

DENVER UNION STATION | PUBLIC REALM DESIGN

DENVER, CO | NOVEMBER 12, 2009

HARGREAVES ASSOCIATES · AECOM · SOM

PRESENTATION SCHEDULE

08.07.08

- CONCEPTUAL FRAMEWORK: PUBLIC MEETING #1

09.04.08

- CONCEPTUAL FRAMEWORK: PUBLIC MEETING #2

09.23.08

- CONCEPTUAL FRAMEWORK: PUBLIC MEETING #3

10.30.08

- CONCEPTUAL FRAMEWORK: PUBLIC MEETING #4

10.01.09

- SCHEMATIC DESIGN: PUBLIC MEETING #2 – 5:30-7:00 pm

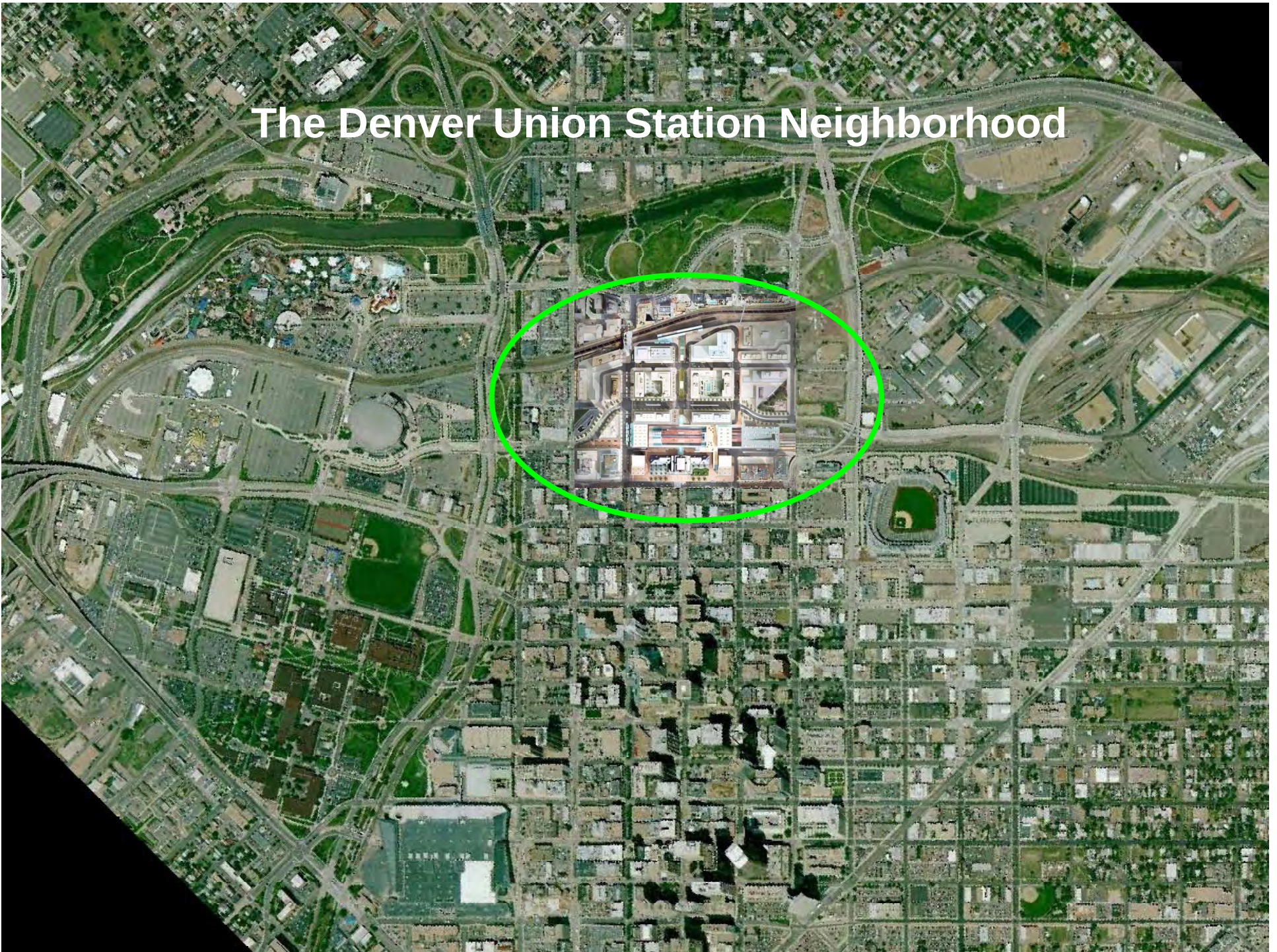
11.12.09

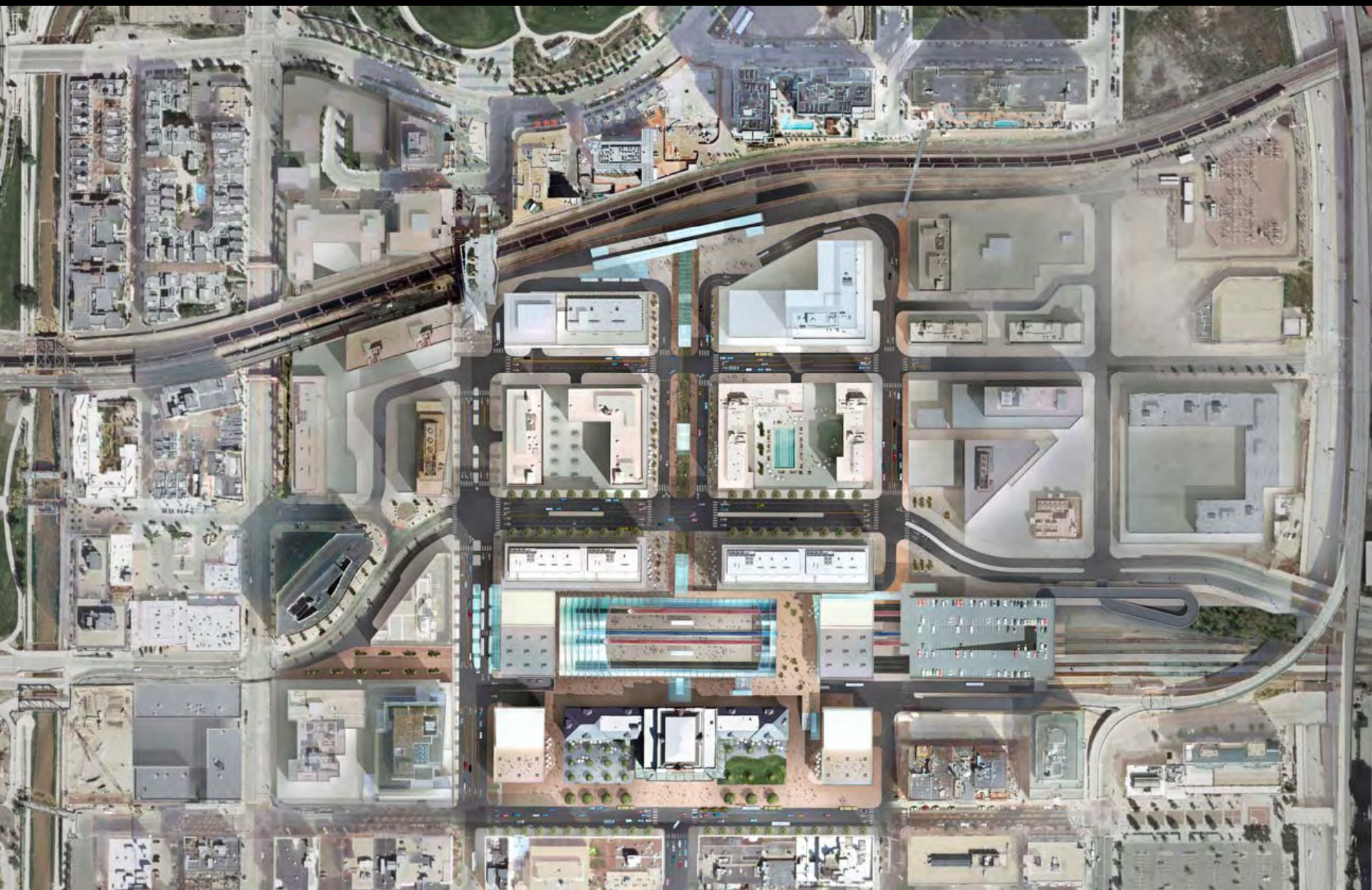
- SCHEMATIC DESIGN: PUBLIC MEETING #3 – 5:30-7:00 pm

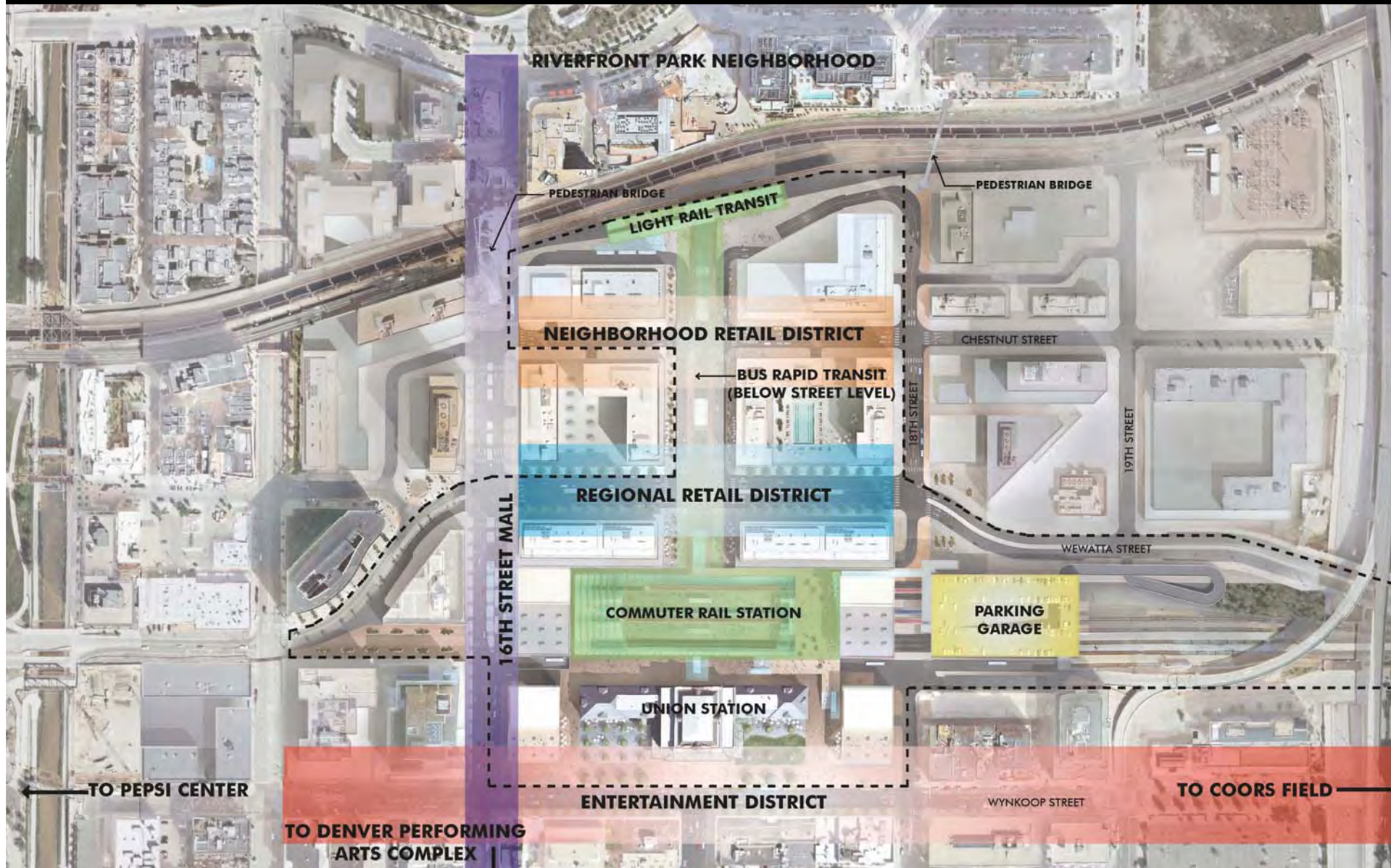
PRESENTATION TOPICS – 11.12.09

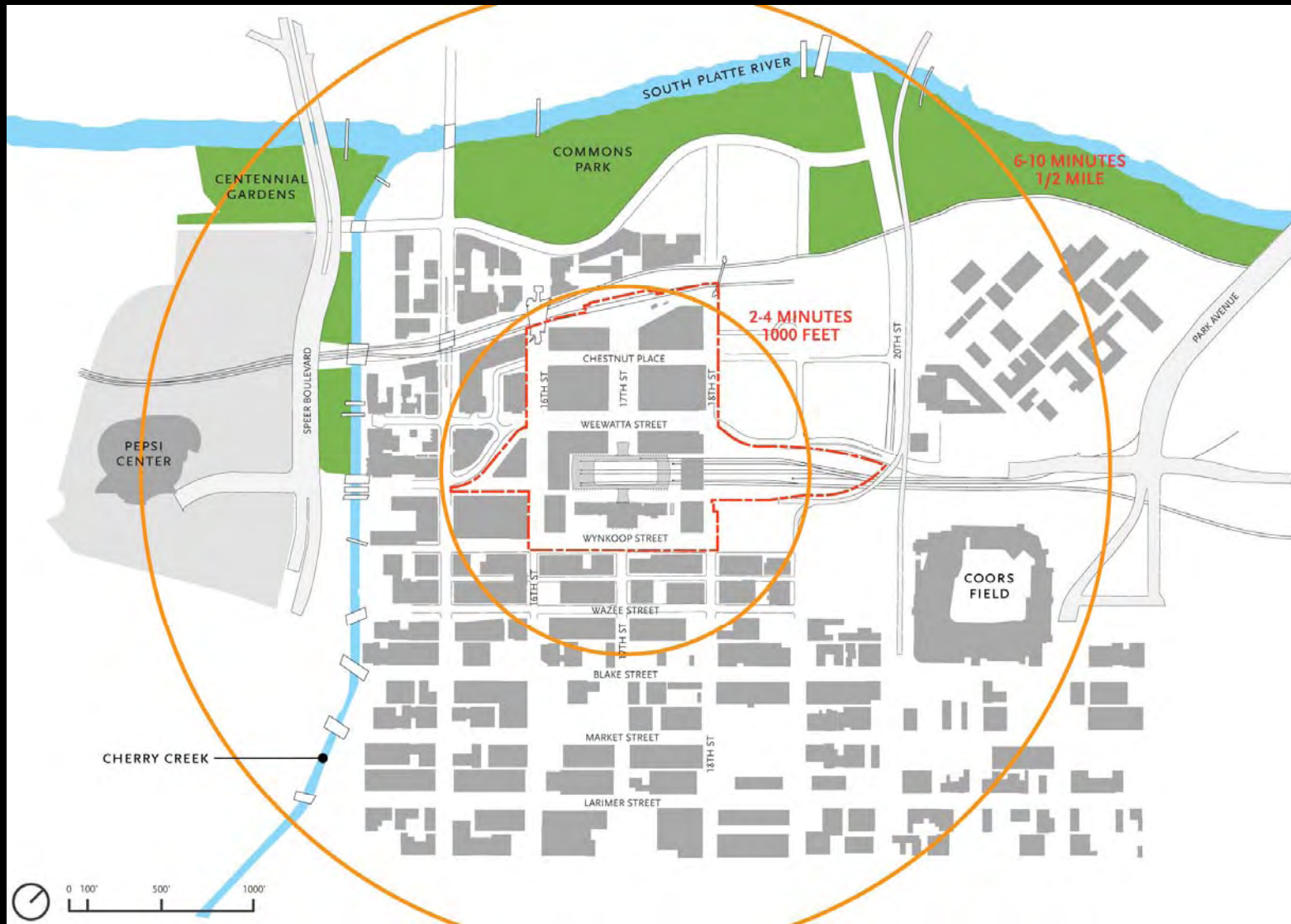
- DUS context
- Light Rail Plaza Concept
- 17th Street Gardens Concept
- Wewatta Plaza Concept
- Wynkoop Plaza Concepts
- Paving/materials survey

The Denver Union Station Neighborhood



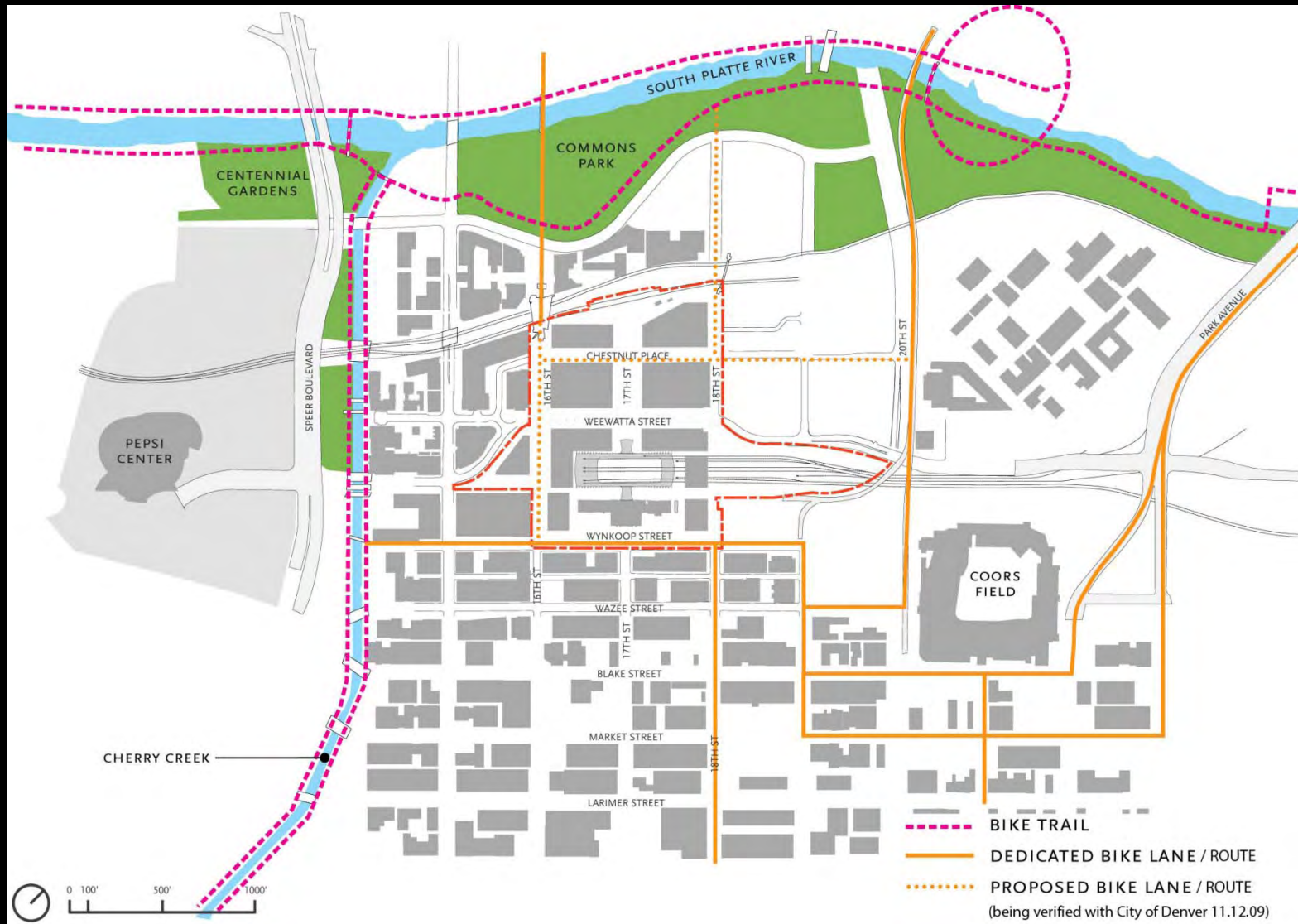






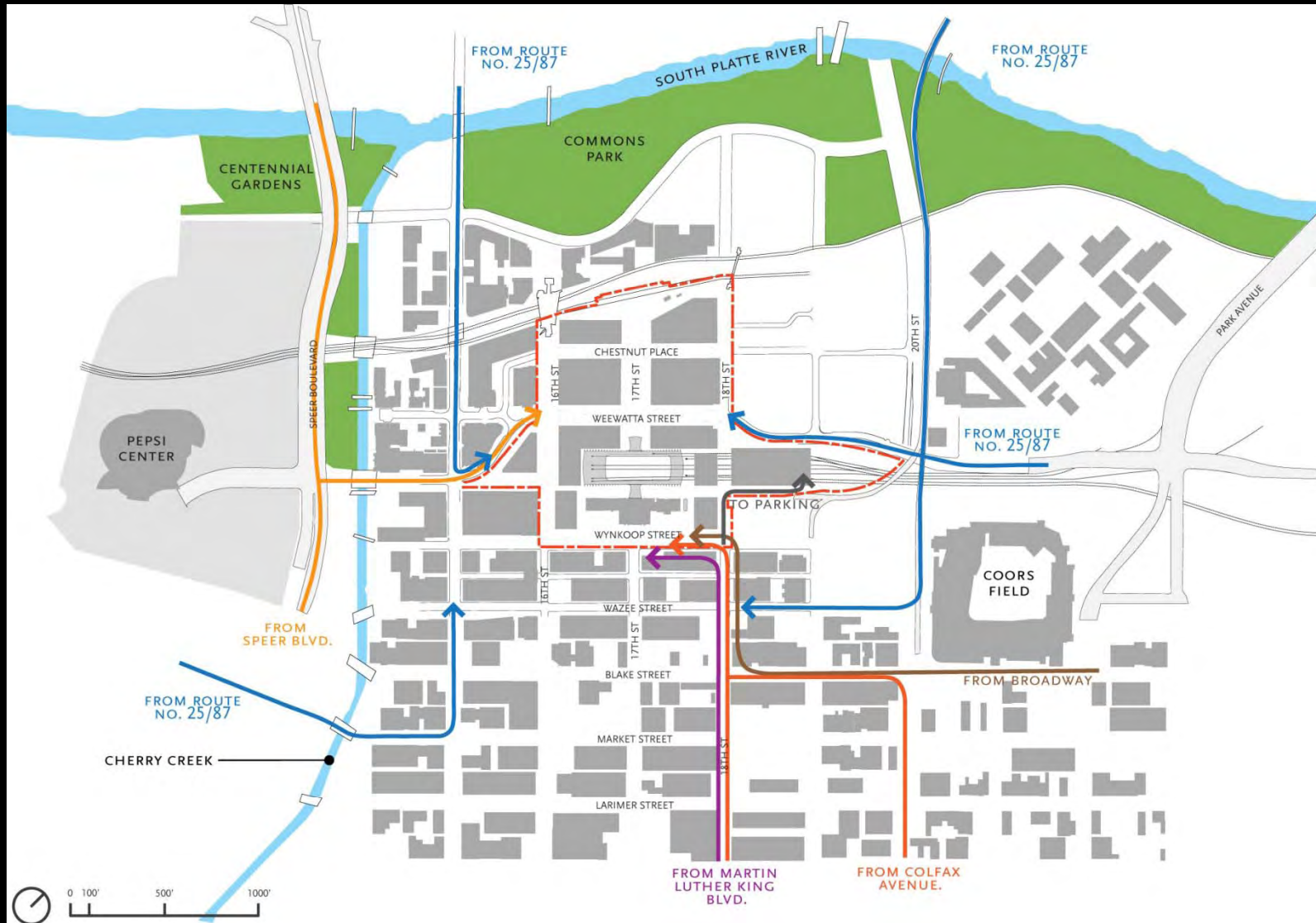
CONTEXT

- Walking distance to Major Stadia, Cherry Creek, South Platte River and Downtown



