

DPD PROJECT No: 3019542  
1920 TERRY AVENUE

**Early Design Guidance**

Downtown Design Review Board Meeting on 5/12/2015



**BUILDING CURE**  
SEATTLE CHILDREN'S RESEARCH INSTITUTE

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*“Seattle Children’s Research Institute is dedicated to making breakthrough discoveries that help prevent, treat and cure childhood disease.*

*Our Immunotherapy program is one of a very small few in the country, and the only one in the Western United States doing this work which seeks to cure children with cancer and other diseases without the need for chemotherapy or radiation.”*

*– James Hendricks, PhD, President*



# 01. DEVELOPMENT OBJECTIVES



**Building Cure** is a purpose built institutional research building, dedicated to transformative therapies with immediate impact on saving lives. The program at all levels, must honor very specific functional and technical requirements and relationships, made visible to the public where practical. The location of the building within the city and within its immediate environs, will communicate both the identity and mission of Seattle Children’s Research Institute, while creating an exemplary streetscape and open space experience.

The development objectives of Building Cure are:

- To ensure functional excellence for each research center within a generic whole**
- To provide a clear and memorable identity of Research**
- To be a forum for life science discovery and dissemination**
- To contribute to a safe, lively, and user-friendly streetscape**
- To ensure stewardship of institutional resources**

The Building Cure research development is sited on the half block bordered by Stewart and Virginia Streets, Terry Avenue, and the Alley. The project will include a 13 level research building of approximately 390,000 gsf above grade. Five levels of below grade area, approximately 150,000 gsf, will accommodate research facilities, building operations, and parking for about 180 vehicles.

<b>Lot Area</b>	<b>42,360 sf</b>
<b>Research Building</b>	<b>~390,000 gsf</b>
<b>Below Grade Research</b>	<b>~40,000 gsf</b>
<b>Below Grade Parking</b>	<b>~110,000 gsf</b>

## 02. CONTEXT ANALYSIS : VICINITY MAP + AERIAL PHOTOGRAPH



### ZONING OVERVIEW:

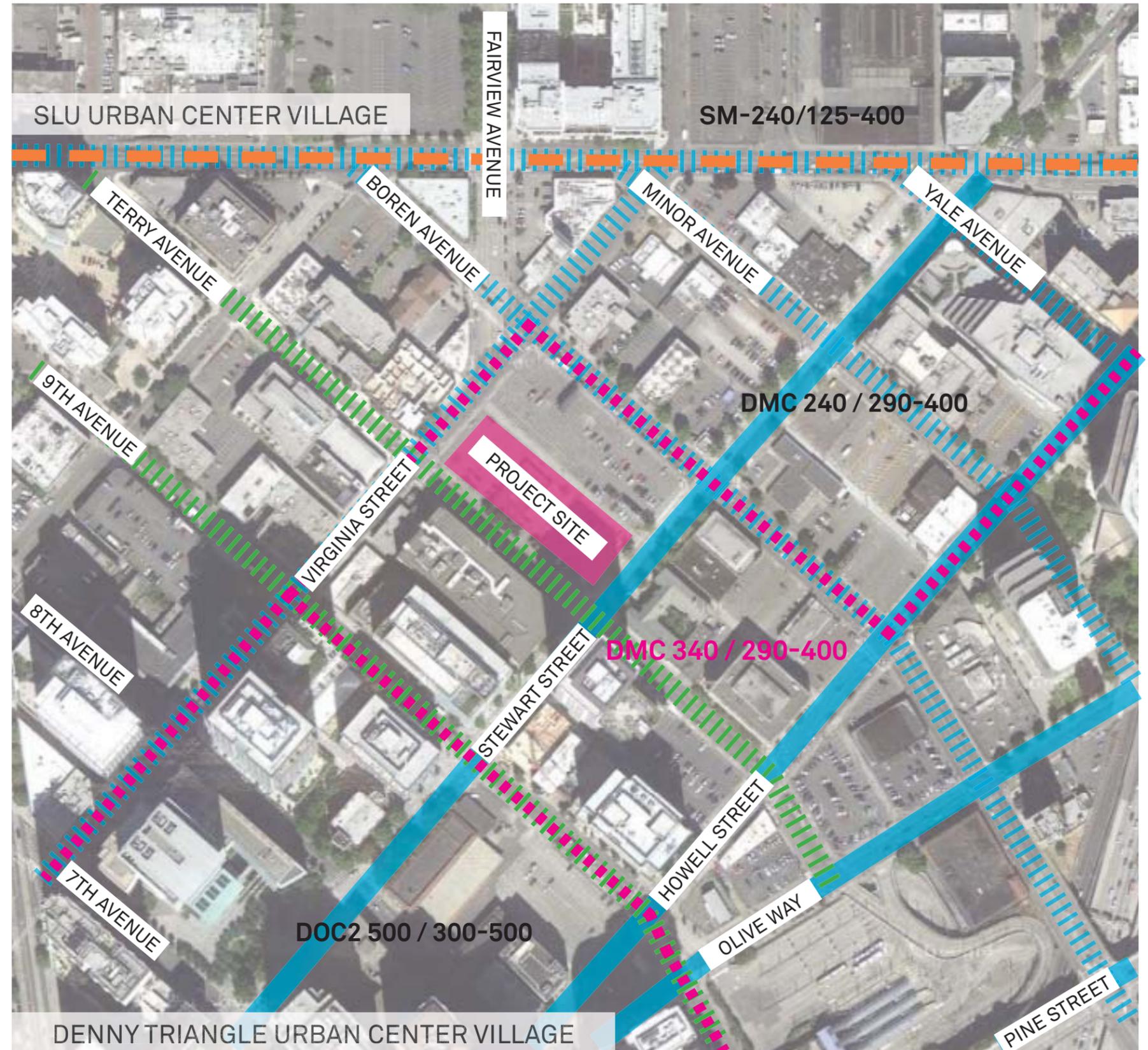
**SITE:** The half block bound by Stewart Street, Terry Avenue, Virginia Street, and the alley.

