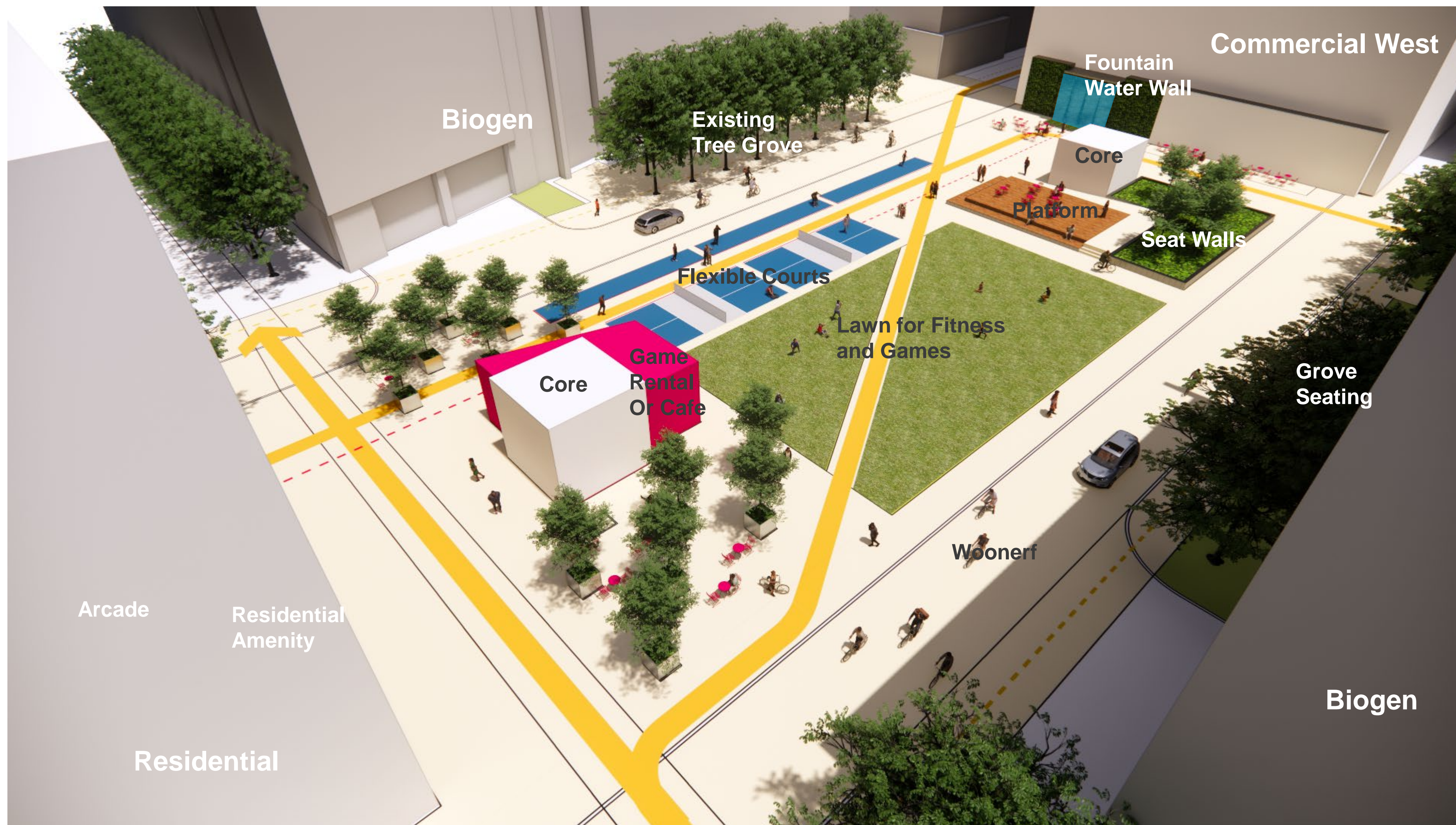
Sanctuary

Natural form

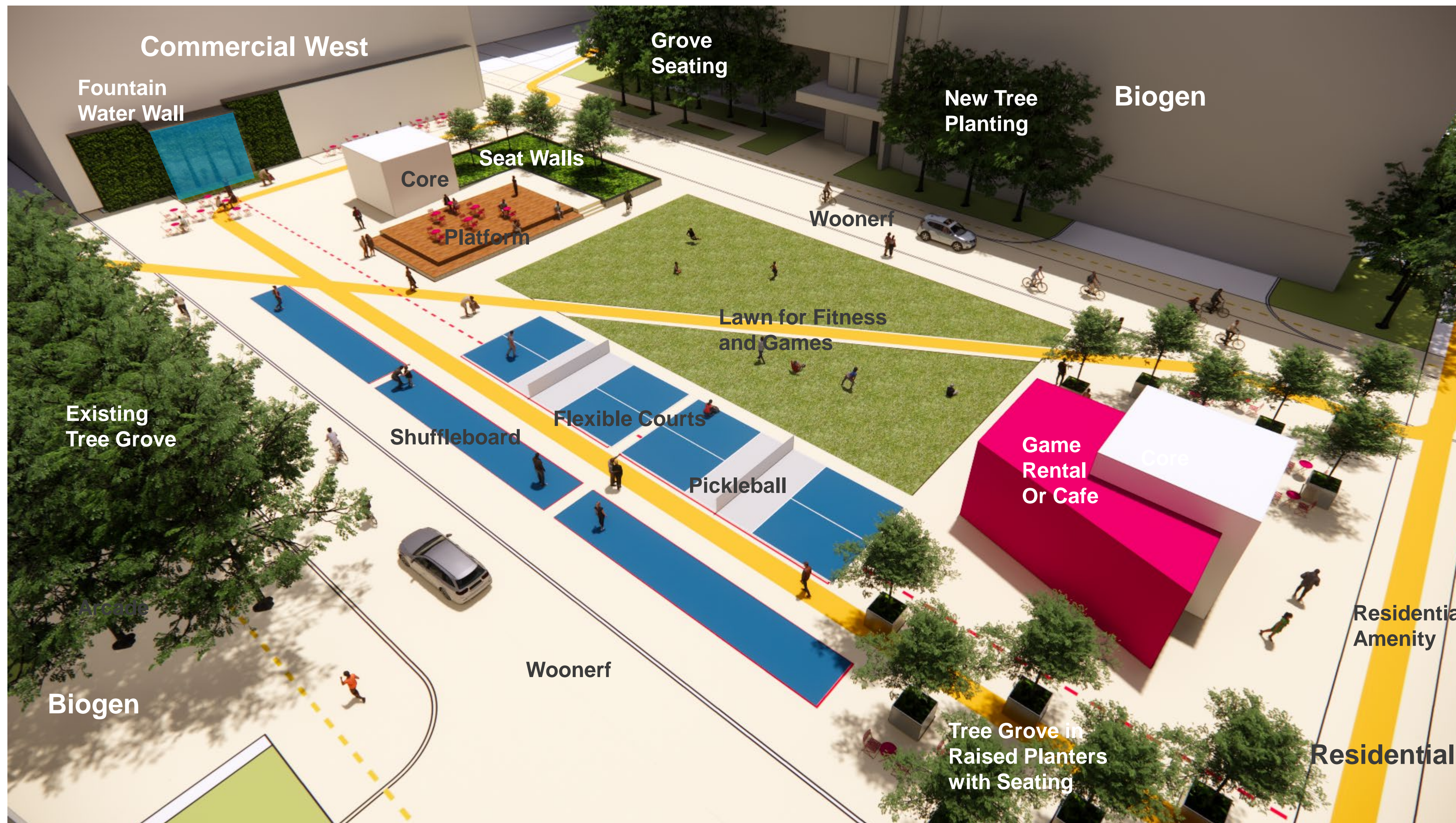
# Activity & Wellness



# Activity & Wellness

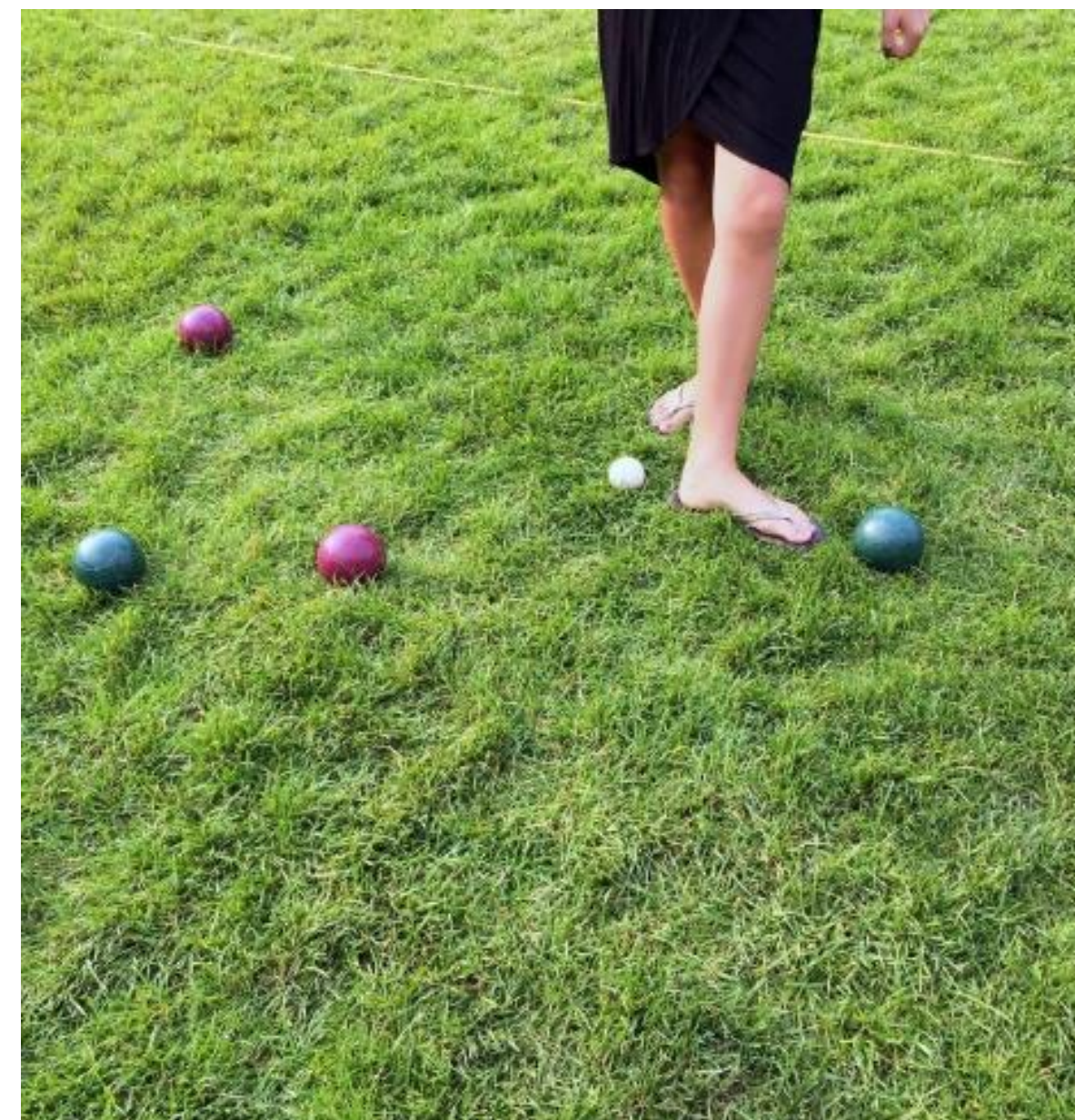


# Activity & Wellness





## Children Play: Recreation Games



### activities on the “pelouse vert”

- petanque
- putting green
- croquet
- east coast kubb
- cornhole
- board games
- jumbo dominoes
- spikeball
- lawn bowling