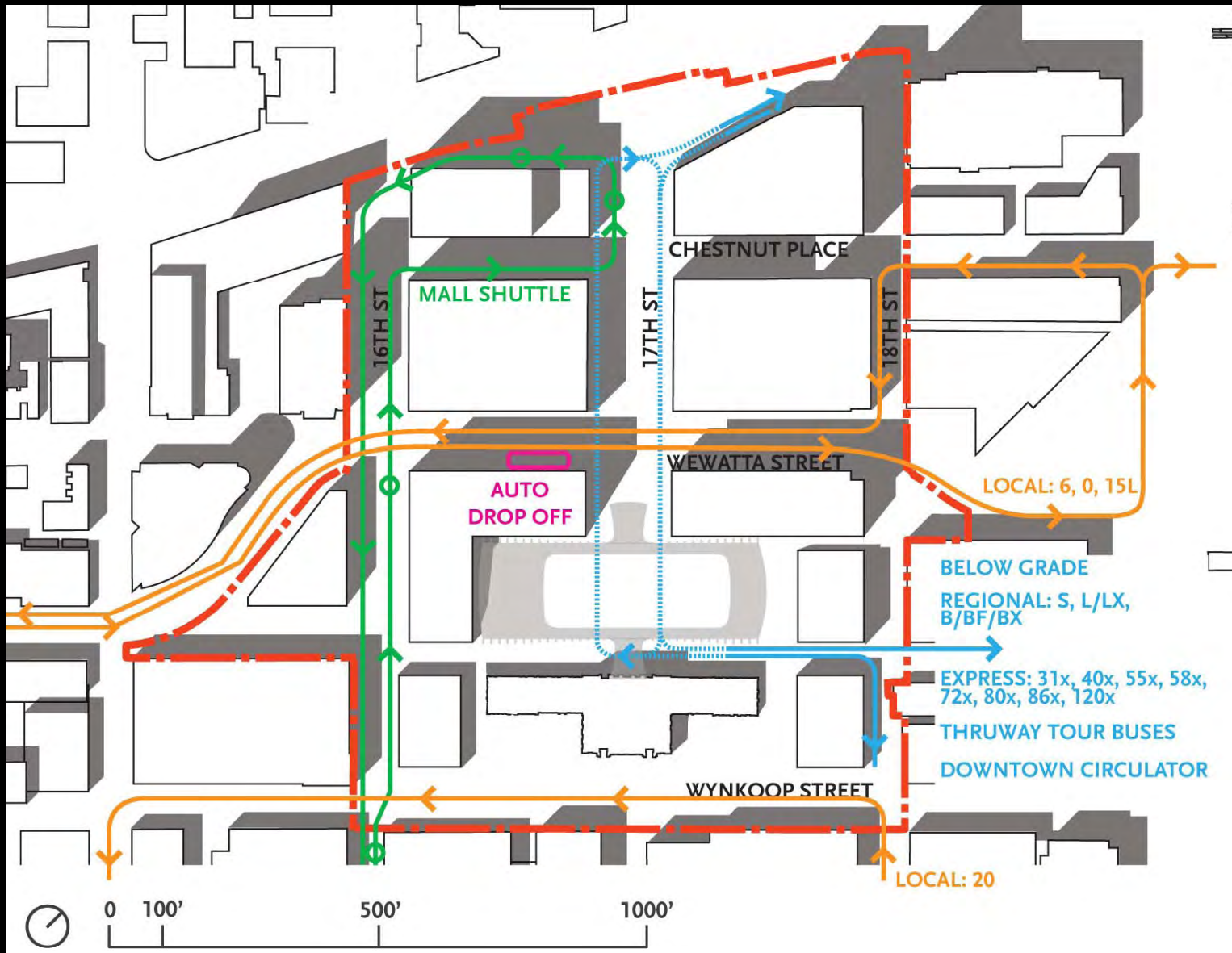
CONTEXT

- Bike Connections

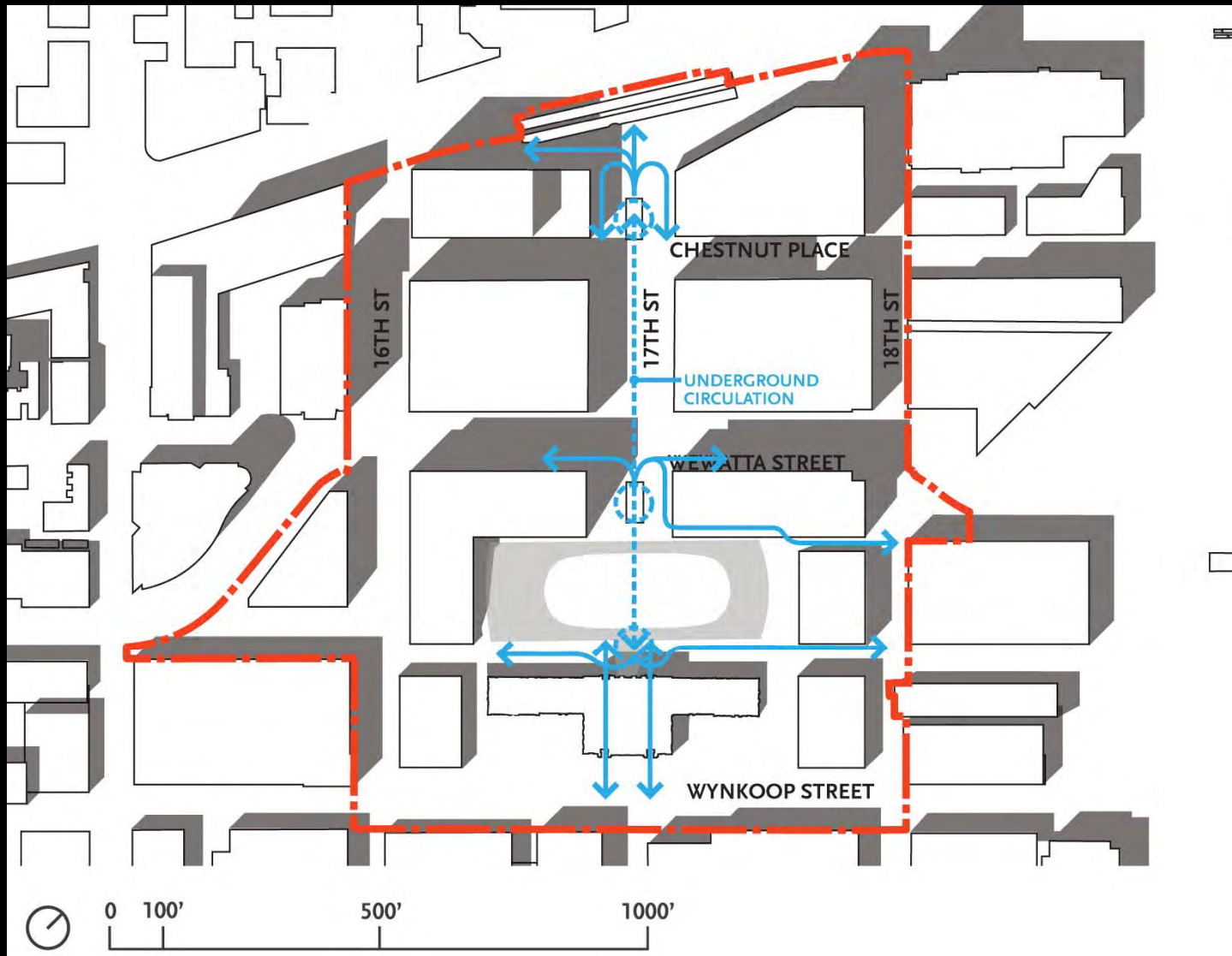


CONTEXT

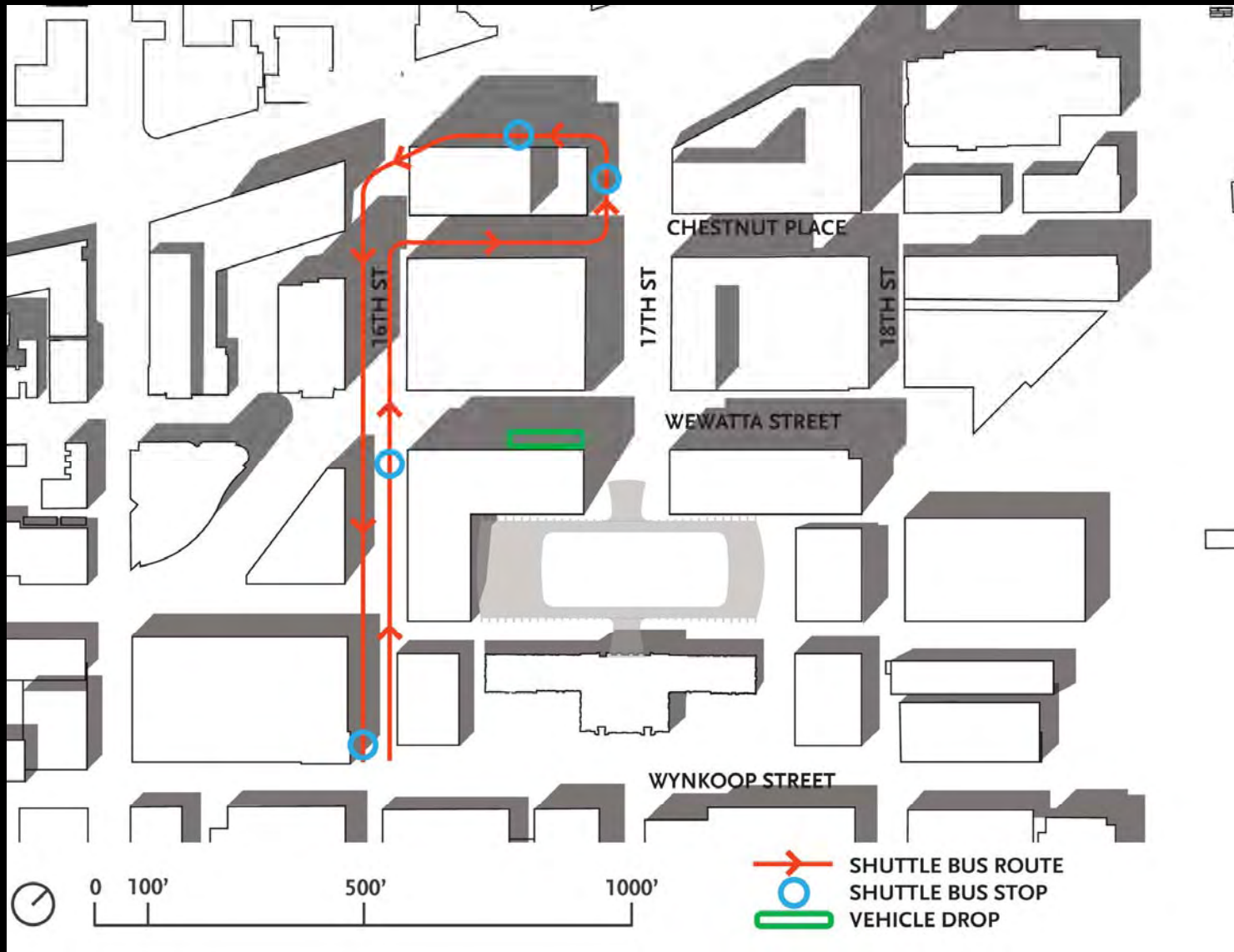
- Vehicular Routes



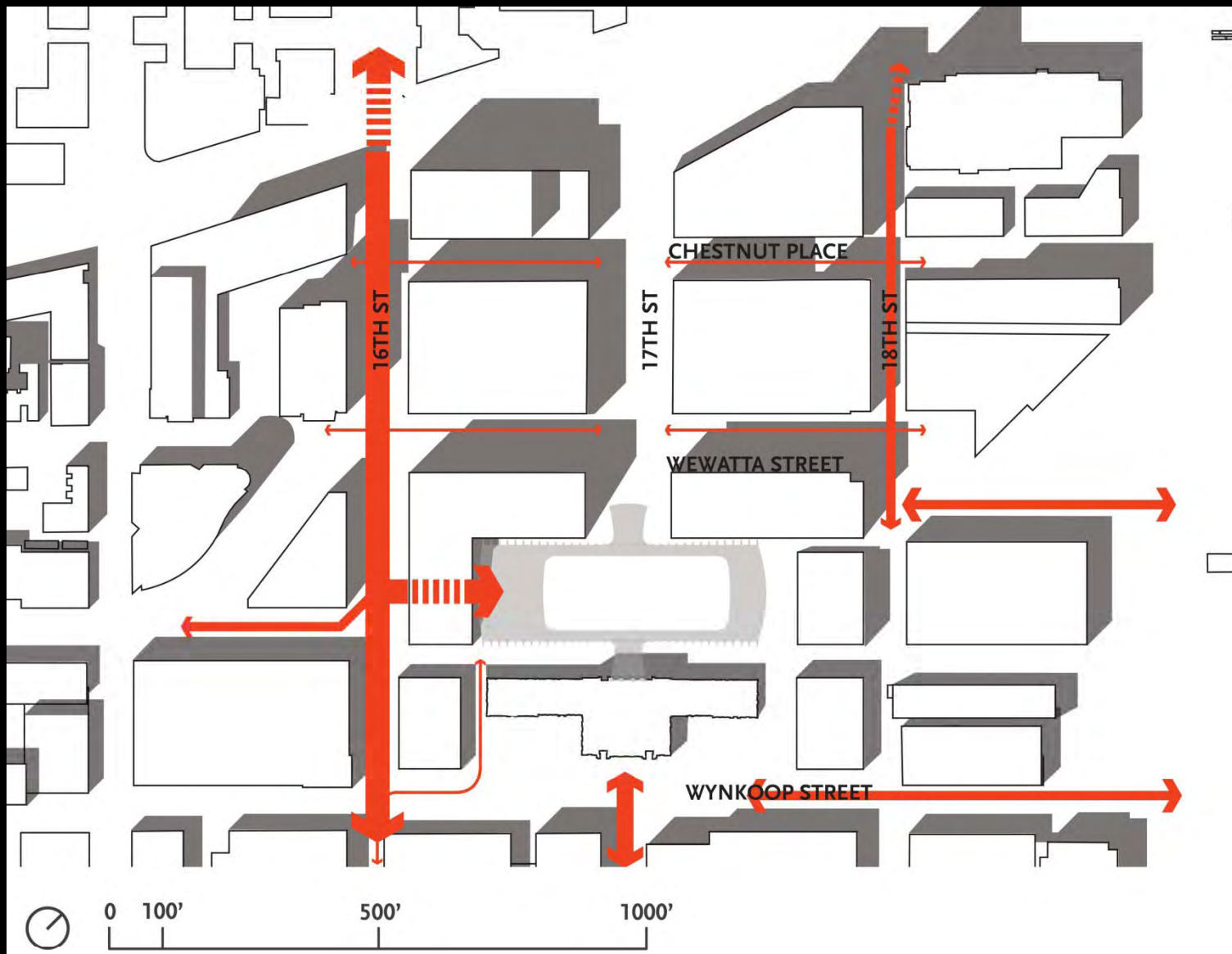
CIRCULATION: BUS SERVICE



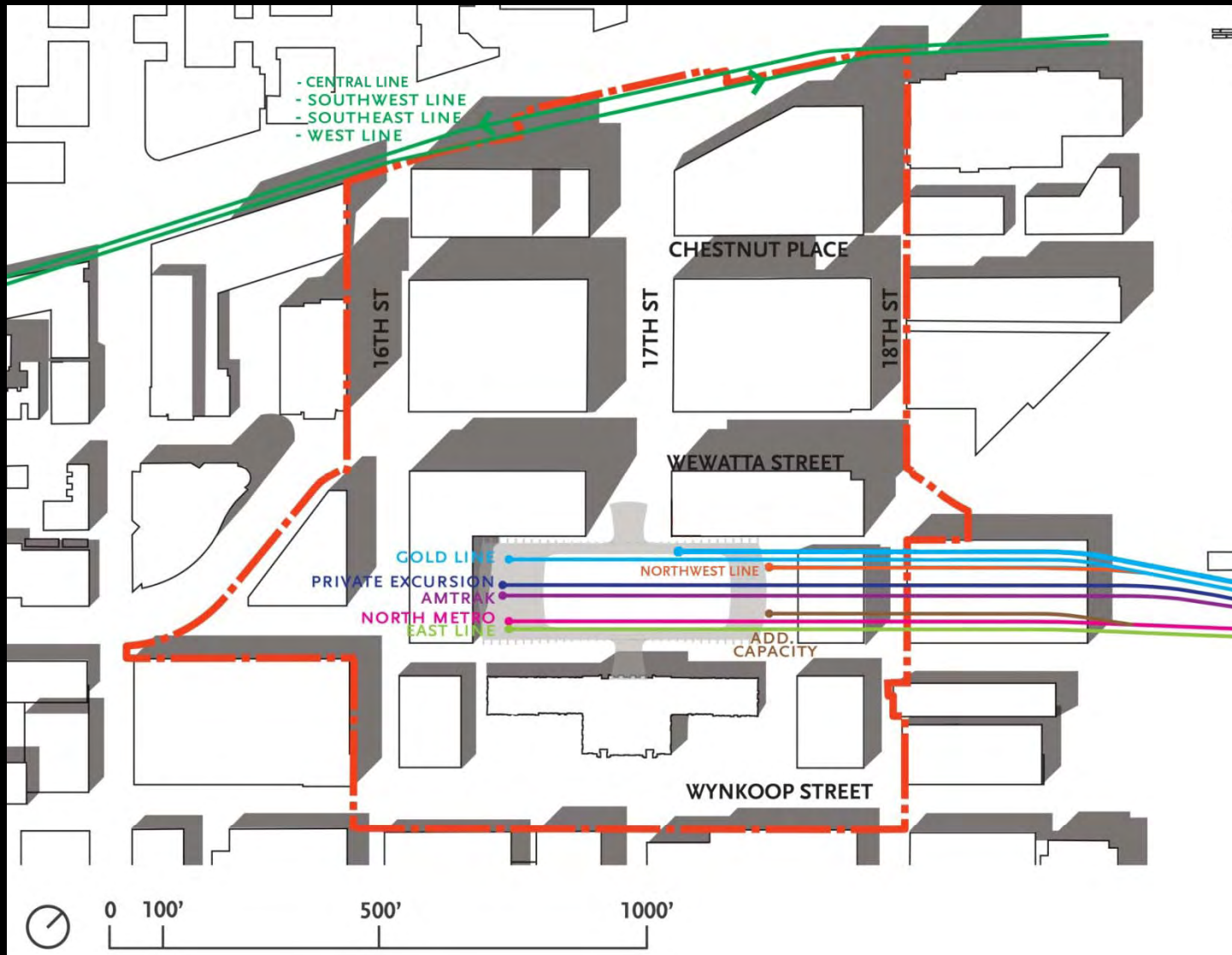
PEDESTRIAN CIRCULATION FROM BUS BOX



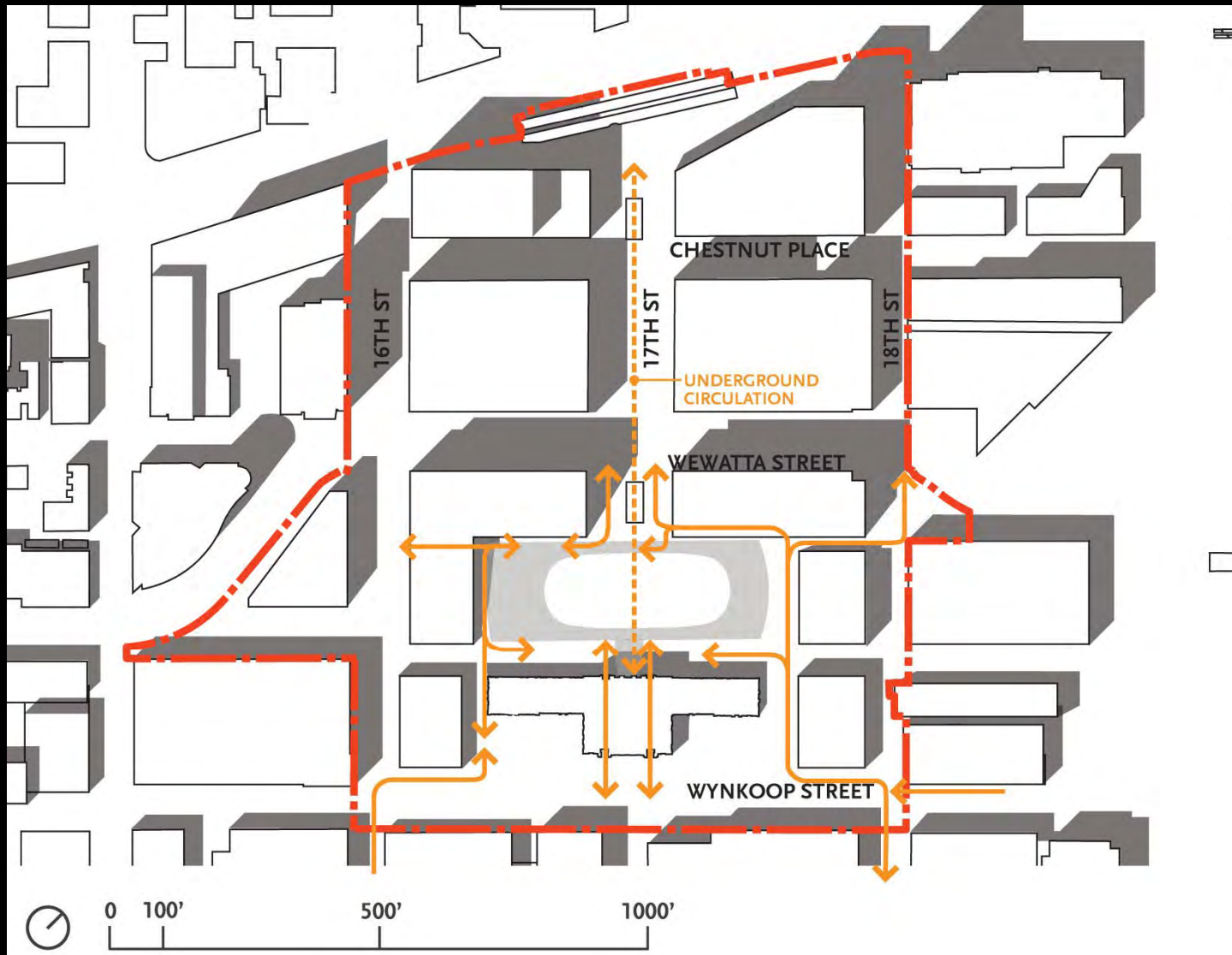
CIRCULATION: SHUTTLE



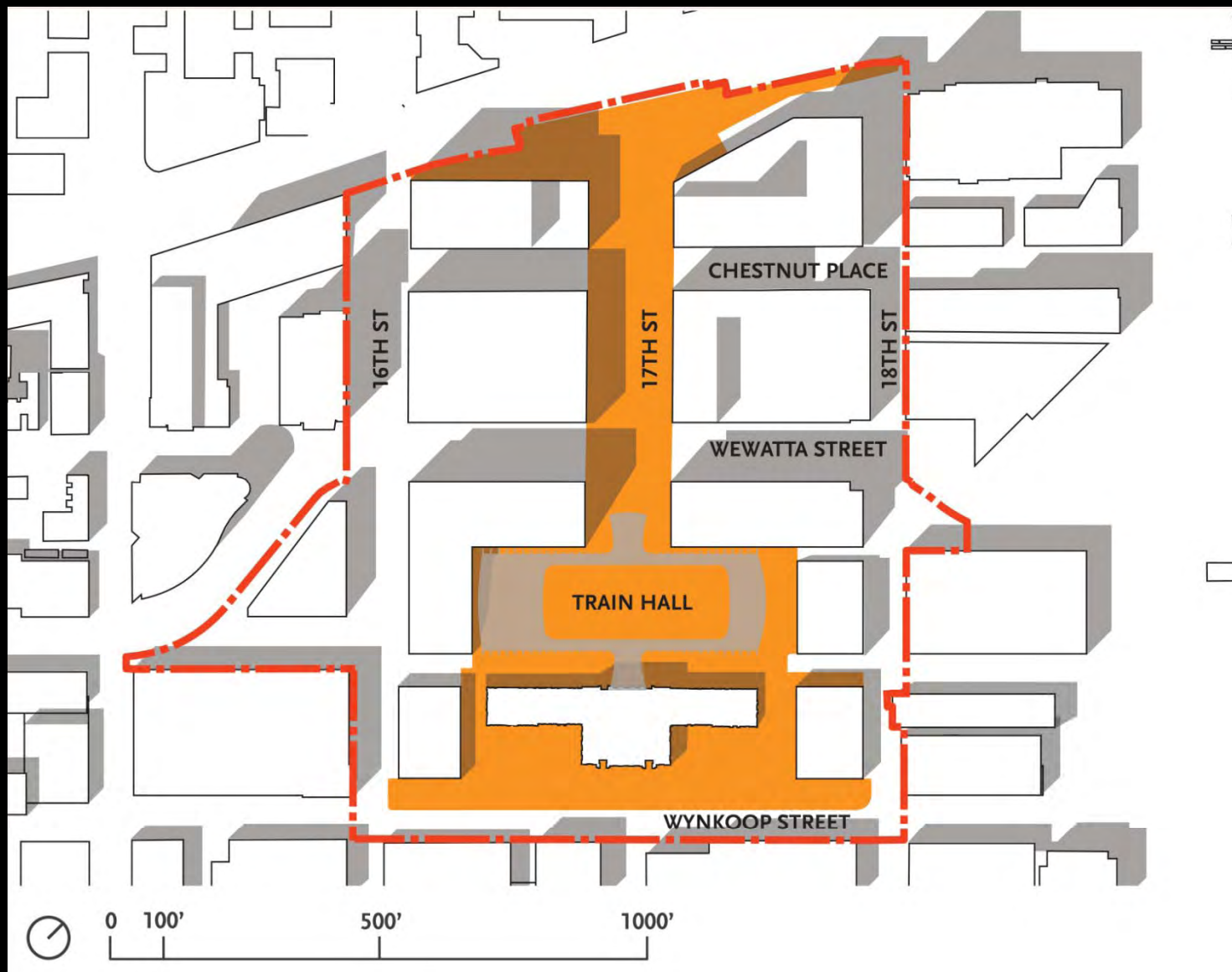
PEDESTRIAN CIRCULATION: NEIGHBORHOOD



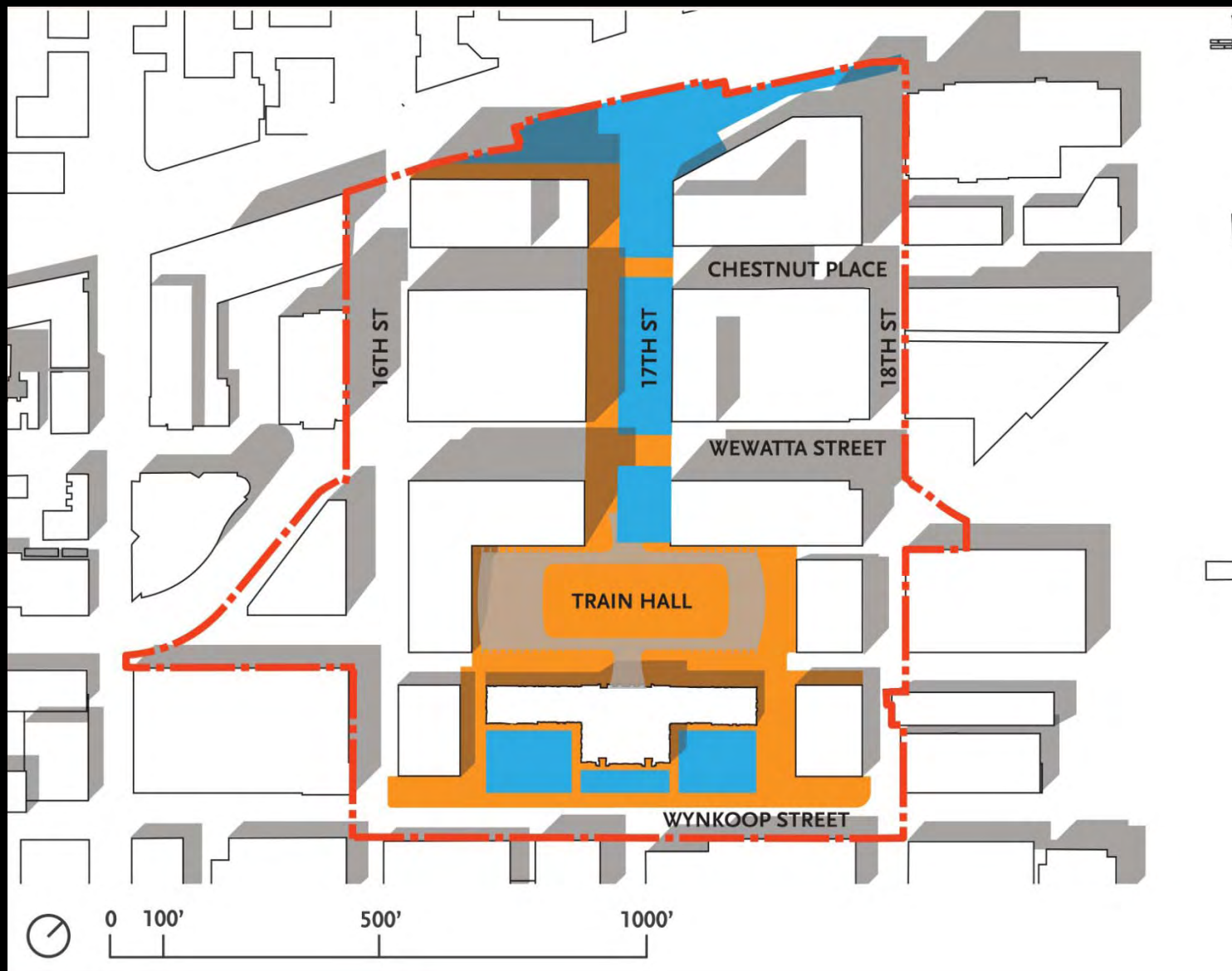
CIRCULATION: TRAIN TRANSIT



PEDESTRIAN CIRCULATION: TRANSIT

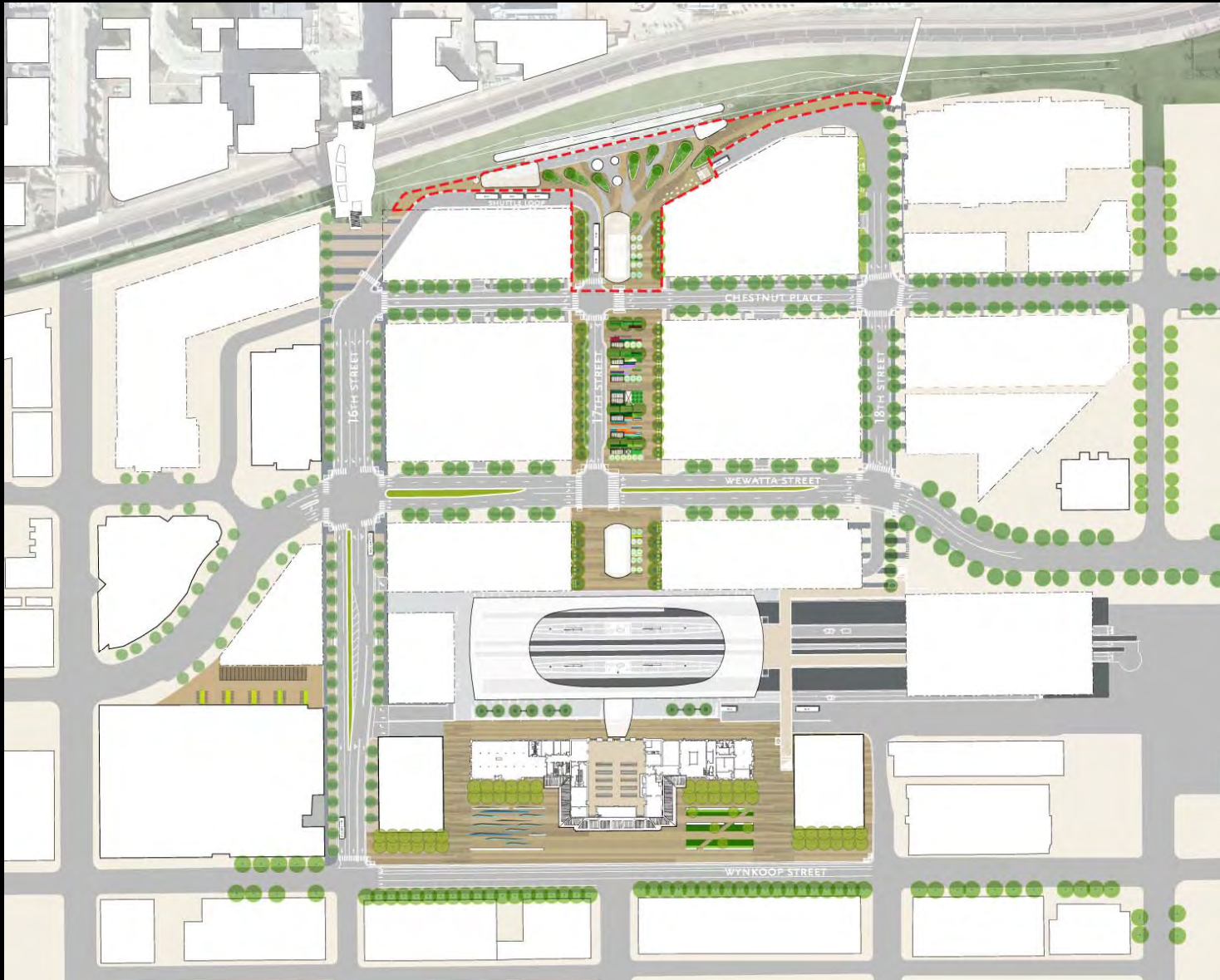


TRANSIT REALM

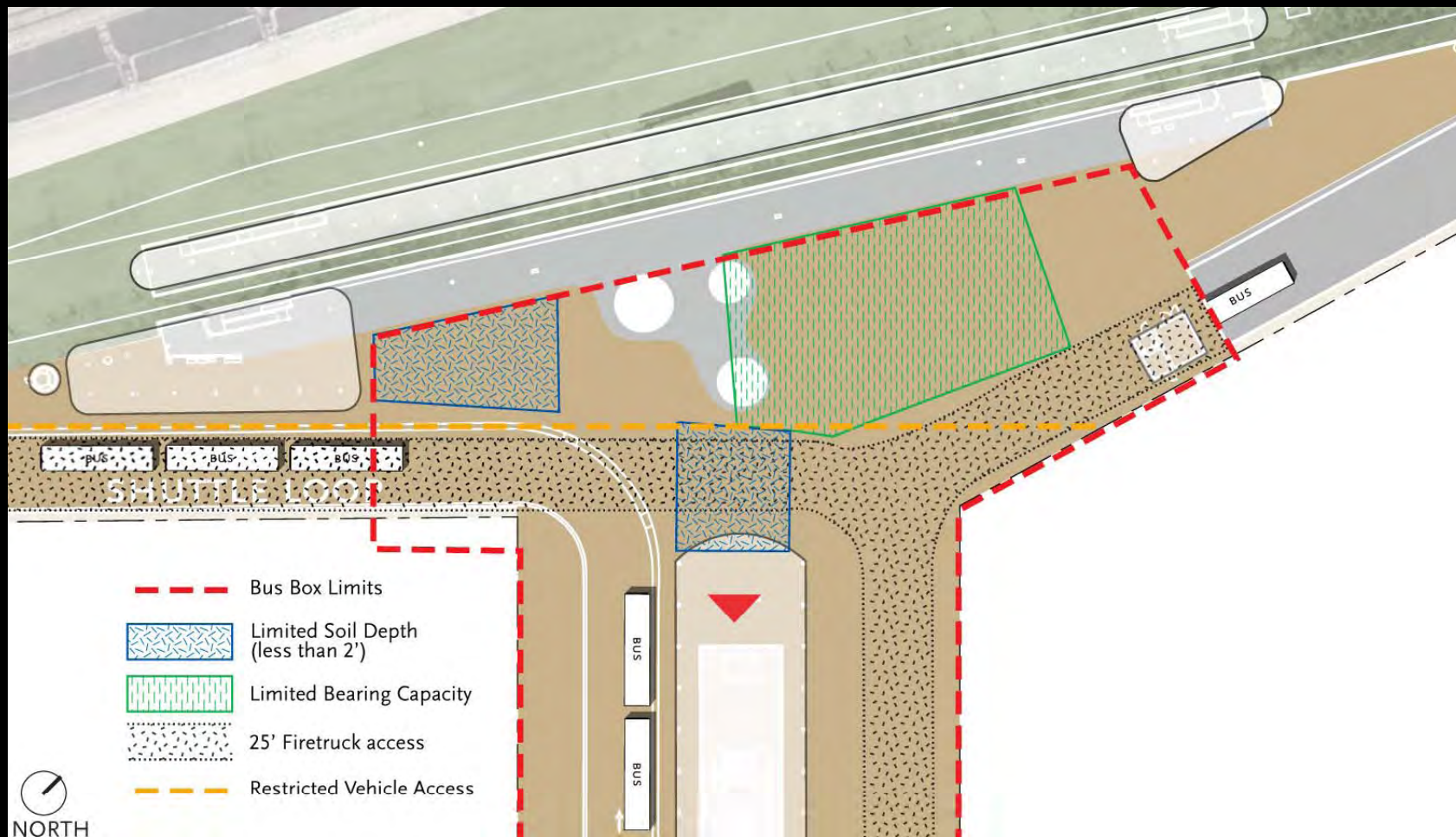


TRANSIT REALM ROOMS

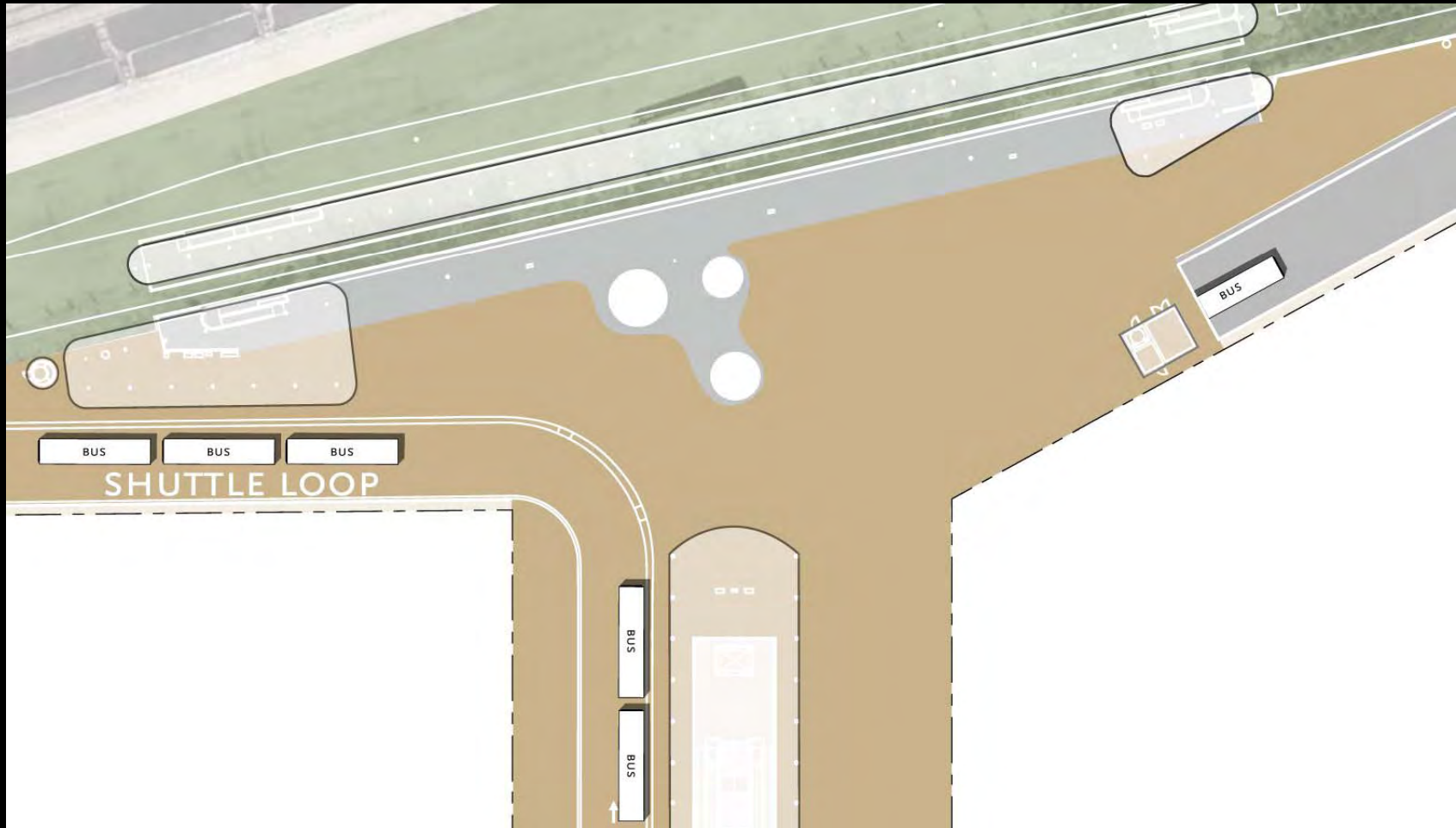
LIGHT RAIL PLAZA



LIGHTRAIL PLAZA AREA OUTLINE

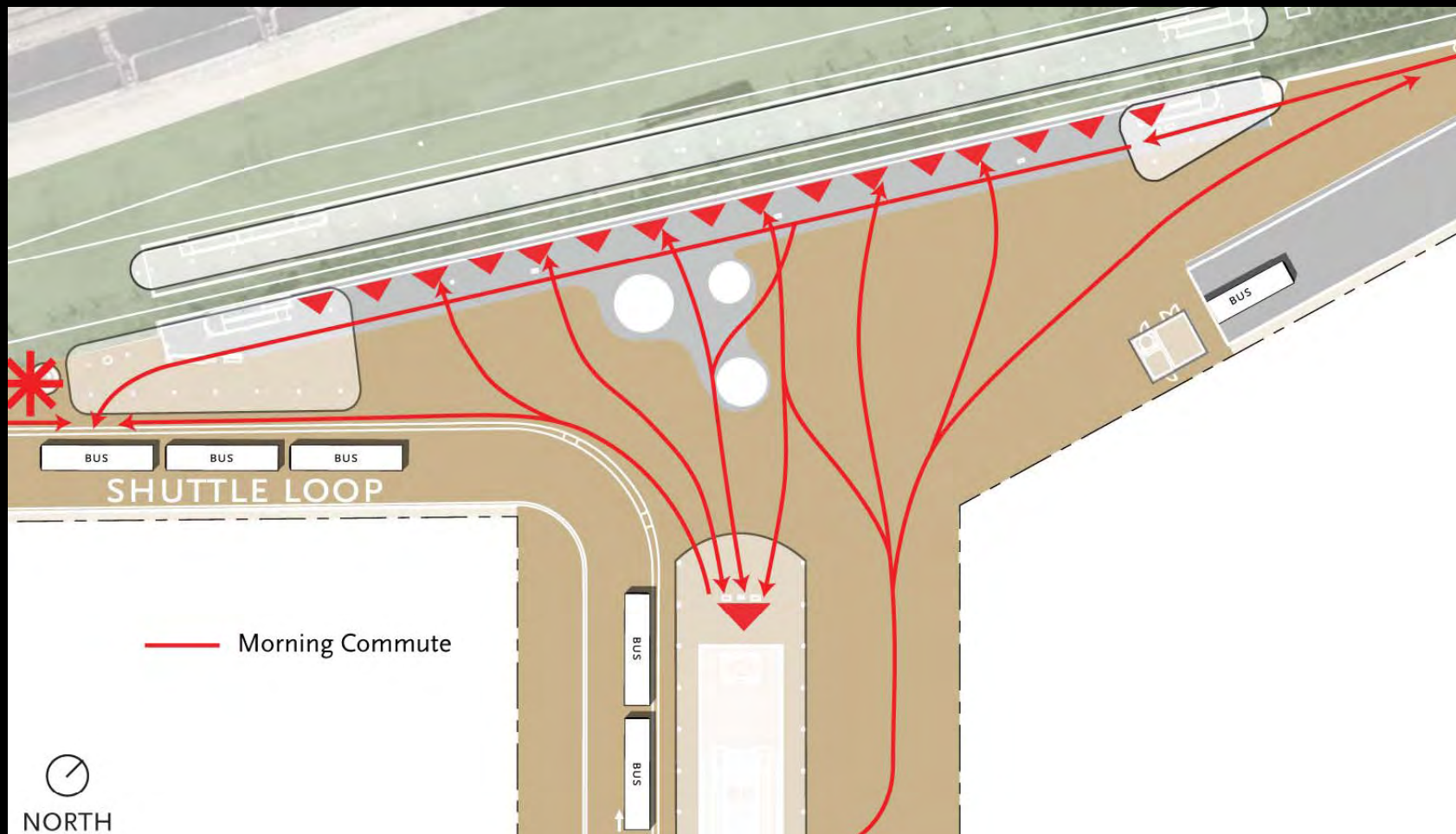


LIGHTRAIL PLAZA CONSTRAINTS



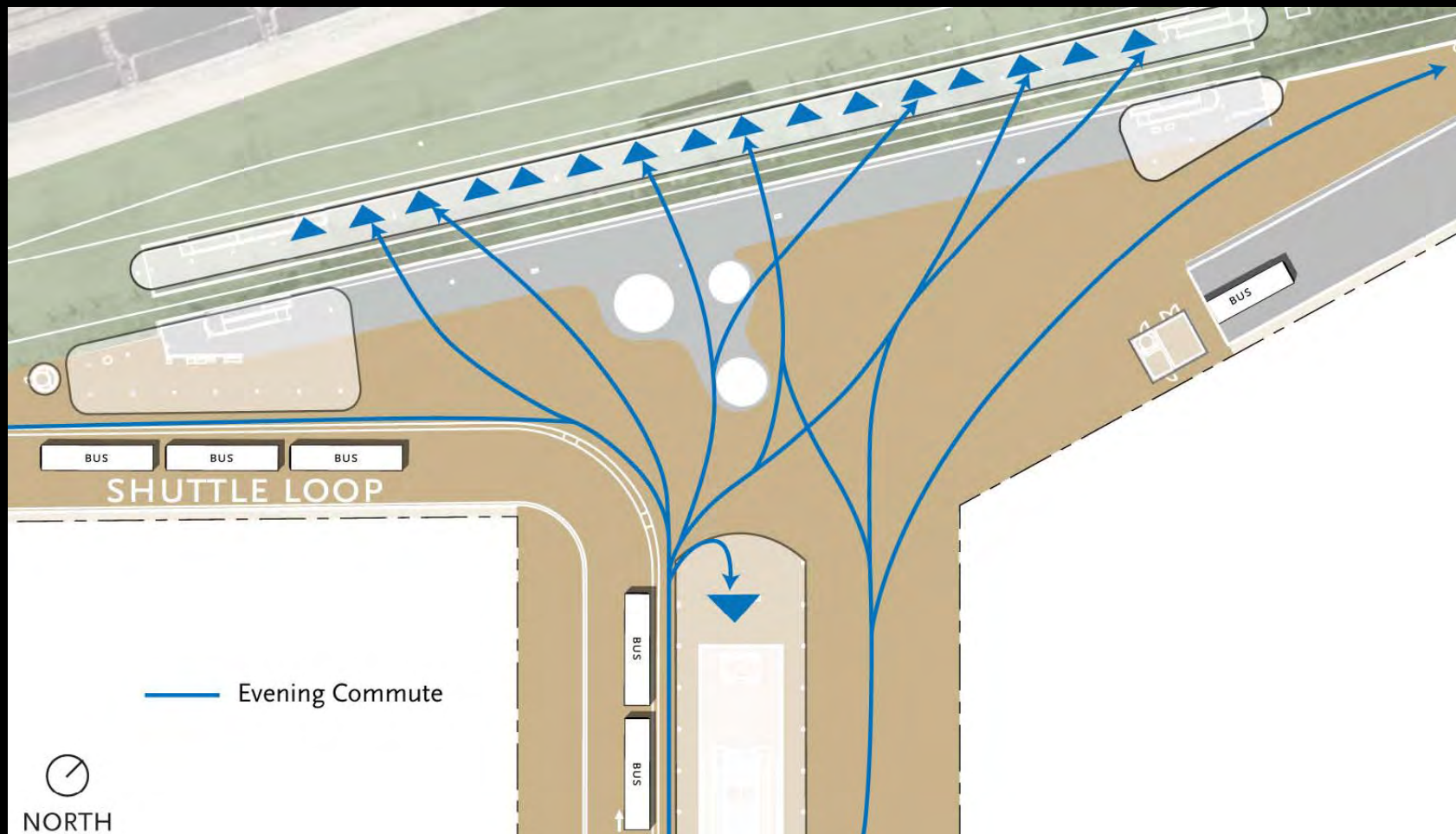
LIGHTRAIL PLAZA

Transit architecture and tubes



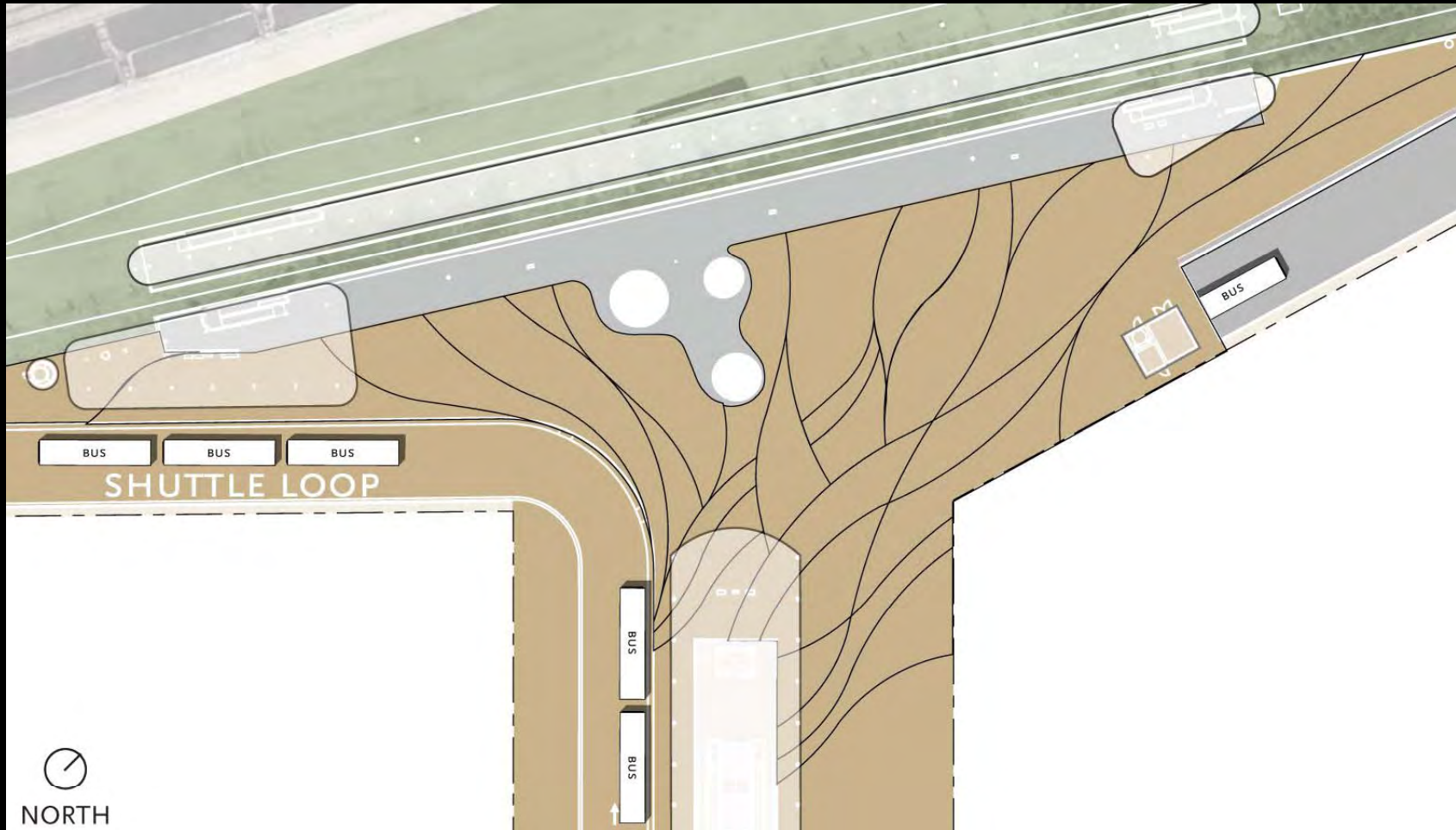