**ZONING:** DMC-340/290-400  
Denny Triangle Urban Center Village

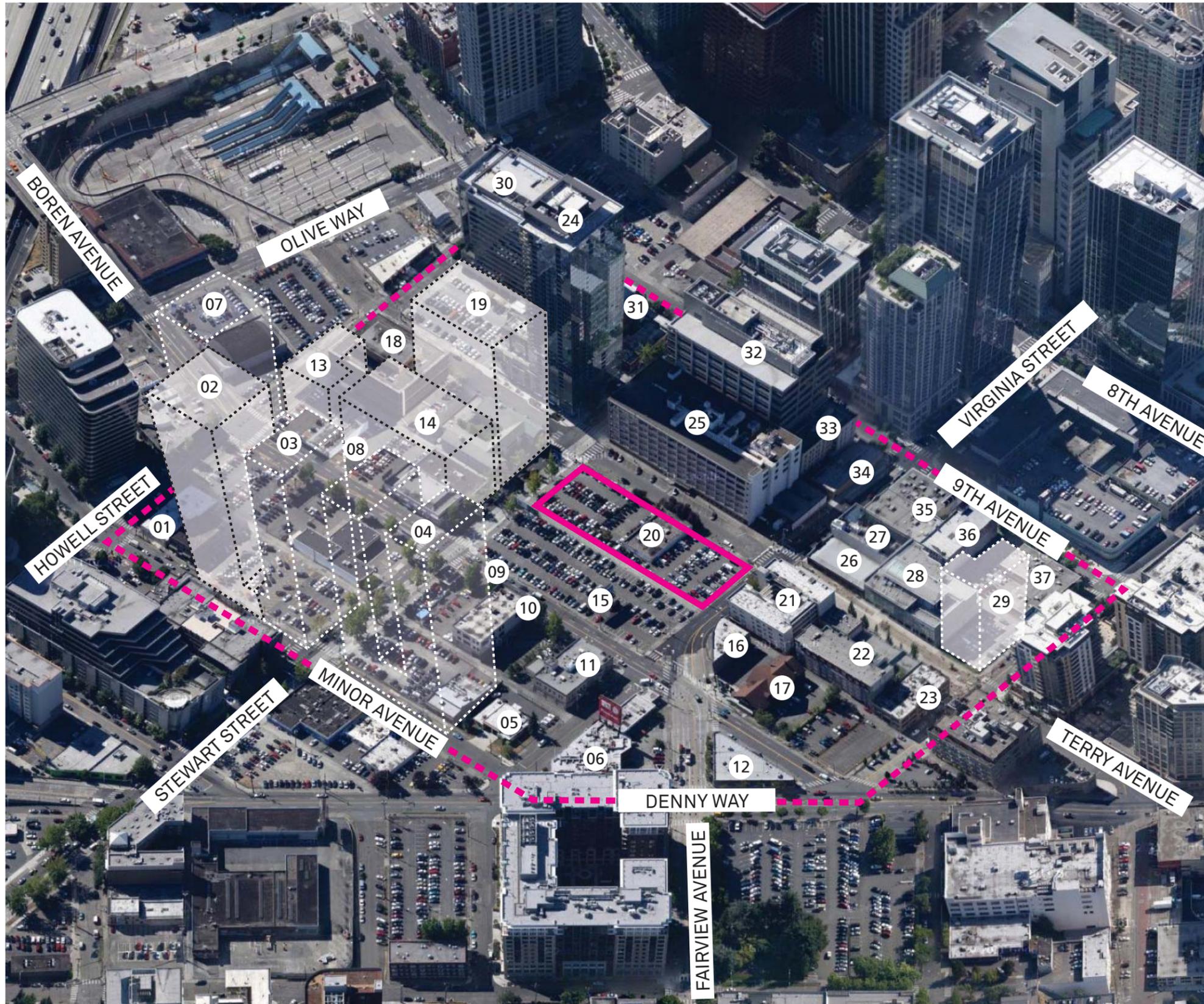
**SITE DIMENSIONS:** 120' x 353'  
**SITE AREA:** 42,360 SF  
**BASE FAR (5):** 211,800 SF  
**FAR MAX (10):** 423,600 SF

### KEY:

- ■ ■ ■ Zoning Boundary
- ■ ■ ■ Urban Center Village Boundary
- ■ ■ ■ Class I Pedestrian Street
- ||| ||| Class II Pedestrian Street
- ||| ||| Green Street



## 02. CONTEXT ANALYSIS : NINE BLOCK AXONOMETRIC (LOOKING SOUTH) - SURROUNDING USES



1. Retail, 1 story (Re-Bar)
2. Future Hotel and Residential, 40 story (Kinects Tower)
3. Future Hotel and Residential, 42 story (Daola Tower)
4. Future Residential, 39 story (Crescent Heights Tower)
5. City Motor Pool Service, 1 story
6. Retail, 1 story
7. Future Residential, 36 story (Tilt 49)
8. Future Office Building, 11 story (Tilt 49)
9. Car Rental, 1 story
10. Office, 3 story
11. Social Service, 2 story
12. Retail, 1 story (Recovery Cafe)
13. Hotel, 14 story (Hilton Garden Inn)
14. Office, 11 story (hill7)
15. Parking & (2) Billboards
16. Office, 2 story
17. Performance Venue, 2 story (Raisbeck)
18. Self Storage, 5 story
19. Future Office Building, 21 story (1007 Stewart)
- 20. Fitness Center, 1 story (demolition DPD#6461616)  
\*Project Site, with existing building**
21. Centennial Lab, 1 story (Cornish College of the Arts)
22. Residential, 4 story
23. Notion Building, 3 story (Cornish College of the Arts)
24. Retail/Residential, 38 story (Aspira)
25. Office, 7 story
26. Office, 1 story
27. Spruce Street School, 3 story
28. Residential, 4 story
29. Future Student Housing, 16 story (Cornish College)
30. Retail/Office, 15 story (Regence)
31. Religious/Residential, 7 story
32. Research/Retail, 11 story (SCRI)
33. Social Services, 5 story
34. Retail, 1 story
35. Cornish Commons, 2 story (Cornish College of the Arts)
36. Beebe Building, 3 story (Cornish College of the Arts)
37. Office, 2 story

- KEY:**
- Project Site
  - - - - - 9 Block Analysis Area
  - - - - - Building Under Construction
  - - - - - Planned Building

02. CONTEXT ANALYSIS : NINE BLOCK AREA - CONTEXT IMAGERY



07  
Tilt 49 (future development)



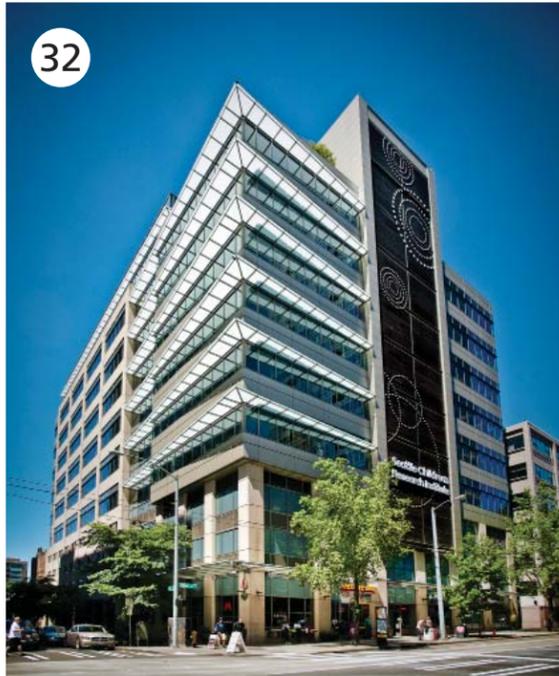
14  
hill7



19  
1007 Stewart (future development)