# Programming: Children's Play



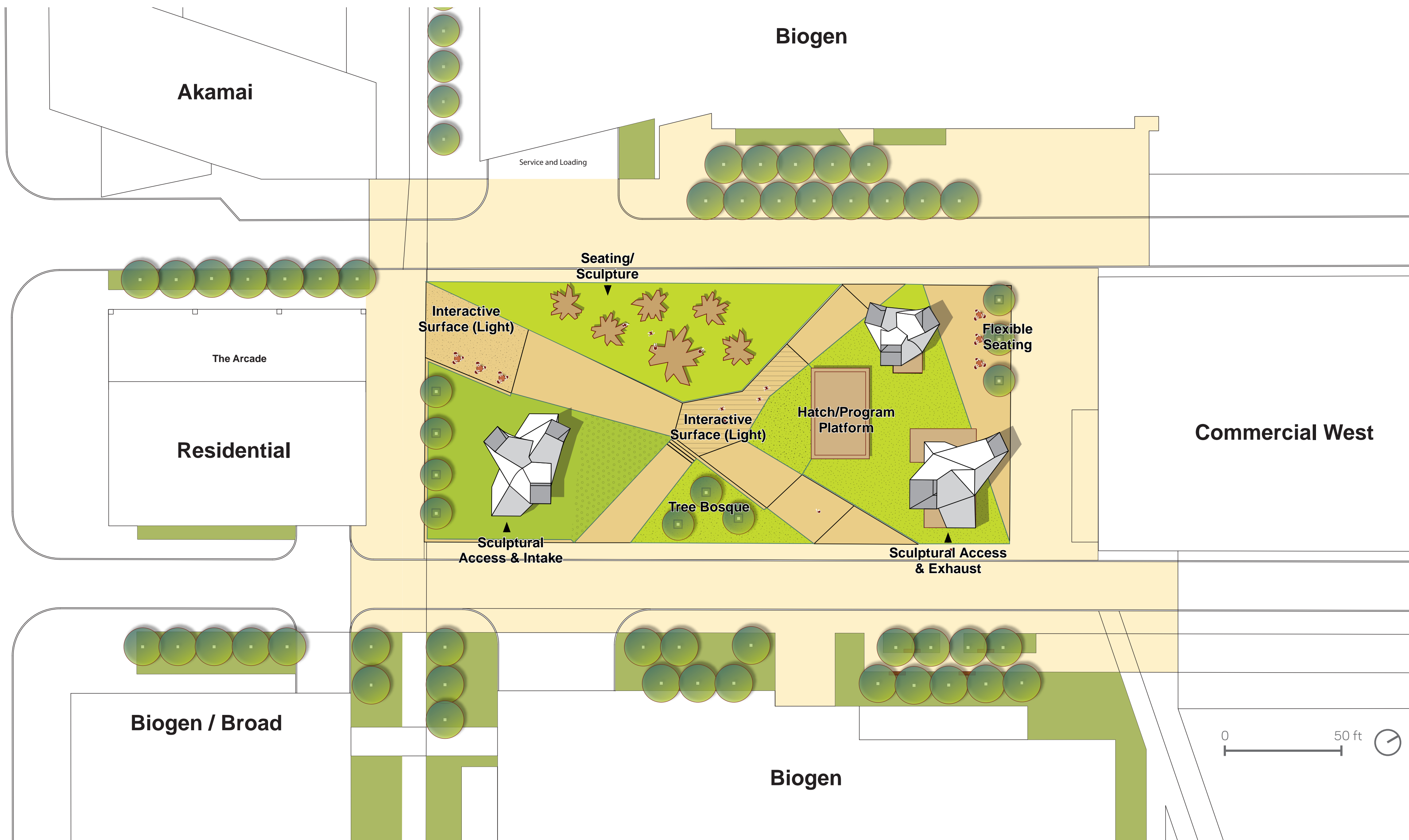
## Programming: Lounge / Reading Room



# Programming: Recreation Games



# Art Space



# Art Space

Commercial West