LIGHTRAIL PLAZA

Primary morning circulation



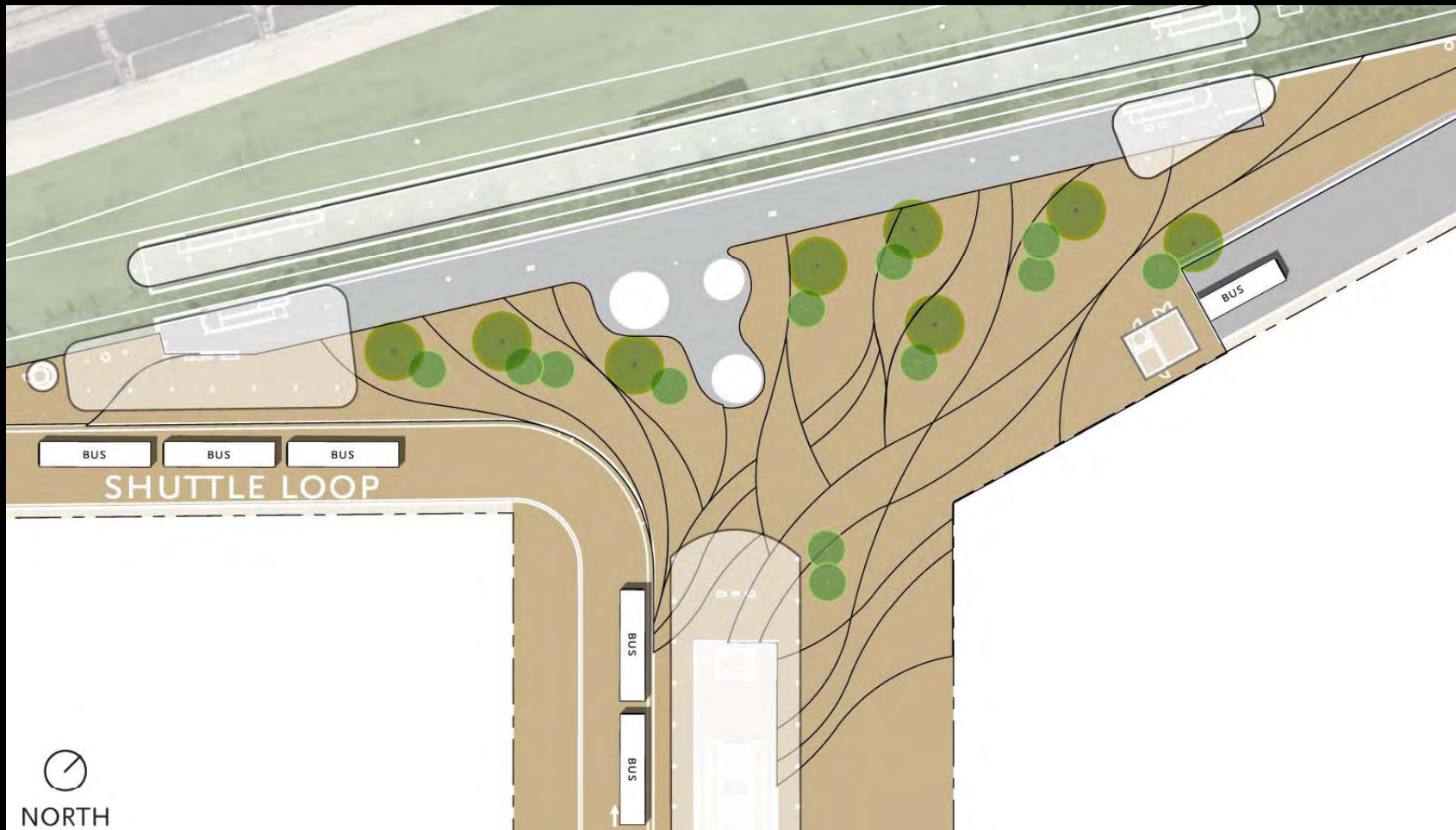
LIGHTRAIL PLAZA

Primary evening circulation



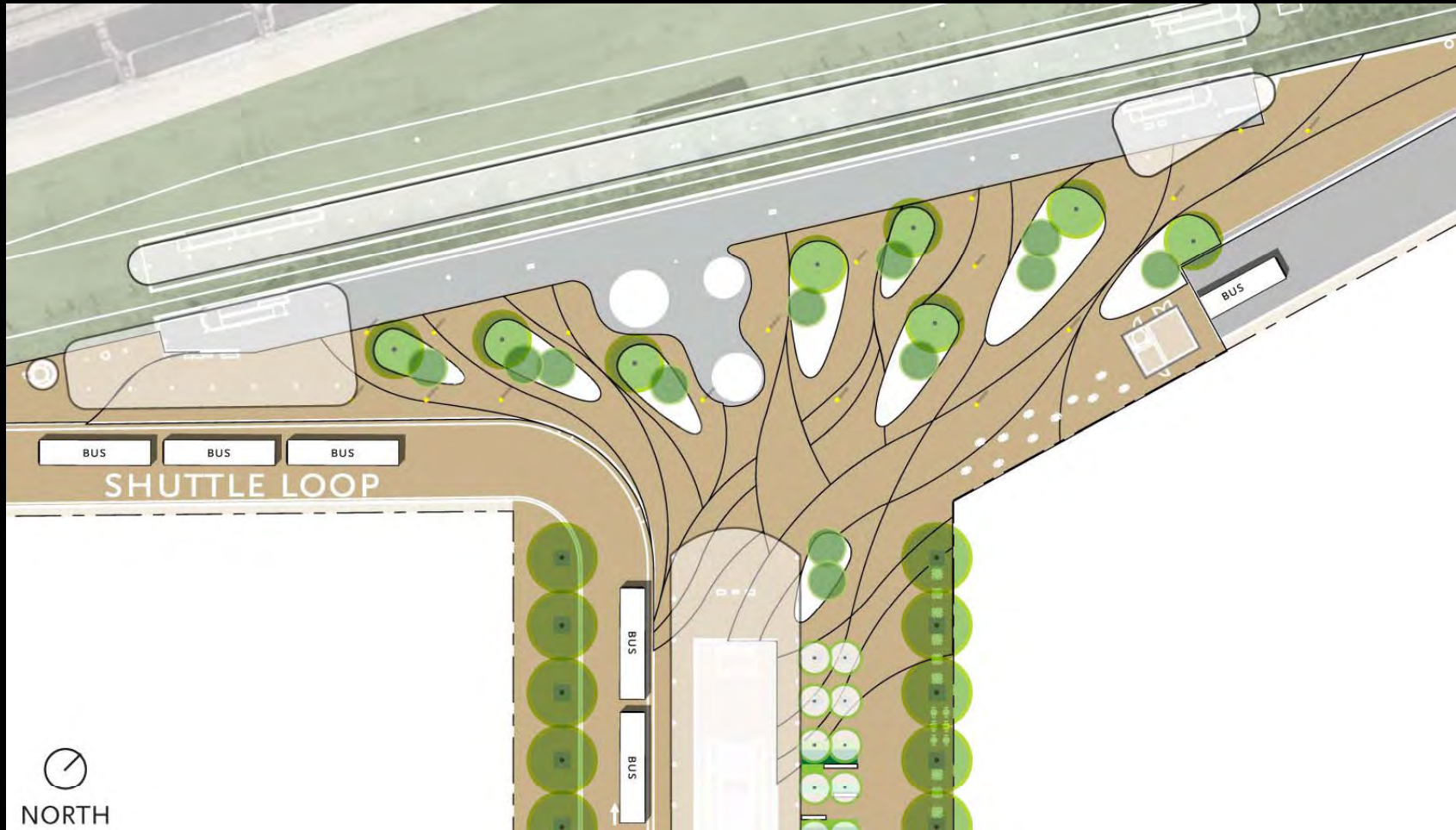
LIGHTRAIL PLAZA

Respect and express desire lines



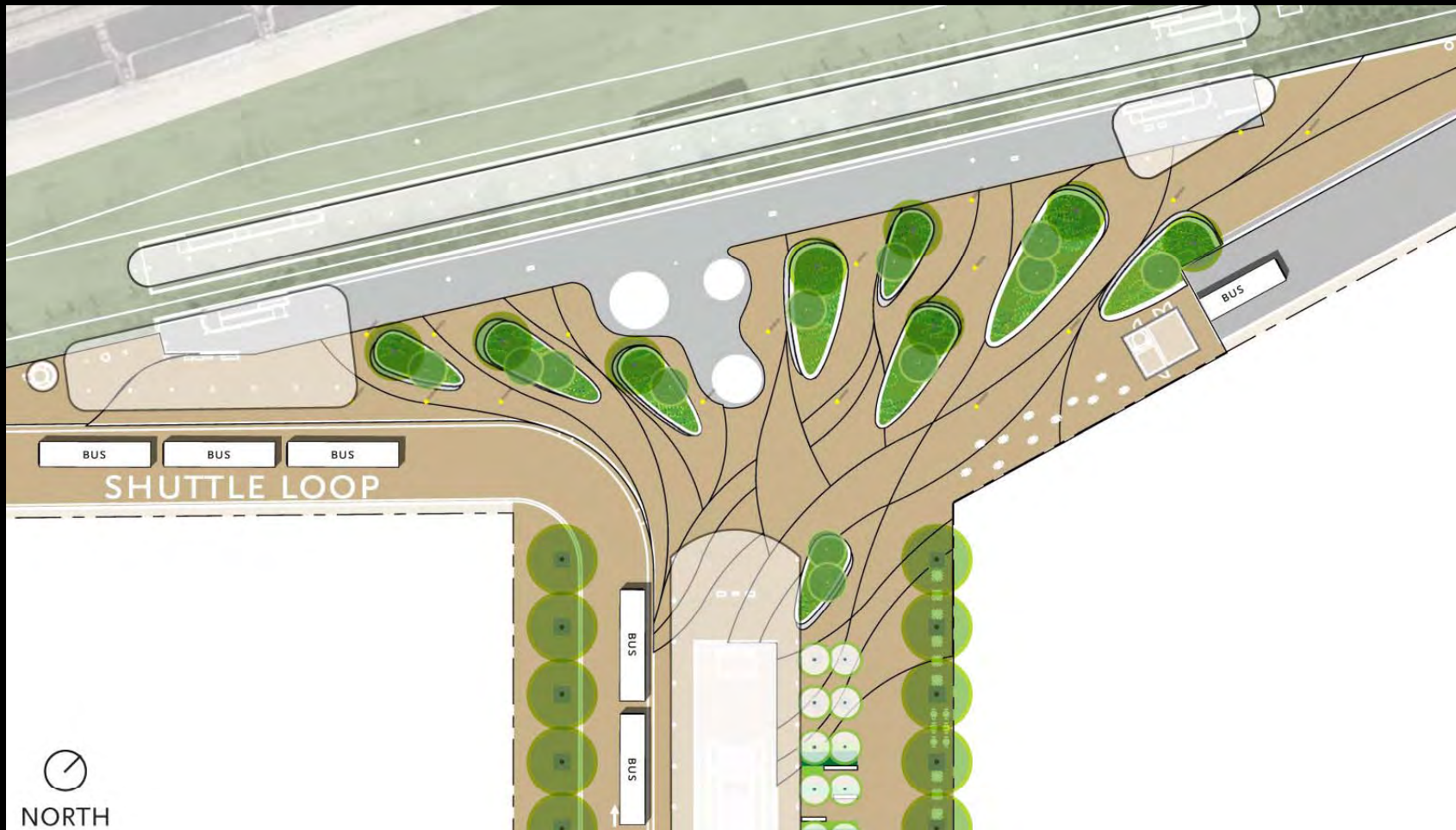
LIGHTRAIL PLAZA

Embed tubes in a landscape system that works with primary circulation



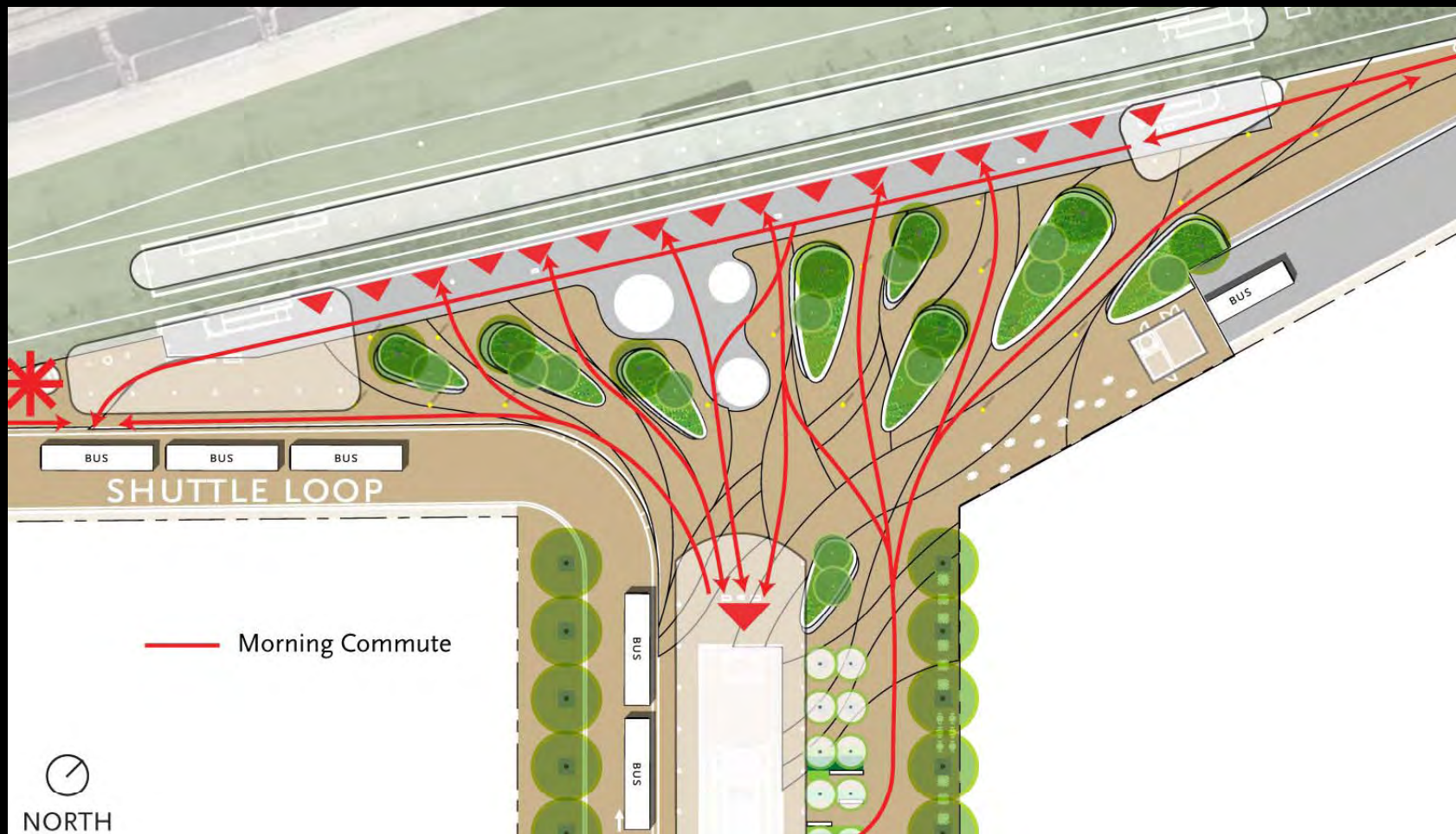
LIGHTRAIL PLAZA

Create opportunities for softscape and shade



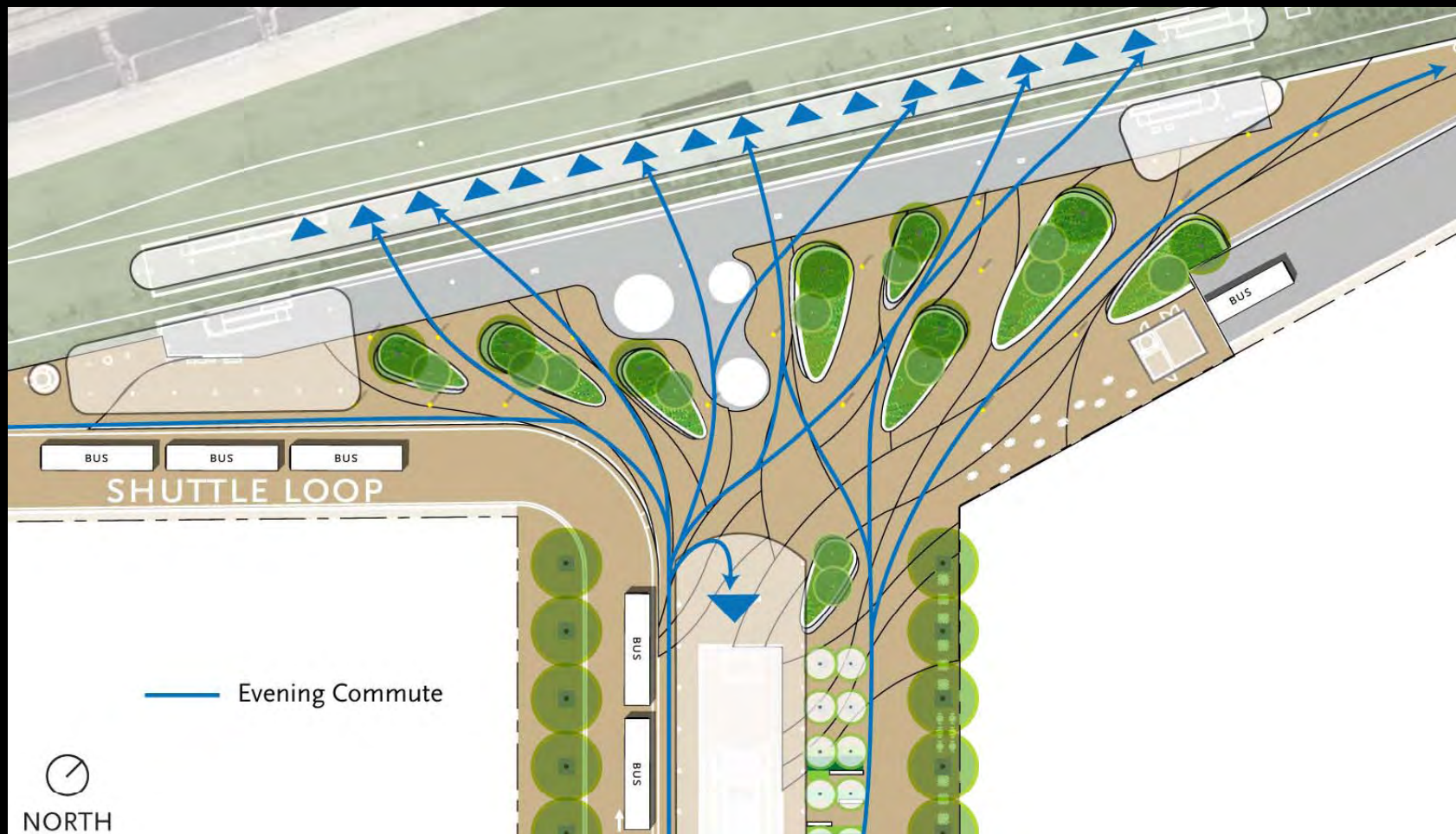
LIGHTRAIL PLAZA

Provide ample seating areas and barriers to vehicular access while allowing views and easy circulation



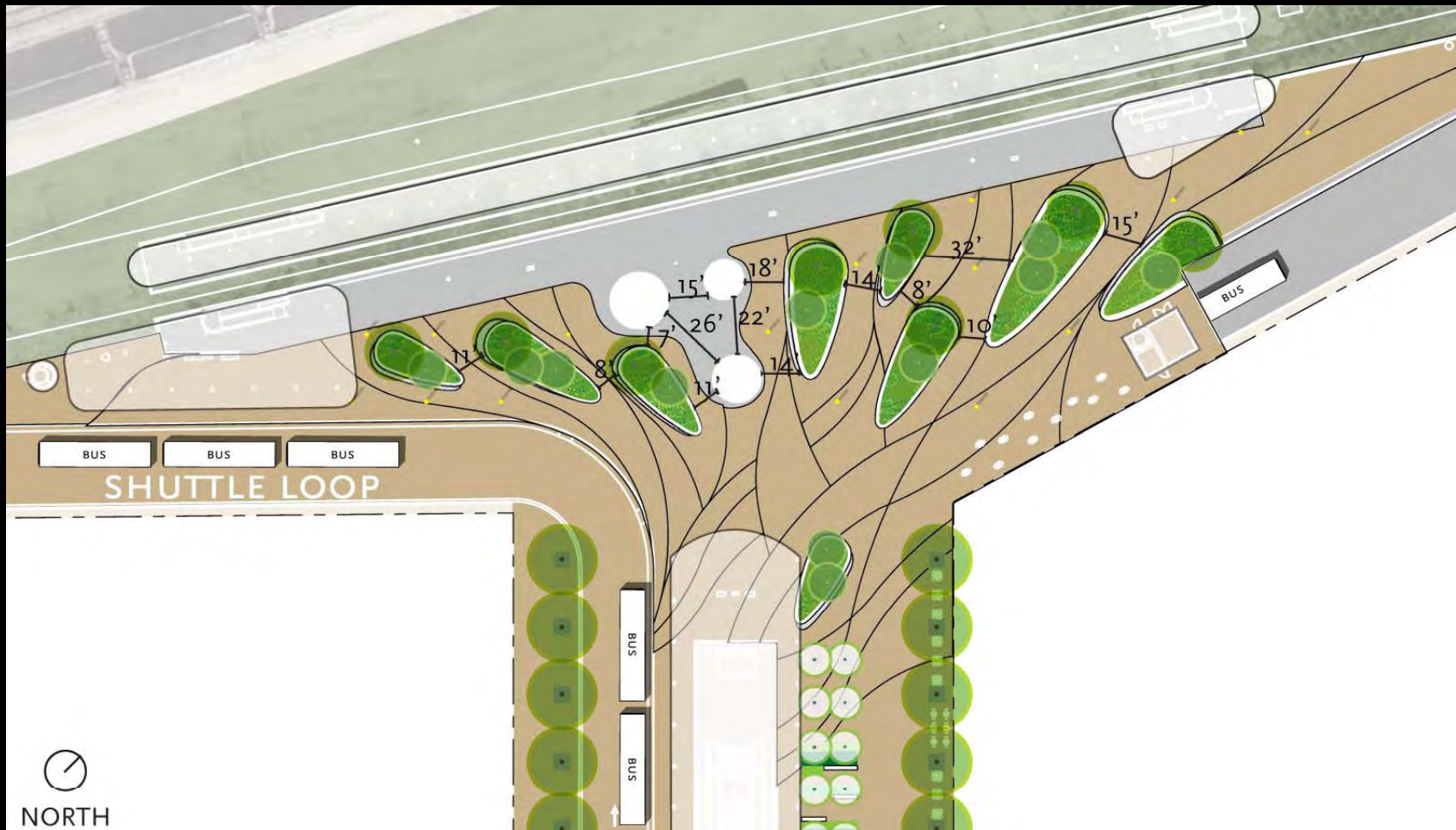
LIGHTRAIL PLAZA

Morning circulation

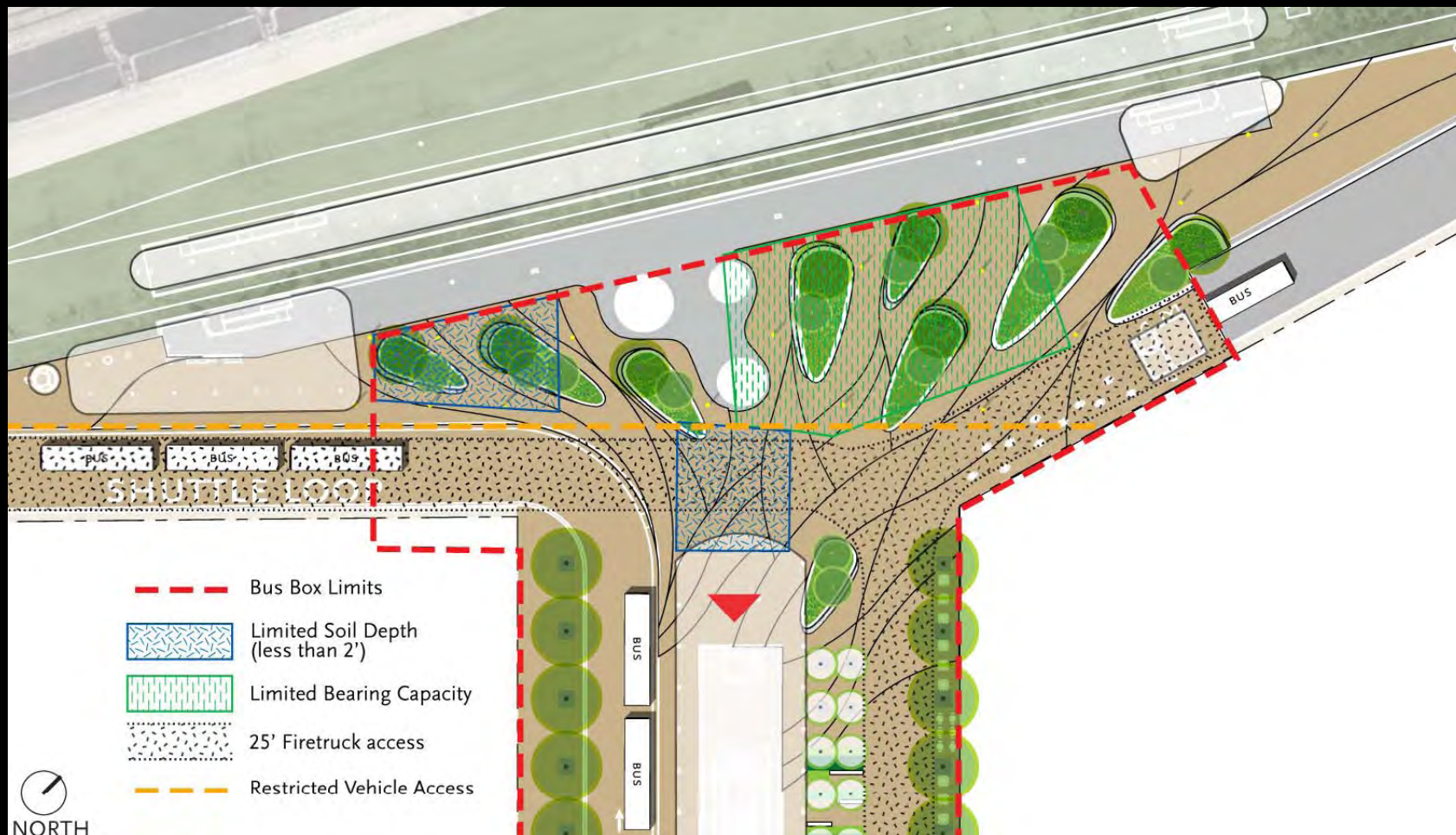


LIGHTRAIL PLAZA

Evening circulation



LIGHTRAIL PLAZA EXHAUST TOWER FOOTPRINTS



LIGHTRAIL PLAZA Composite constraints



LIGHTRAIL PLAZA

Paving concept express primary circulation and reinforces connection with 17th Street corridor