24  
Aspira Tower



32  
Jack MacDonald Building



26  
Spruce Street School



28  
Carbon 56 Apartments

02. CONTEXT ANALYSIS : NINE BLOCK AREA - CONTEXT IMAGERY



Gethsemane Lutheran Church



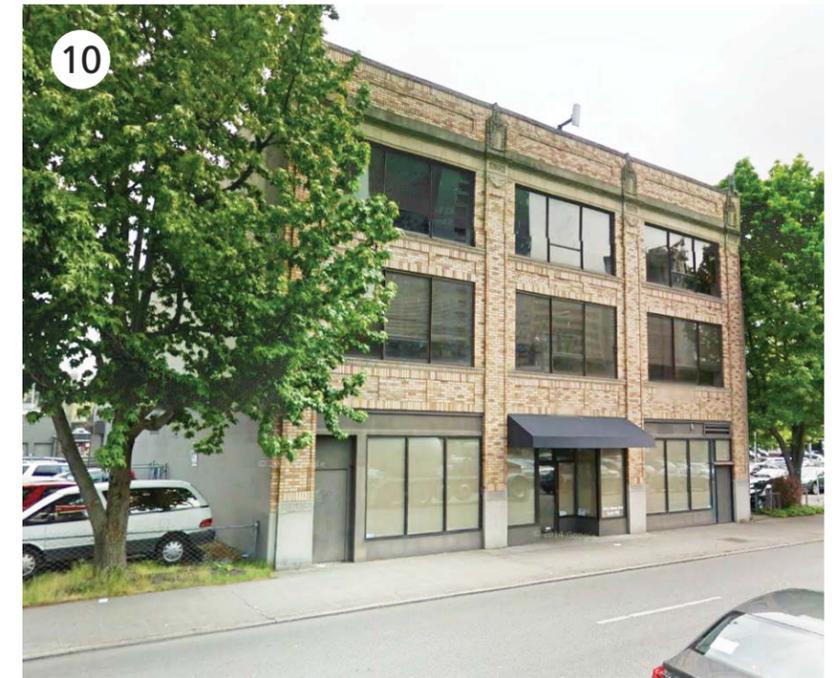
1915 Terry Avenue



Cornish College of the Arts



2 Story Office Building

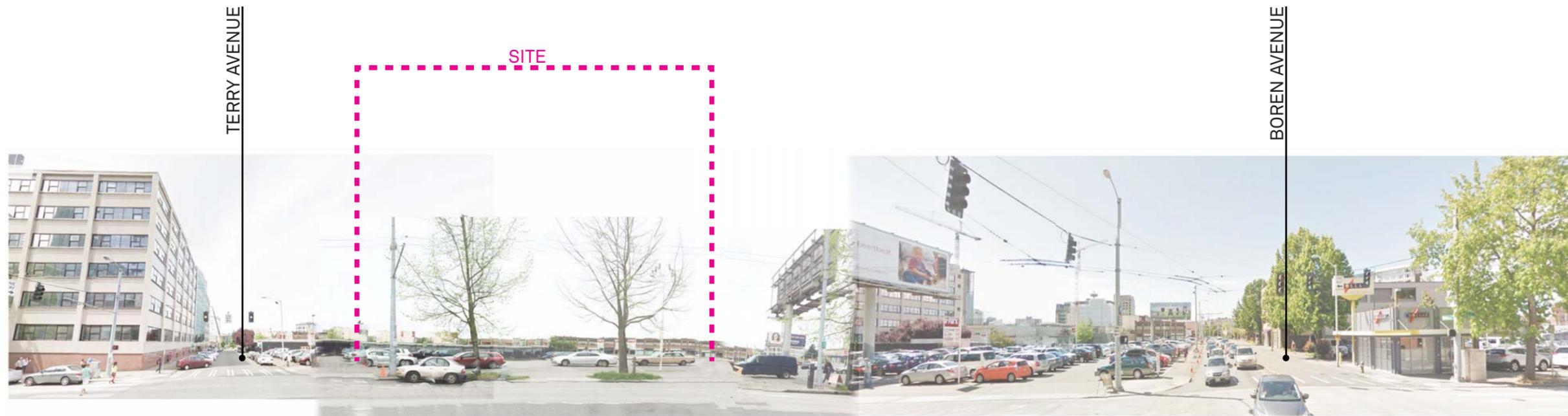


1916 Boren Avenue Office

## 02. CONTEXT ANALYSIS : STREETScape

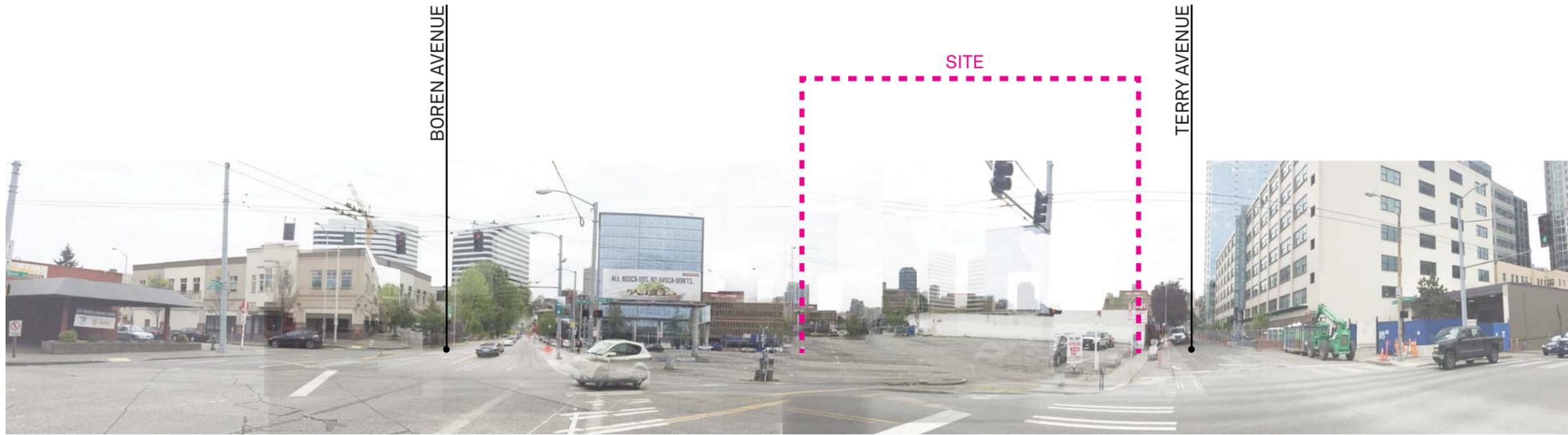


TERRY AVENUE (LOOKING NORTHEAST)

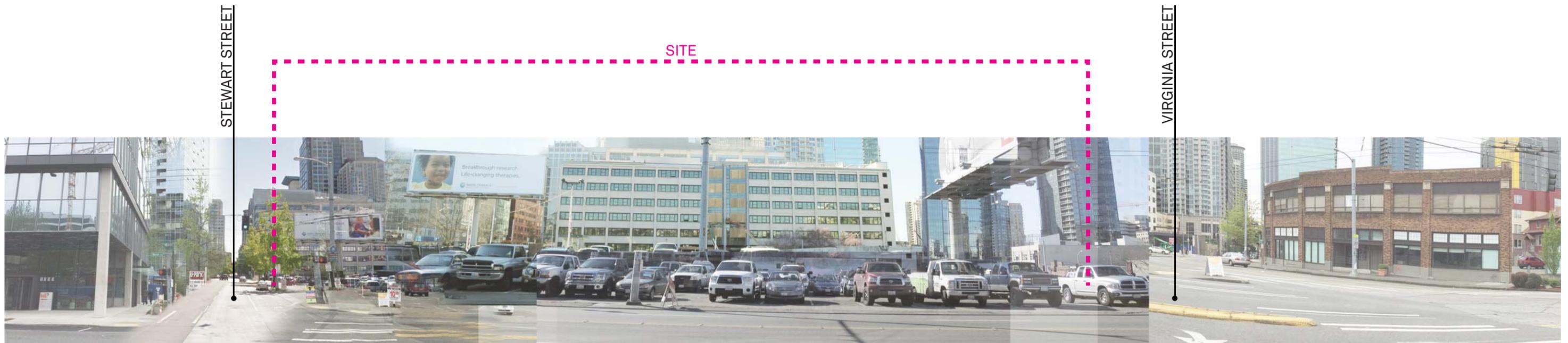


STEWART STREET (LOOKING NORTHWEST)