Commercial East

Biogen

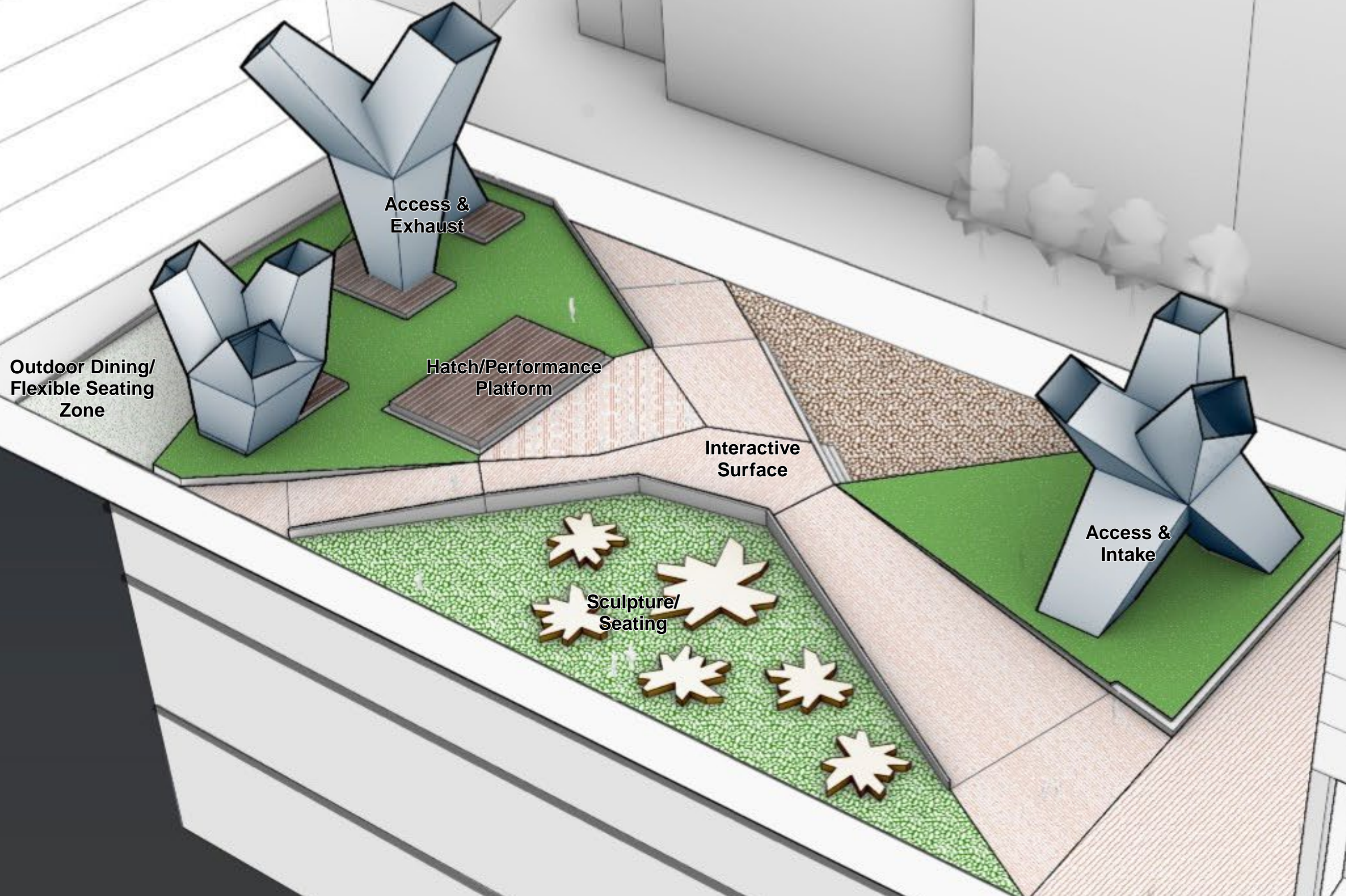
Residential



# Art Space

Commercial East

Commercial West

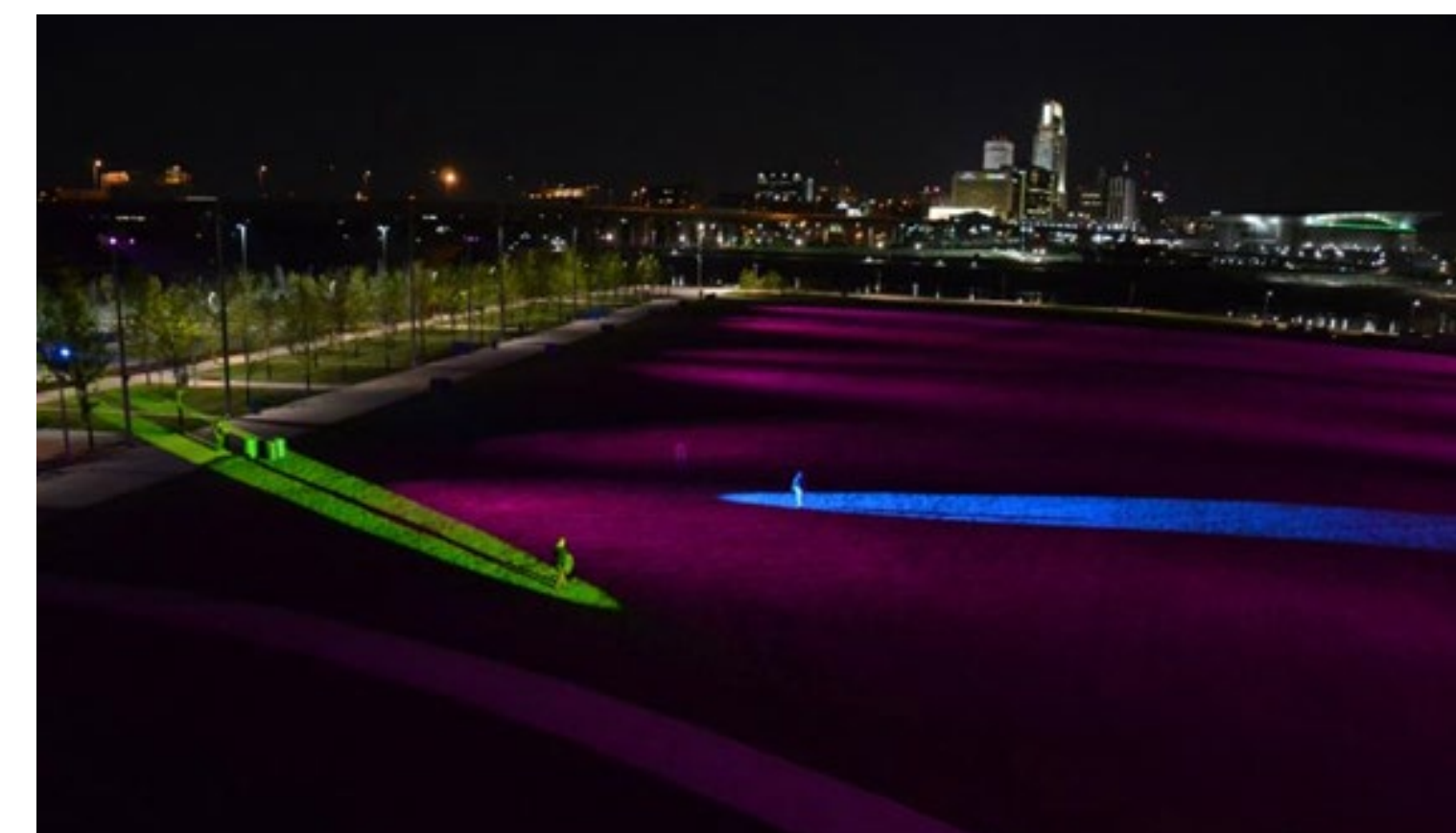
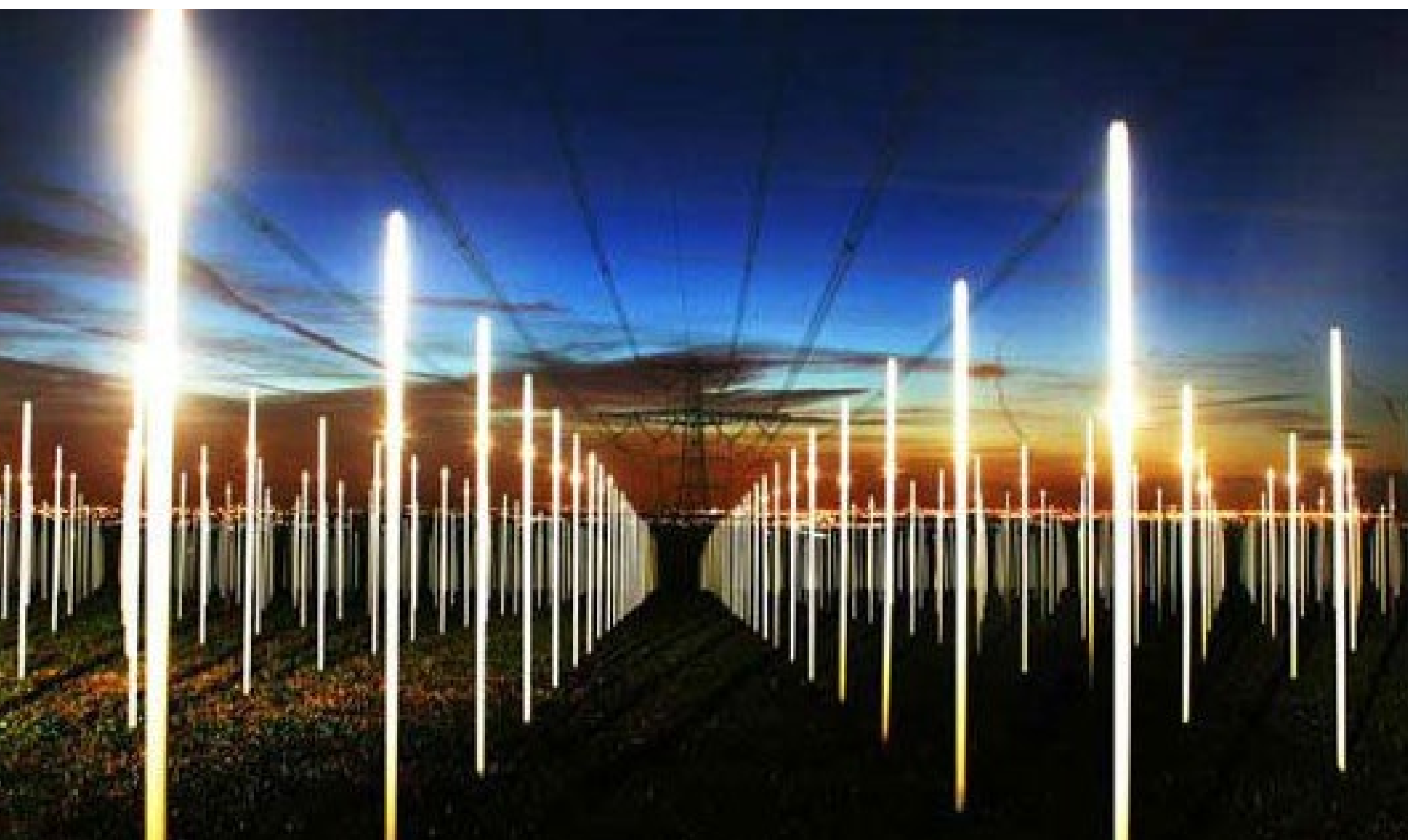