- Arrival/Departure
- Cohesive Identity
- Occupiable surfaces
- Energy/phenomenon

- Bike Station
- Future hangout/lunch time
- Future outdoor dining @bldg edges

LIGHTRAIL PLAZA DESIGN – AXON



LIGHTRAIL PLAZA DESIGN – AXON



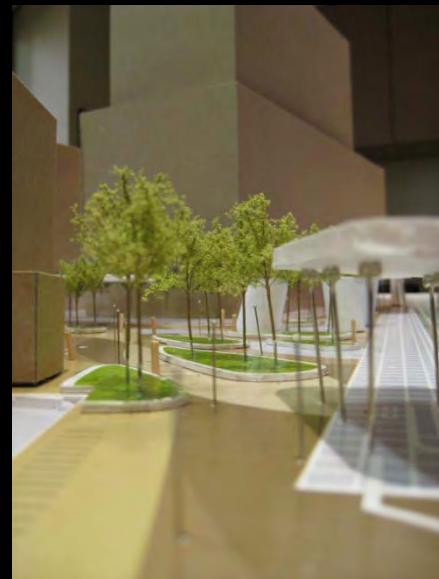
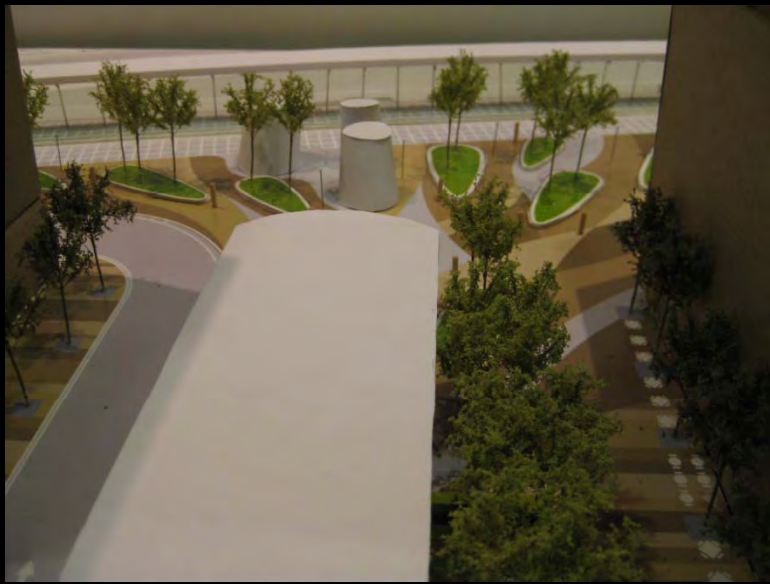
LIGHTRAIL PLAZA DESIGN – lrt platform to chestnut pavilion



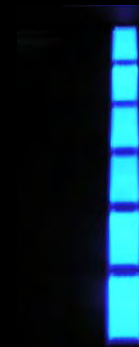
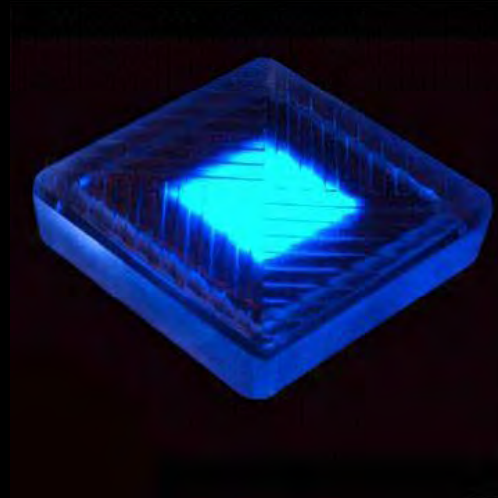
LIGHTRAIL PLAZA DESIGN – lrt platform to 17th Street promenade



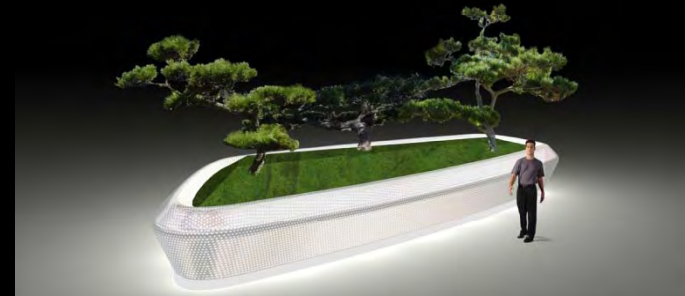
LIGHTRAIL PLAZA DESIGN – 17th street promenade to
lrt platform



MODEL PHOTOGRAPHS

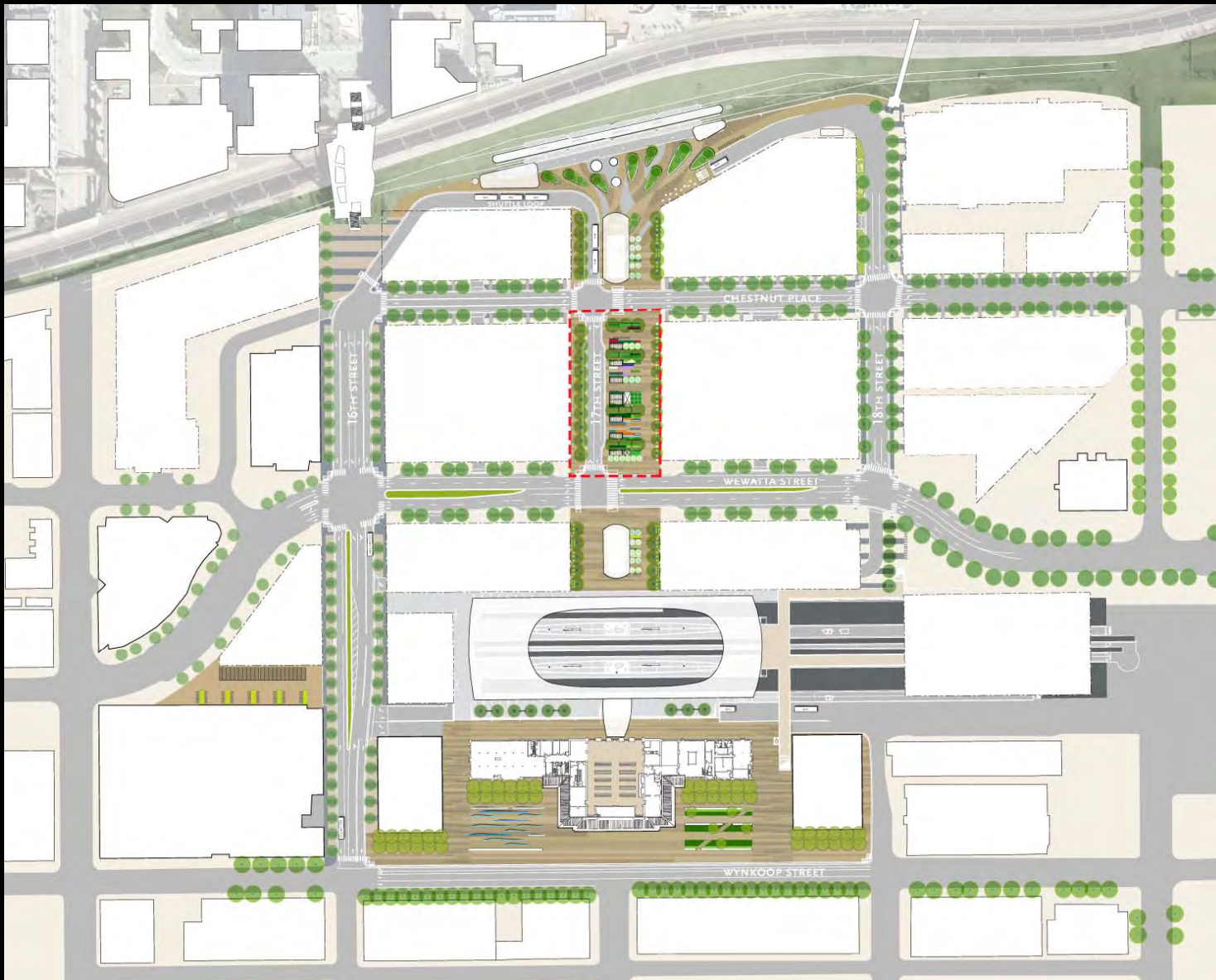


LIGHTRAIL PLAZA - LIGHTING PRECEDENTS



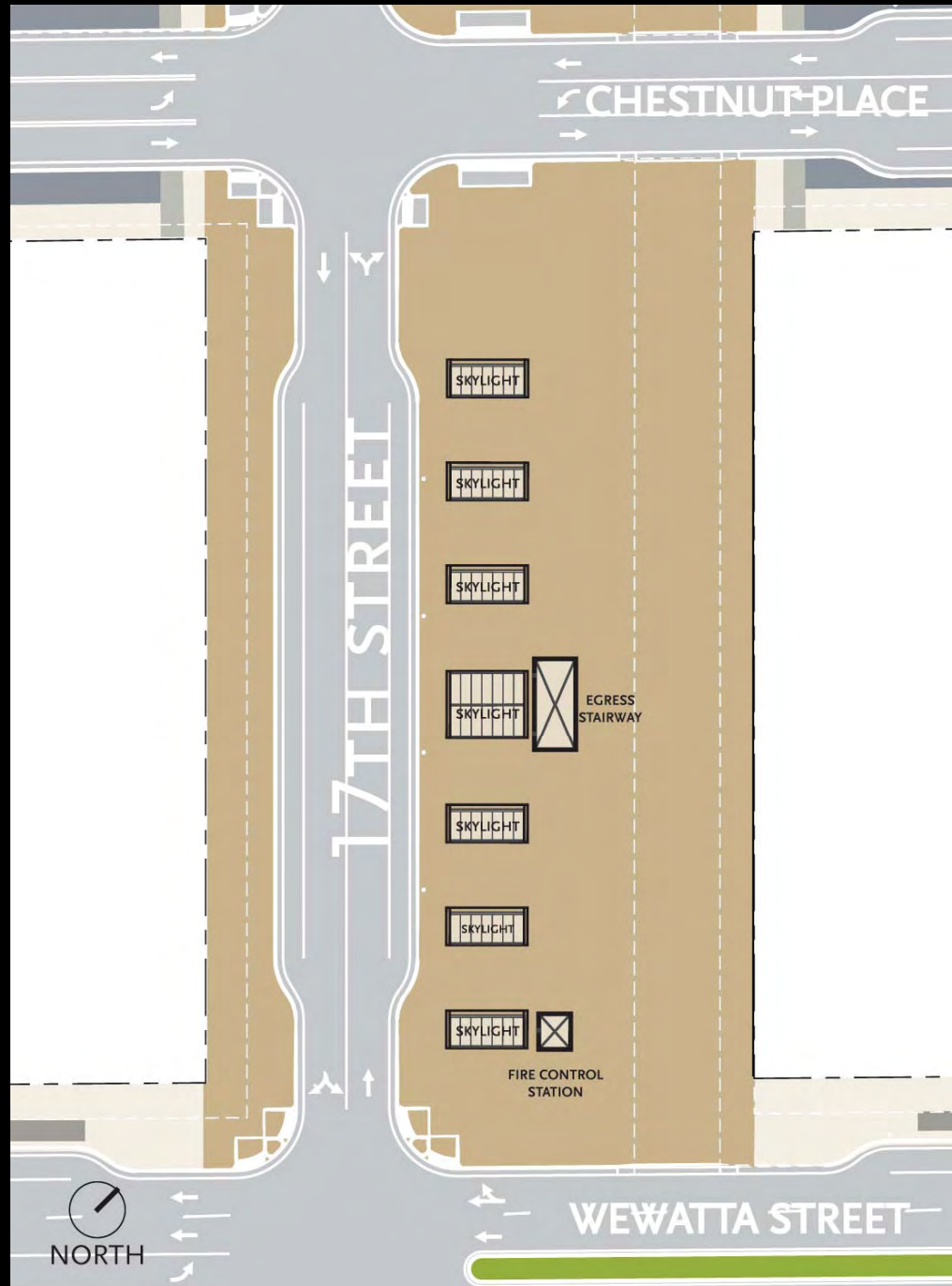
LIGHTRAIL PLAZA - LIGHTING & SEATING PRECEDENTS

17TH STREET GARDENS/PROMENADE

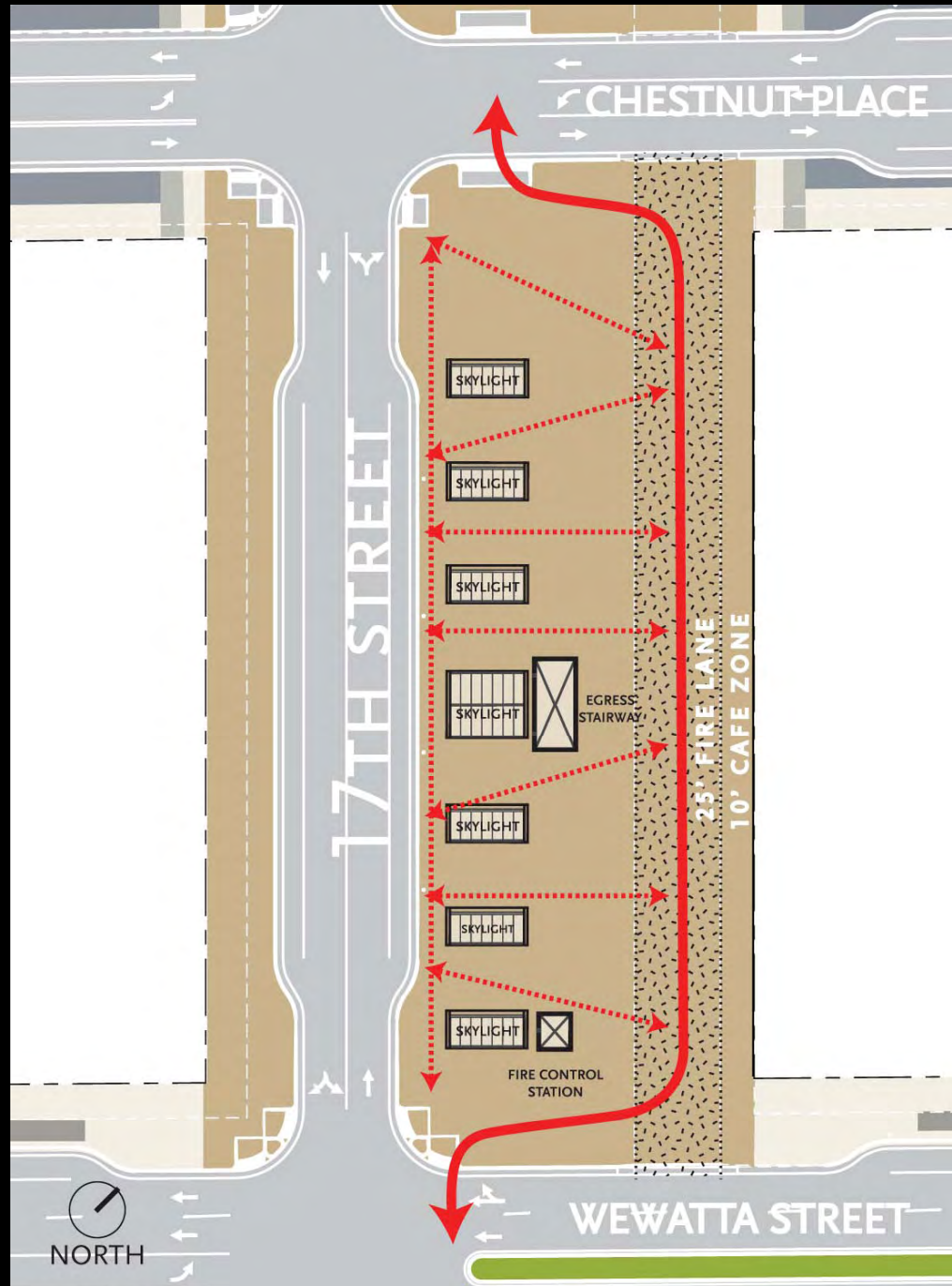


17th STREET GARDENS AREA OUTLINE

17th STREET GARDENS COMPONENTS



17th STREET GARDENS CIRCULATION



17th STREET GARDENS GARDEN ROOMS



17th STREET GARDENS DIMENSIONS



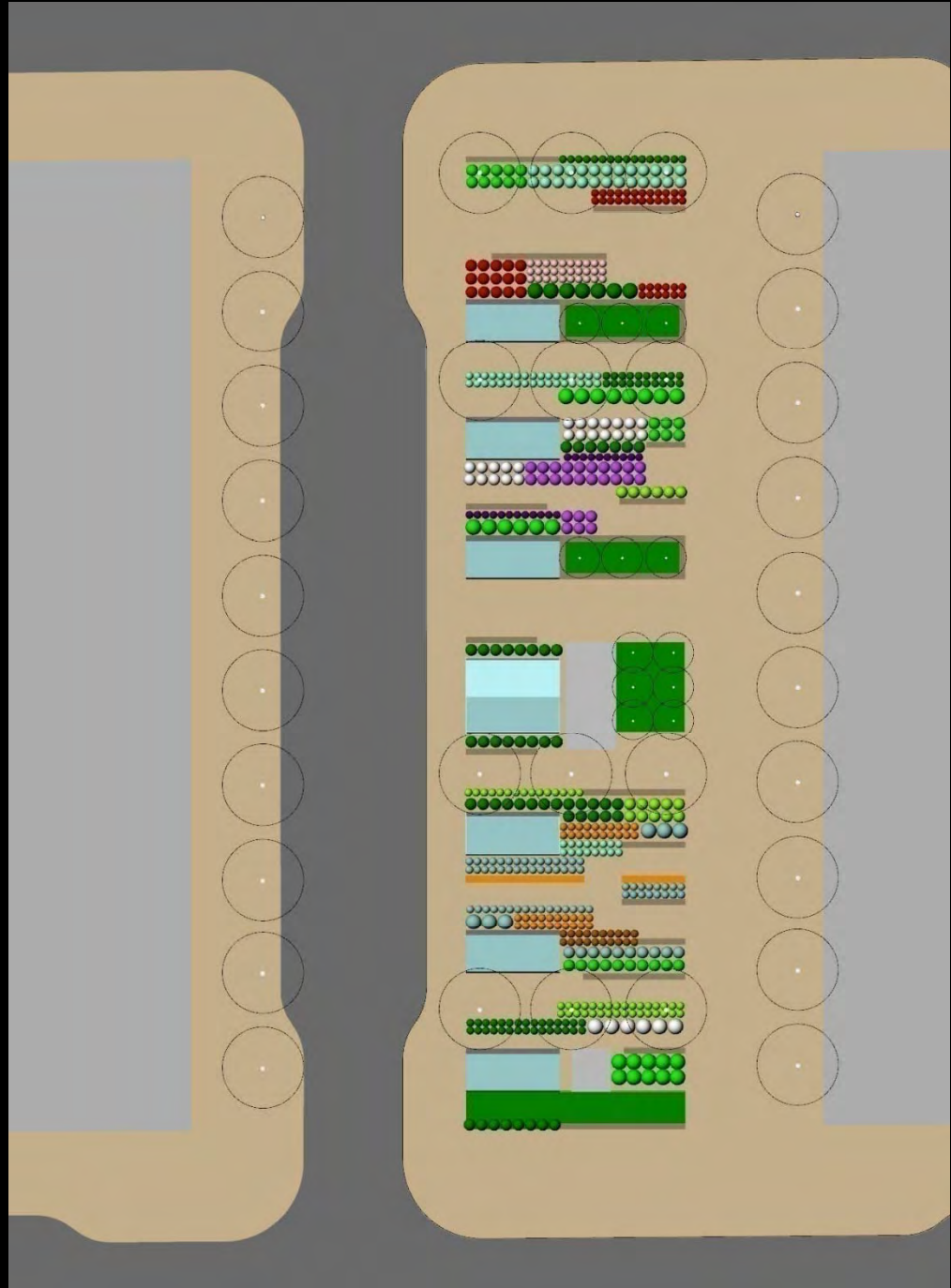
17th STREET GARDENS PROGRAM



17th STREET GARDENS



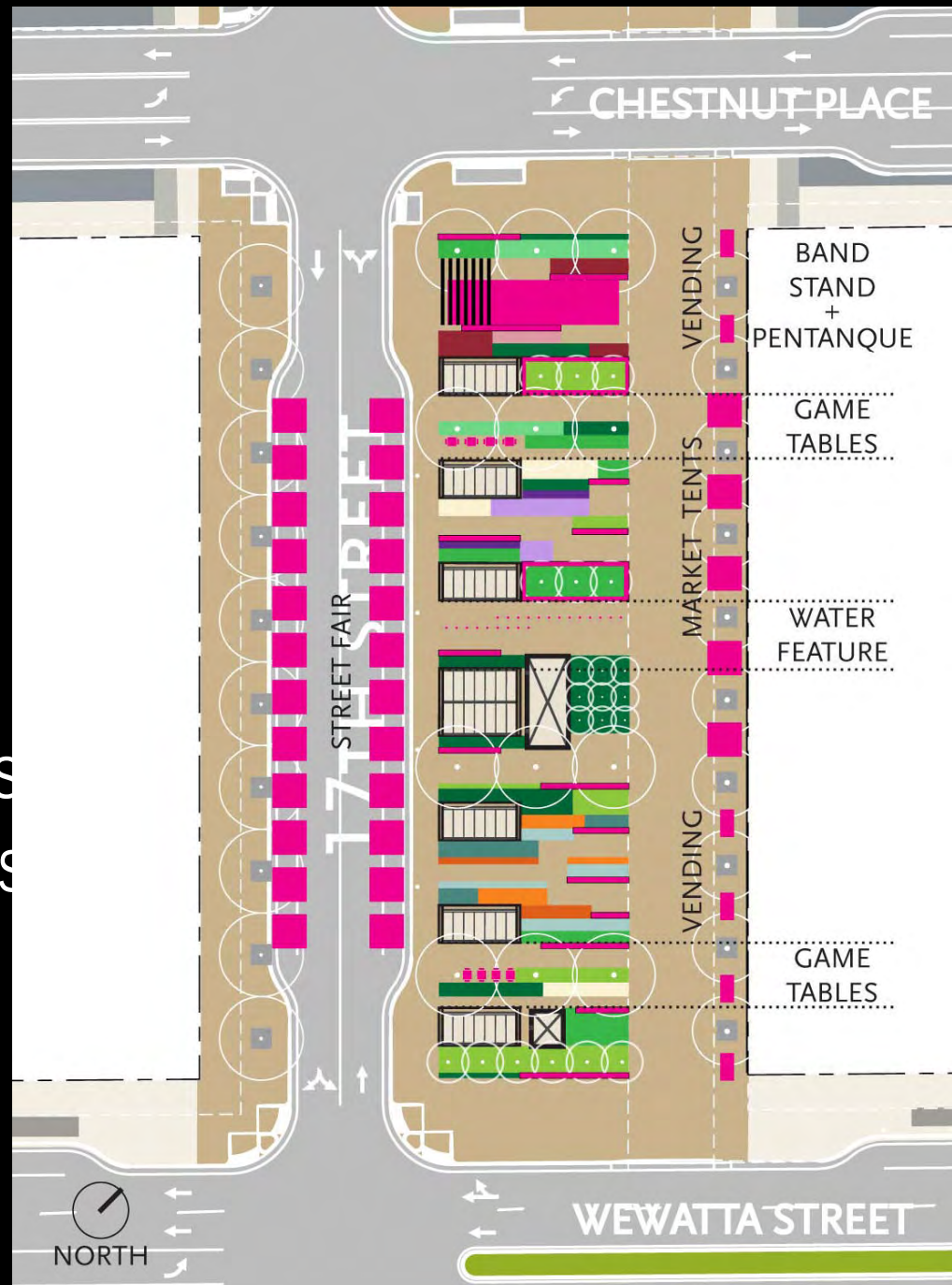
17th STREET GARDENS PLAN



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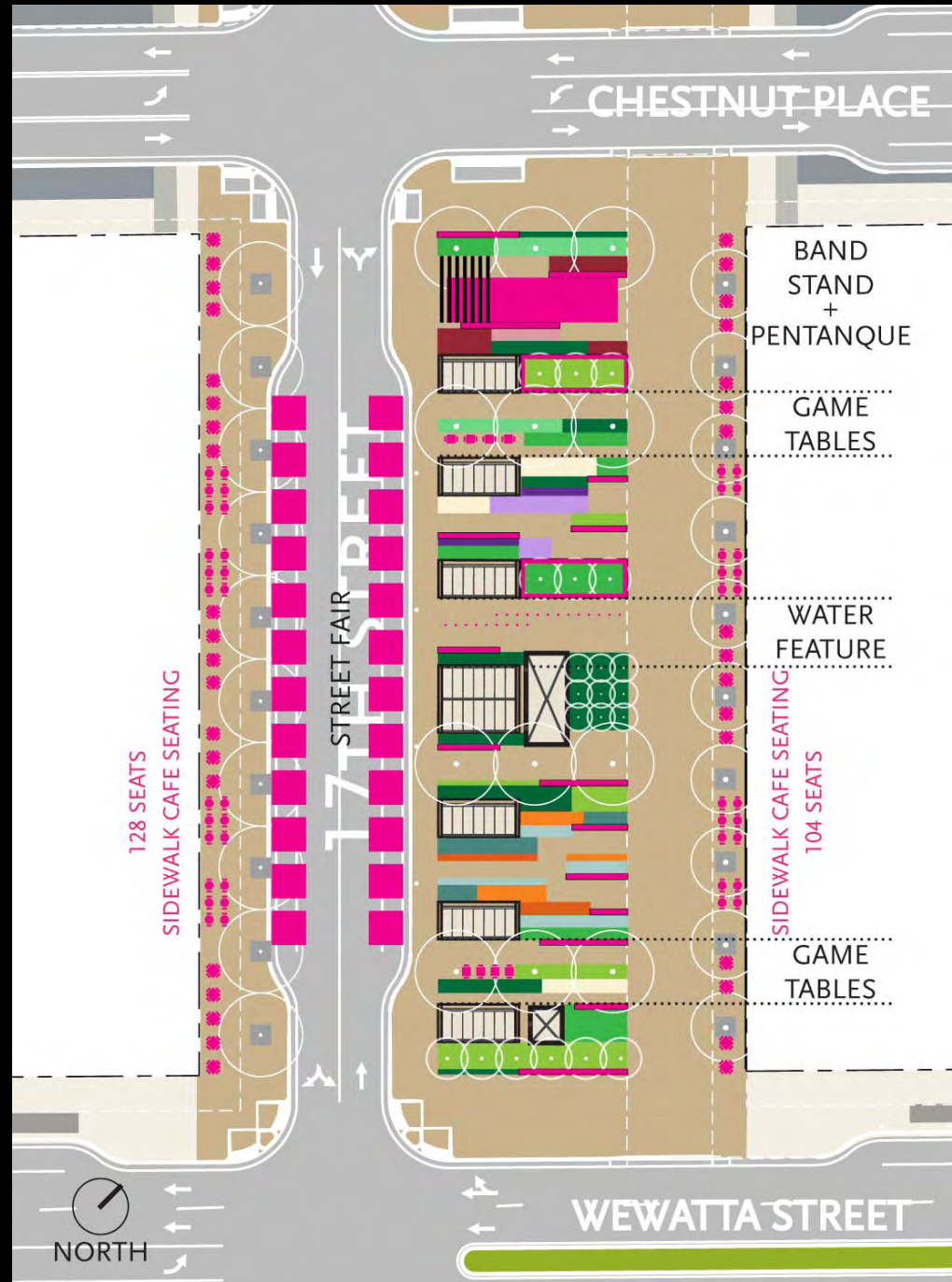
15' X 25' STAGE
13' X 30' PENTANQUE
10' X 10' MARKET TENTS
4' X 8' VENDING CARTS
3' X 3' GAME TABLES

17th STREET GARDENS PROGRAM



232 CAFÉ SEATS

17th STREET GARDENS PROGRAM - FUTURE





17th STREET GARDENS PLANTING

CIMICIFUGA RACEMOSA (1.5'HT)



BUXUS_MICROPHYLLA (3'HT)



BOUETELOUA_GRACILIS (1.5'HT)



ECHINACEA_ORANGE
MEADOWBRITE(3'HT)



YUCCA FILAMENTOSA (3'HT)



SEDUM_AUTUM_JOY (2'HT)



EPHEDRA EUISETINA (4'HT)



FESTUCA GLAUCA
BOULDER BLUE(8"HT)



AGASTACHE_AURANTICA(1.5'HT)



KNAUTIA_MACEDONICA (2'HT)



CALAMAGROSTIS_ACUTIFLORA
KARL FOERSTER (4'HT)



EPHEDRA EUISETINA (4'HT)



EPILOBIUM_CANUM (6"HT)



HELIOTRICHON
SEMPERVIRENS(2.5'HT)



PANICUM VIRGATUM
HEAVY METAL (4'HT)



CLETHRA ALNIFOLIA
HUMMING BIRD (4'HT)



17th STREET GARDENS PLANTING

ECHINOPS_RITRO
VEITCHS BLUE (3'HT)



BUXUS_MICROPHYLLA (3'HT)



ROSA_SEAFOAM (3'HT)



MISCANTHUS_SINENSIS
STRICTUS (3'HT)



xxx (3'HT)



PEROVSKIA 'LITTLE SPIRE' (3'HT)



CYTISUS_SCOPARIUS
MOONLIGHT (4'HT)



SALVIA_SUPERBA
MAY NIGHT (2'HT)



AMORPHA_CANESCENS (3'HT)



MISCANTHUS_SINENSIS
MORNING_LIGHT (4'HT)



17th STREET GARDENS PLANTING

BUXUS_MICROPHYLLA (3'HT)



JUNIPERUS_SQUAMATA (3'HT)



RIBES_ALPINUM (2.5'HT)



MISCANTHUS_SINENSIS
PURPURASCENS(4'HT)



MONARDIA (3'HT)



PINUS_MUGO_MOPS (3'HT)



xxx(3'HT)



CORNUS_SERICEA (4'HT)



17th STREET GARDENS PLANTING



17th STREET AXON WITHOUT TREES

- Maximizes contiguous pedestrian space
- Responds to climate
- Allows for additional program
- Variety of green elements – color/texture/seasonal
- Variety of seating – fixed and movable
- Interactive children's element
- Small events/programs
- Future outdoor dining



17th STREET AXON WITHOUT TREES



17th STREET PERSPECTIVE LOOKING WEST



17th STREET PERSPECTIVE LOOKING WEST (EVENING)



17th STREET WATER GARDEN

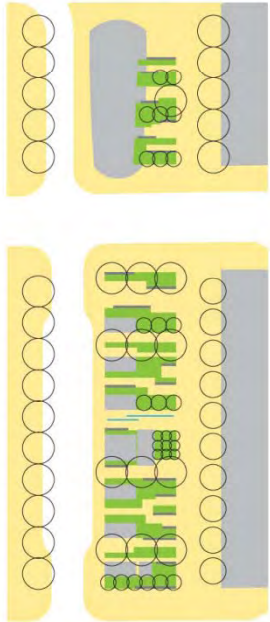


17th STREET GARDEN ROOM

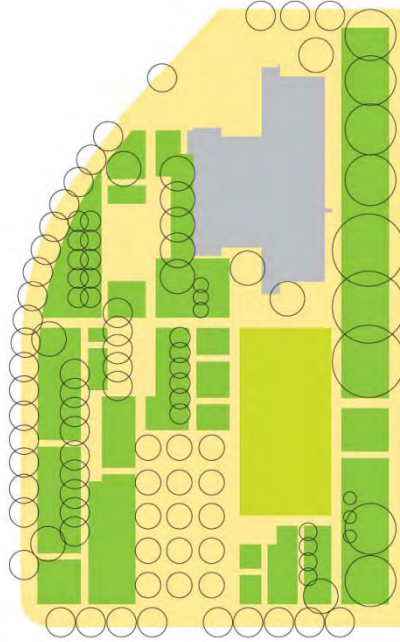


17th STREET GARDEN ROOM (WINTER)