## 02. CONTEXT ANALYSIS : STREETScape



VIRGINIA STREET (LOOKING SOUTHEAST)



BOREN AVENUE (LOOKING SOUTHWEST)

## 02. CONTEXT ANALYSIS : MOVEMENT PATTERNS

MAJOR STREETS



BUS AND TRANSIT HUB



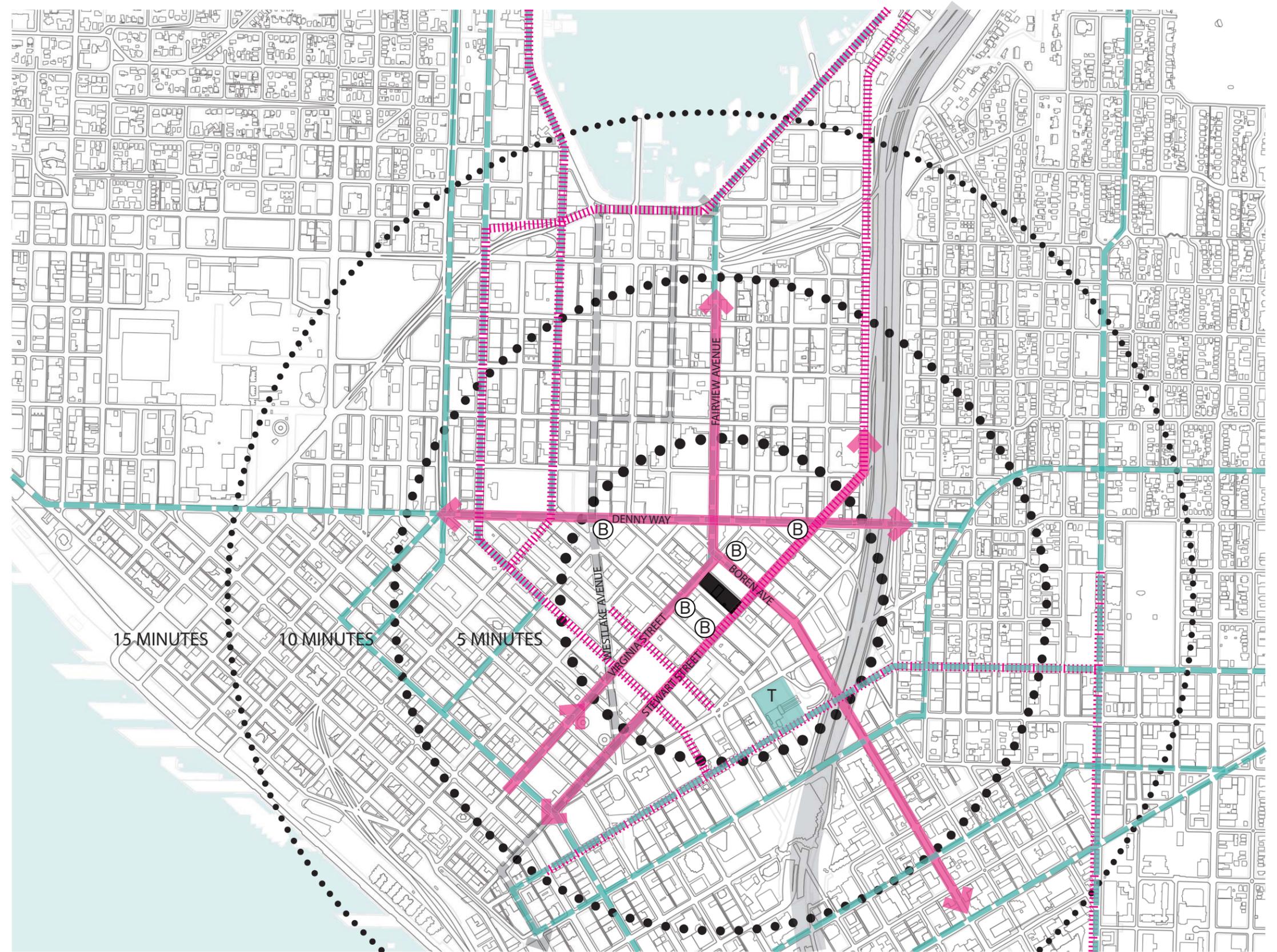
BIKE LANES,



STREET CAR



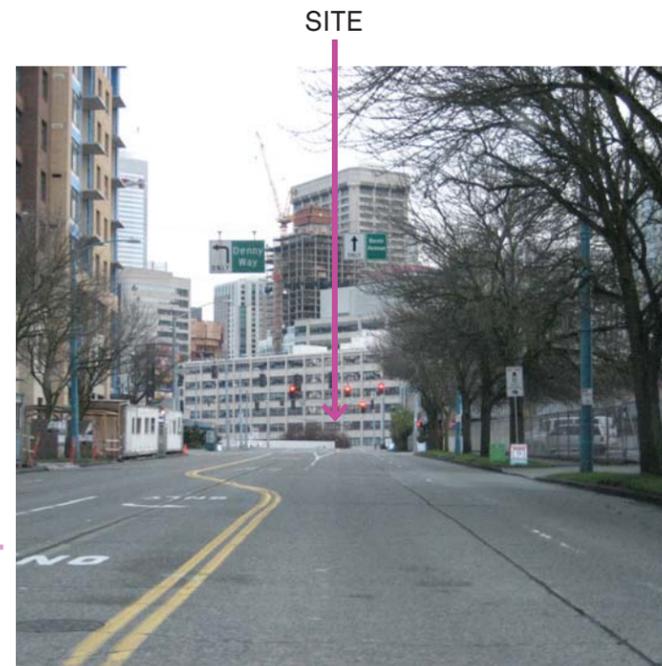
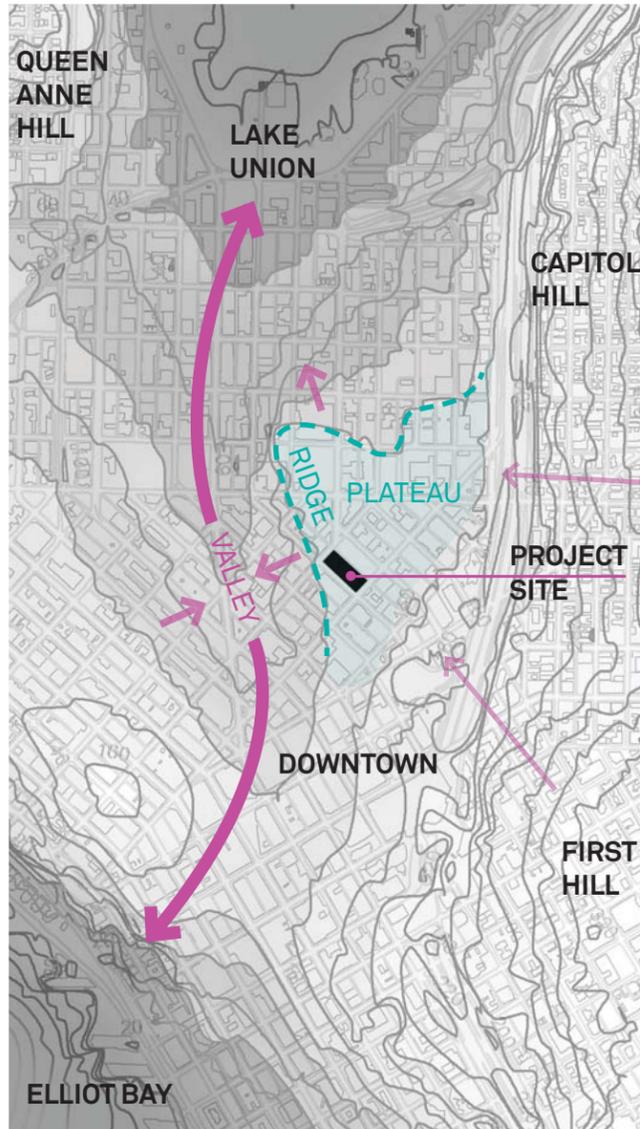
BUS STOPS