Residential

Biogen

# Lighting and Interactive Elements

<https://vimeo.com/51054369>

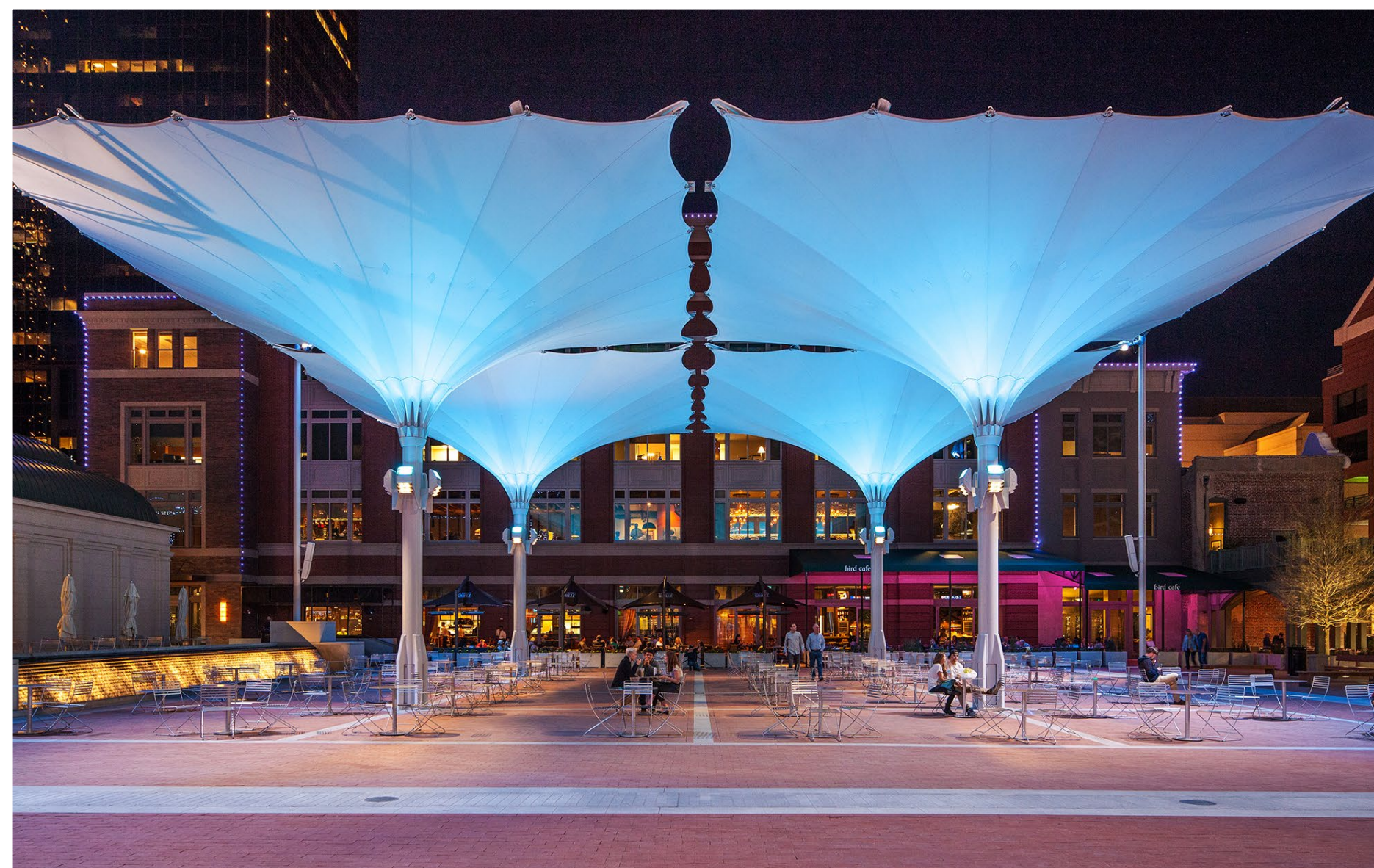




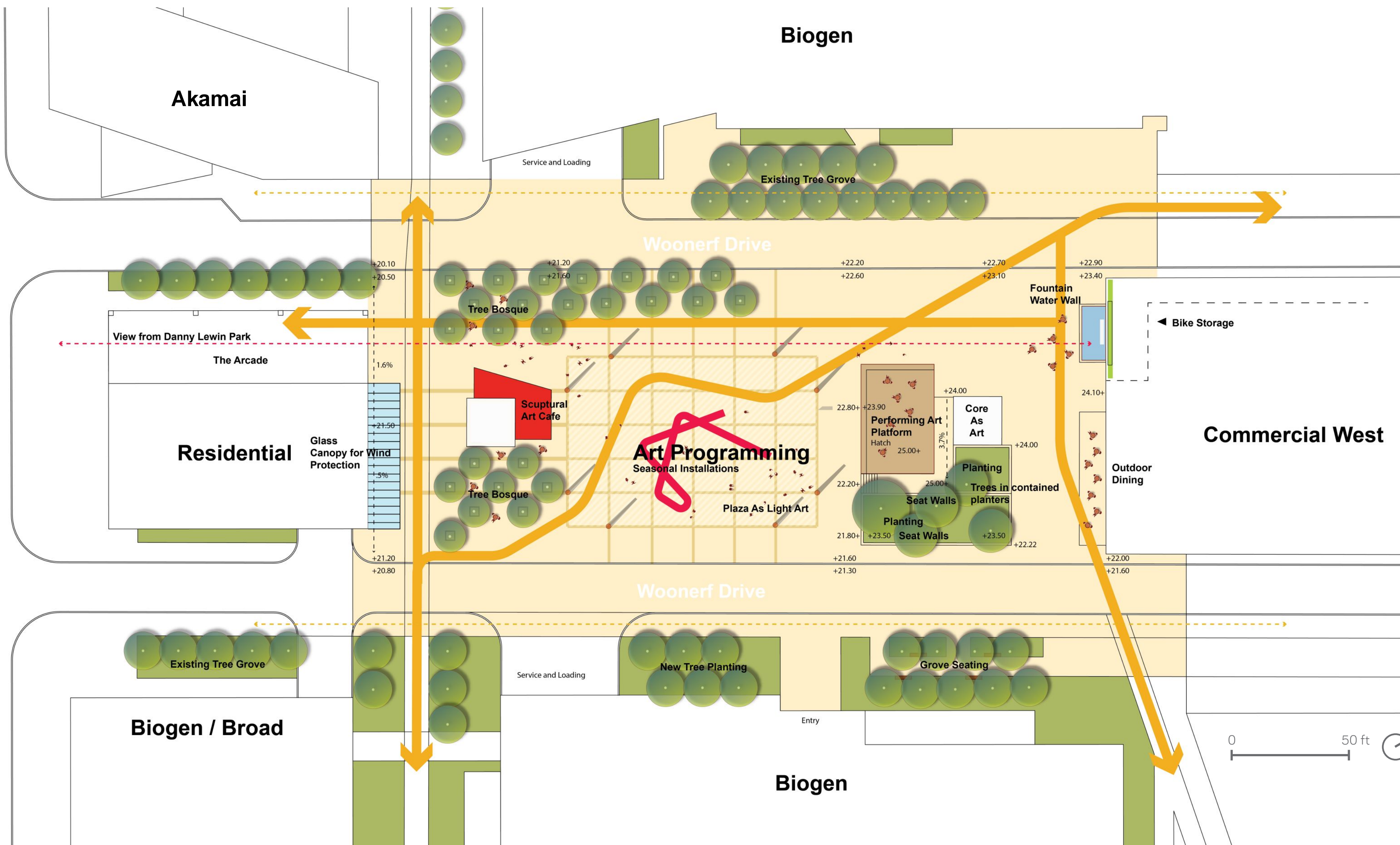
**Open Space  
Precedents**  
Dramatic  
Infrastructure