17TH STREET GARDENS
DENVER UNION STATION
DENVER, COLORADO

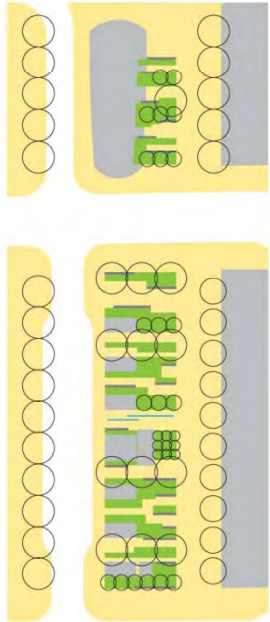


URBAN GARDENS
DISCOVERY GREEN
HOUSTON, TEXAS

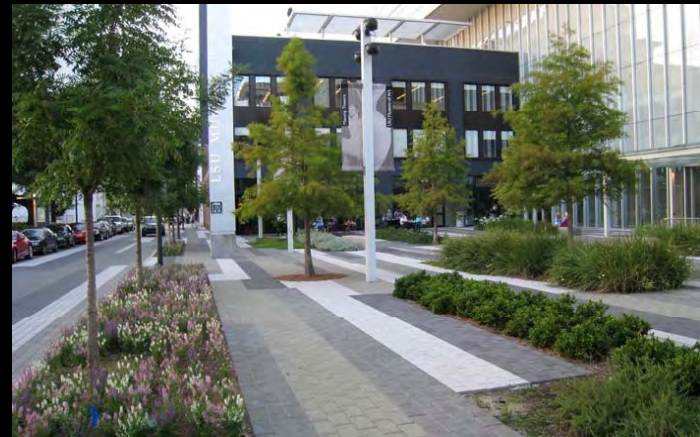
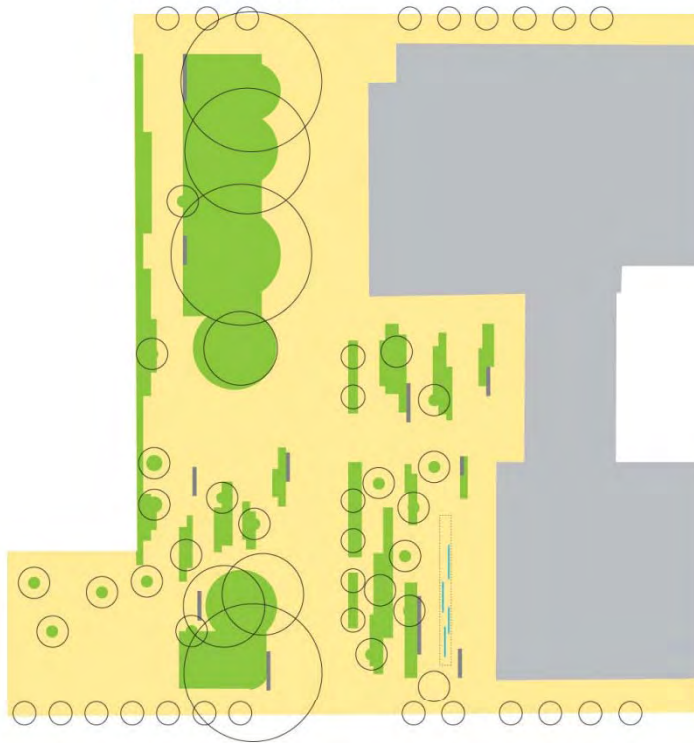


DISCOVERY GREEN SCALE COMPARISON

17TH STREET GARDENS
DENVER UNION STATION
DENVER, COLORADO

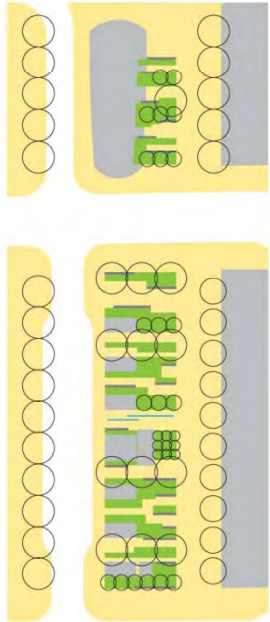


ENTRY PLAZA + GARDENS
SHAW CENTER FOR THE ARTS
BATON ROUGE, LOUISIANA

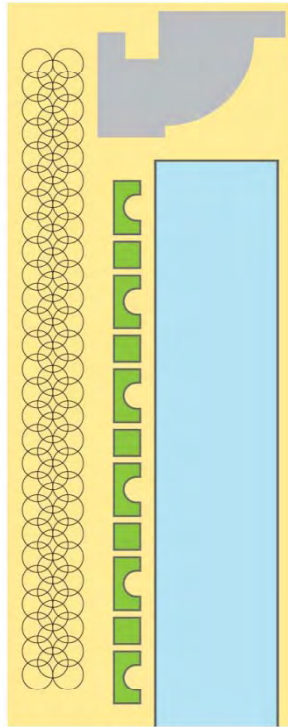


SHAW CENTER SCALE COMPARISON

17TH STREET GARDENS
DENVER UNION STATION
DENVER, COLORADO



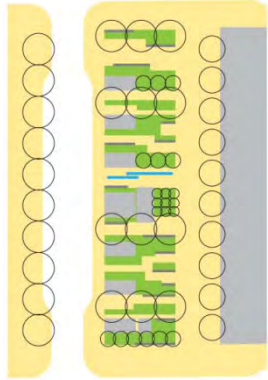
SEASONAL PLANTING
CHRISTIAN SCIENCE CENTER
BOSTON, MASSACHUSETTES



CHRISTIAN SCIENCE CENTER SCALE COMPARISON



17TH STREET GARDENS
DENVER UNION STATION
DENVER, COLORADO

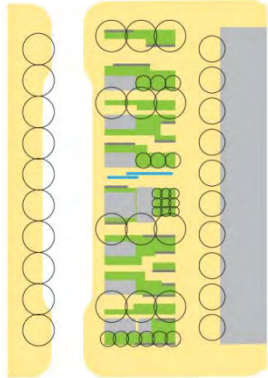


FLOWER GARDENS
WASHINGTON PARK
DENVER, COLORADO

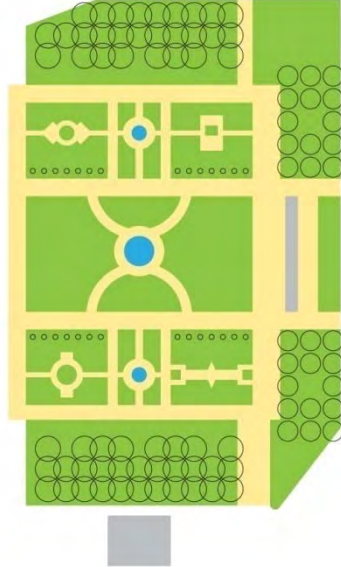


WASHINGTON PARK SCALE COMPARISON

17TH STREET GARDENS
DENVER UNION STATION
DENVER, COLORADO



CENTENNIAL GARDENS
DENVER, COLORADO



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CENTENNIAL GARDENS SCALE COMPARISON



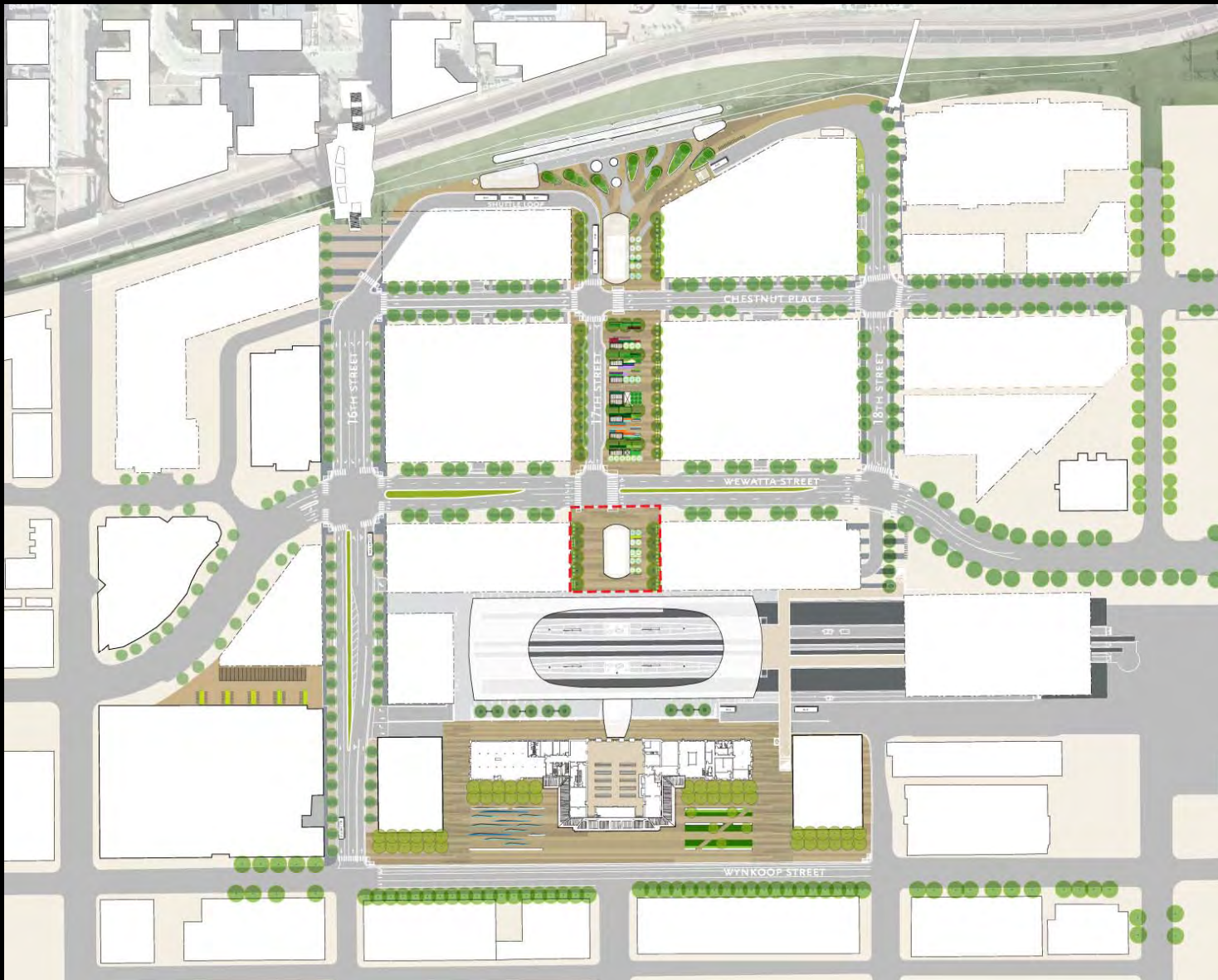
17th STREET FOUNTAIN PRECEDENTS



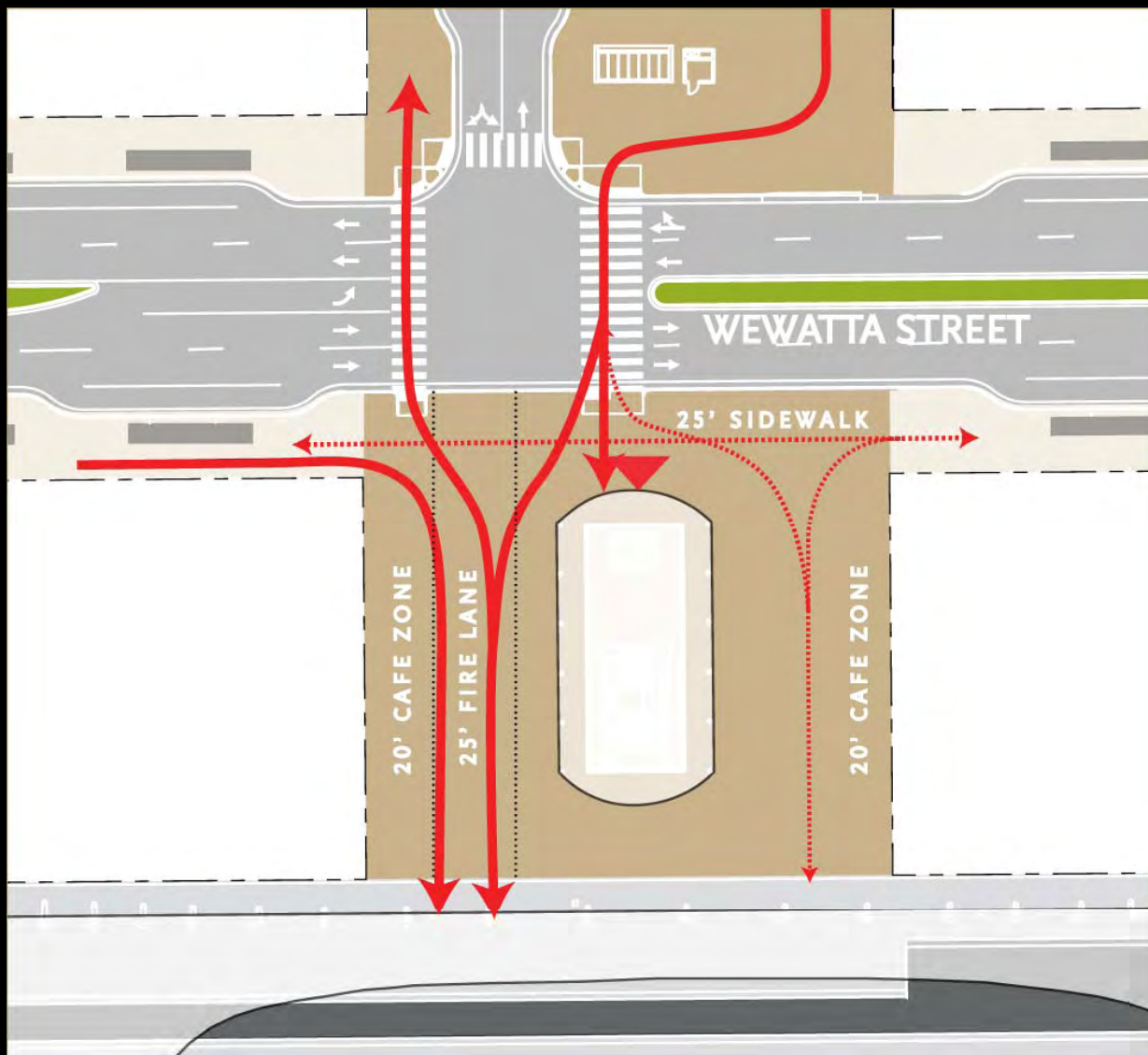
17th STREET PRECEDENTS

WEWATTA PLAZA

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WEWATTA PLAZA AREA OUTLINE



WEWATTA PLAZA CONSTRAINTS



WEWATTA PLAZA CIRCULATION

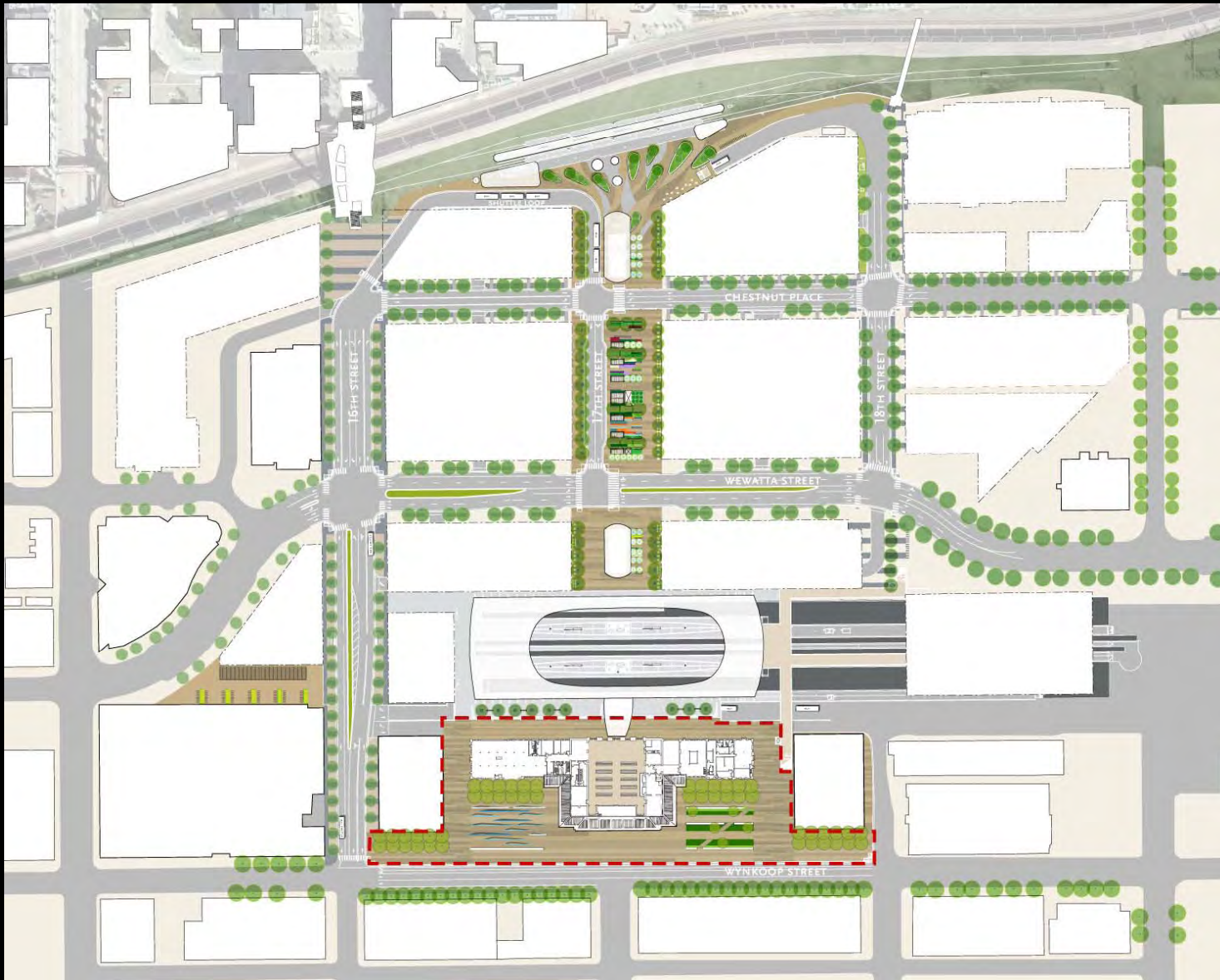


- Circulation in multiple directions
- Visual bookend to 17th Street corridor
- Future outdoor dining
- Sense of arrival

WEWATTA PLAZA PLAN

WYNKOOP PLAZA

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WYNKOOP PLAZA AREA OUTLINE



1881

The Union Depot & Railroad Company built the city's first Union Station. It cost \$525,000 and opened on June 1, 1881.

1895

In the late nineteenth century the landscape in front of the station was a formal planting of trees surrounding open greens.

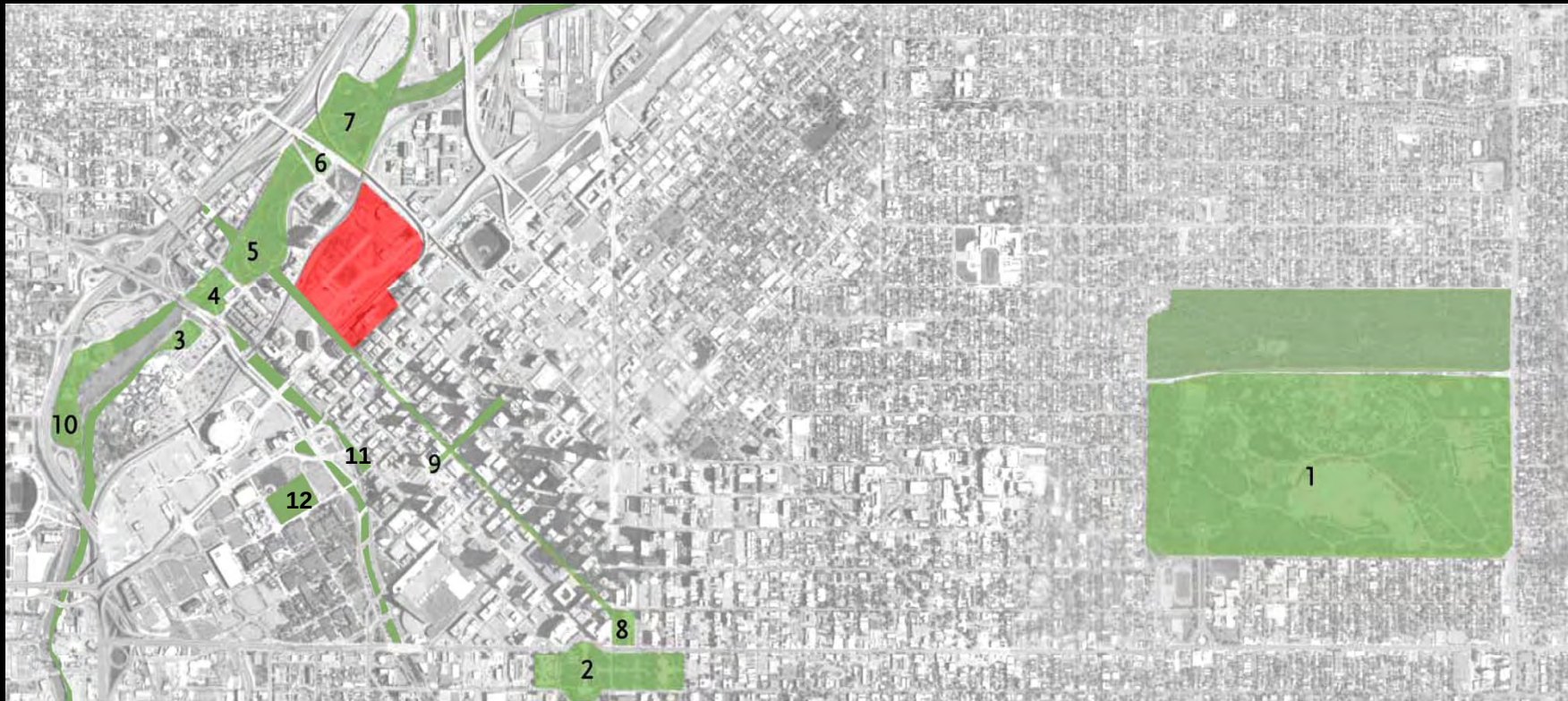


1914

After burning in 1894, Union Station was rebuilt with a lower roofline and clock tower.

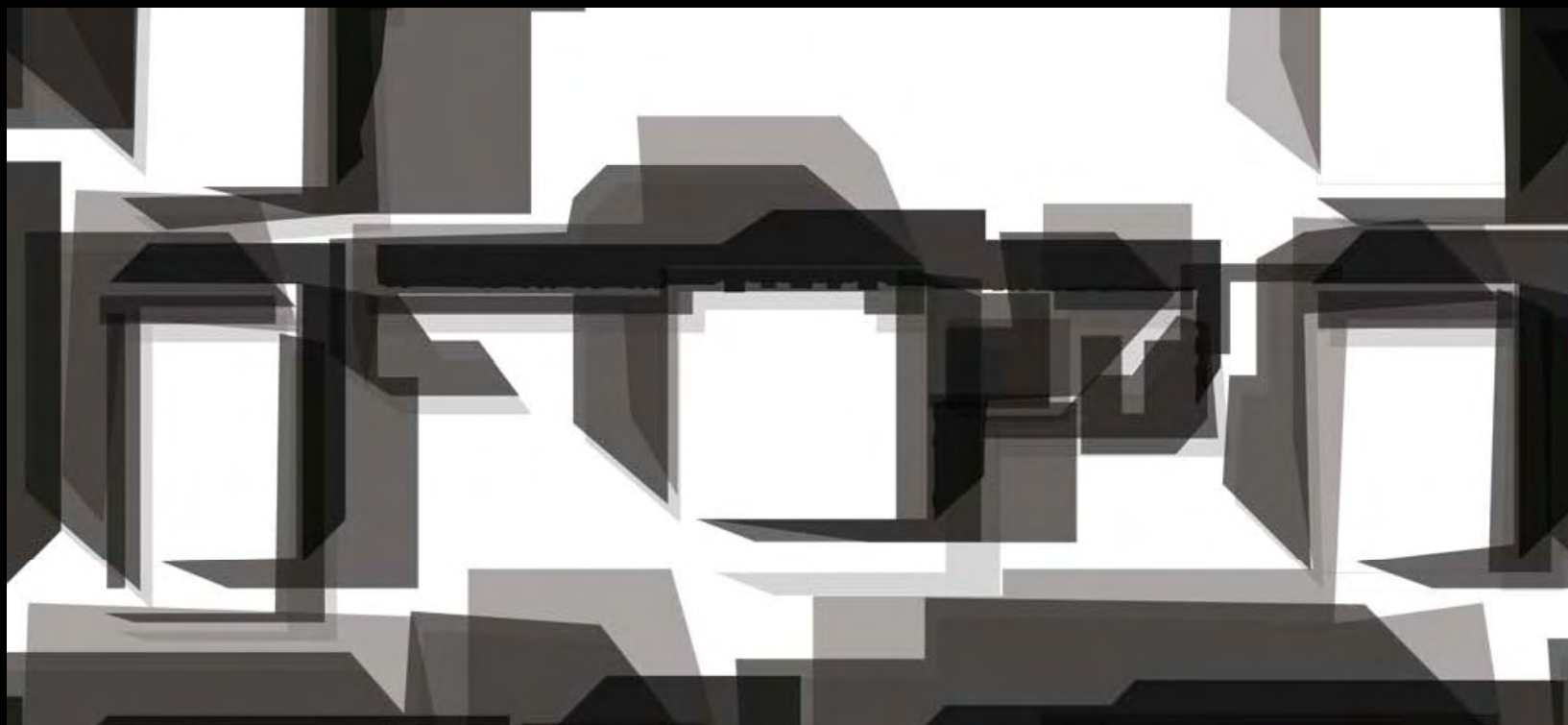
Later, the Denver Union Terminal Railway tore down the stone clock tower and replaced with the building's lower expanded center section that you see to this day.

SITE HISTORY: UNION STATION

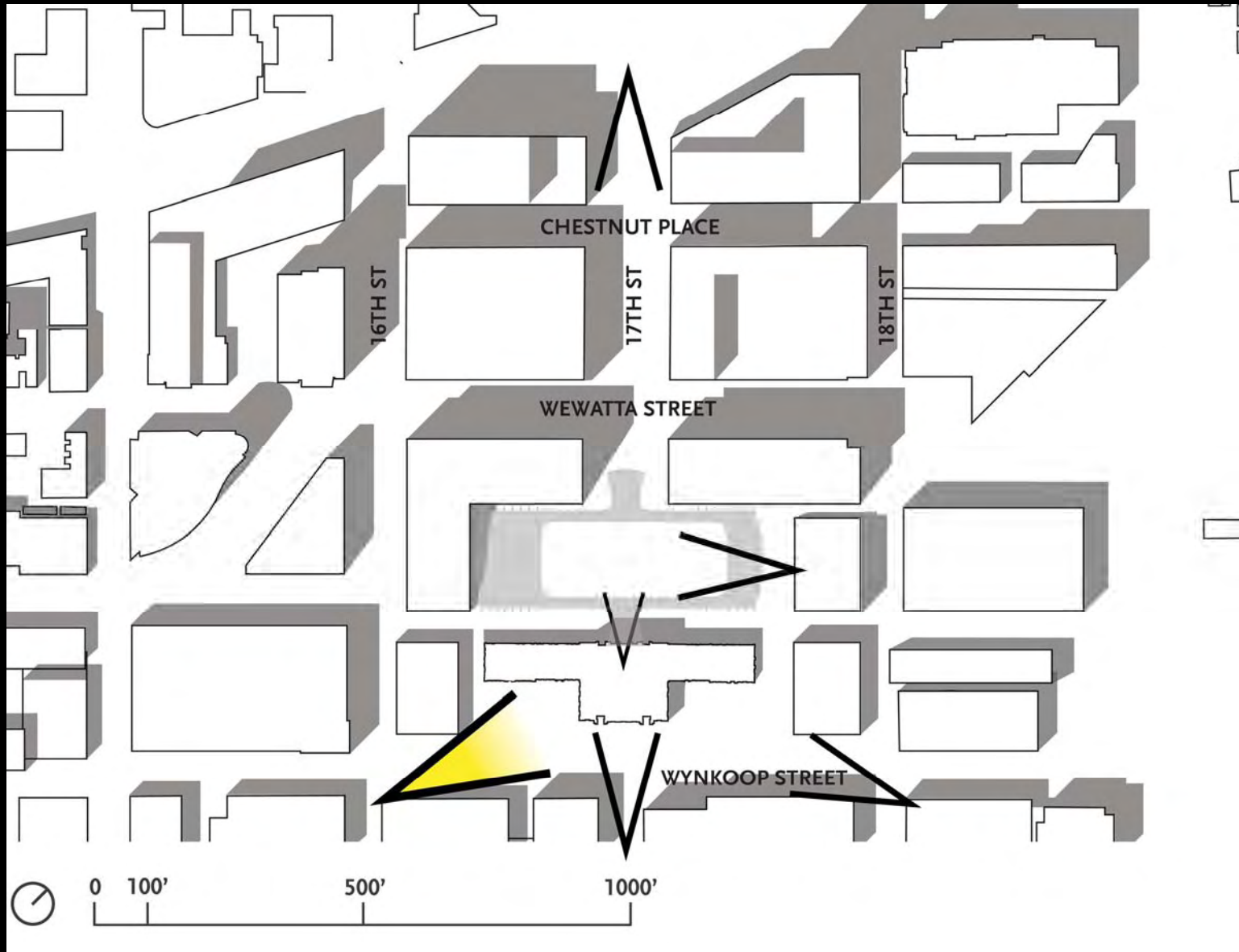


OPEN SPACE CONTEXT

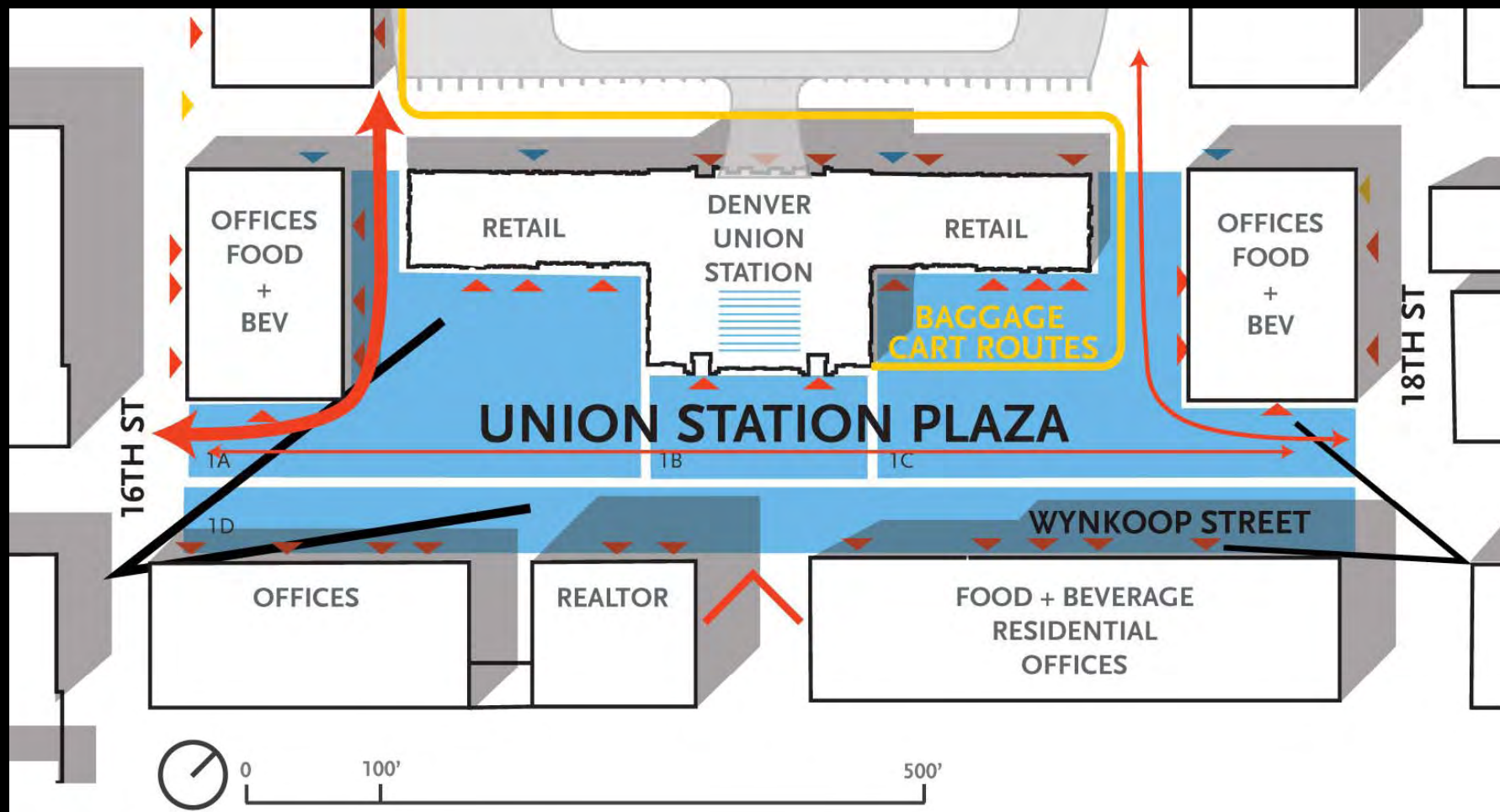
1. Denver City Park
2. Denver Civic Center and City Hall Plaza
3. Centennial Gardens
4. Confluence Park
5. Commons Park
6. Denver Skate Park
7. City of Cuernavaca Park
8. 16th Street Mall
9. Skyline Park
10. Gates-Crescent Park
11. Cherry Creek Greenway
12. Tivoli Quad, Auraria Campus