## 02. CONTEXT ANALYSIS : CONNECTIONS



## 02. EXISTING SITE CONDITIONS : LANDFORM + TOPOGRAPHY



FAIRVIEW AVENUE-  
LOOKING SOUTH



VIRGINIA STREET-  
LOOKING NORTHEAST



STEWART STREET-  
LOOKING SOUTHWEST

### OBSERVATIONS & OPPORTUNITIES:

**The site sits at the center of a plateau in the Denny Triangle neighborhood.**

- This forms an opportunity to be a central space in the neighborhood

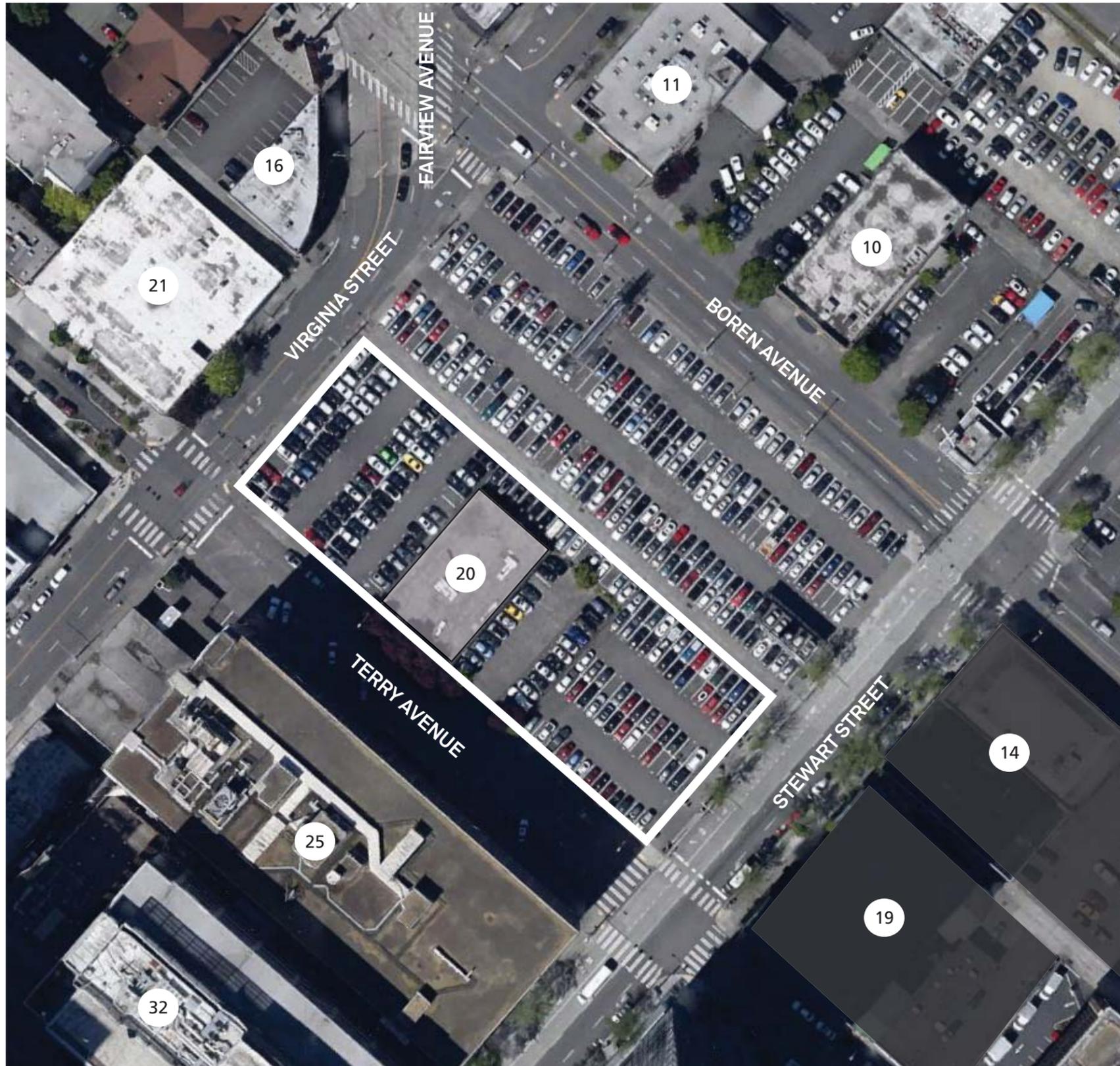
**The site will be seen from both hills and valleys that surround it.**

- Contribute an important lush and populated component to the Capitol Hill, First Hill, Downtown, and South Lake Union city views.
- Draw people to the site from blocks around.

**Adjacent constrained thoroughfares Virginia Street and Stewart Street will focus attention at street level.**

- Street planting and trees can set the tone for a greener & healthier pedestrian zone within the neighborhood.
- Establish strong pedestrian realm along Stewart Street and Virginia Street.
- Create high activity & visibility in the public realm.

## 02. EXISTING SITE CONDITIONS : EXISTING USE + STRUCTURES



Existing 1920 Terry Building (1 story)



Existing Parking Lot

## 02. EXISTING SITE CONDITIONS : EXISTING SITE & TREE SURVEY

### VIRGINIA STREET:

There are no existing trees abutting the property.

The City Arborist will approve proposed species for this street.

### TERRY AVENUE:

There are four (4) *Prunus cerasifera* (Thundercloud' Purpleleaf Plum) trees abutting the property.

The City Arborist recommends removal of all four trees due to the facts that they are short-lived trees, only one of them is in decent condition, and for the Green Street program, a variety of genus and species is recommended.