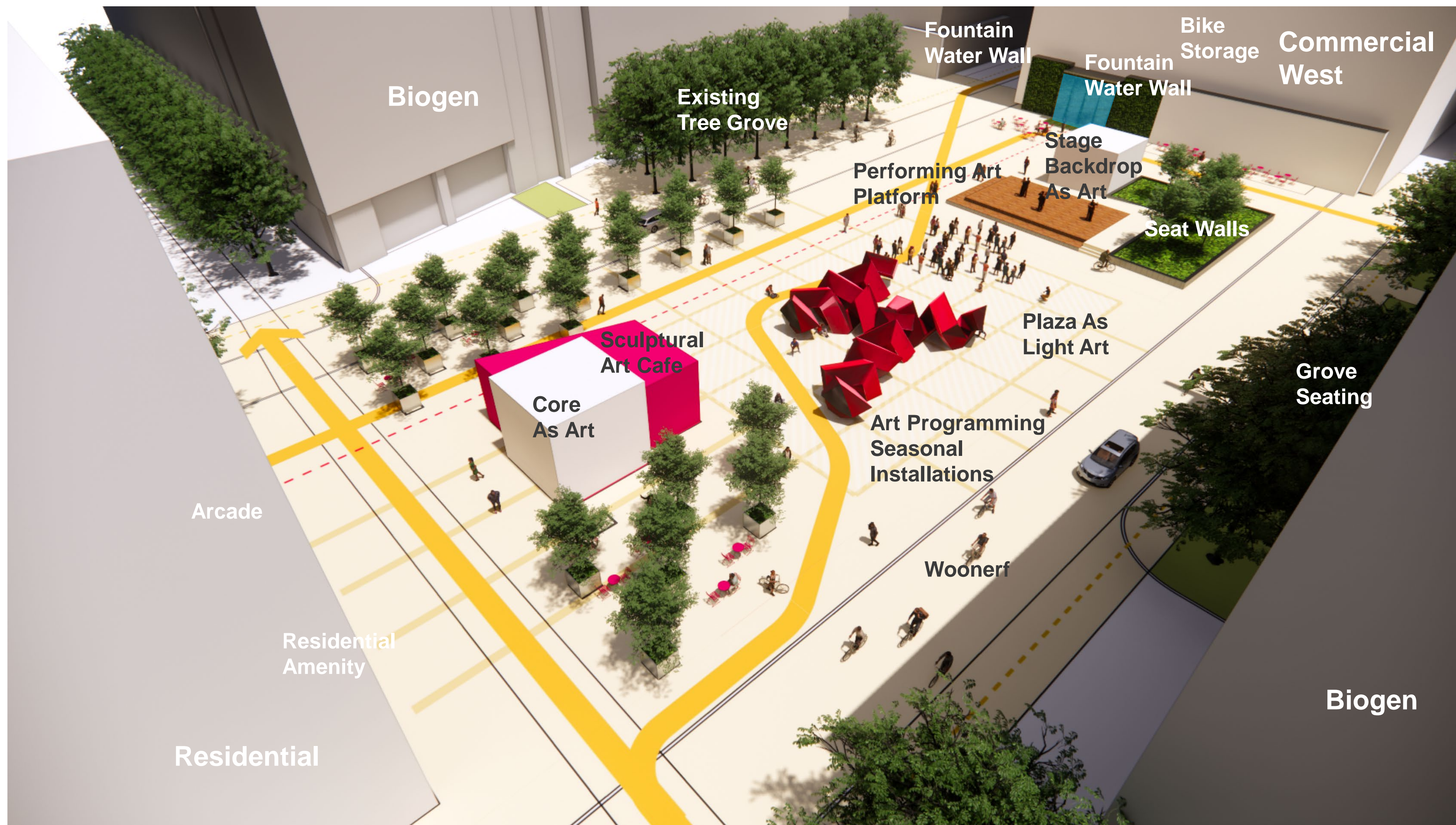
# Open Space Precedents Structures



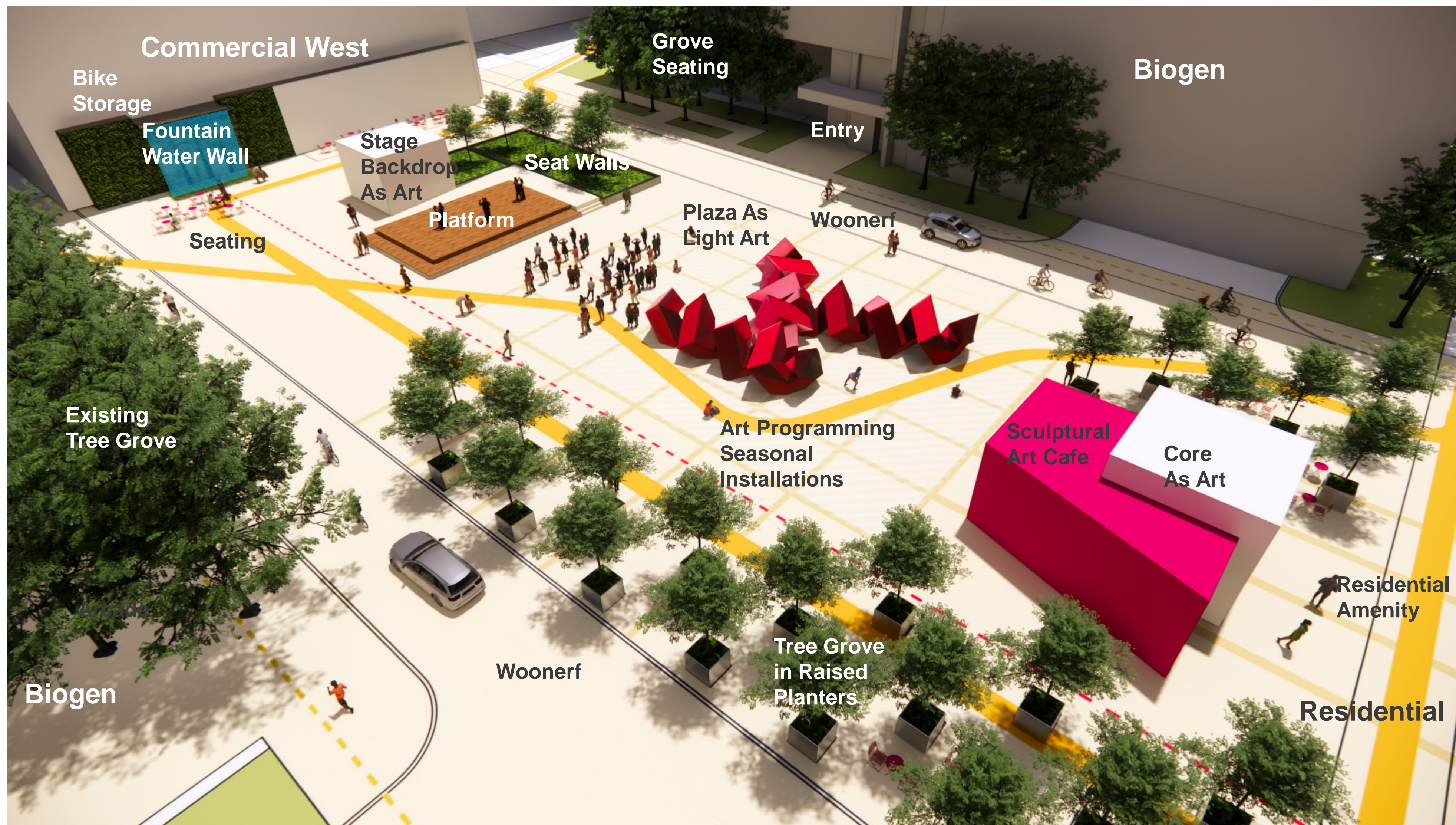
# Arts & Activity