SUN/SHADOW



IMPORTANT VIEWS



UNION STATION PLAZA

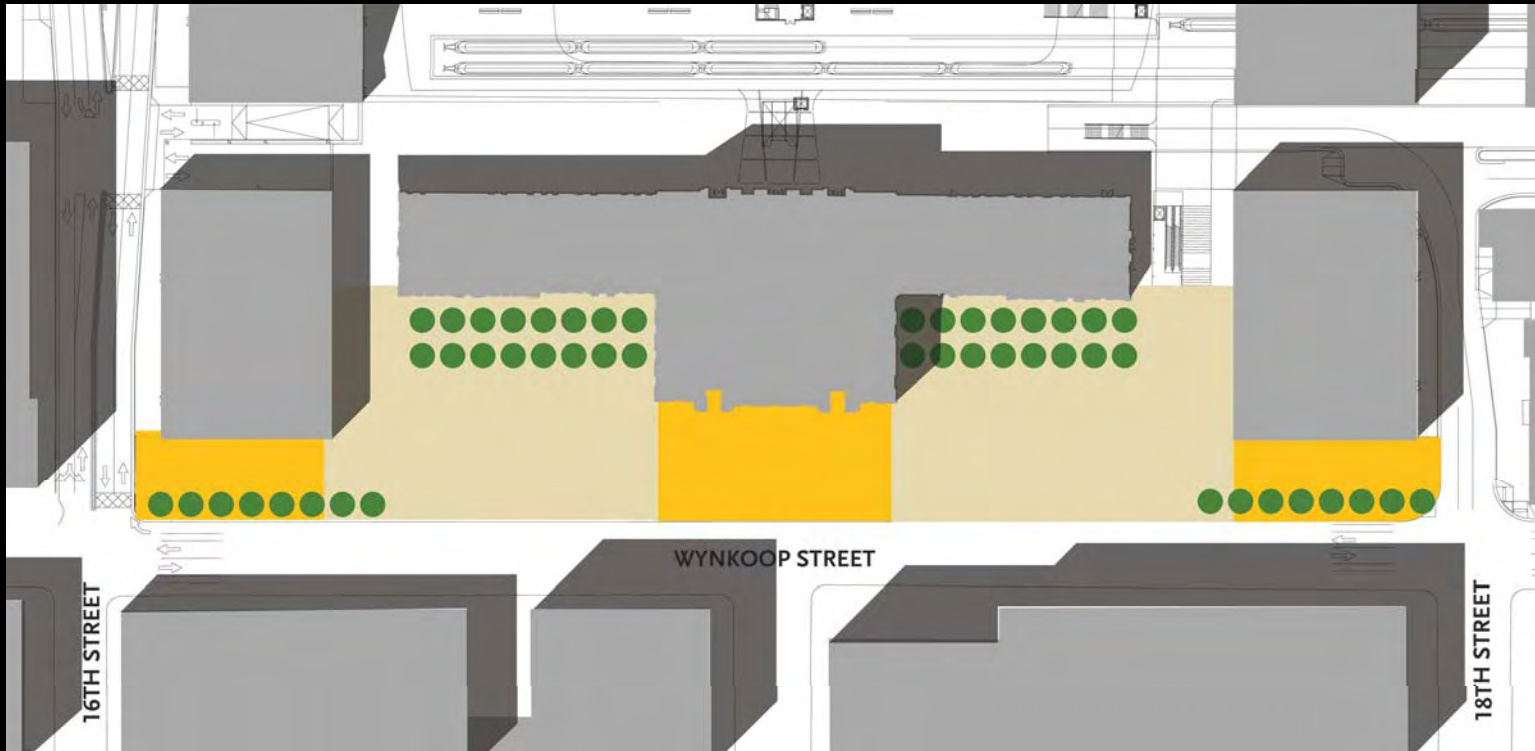
- Shadow Study = Equinox at 12 pm
- Zones 1A, 1B, 1C, 1D
- 2.3 Acres

- ▶ PARKING ENTRANCE
- ▶ BUILDING ENTRANCE
- ▶ SERVICE ACCESS



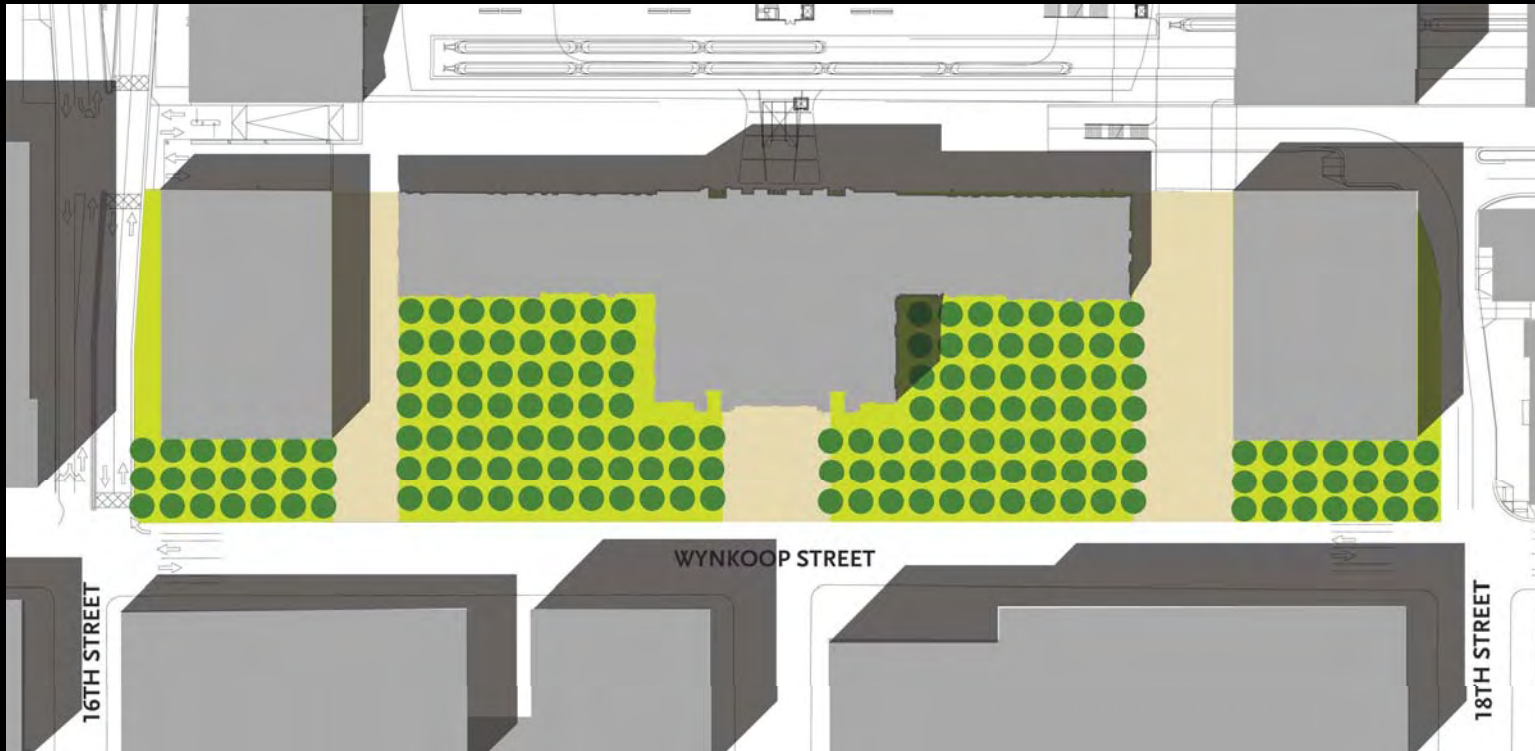
UNION STATION

- View corridor from 16th Street Mall / Shuttle

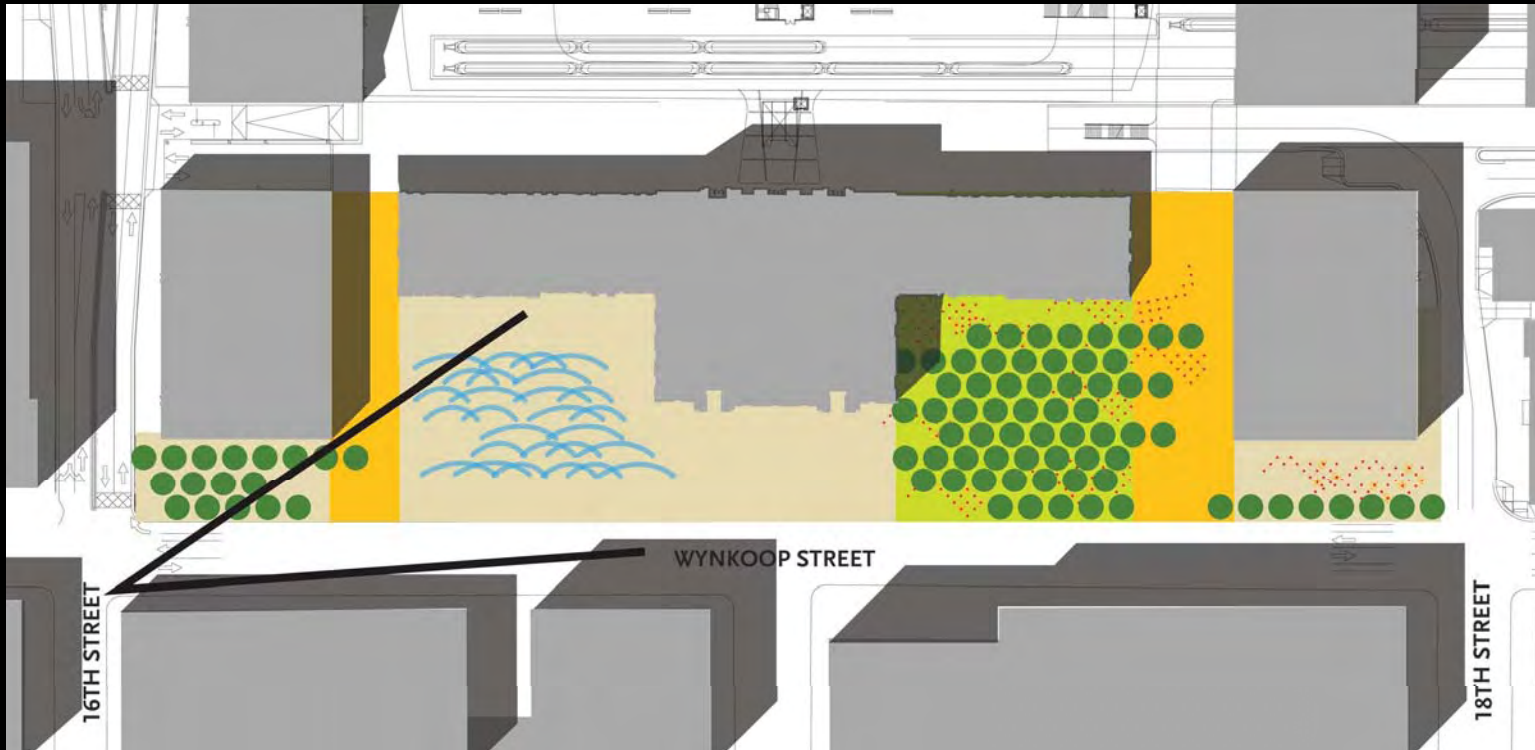


TYPICAL

- Symmetrical
- Historic

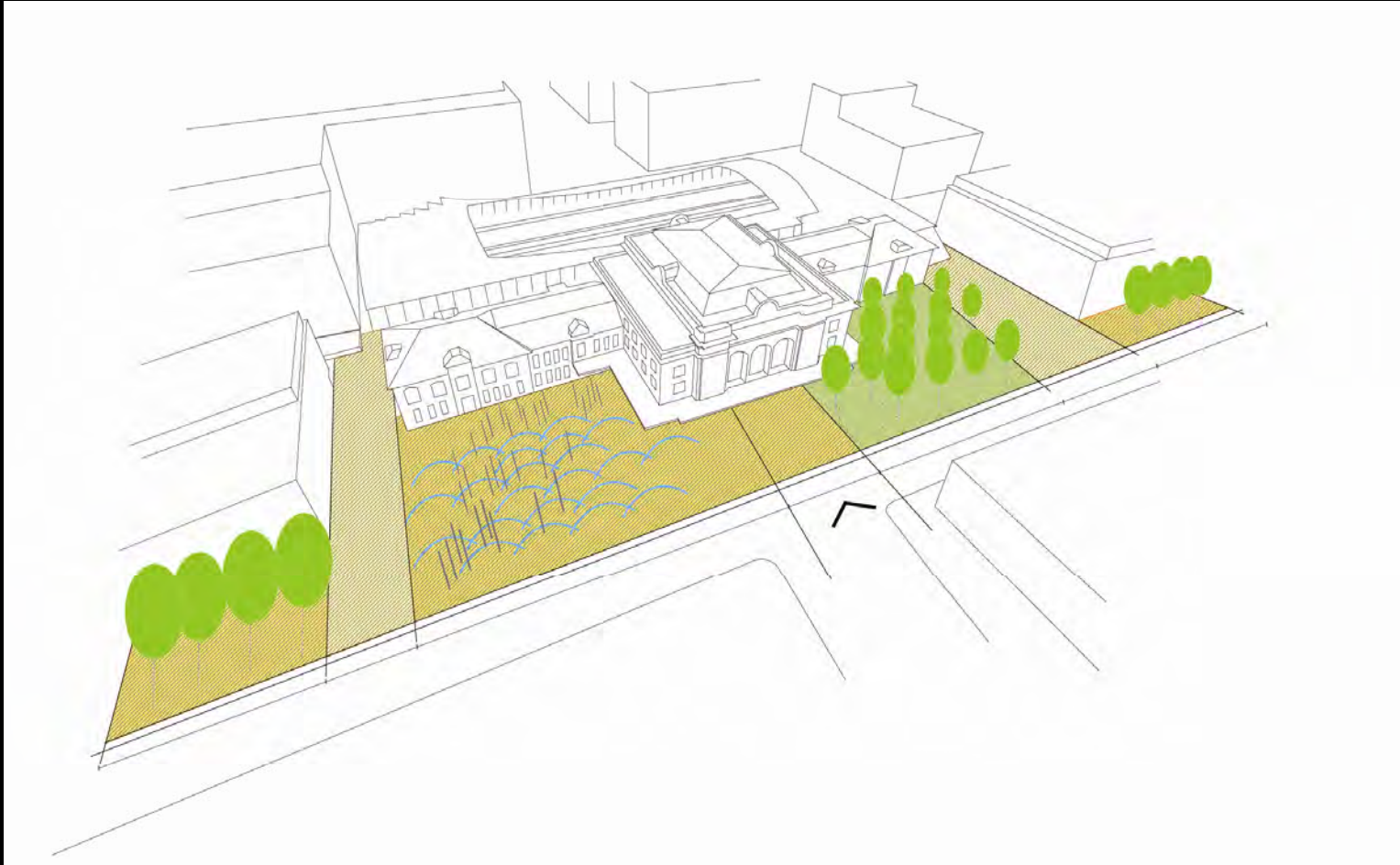


ALTERNATE – max green



PROPOSED – HYBRID/ASYMMETRICAL

- Addresses asymmetry of the site
- Expresses east-west movement
- Variety of spaces and uses
- Flexible spaces

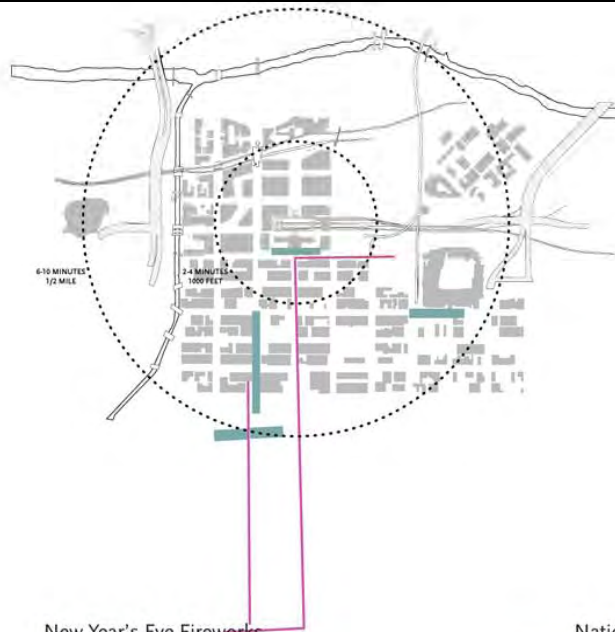


PROPOSED – HYBRID/ASYMMETRICAL

- Addresses asymmetry of the site
- Expresses east-west movement
- Variety of spaces and uses
- Flexible spaces

PROPOSED PRECEDENTS



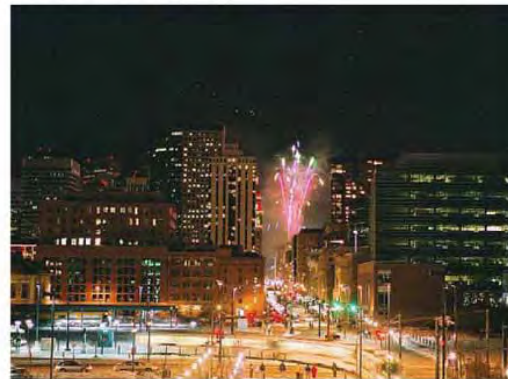


EVENTS:
 Christ Kindl Market
 9News Parade of Lights
 Tuba Christmas
 New Year's Eve Fireworks
 National Western Stock Show Parade

9News Parade of Lights



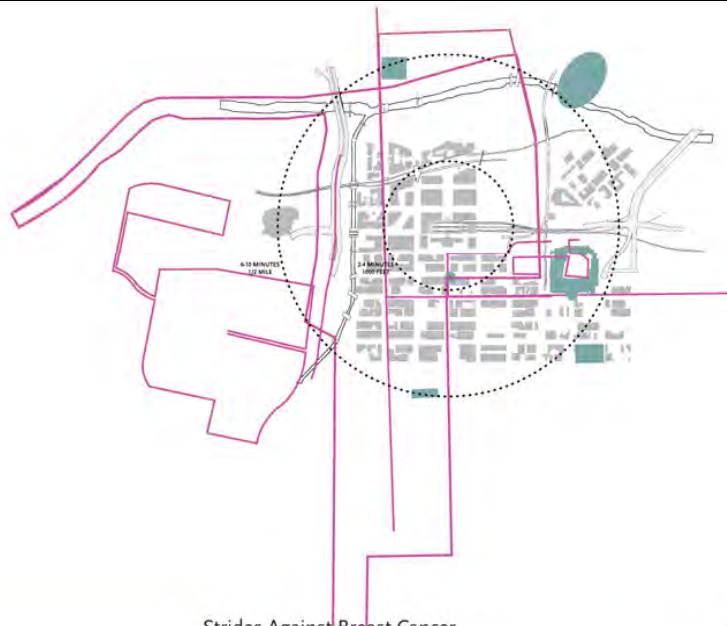
New Year's Eve Fireworks



National Western Stock Show Parade



WINTER PROGRAMMING



EVENTS:
 St. Patrick's Day Parade
 Runnin' of the Green Lucky 7k
 Colorado Rockies Opening Day
 Ballpark Market
 Go Metro State 5k
 Arthritis Walk
 Strides Against Breast Cancer
 Stop the Violence
 Rockies Home Run 5k
 Learning Source Spelling Bee

St. Patrick's Day Parade



Strides Against Breast Cancer



Green Lucky 7k

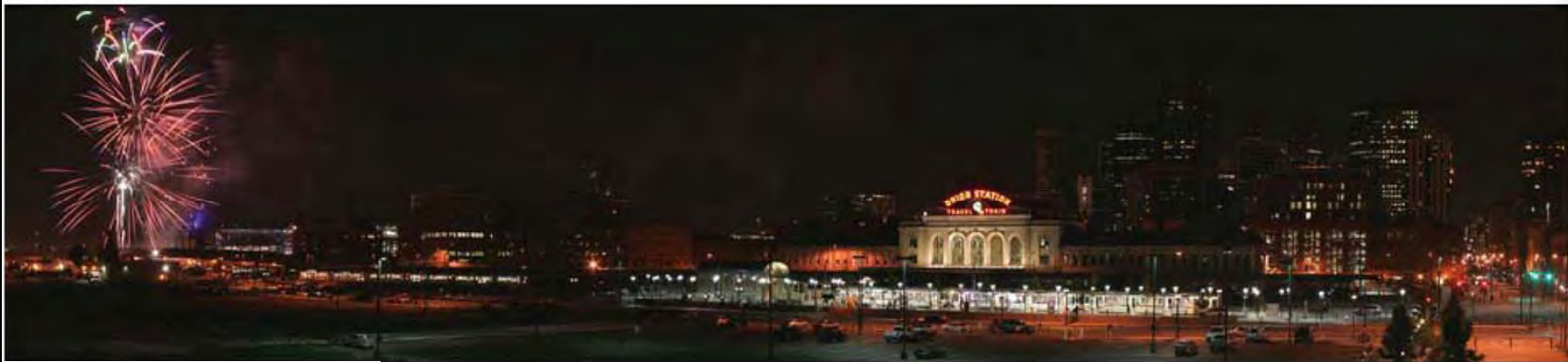


SPRING PROGRAMMING

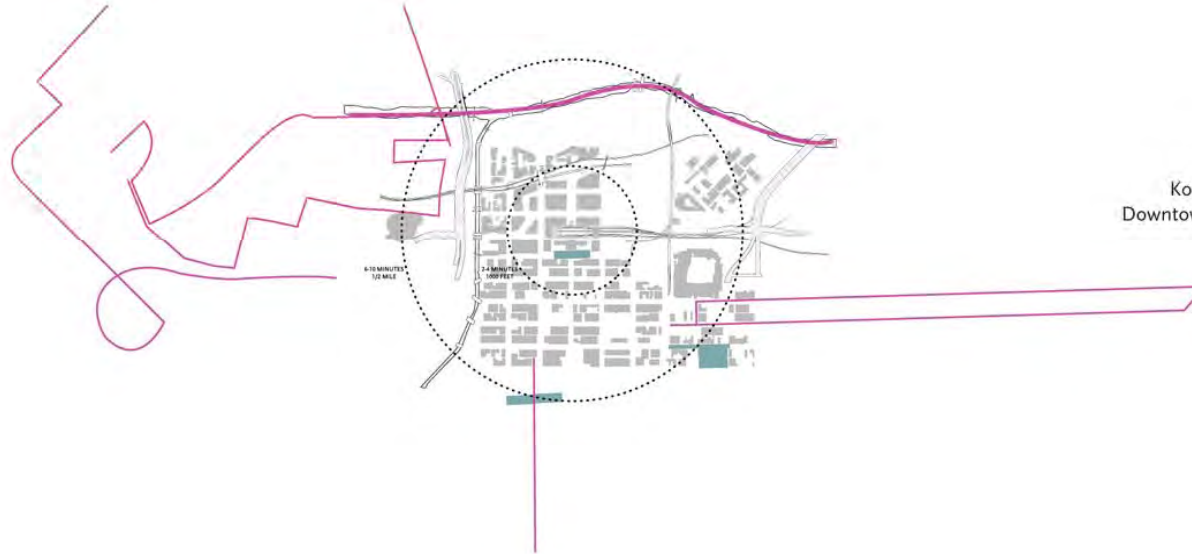


EVENTS:
 La Piazza Dell'Arte
 Puerto Rico Festival
 Rocky Mountain Half-Marathon & 8k Race
 Movies in the Park
 Skyline Park Summer Concerts
 Cherry Blossom Festival
 Confluence Concerts
 July 4th Fireworks
 Ballpark Market
 River Flicks
 Fit to Fight 5k (IAFC)

July 4th Fireworks



SUMMER PROGRAMMING



EVENTS:
 Ballpark Market
 Racquetball Exhibition
 Oktoberfest
 South Platte Riversweep
 Oktoberfest 5k and 10k Run
 Fans on the Field
 Komen Denver Race for the Cure
 Downtown Denver Grand Illumination

South Platte Riversweep



Oktoberfest at Larimer Square



Downtown Denver Grand Illumination



FALL PROGRAMMING



PROGRAM OPTIONS:
 Semi-Permanent Fairs & Festivals
 Farmers Markets
 Flea Markets
 Food Festivals
 Art & Craft Fairs

COUNTS:
 68 Pedestrian Service Tents

DIMENSIONS:
 10' X 10' Tents

REQUIREMENTS:
 Electric
 Water

MEDIUM FARMERS' MARKETS / FESTIVAL



PROGRAM OPTIONS:

Farmers Markets
Flea Markets
Food Festivals
Art & Craft Fairs

COUNTS:

176 Vehicle Service Tents
75 Pedestrian Service Access Tents

DIMENSIONS:

10' X 10' Tents

REQUIREMENTS:

Electric
Water
Street Closure

REFERENCES:

TASTE OF COLORADO

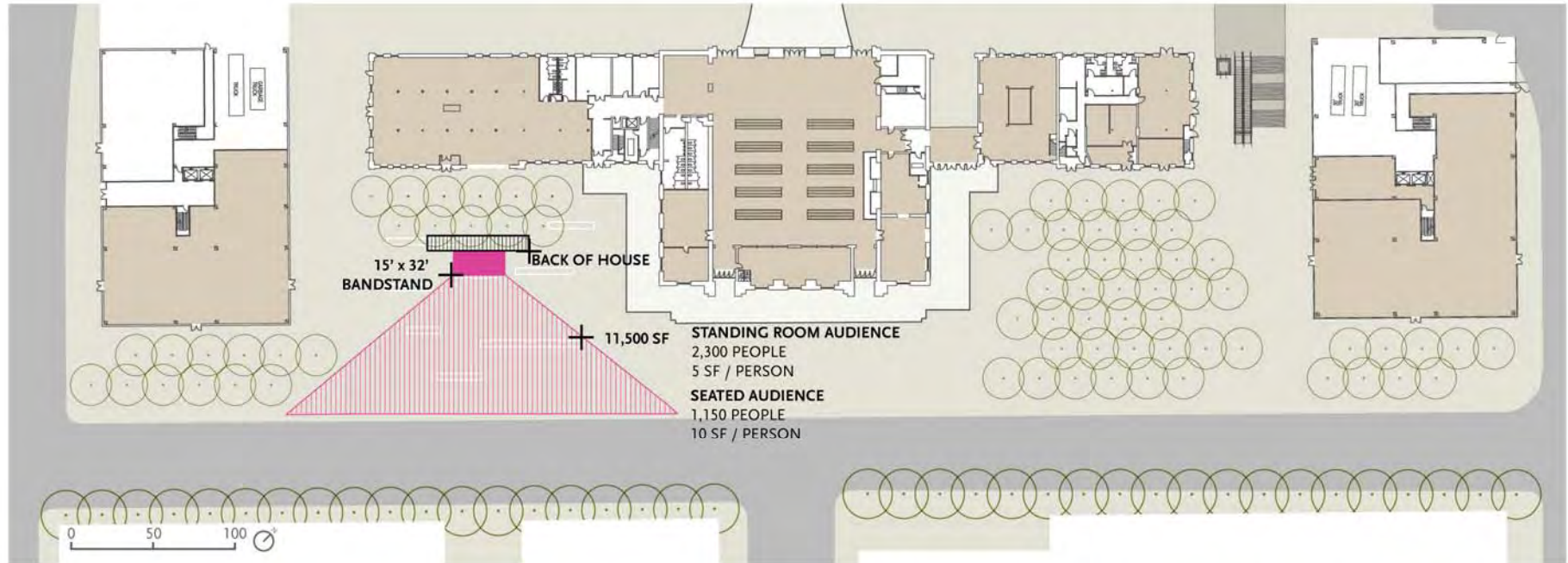
3 Days
50+ Food Vendors
250 Arts Vendors
500,000 Attendance
6 Performance Stages

CHERRY CREEK ARTS FESTIVAL

3 Days
230+ Arts Vendors
350,000 Attendance
5 Stages

LARGE MARKET / FESTIVAL

HARGREAVES



PROGRAM OPTIONS:
 Small Music Performances
 Dance
 Poetry / Literature Readings
 Speeches
 Puppet Shows
 Small Theater

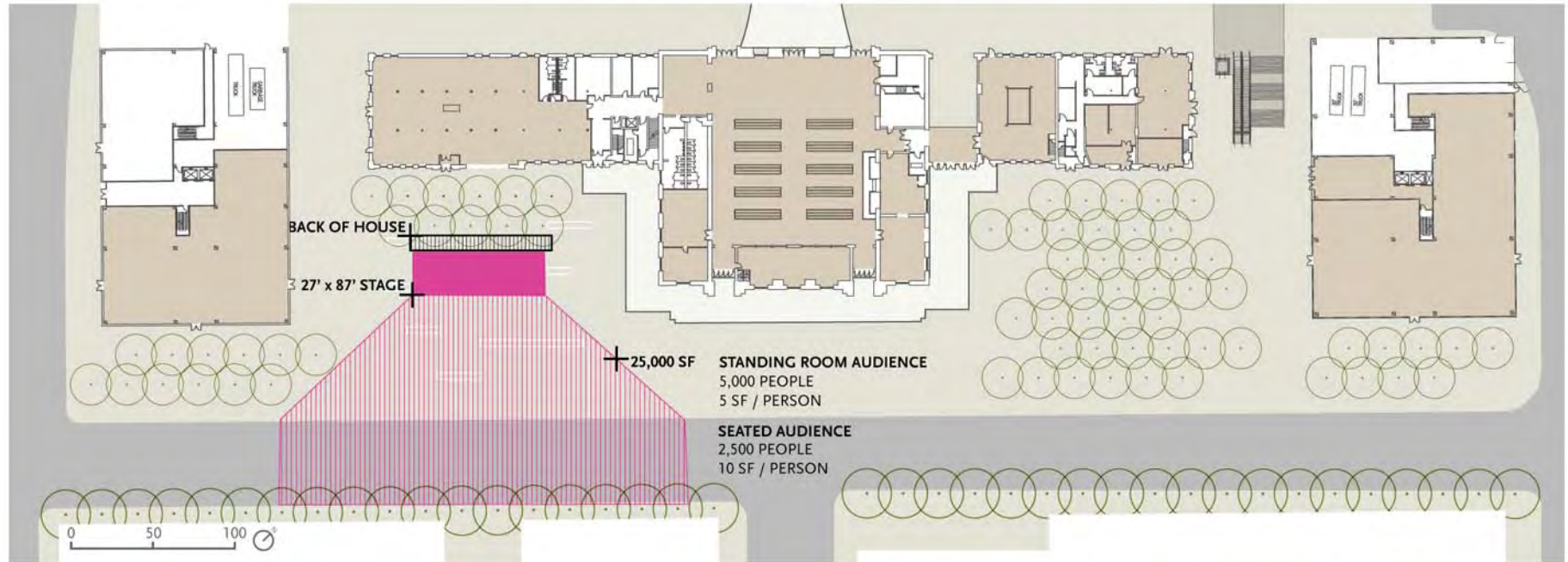
COUNTS:
 1 Small Bandstand

DIMENSIONS:
 15' x 32' Bandstand

REQUIREMENTS:
 Electric
 Water

MEDIUM PERFORMANCE

HARCO



PROGRAM OPTIONS:

Concerts
Dance Recitals
Rallies
Outdoor Film

COUNTS:

1 Large Stage

DIMENSIONS:

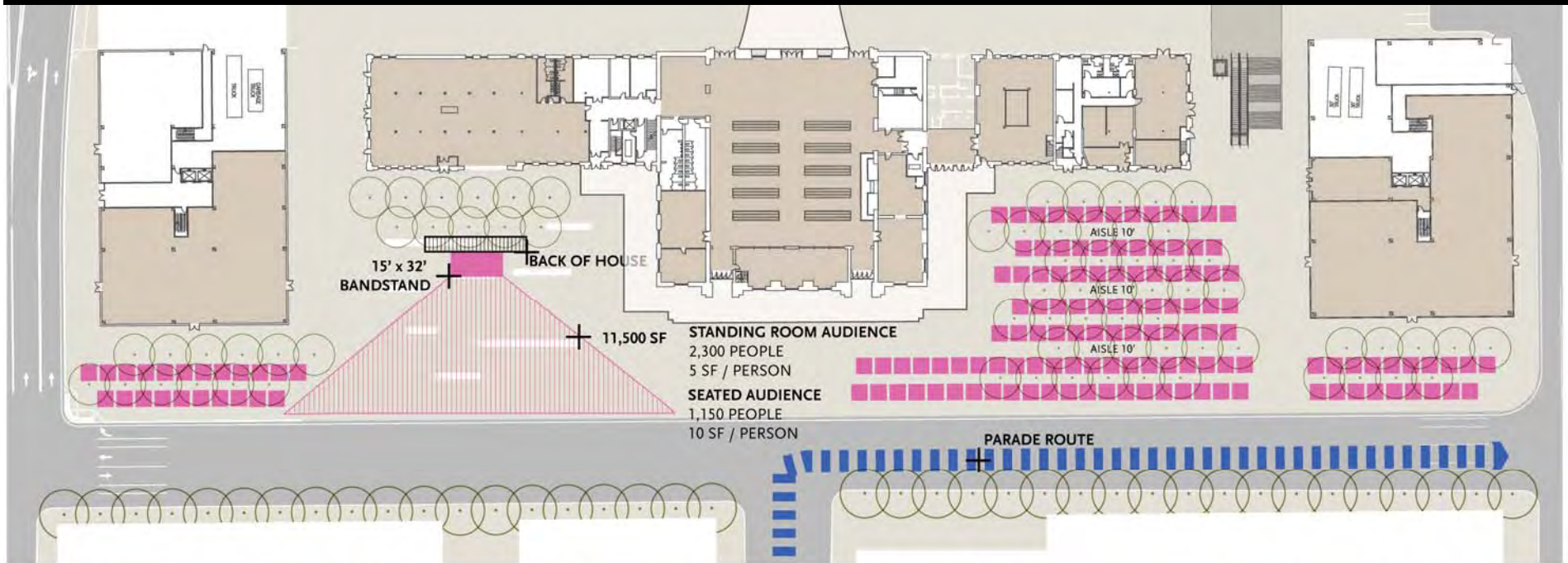
27' x 87' Stage

REQUIREMENTS:

Electric
Water
Street Closure

LARGE PERFORMANCE

HARCO



MULTI-PROGRAMMED FESTIVALS



PROGRAM OPTIONS:

Fairs & Festivals
Small Markets
Bandstand Performances
Parade Route

COUNTS:

145 Pedestrian Service Tents
1 Small Bandstand

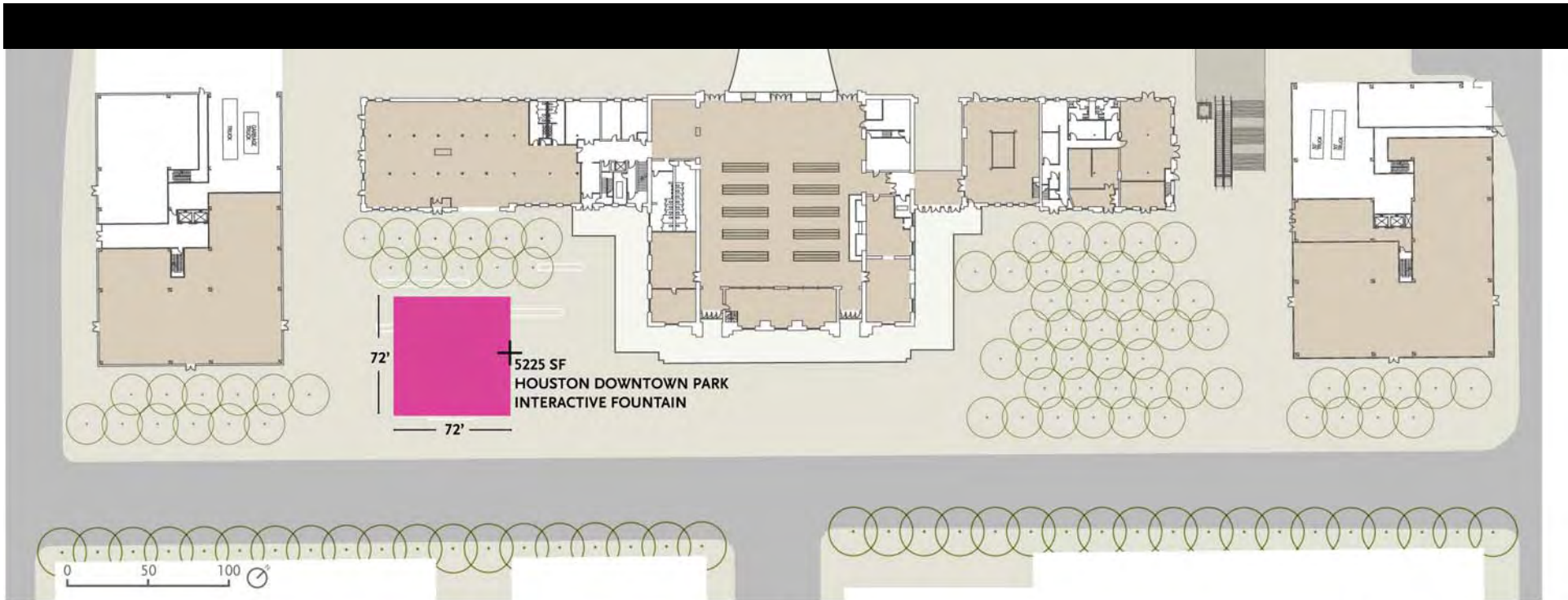
DIMENSIONS:

10' X 10' Tents
15' x 32' Bandstand

REQUIREMENTS:

Electric
Water
Street Closure

MULTI-EVENT FESTIVAL



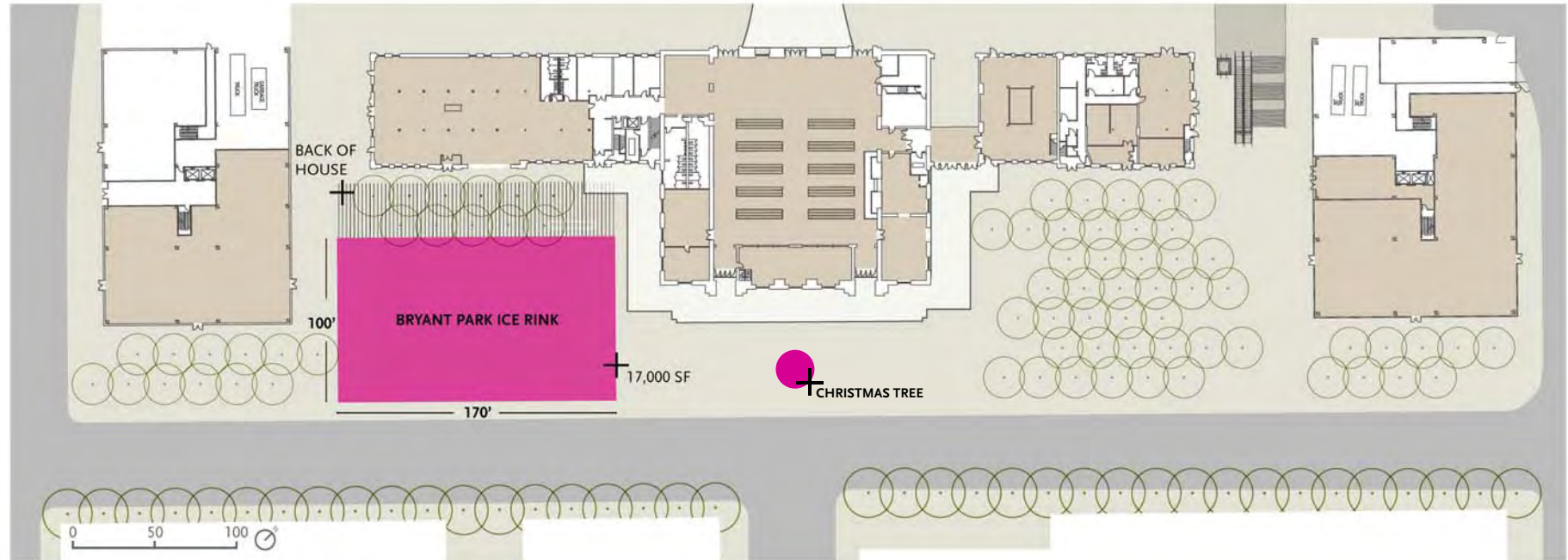
PROGRAM OPTIONS:
Interactive Fountain
On / Off Feature

DIMENSIONS:
5225 SF
72' X 72'

REQUIREMENTS:
Electric
Water
Below Grade Reservoir
Pump Room

INTERACTIVE FOUNTAIN

HARGRE



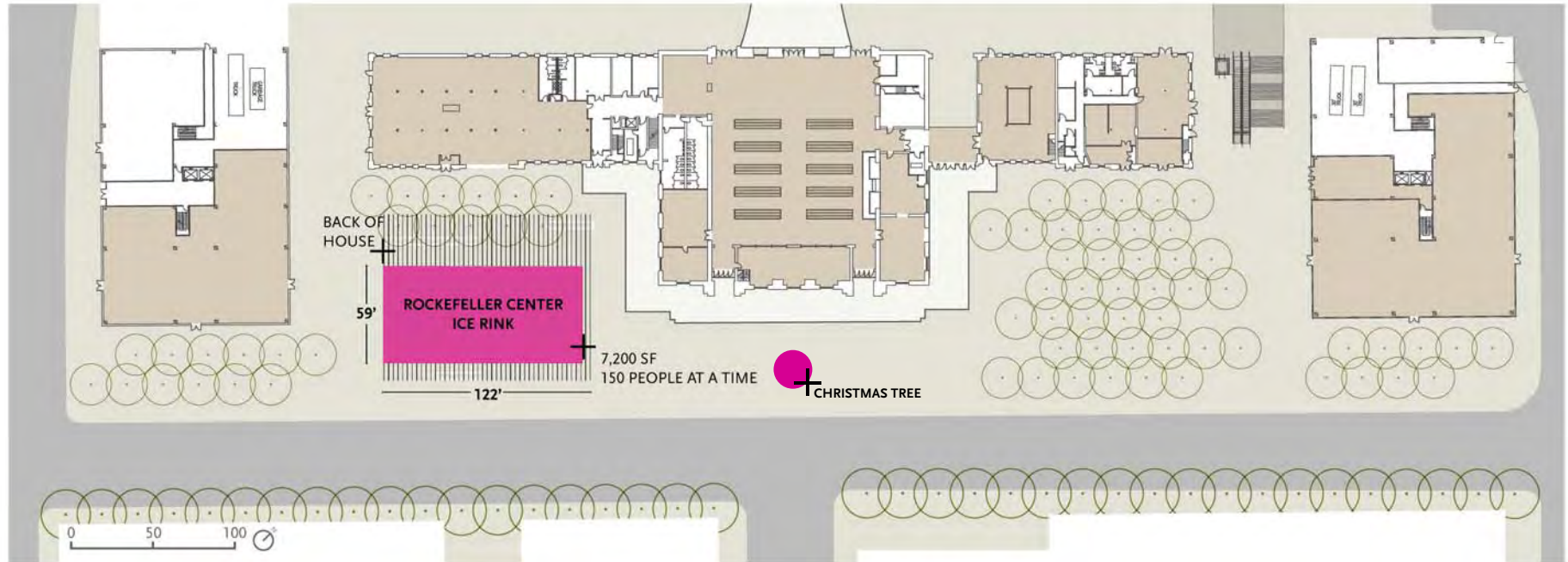
PROGRAM OPTIONS:
 Open Skate
 Small Hockey Games
 Figure Skating

COUNTS:
 1 Medium Ice Rink

DIMENSIONS:
 17,000 SF Rink / 170' x 100'
 + Support Space

REQUIREMENTS:
 Electric
 Water
 Zamboni
 Skate Rental
 Storage

ICE SKATING – BRYANT PARK



PROGRAM OPTIONS:

Open Skate
Small Hockey Games
Figure Skating

COUNTS:

1 Medium Ice Rink

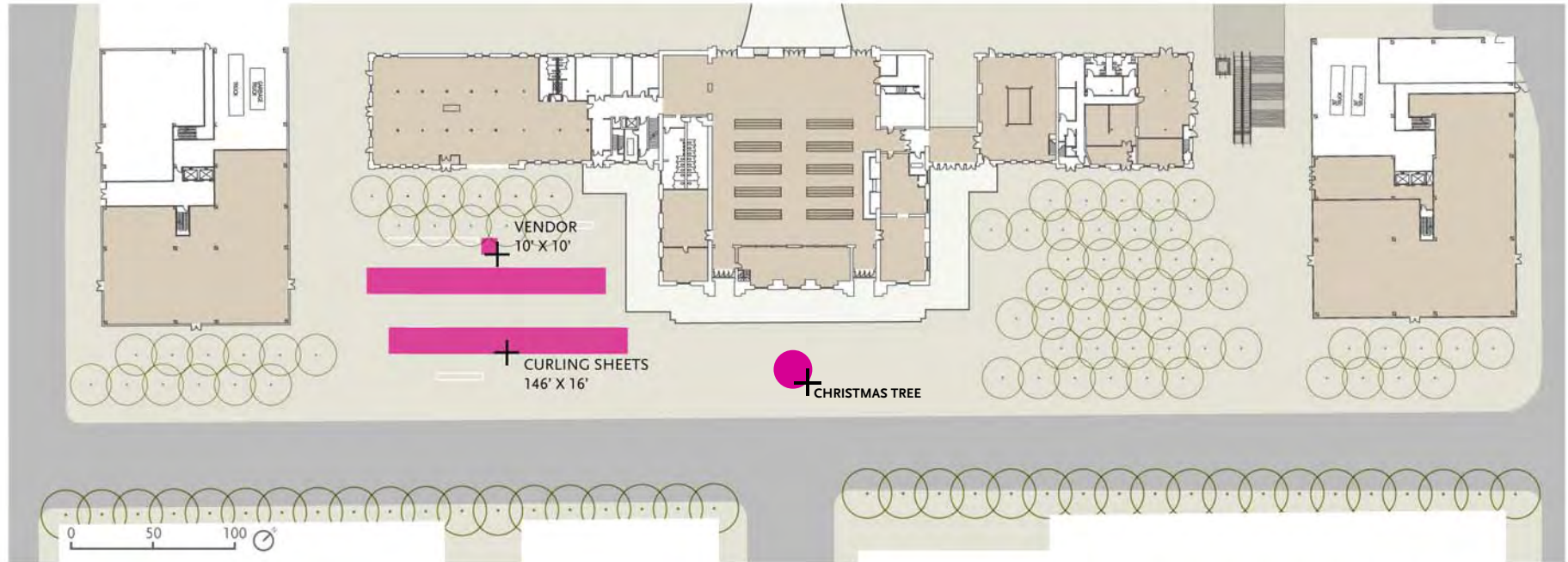
DIMENSIONS:

7,200 SF Rink + Support Space

REQUIREMENTS:

Electric
Water
Zamboni
Skate Rental
Storage

ICE SKATING – ROCKEFELLER CENTER



PROGRAM OPTIONS:

Curling
Ice Bowling

COUNTS:

2 Curling Sheets

DIMENSIONS:

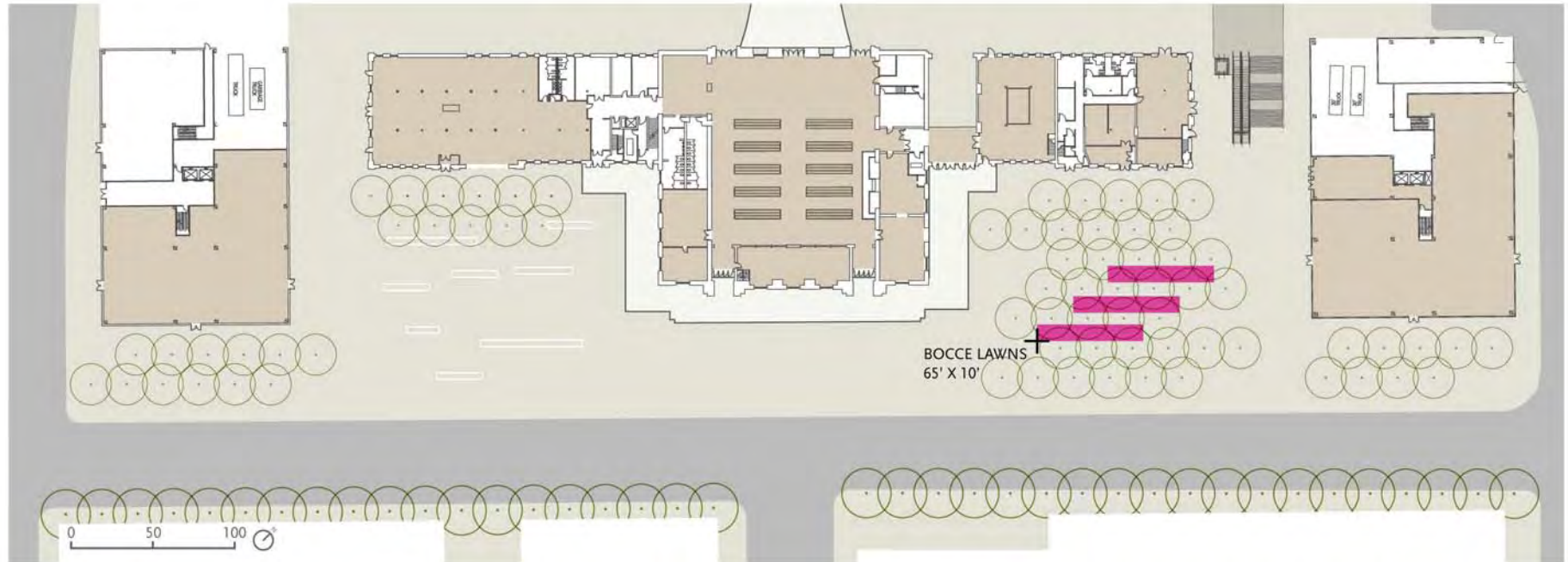
146' x 16' Sheets
10' x 10' Vendor

REQUIREMENTS:

Electric
Water
Equipment Vendor
Storage

CURLING

HARCO



PROGRAM OPTIONS:
Bocce / Lawn Bowling

COUNTS:
3 Bocce Courts or Lawns
Rental or Vendor

DIMENSIONS:
65' x 10' Bocce Lawns

REQUIREMENTS:
Lawn / Court Maintenance
Water
Rental
Storage

BOCCE

HARC



PROGRAM OPTIONS:
Petanque
Horseshoes

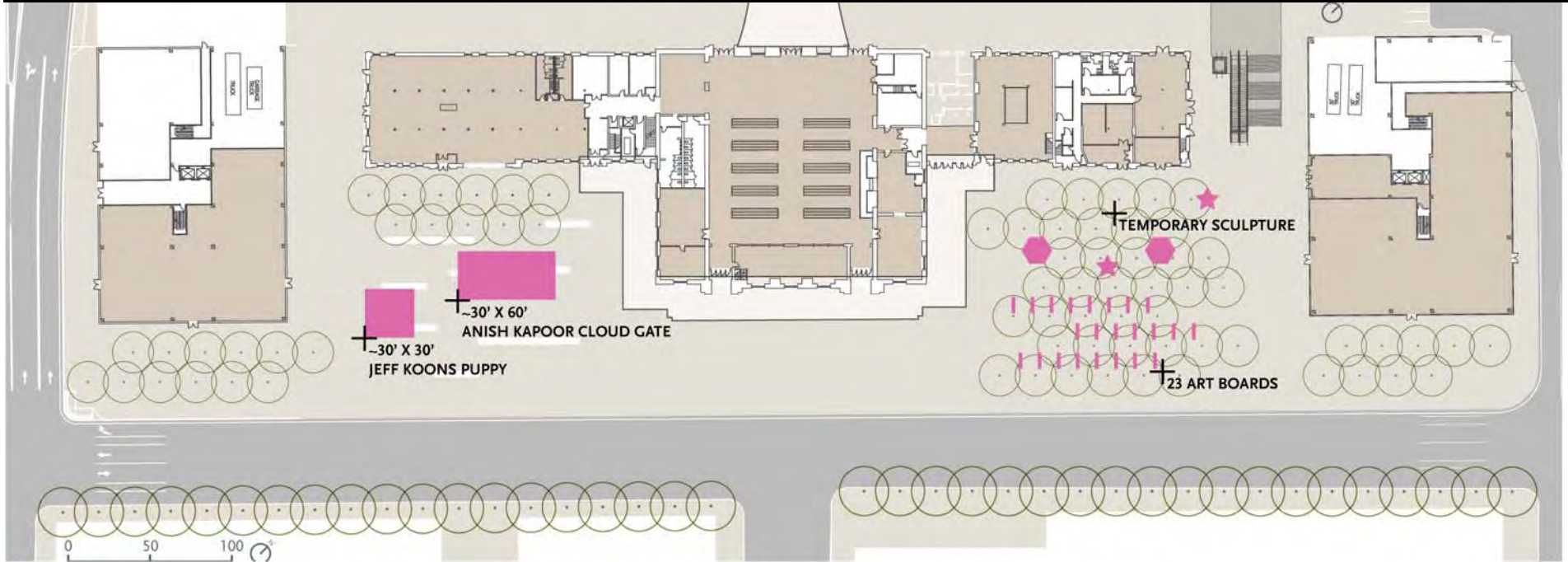
COUNTS:
3 Petanque Courts
*Petanque Street Fair

DIMENSIONS:
50' x 13' Courts

REQUIREMENTS:
Court Maintenance
Rental
Storage
*Street Closure

PETANQUE

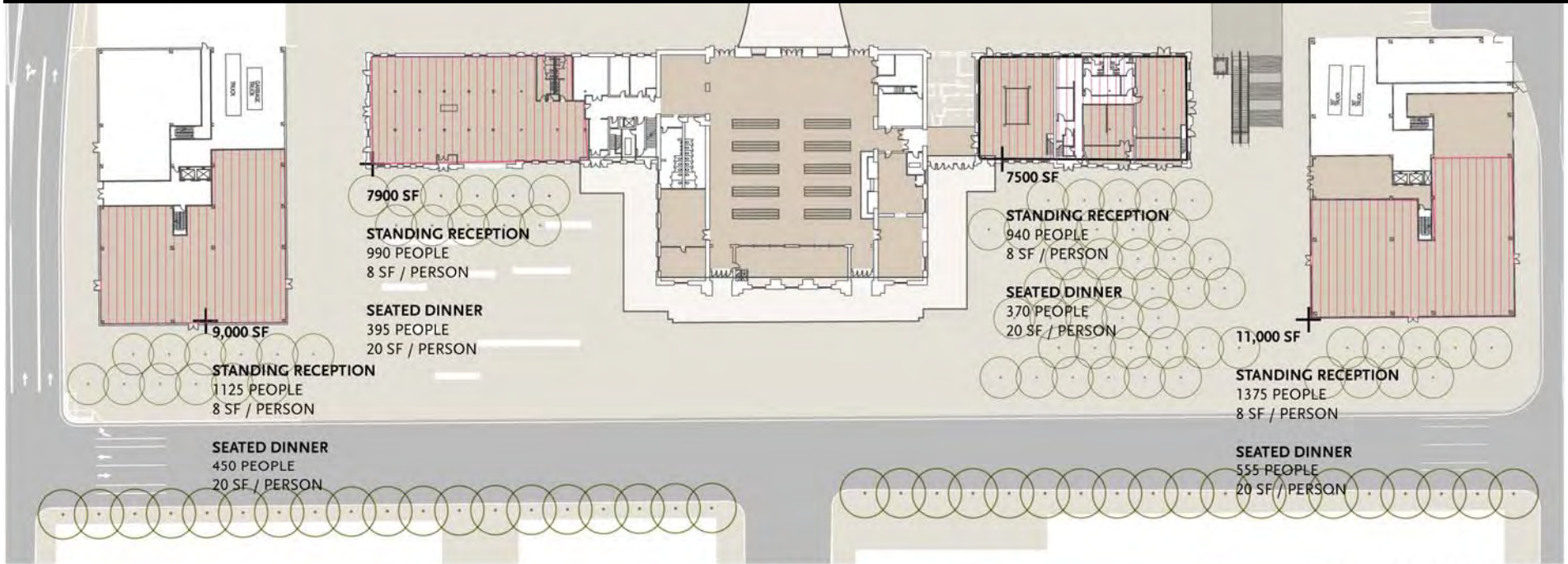
HARCO



PROGRAM OPTIONS:
 Rotating Exhibits
 Permanent Sculpture
 Temporary Sculpture

REQUIREMENTS:
 Lighting

ART: PERMANENT OR TEMPORARY



PROGRAM OPTIONS:

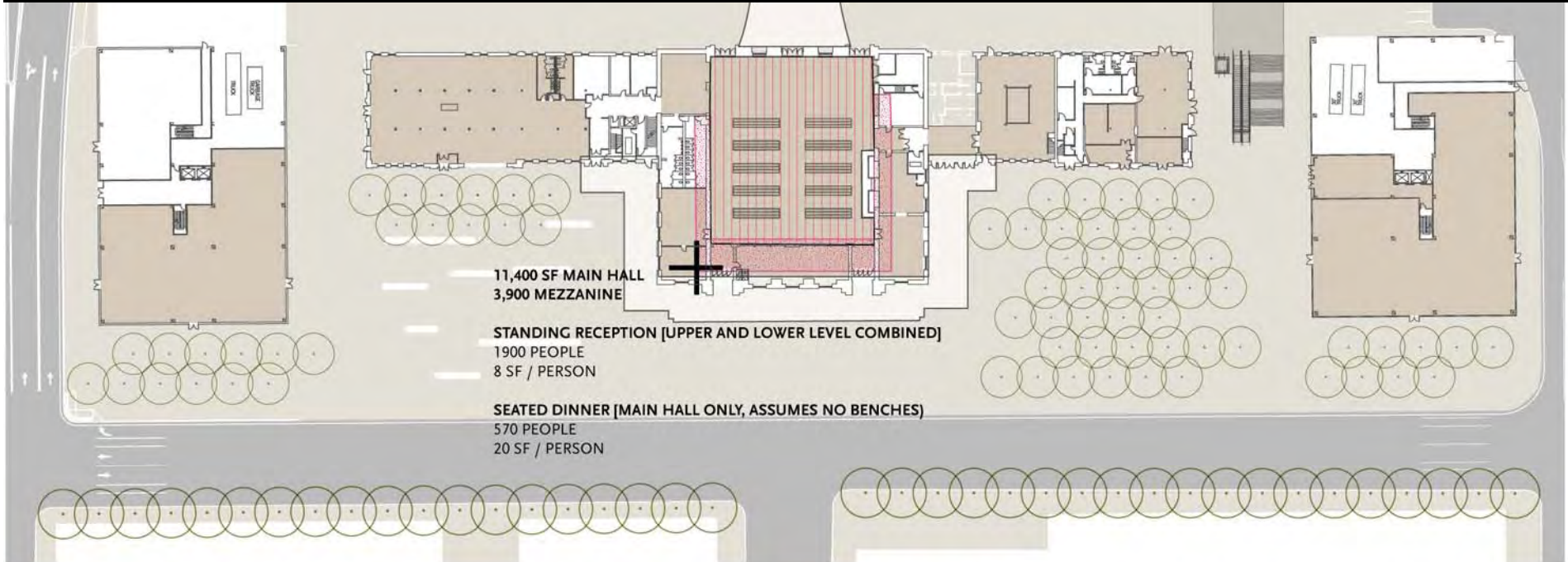
Cafe
Retail
Restaurant
Gallery

DIMENSIONS:

~35,400 SF

PERMANENT TENANTS

HARGREAVES



PROGRAM OPTIONS:
Reception
Seated Dining

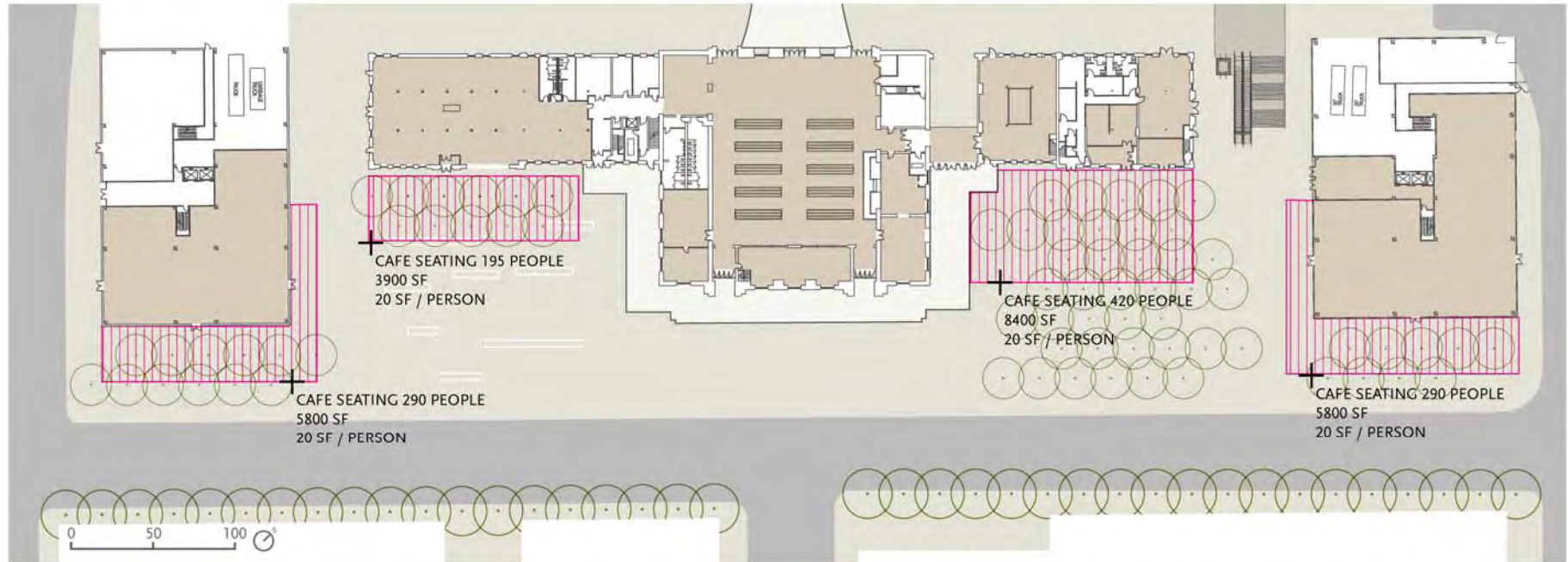
COUNTS:
Sit Down Dining for 570 People
1 Person / 20 SF

Reception Space for 1900 People
1 Person / 8 SF

DIMENSIONS:
~15,300 SF

REQUIREMENTS:
Building Utilities

TRAIN HALL RECEPTION / DINING



PROGRAM OPTIONS:

Cafe
Restaurant
Coffeeshop

COUNTS:

Sit Down Dining for 1,195 People
1 Person / 20 SF

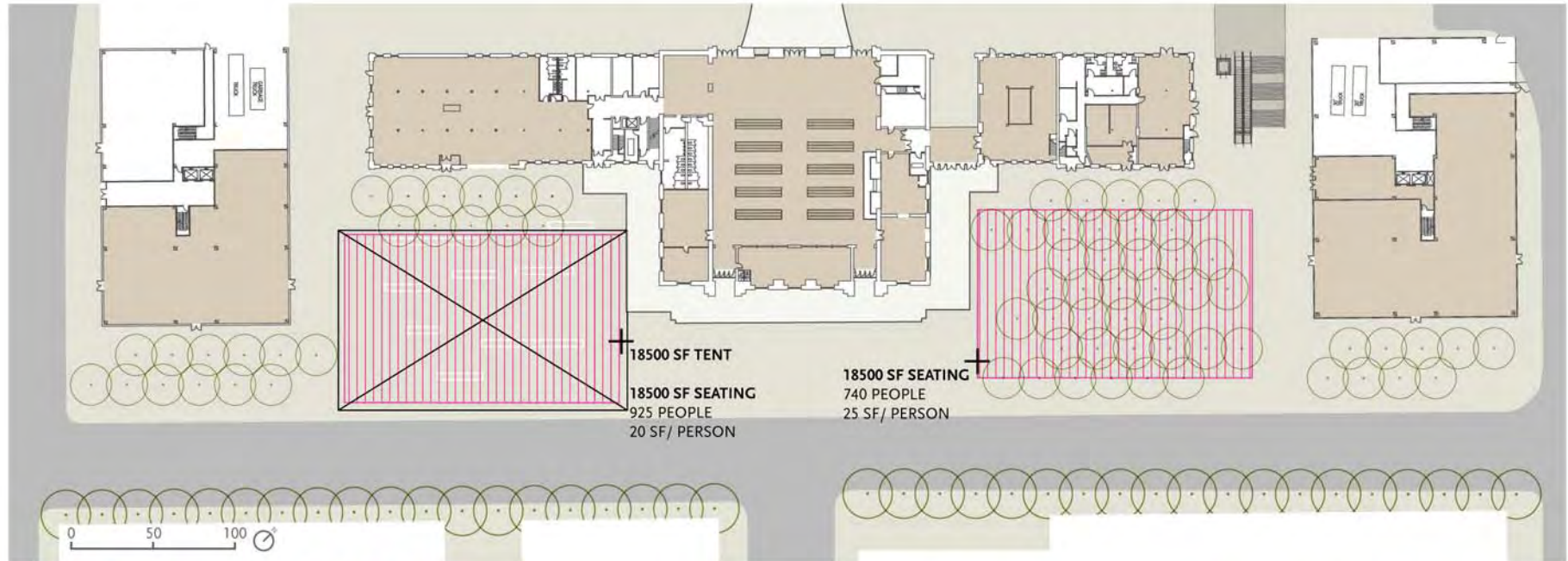
DIMENSIONS:

~24,000 SF

REQUIREMENTS:

Adjacent In-Building Restaurant or Cafe

PERMANENT OUTDOOR DINING



PROGRAM OPTIONS:

Beer Garden
Food Festival
Banquet

COUNTS:

1 Tent
Table Space for 1,665 People

DIMENSIONS:

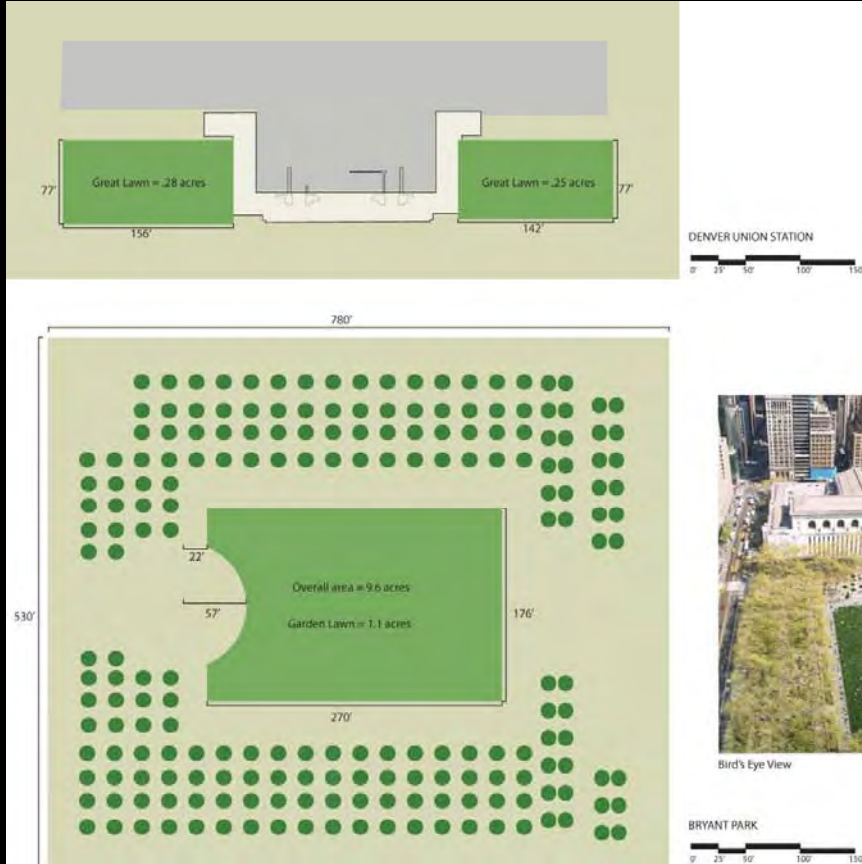
37,000 SF

REQUIREMENTS:

Water
Electric

FESTIVAL / BANQUET DINING

HARCO



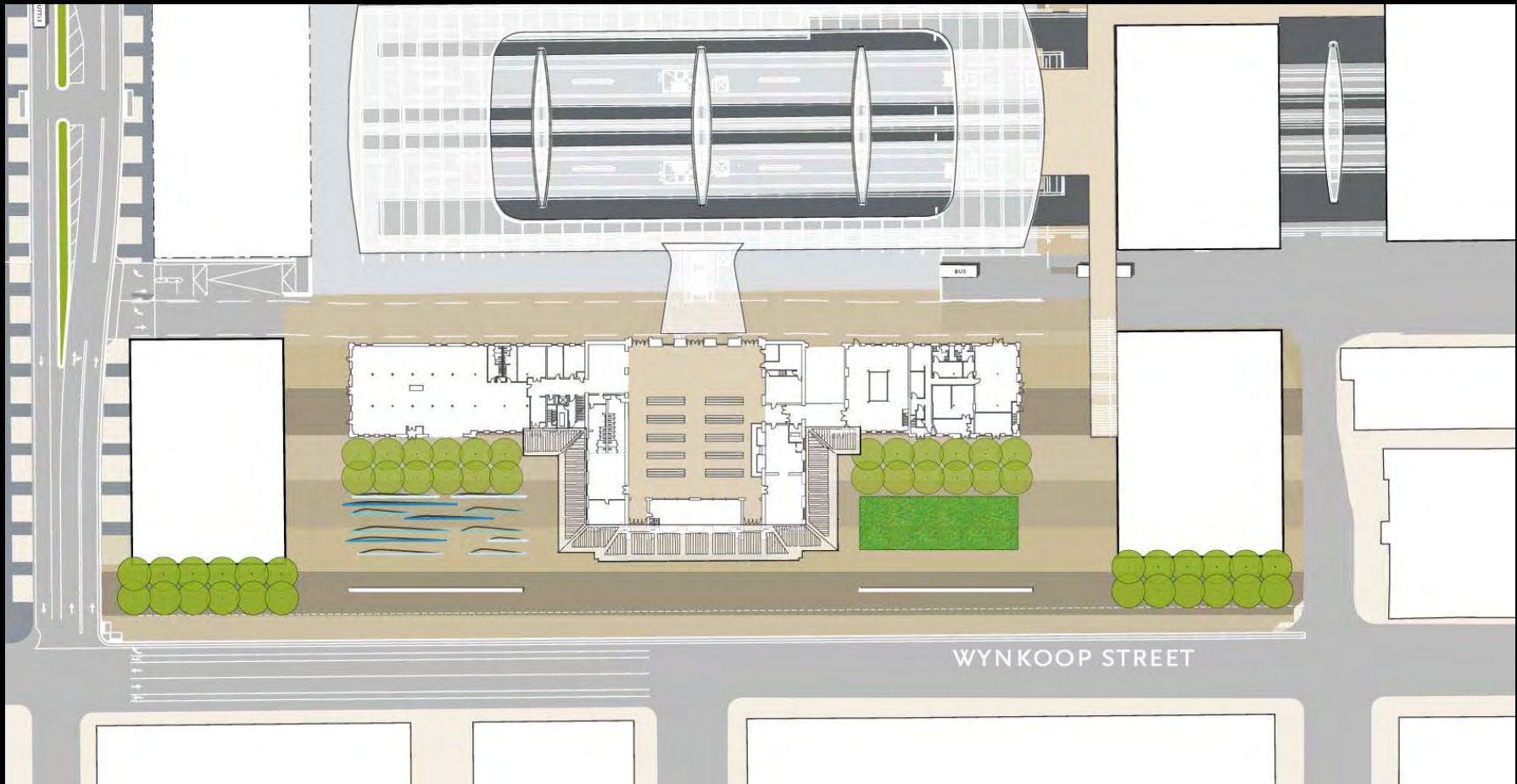
SCALE COMPARISON- WYNKOOP VS BRYANT PARK

BRYANT PARK - 9.6 ACRES OVERALL/1.1 ACRE LAWN

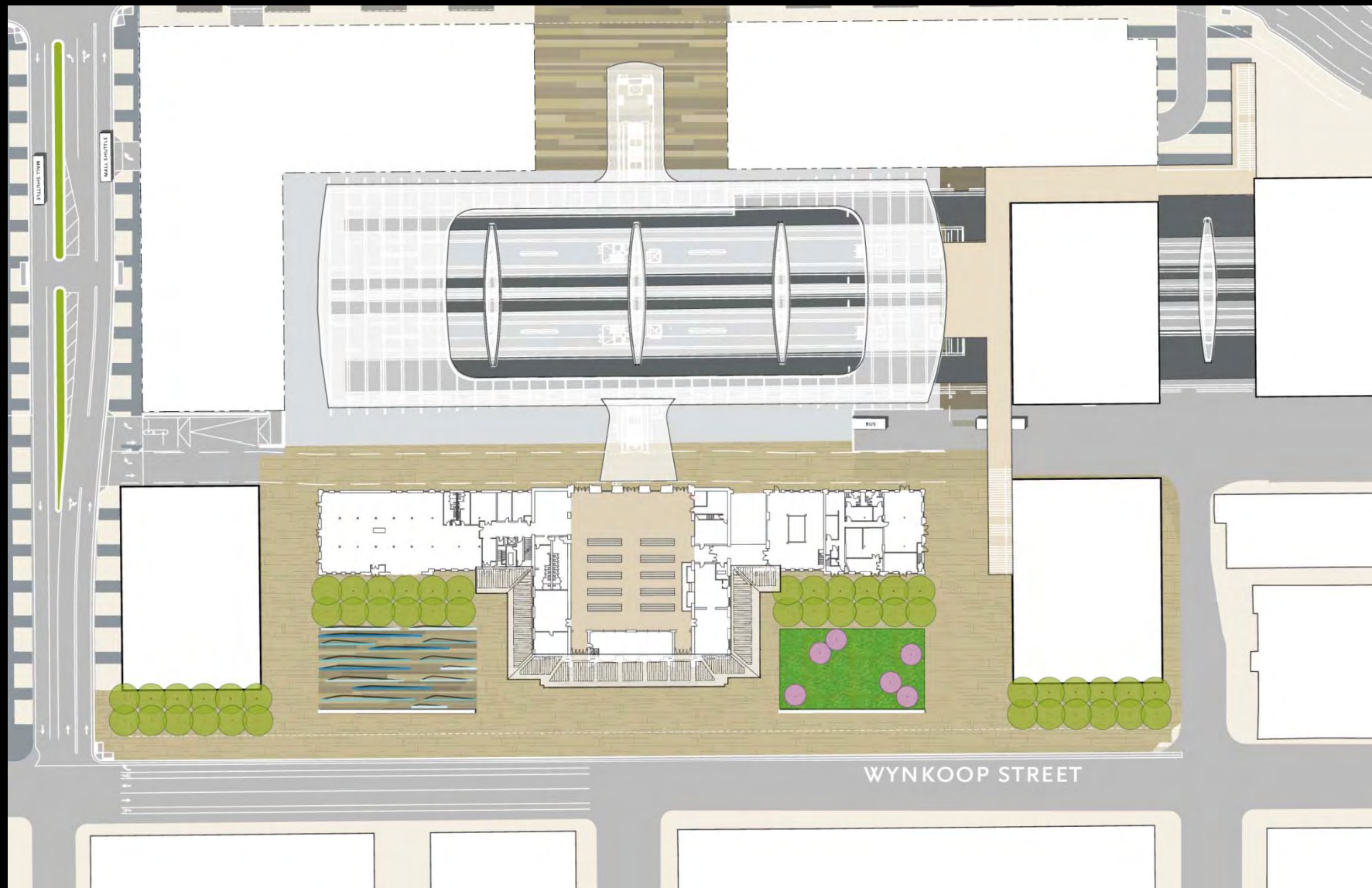
WYNKOOP PLAZA (IN FRONT OF STATION) – 1.92 ACRES OVERALL



Total Area 1.92a



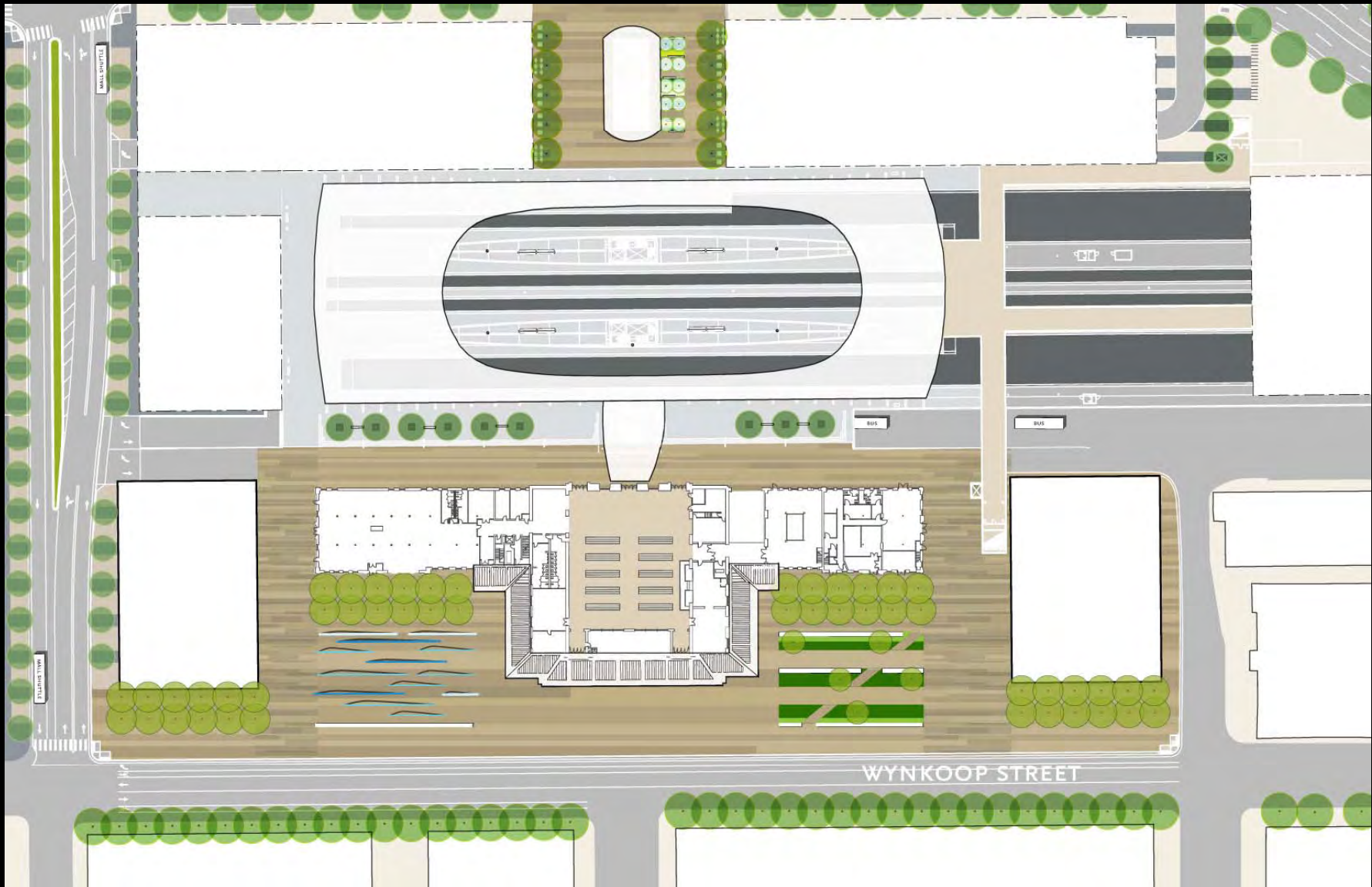
WYNKOOP DESIGN CONCEPT "A"



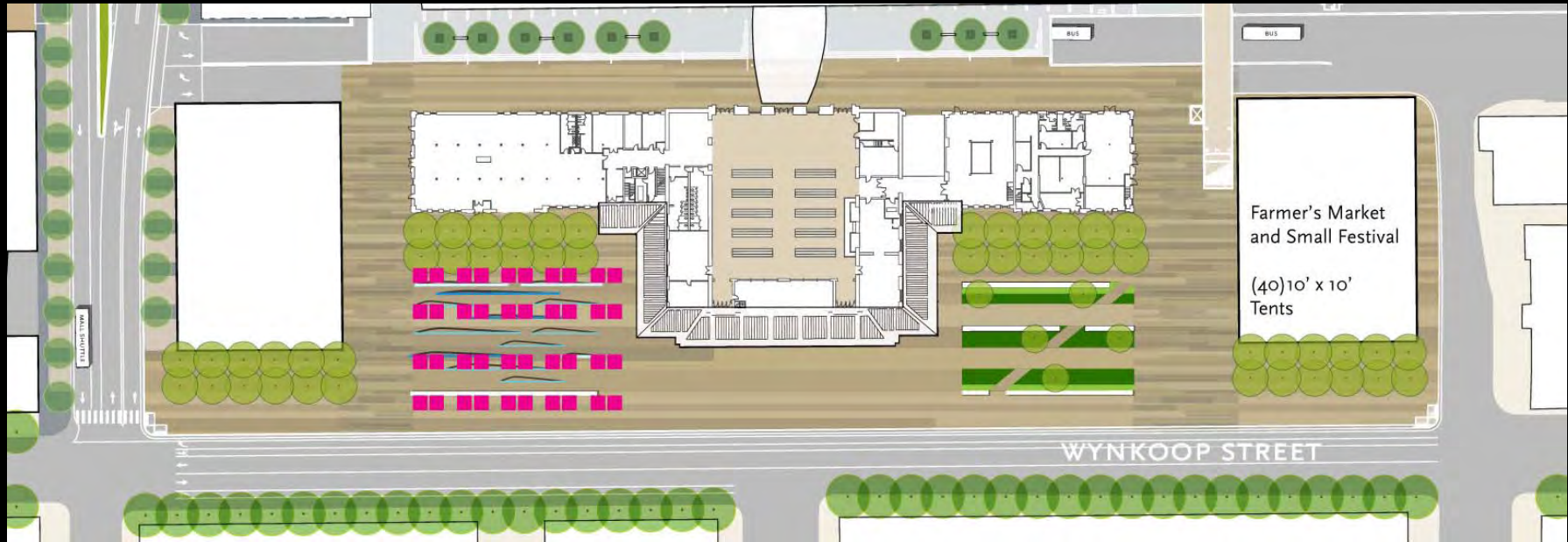
WYNKOOP DESIGN CONCEPT "B"



WYNKOOP DESIGN CONCEPT "C"



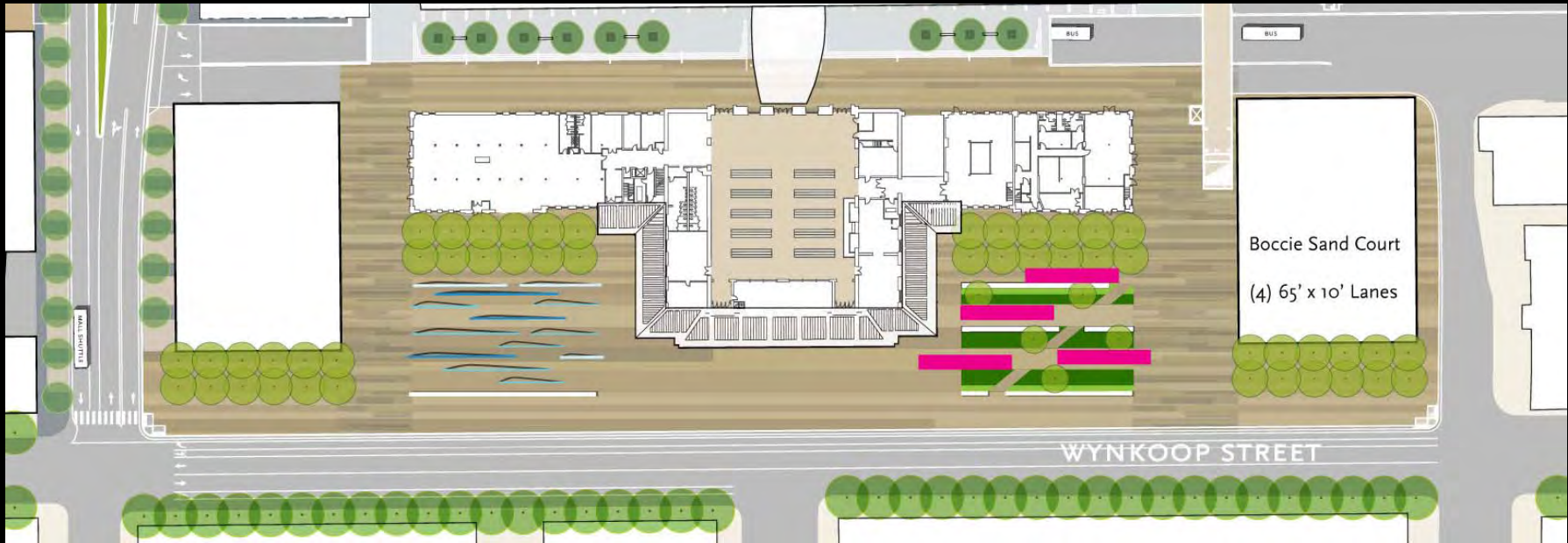
WYNKOOP DESIGN CONCEPT "D"



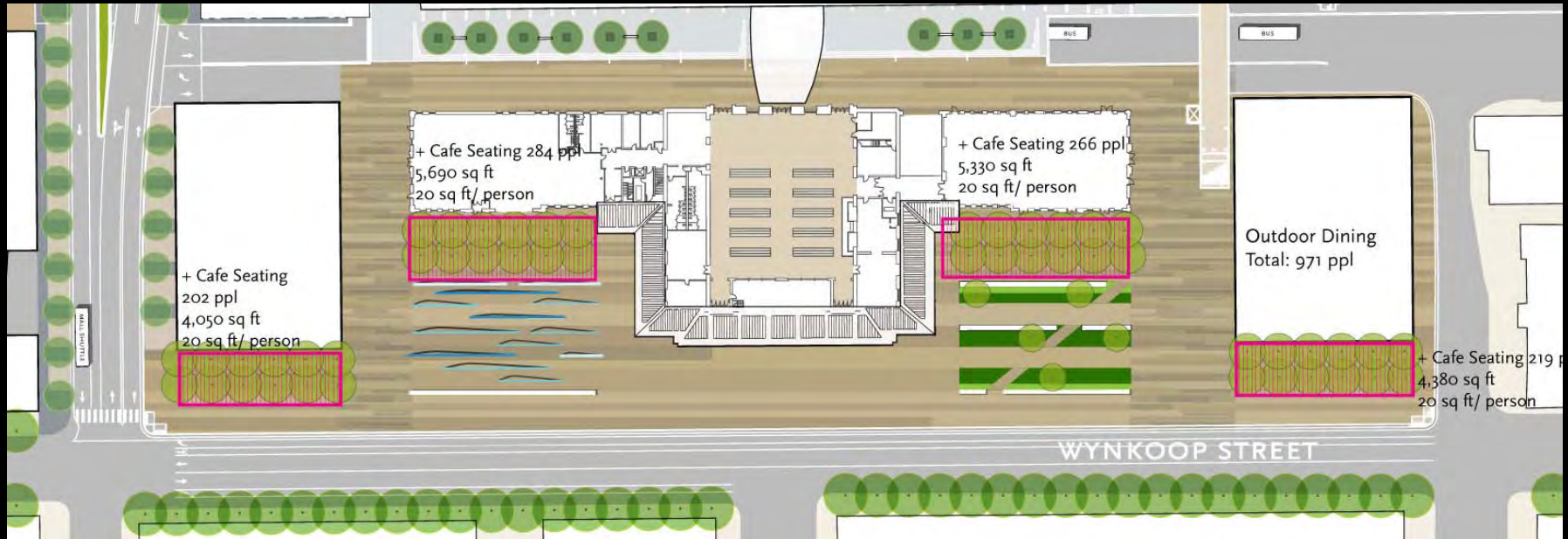
WYNKOOP FARMER'S MARKET AND SMALL FESTIVAL



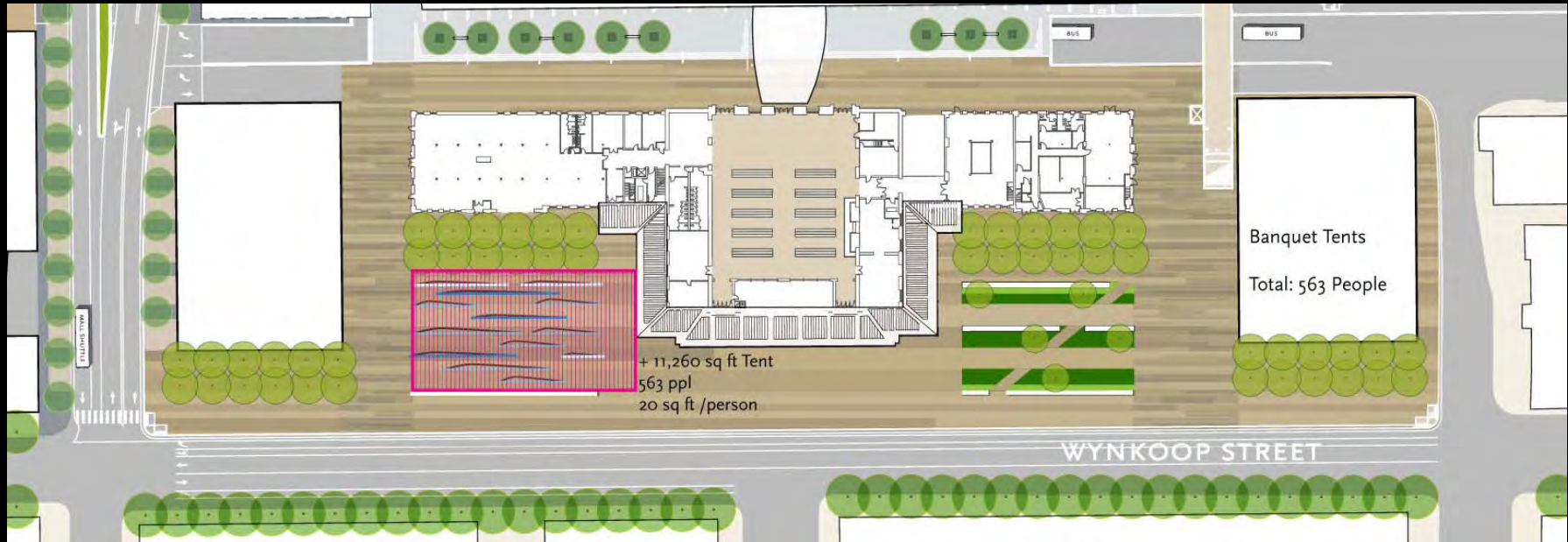
WYNKOOP LARGE FESTIVAL



WYNKOOP BOCCIE COURTS



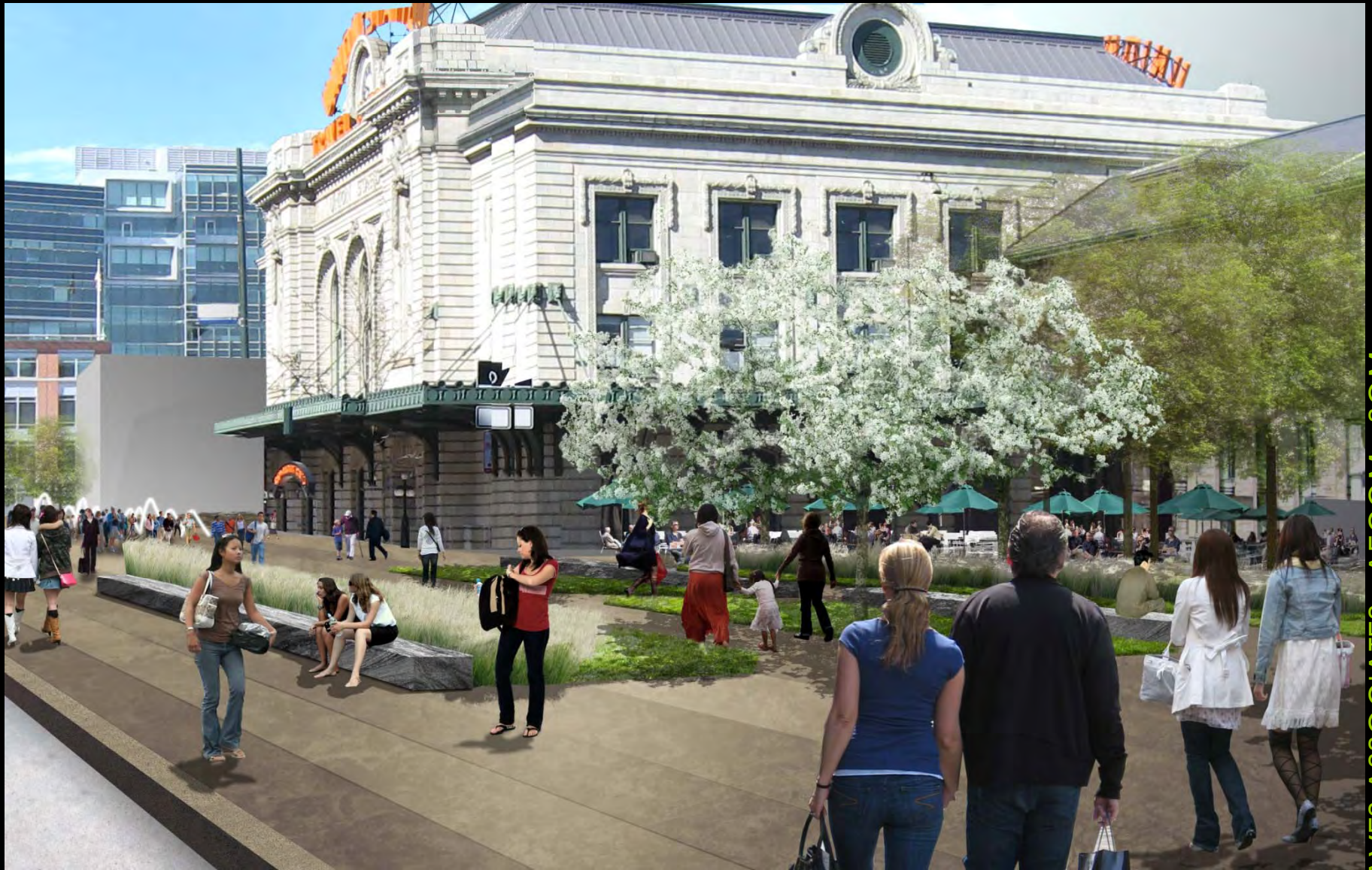
WYNKOOP OUTDOOR CAFES



WYNKOOP FESTIVAL / BANQUET DINING



VIEW FROM 16TH STREET



VIEW FROM 18TH STREET

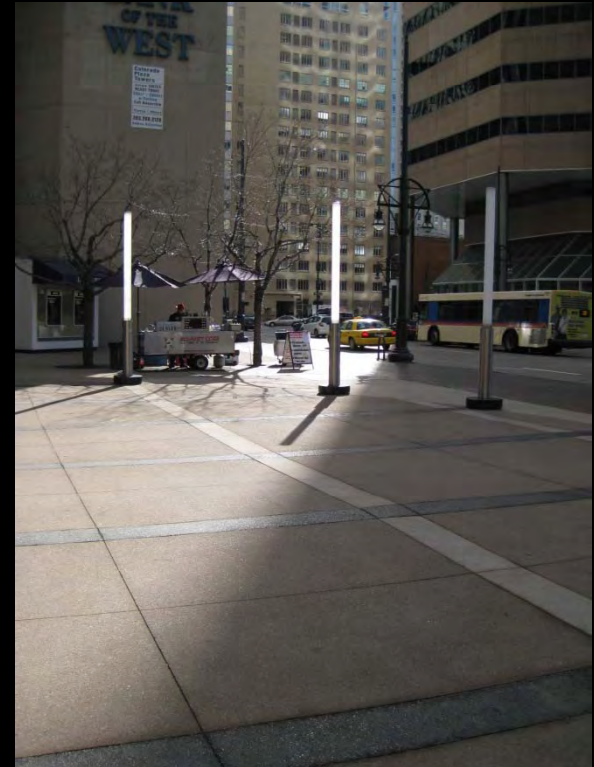
PAVING/MATERIAL SURVEY



Concrete unit pavers



Brick



Concrete unit pavers

17TH STREET AND CALIFORNIA



19TH STREET AND STOUT - FEDERAL BUREAU OF INVESTIGATION



18TH STREET AND CHAMPA -
DENVER PLACE



Concrete unit pavers



17TH AND CHAMPA –
US BANK HOME MORTGAGES



Granite



17TH AND LAWRENCE-
MOLSON COORS



Granite



16TH STREET MALL



Granite and Brick

HISTORIC LODO





Brick

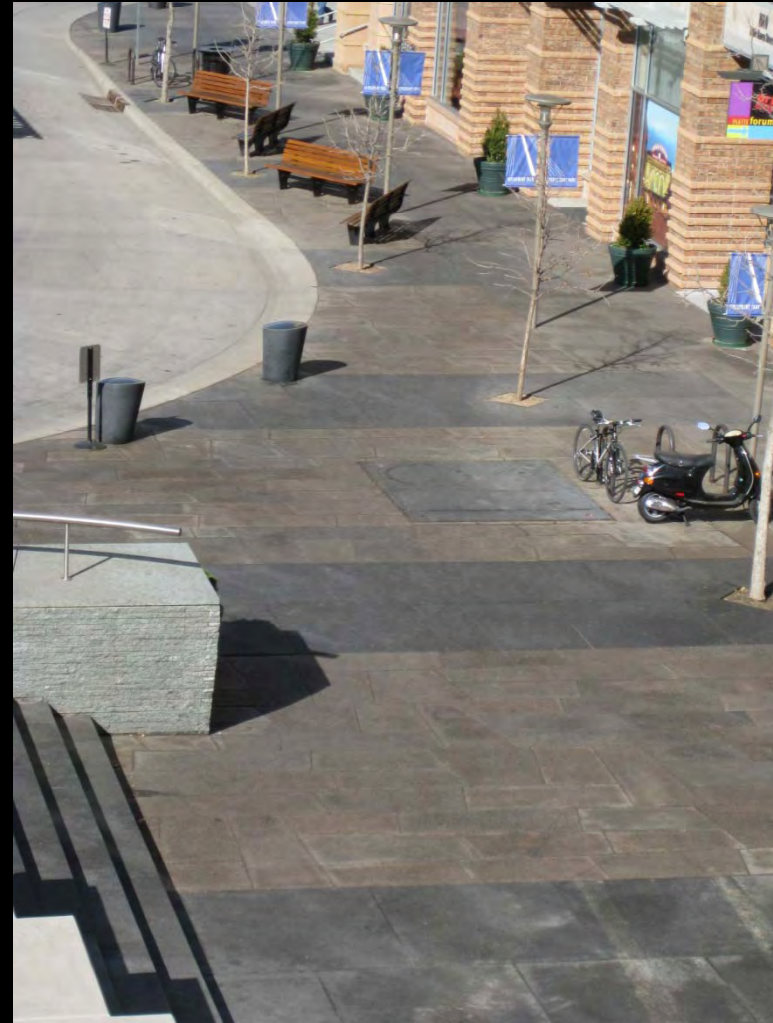


Concrete unit pavers

HISTORIC LODO



granite



MILLENNIUM BRIDGE



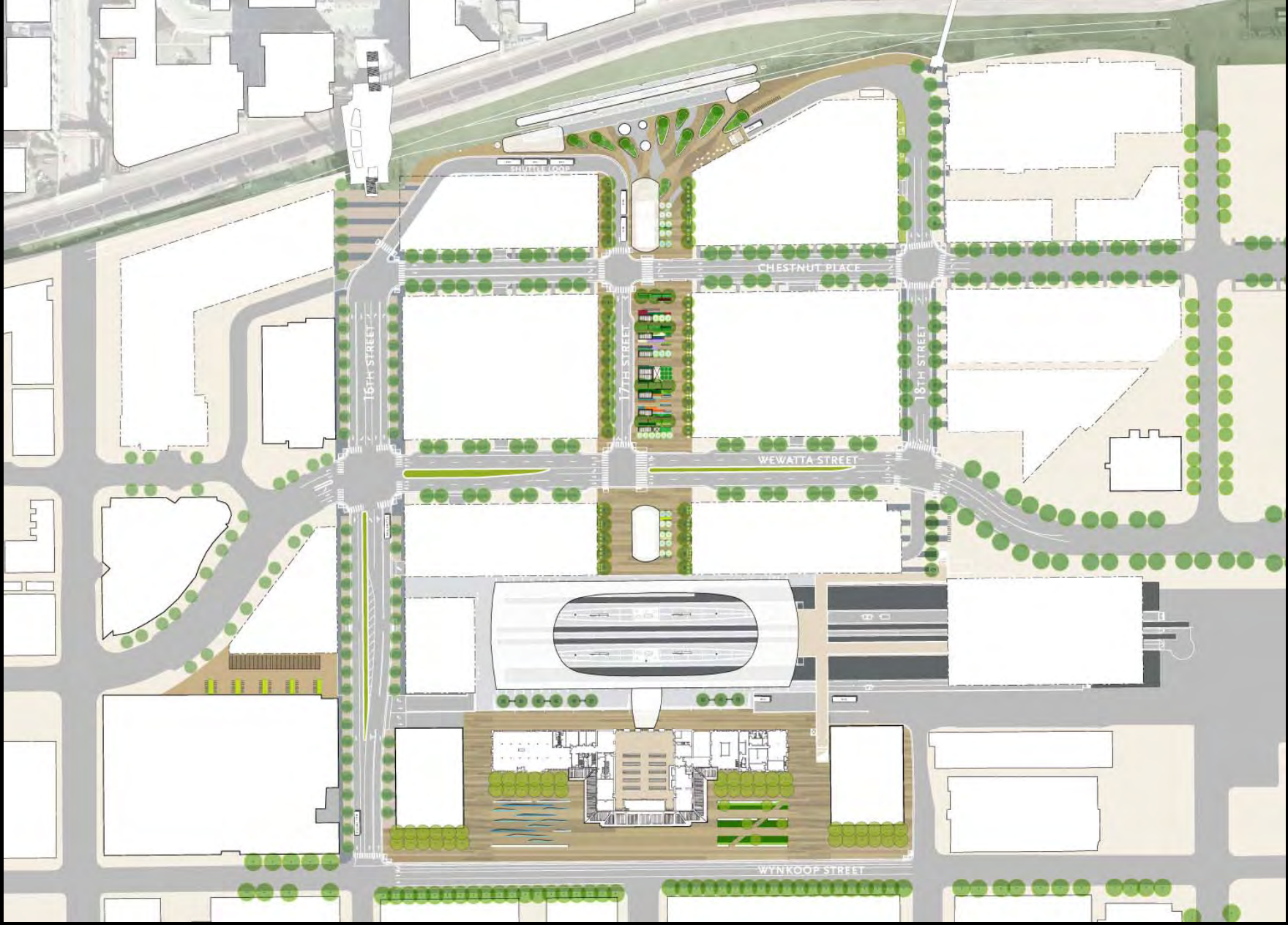
BUILDINGS



BUILDINGS



HISTORIC LODO BUILDINGS



PLAN