TERRY AVENUE

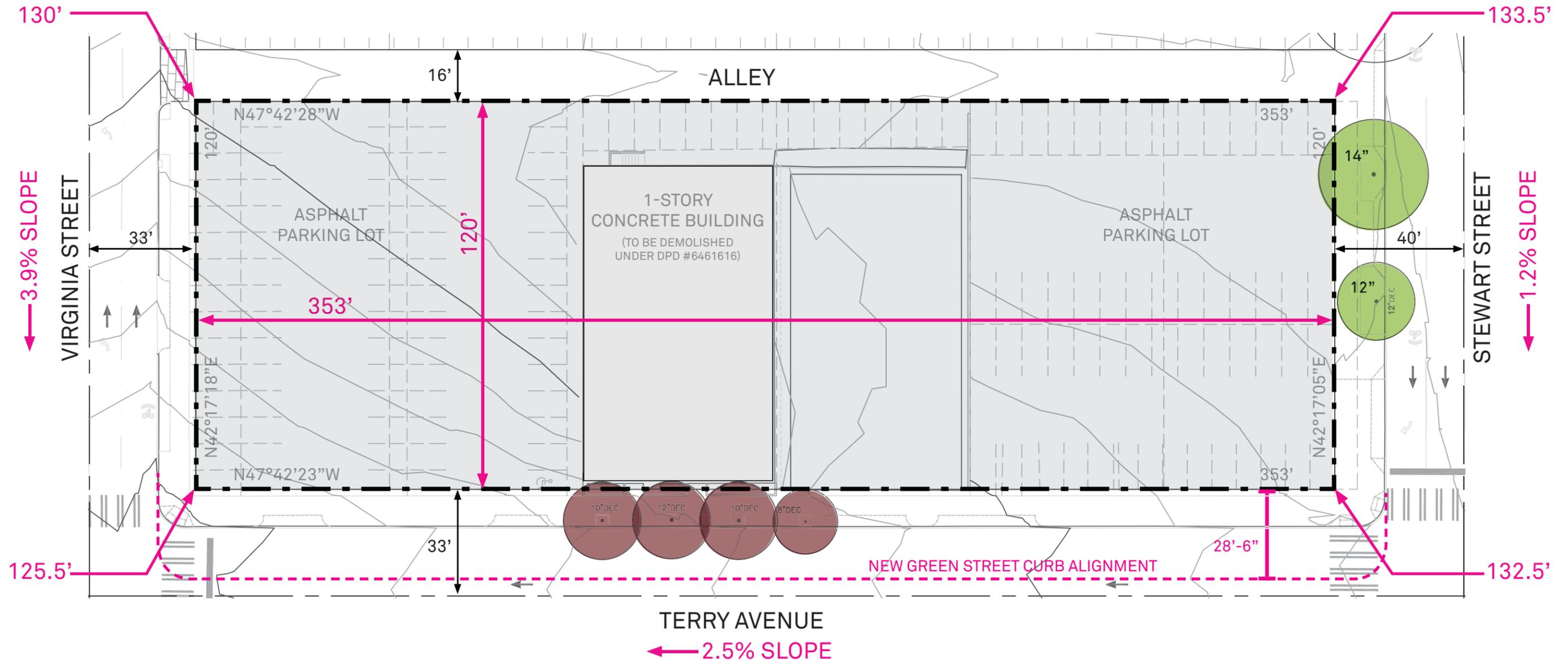


STEWART STREET

### STEWART STREET:

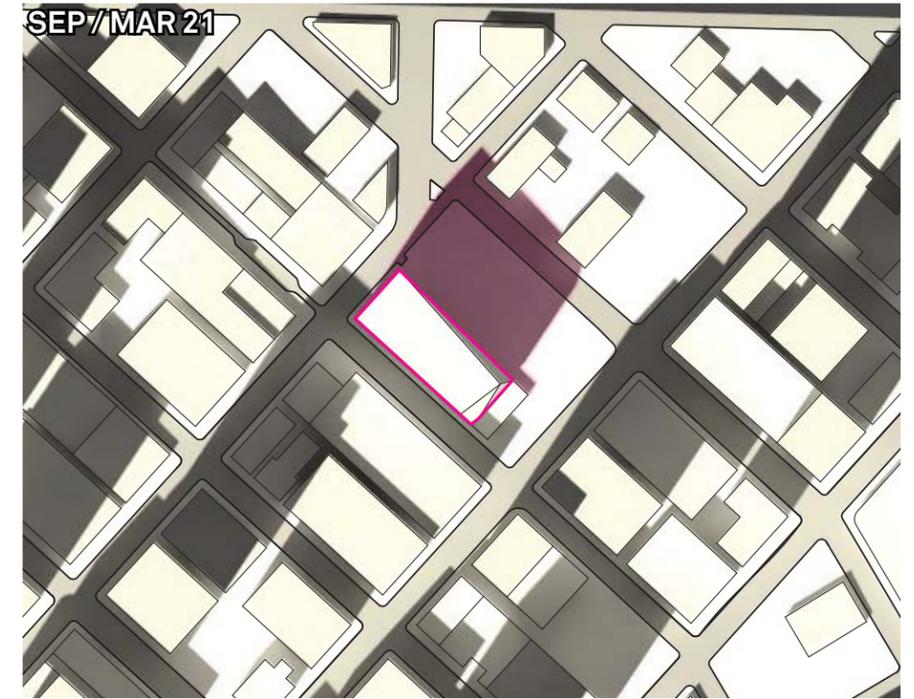
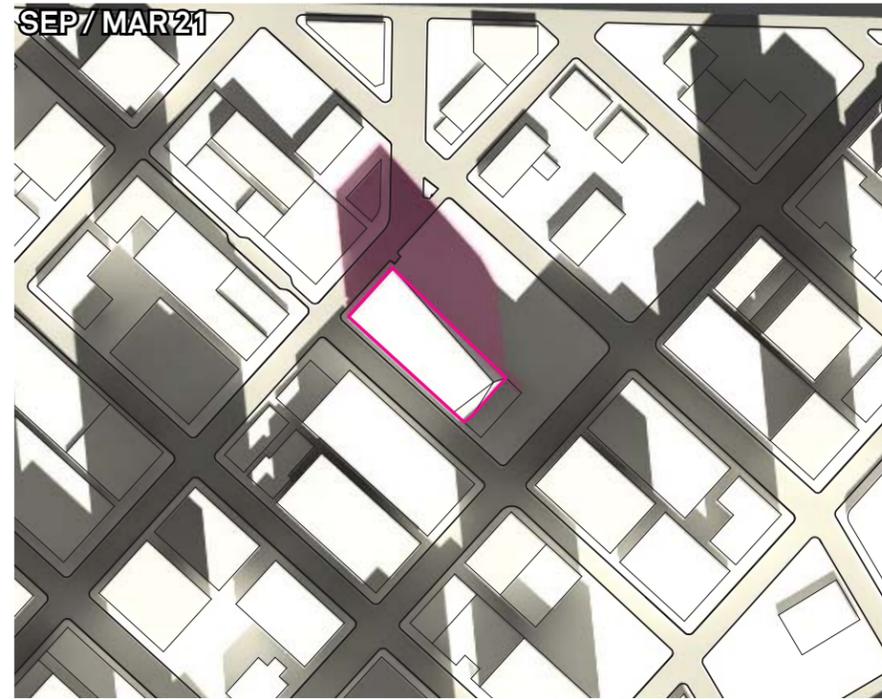
There are two (2) *Liquidambar styraciflua* (Sweetgum) trees abutting the property.

The City Arborist reports that both of these trees are in good condition, will remain, and will be adequately protected during construction.