# Arts & Activity

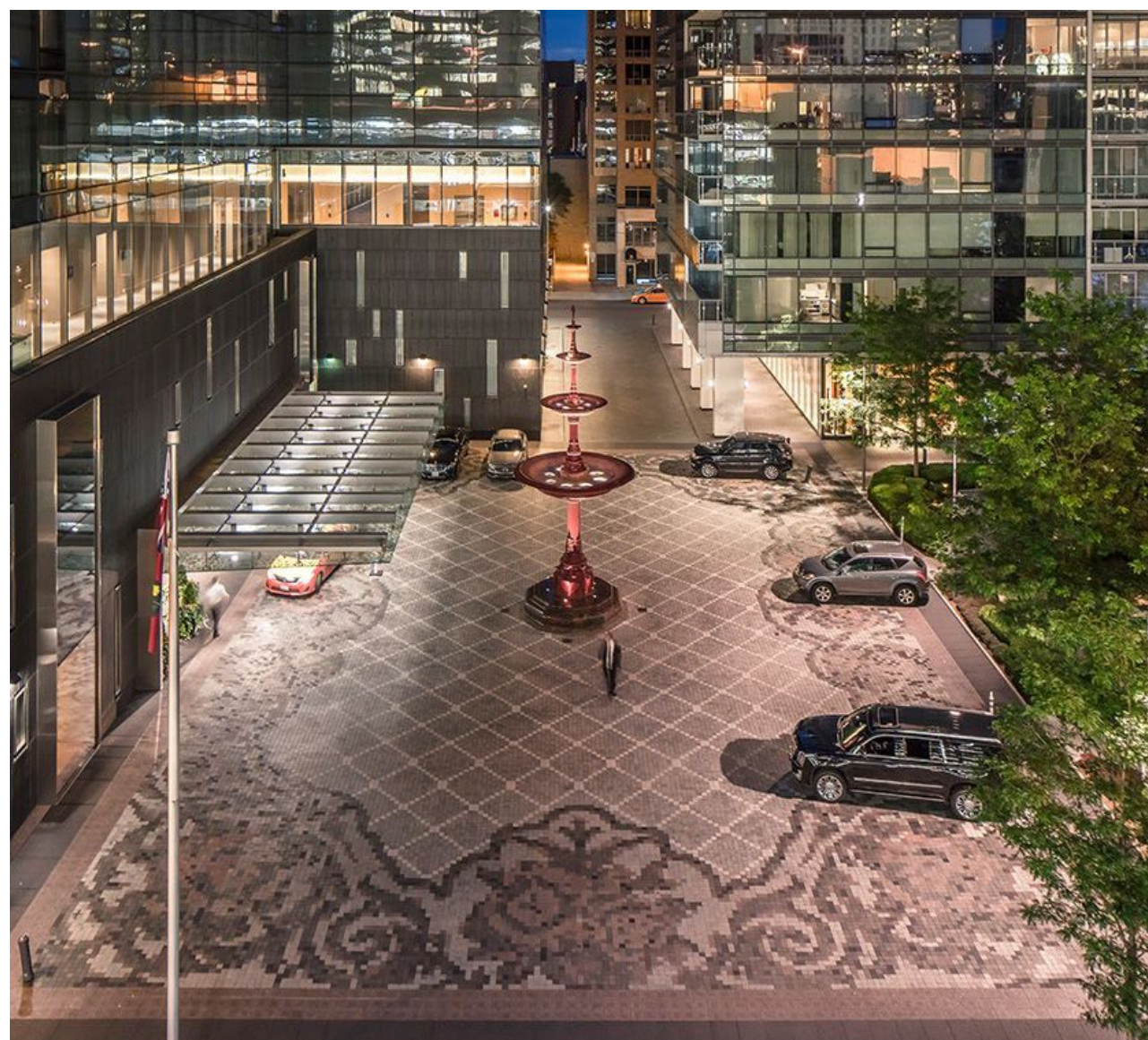
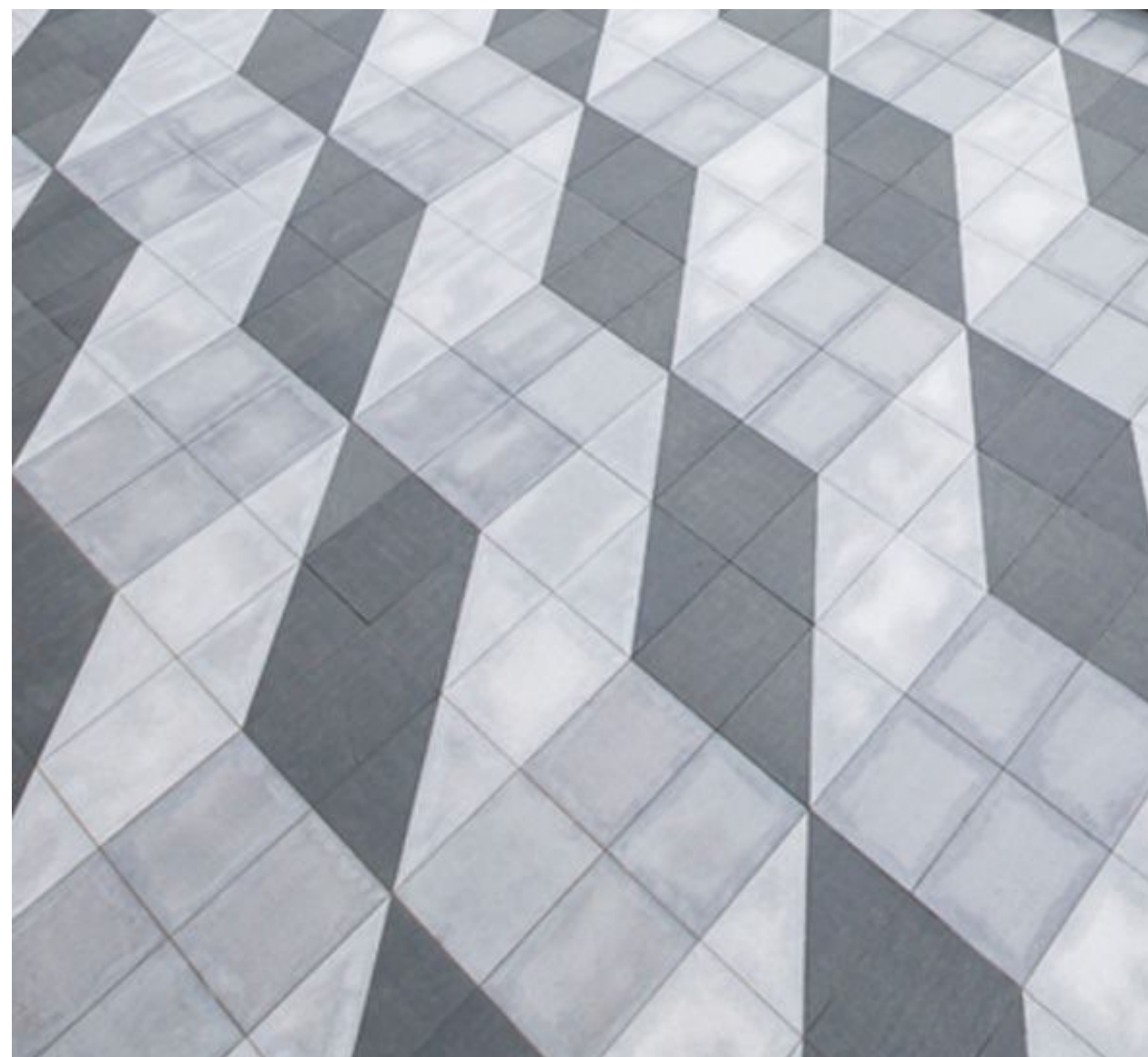
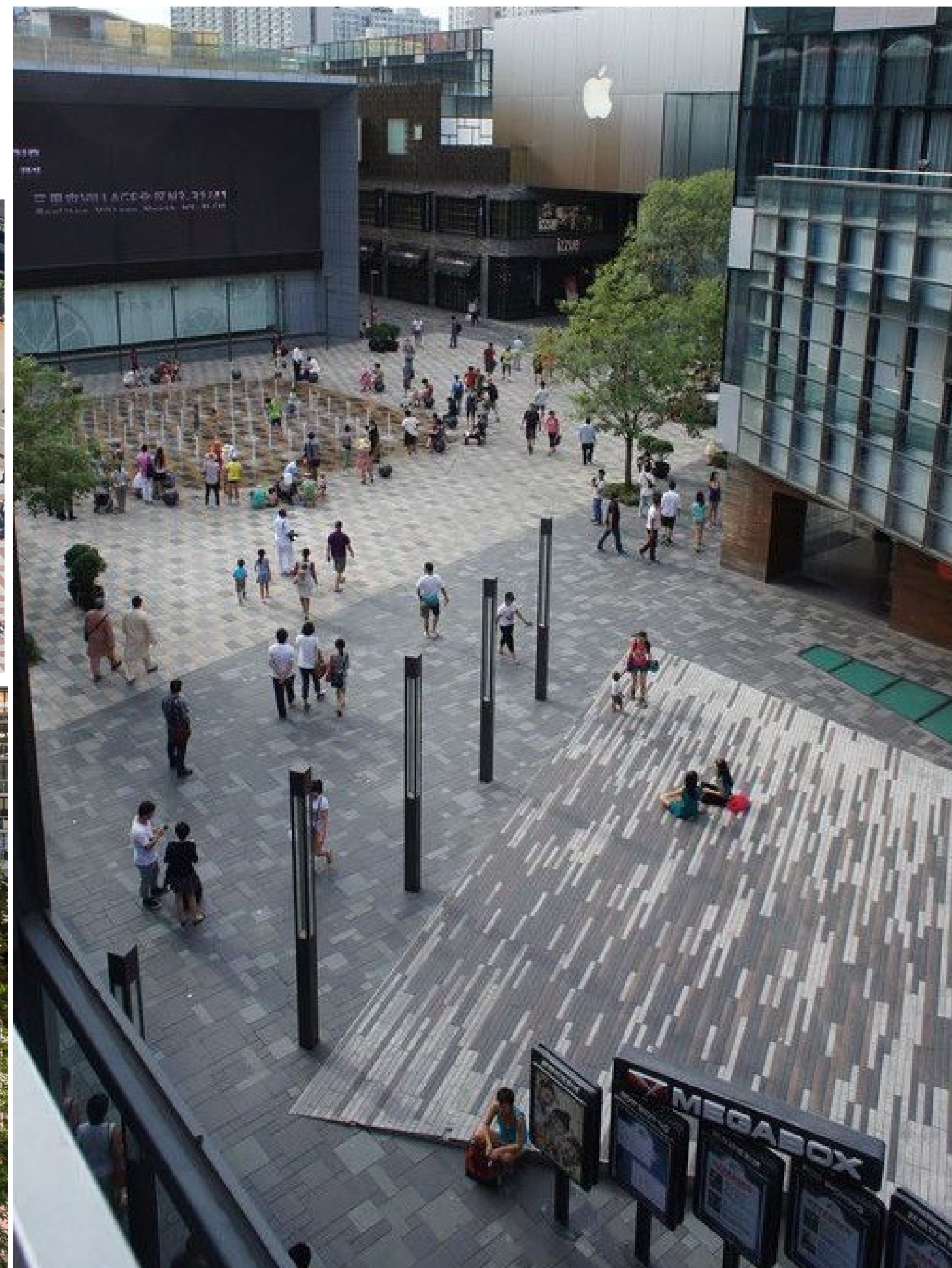