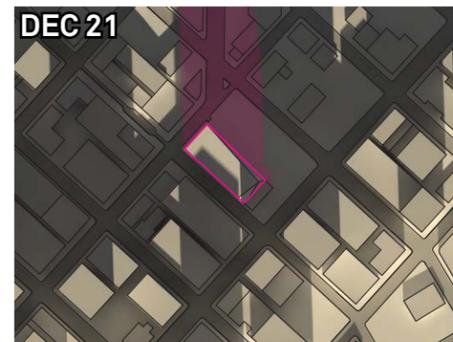


## 02. EXISTING SITE CONDITIONS : SUN/SHADOW ANALYSIS

\*DISPLAYING PREFERRED MASSING ALTERNATIVE (#3)



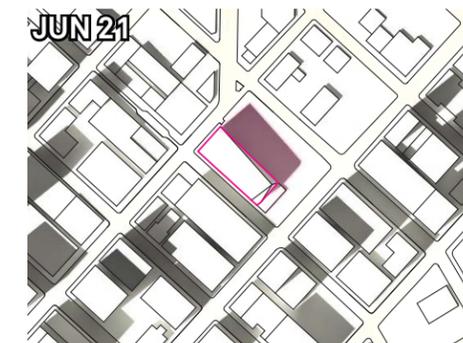
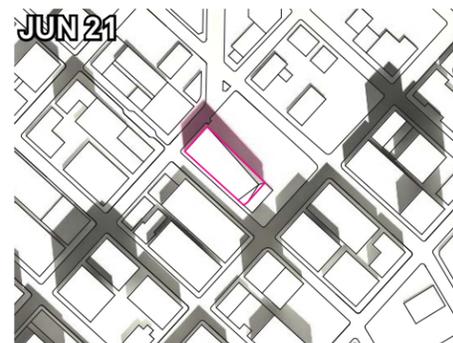
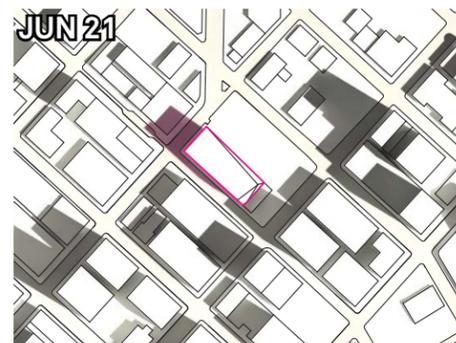
10:00



12:00



14:00



## 03. DESIGN GUIDELINES



### A. SITE PLANNING AND MASSING

#### A-1 Respond to the physical environment

Develop an architectural concept and compose the building's massing in response to geographic conditions and patterns of urban form found nearby or beyond the immediate context of the building site.

*The surrounding buildings are generally composed of simple, rectilinear forms. The architectural concept for Building Cure is informed both by internal forces (the research program) and external forces (the natural environment and the city context). The street and pedestrian alley sides of the building organize the lab and office program, while the ends of the building provide social connection across the program, and respond to shifts in the city grid.*

### B. ARCHITECTURAL EXPRESSION

#### B-1 Respond to the neighborhood context

Develop an architectural concept and compose the major building elements to reinforce desirable urban features existing in the surrounding neighborhood.

*The buildings in the surrounding area have considered streetscape development and create positive connection between the interior program to the street. Building Cure will build upon these attributes in both the streetscape and the purpose built research program above the streetscape.*

#### B-3 Reinforce the positive urban form & architectural attributes of the immediate area

Consider the predominant attributes of the immediate neighborhood and reinforce desirable siting patterns, massing arrangements, and streetscape characteristics of nearby development.

*The immediate context is rapidly developing. Positive features include simple form, textured facades, and positive streetscape development. Building Cure will build upon these attributes with the prominent additions of a grade level open space and green street development.*



#### B-4 Design a well-proportioned & unified building

Compose the massing and organize the publicly accessible interior and exterior spaces to create a well-proportioned building which exhibits a coherent architectural concept. Design the architectural elements and finish details to create a unified building, so that all components appear integral to the whole.

*Building Cure will be a geometrically dynamic tower with a coherent envelope that responds simultaneously to specific programmatic requirements and environmental orientation. The streetscape level is composed of programmatic solids connected with soaring transparent storefront to promote the connection of interior and exterior spaces.*

### C. THE STREETScape

#### C-1 Promote pedestrian interaction

Spaces for street level uses should be designed to engage pedestrians with the activities occurring within them. Sidewalk-related spaces should be open to the general public and appear safe and welcoming.

*As described in B4, the ground level program is organized to promote pedestrian engagement. A cafe is located on the Stewart Street façade of the open space; while the Discovery Center, Forum and Classrooms are located on Terry Avenue, where the public is encouraged to discover the history, mission, outcomes and cures developed by SCRI.*

#### C-2 Design facades of many scales

Design architectural features, fenestration patterns, and materials compositions that refer to the scale of human activities contained within. Building facades should be composed of elements scaled to promote pedestrian comfort, safety, and orientation.

*At the streetscape level, the Cafe, Forum, and Classrooms anchor the corners of the building are envisioned to be clad in more solid, textural materials promoting a sense of stability and longevity. They are connected by clear vision glass to promote inside/outside connectivity, culminating in a double height glass facade at the entry.*

#### C-4 Reinforce building entries

To promote pedestrian comfort, safety, and orientation, reinforce the building's entry.

*The entry to Building Cure is prominently featured toward the open corner of Stewart and Terry in a highly transparent double height atrium.*

## 03. DESIGN GUIDELINES



### C-6 Develop the alley facade

To increase pedestrian safety, comfort, and interest, develop portions of the alley facade in response to the unique conditions of the site or project.

*The landscape and building design will create an alley that is highly functional for the service needs of a research laboratory, desirable, and user-friendly as a pedestrian connection to Fairview Avenue.*

## D. PUBLIC AMENITIES

### D-1 Provide inviting & usable open space

Design public open spaces to promote a visually pleasing, safe, and active environment for workers, residents, and visitors. Views and solar access from the principal area of the open space should be especially emphasized.

*The main open space for the project is located on the Southwest corner of the site at Stewart Street and Terry Avenue. Because of its orientation, this corner will receive the best solar access on the site. In addition, placing the main public space in the southwest portion of the block also takes advantage of the natural high point of the site to emphasize the view west on Stewart Street.*

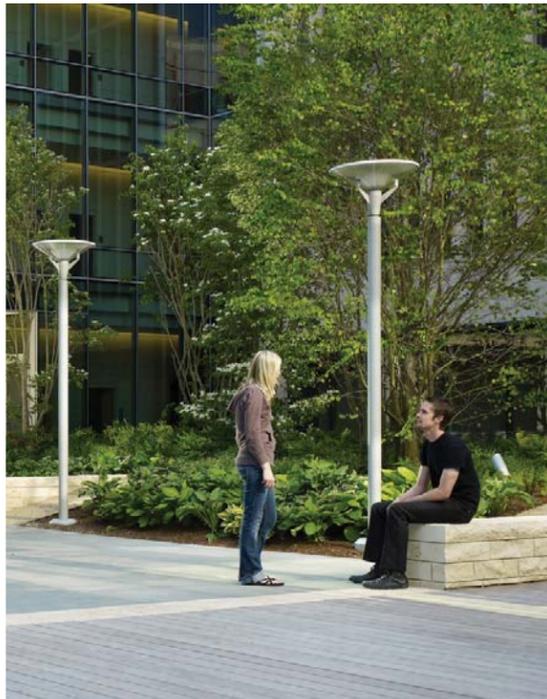
*The Terry Avenue Green street will be a low vehicular use, pedestrian oriented, safe, lush, healthy, green environment in the public ROW, thereby improving the city sidewalk network and providing an enjoyable element to surrounding building users and inhabitants.*

### D-2 Enhance the building with landscaping

Enhance the building and site with substantial landscaping—which includes special pavements, trellises, screen walls, planters, and site furniture, as well as living plant material.