# Arts & Activity

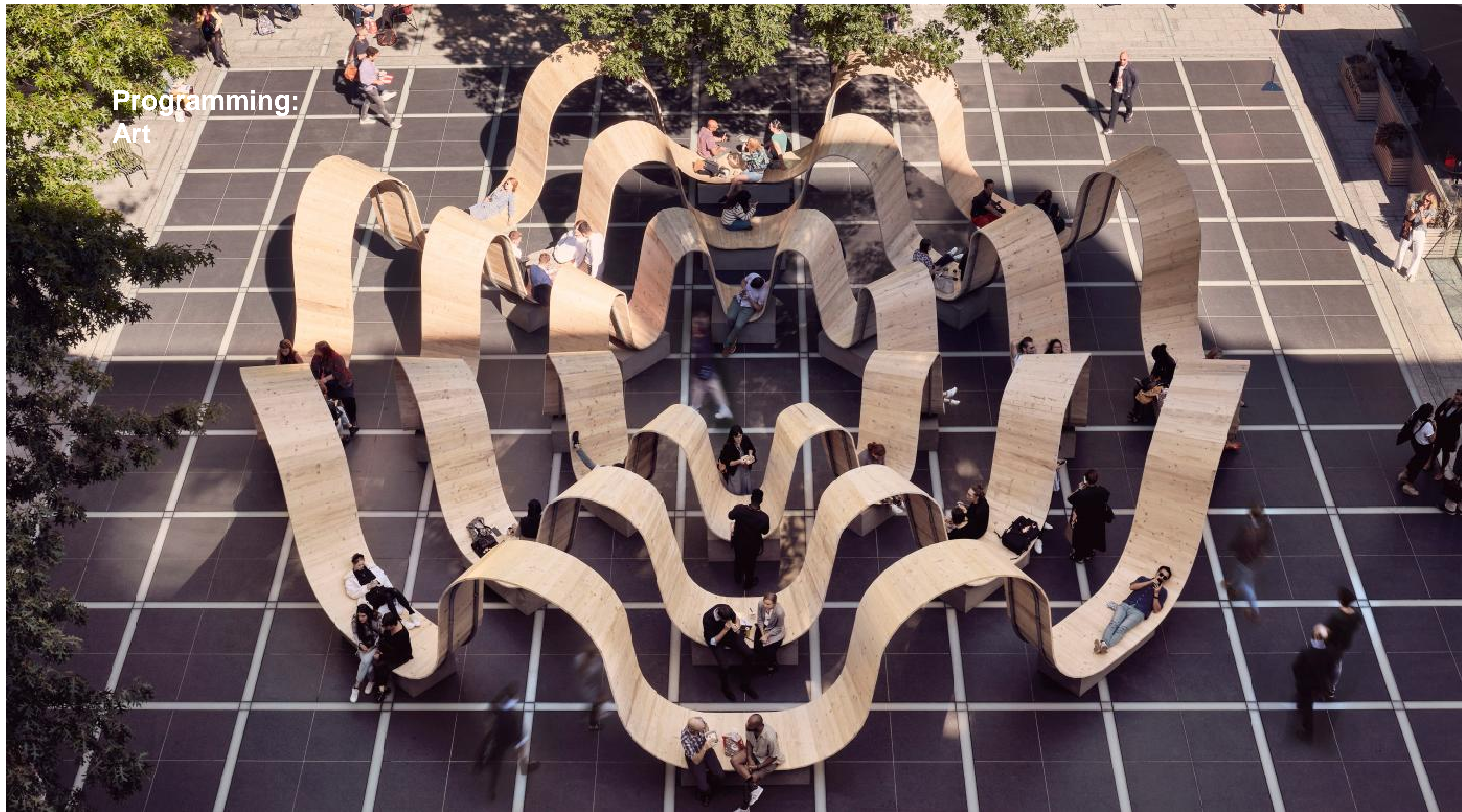


# Open Space Precedents

## Paving

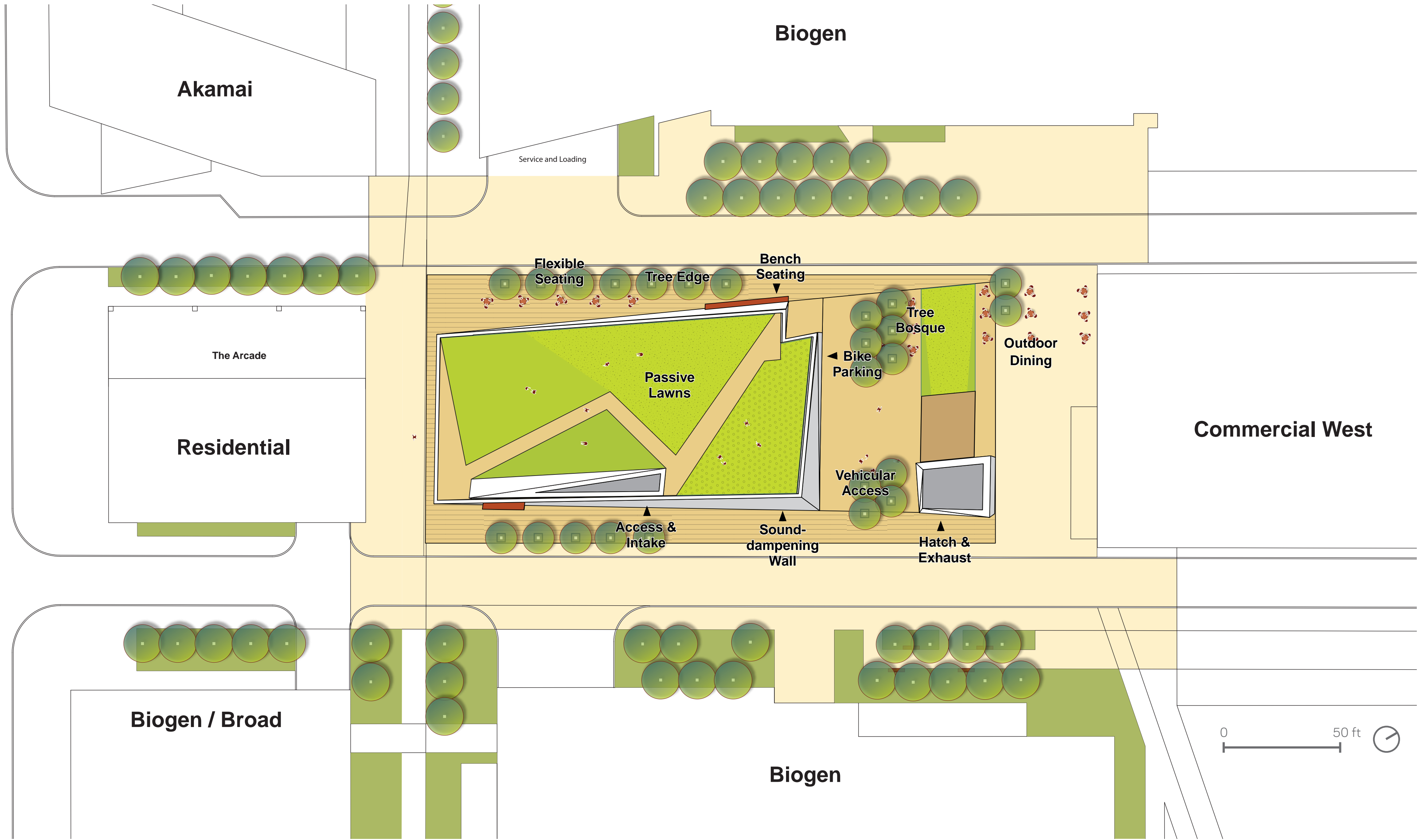


# Open Space Precedents



Programming:  
Art

# Urban Oasis





# Urban Oasis

Commercial West

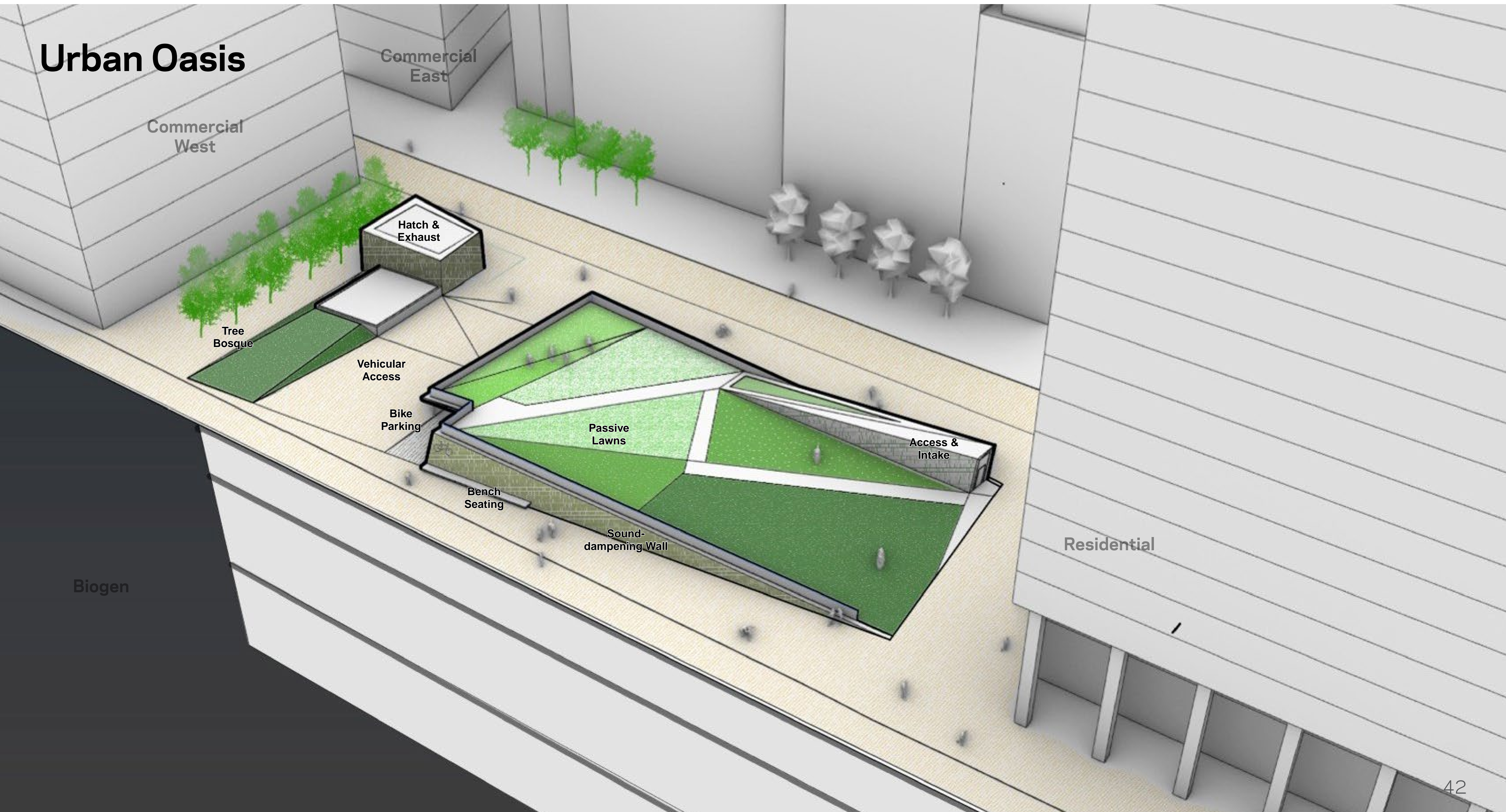
Commercial East

Biogen

Residential



# Urban Oasis



Commercial East

Commercial West

Hatch & Exhaust

Tree Bosque

Vehicular Access

Bike Parking

Passive Lawns

Access & Intake

Bench Seating

Sound-dampening Wall

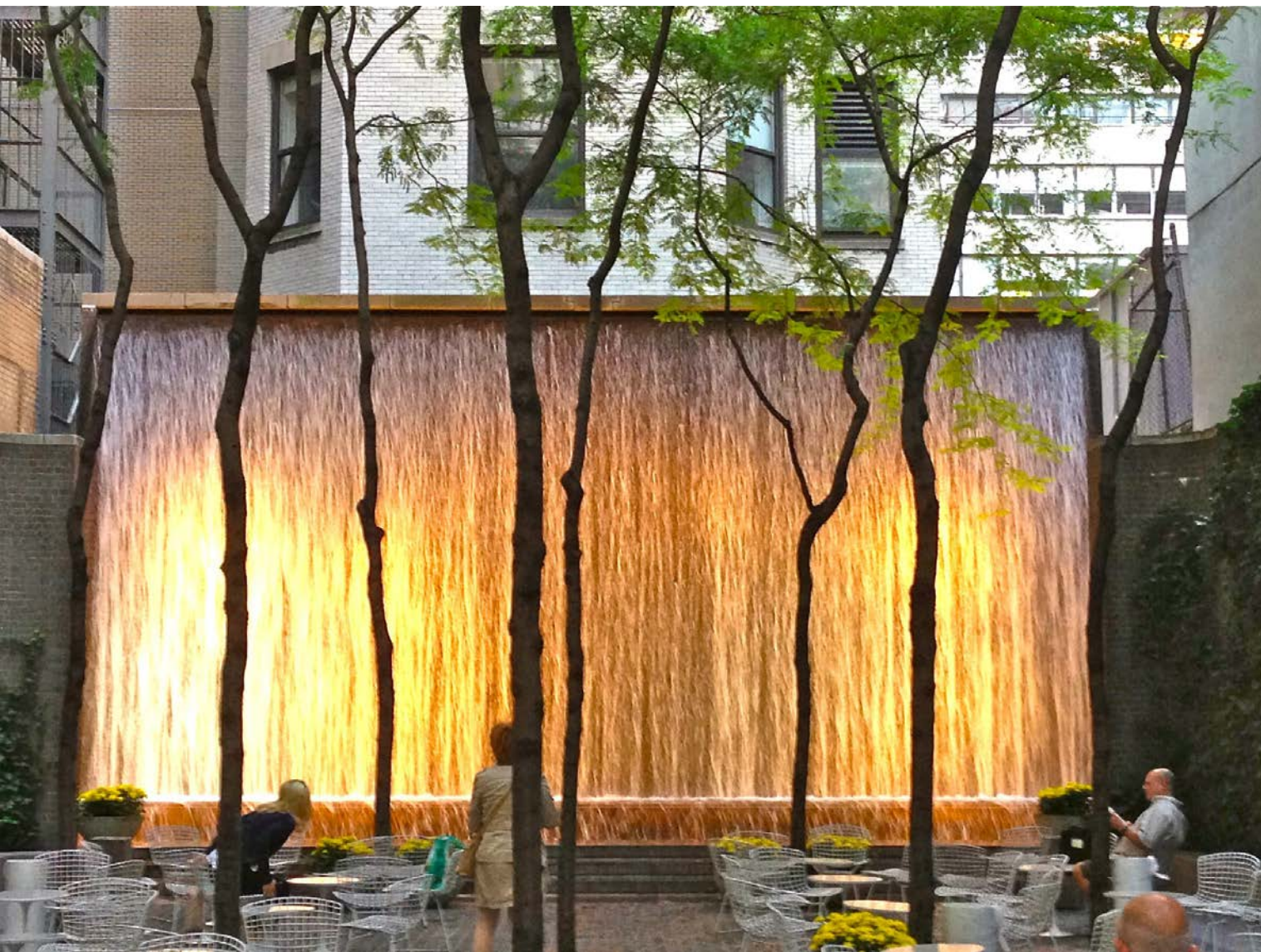
Residential

Biogen

# Open Space Precedents Sanctuary Landscapes



# Open Space Precedents Water Features



Broadway Canal Expressed Through a Water Feature



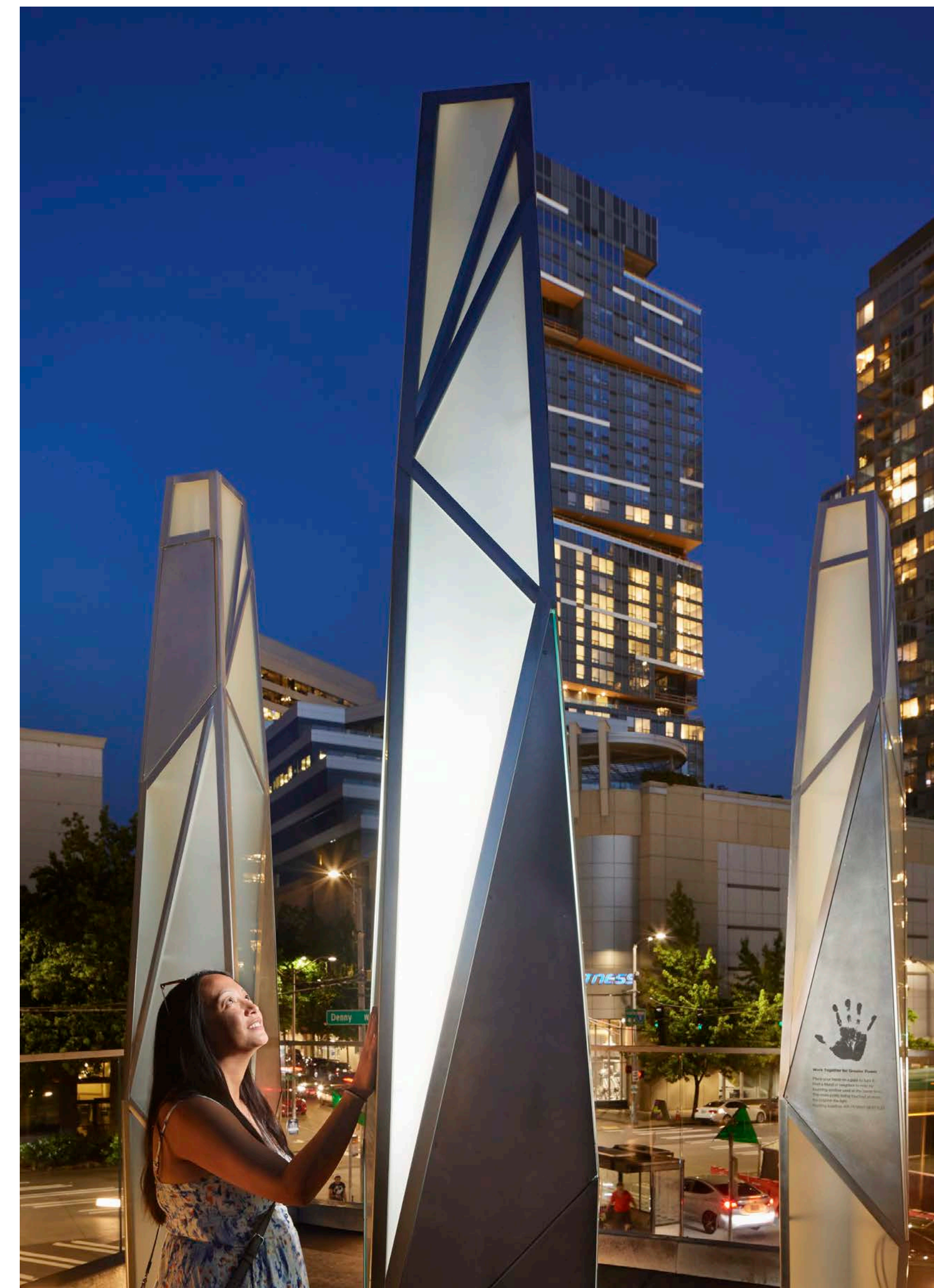
# Denny Substation



# Denny Substation



# Denny Substation





# Volpe Redevelopment Open Space Network



K  
RT  
ZA  
ZA  
MENADE