*The project will use street trees, plantings and site furnishings to create a strong pedestrian experience on all streets. The tree and understory character of each streetscape will build off of the existing character on adjacent blocks to provide continuity within the City fabric.*

*The southwest corner of the site will provide a unique gathering space with distinct paving, retail spill out onto the open space, and plantings that will enhance the character and human-scale texture of the space. Access and sightlines to the main building entry will be clear and accessible.*



### D-3 Provide elements that define the place

Provide special elements on the facades, within public open spaces, or on the sidewalk to create a distinct, attractive, and memorable “sense of place” associated with the building.

*The design of Building Cure and the open space will integrate elements which communicate the mission of SCRI.*

### D-4 Provide appropriate signage

Design signage appropriate for the scale and character of the project and immediate neighborhood. All signs should be oriented to pedestrians and/or persons in vehicles on streets within the immediate neighborhood.

*Signage is integral to communicating Children’s mission to cure pediatric disease; which will be well integrated in the design.*

### D-6 Design for personal safety & security

Design the building and site to enhance the real and perceived feeling of personal safety and security in the immediate area.

*As a health organization, safety and security is paramount. The open space will be designed with CPTED principles and the high degree of ground level glazing provides eyes on the street.*

## E. VEHICULAR ACCESS AND PARKING

### E-3 Minimize the presence of service areas

Locate service areas for trash dumpsters, loading docks, mechanical equipment, and the like away from the street front where possible. Screen from view those elements which for programmatic reasons cannot be located away from the street front.

*For a pedestrian oriented alley to be successful, the visual impact of service areas must be minimized. Building Cure will locate service areas for trash dumpsters, loading docks, mechanical equipment, and the like, away from the street frontage where possible; and screen from view those elements which for programmatic rationale cannot be located away from the street front.*

# 04. ZONING CODE ANALYSIS

**Site Location:** The western half Block 41 bound by Terry, Stewart, Virginia, and the alley.

**Zoning:** DMC-340/290-400  
Downtown Mixed Commercial  
Downtown Fire District  
Denny Triangle Urban Center Village

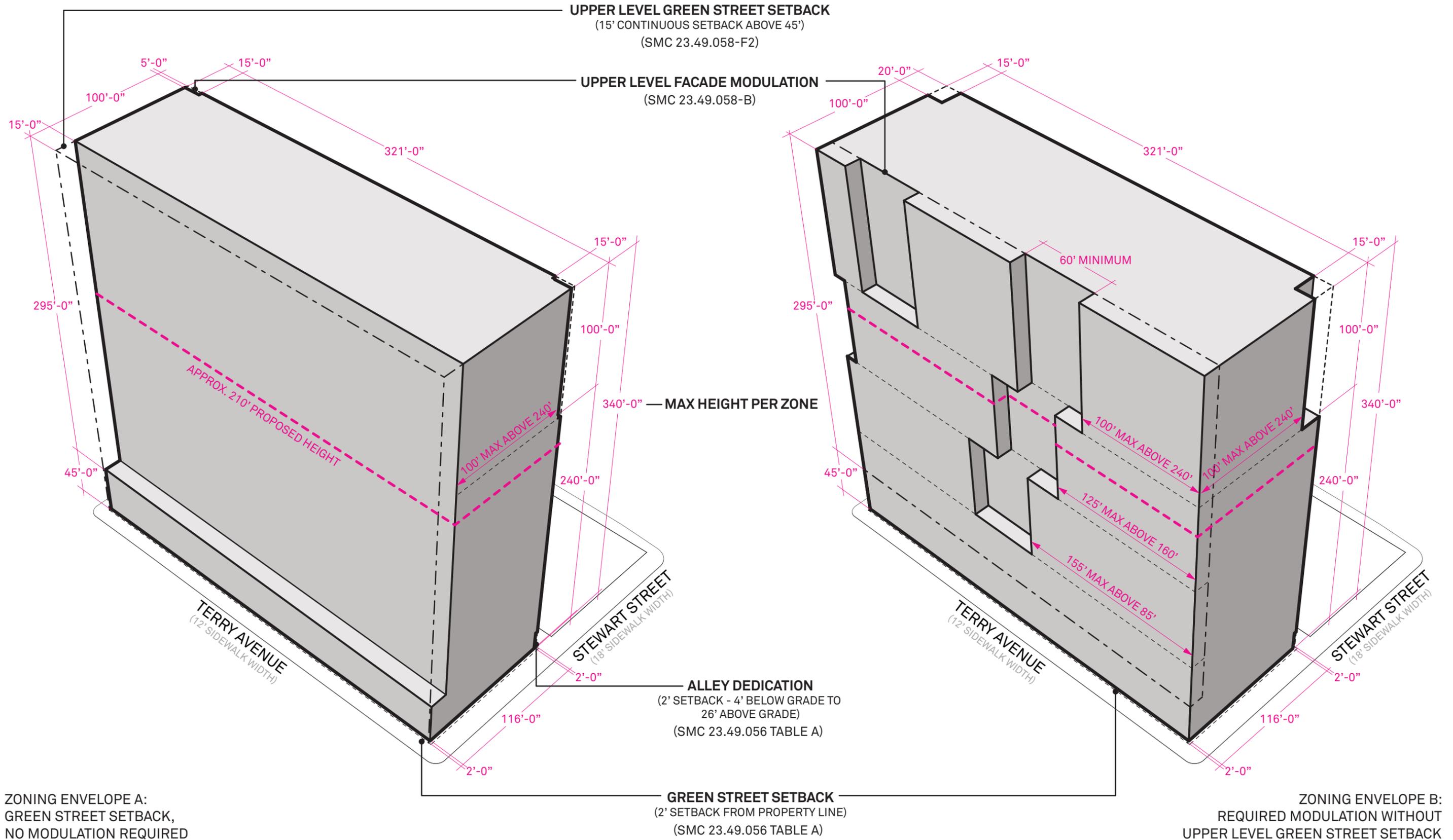
**Site Dimensions:** 120 x 353

Standard	Description
<b>23.49.008</b>	<b>Structure Height</b>
A.3	Maximum Height for Non Residential Use = 340' <i>The proposed structure height is ~210'</i>
<b>23.49.009</b>	<b>Street Level Use Requirements</b>
Map 1G B	Required on Terry Avenue and Stewart Street Minimum 75% of each frontage must be occupied by qualifying street uses <i>The applicant intends to seek a departure to the minimum street use frontage</i>
<b>23.49.011</b>	<b>Floor Area Ratio</b>
Table A	Base = 5, Max = 10 <i>The applicant intends to exceed the base FAR through a mix of TDR's and bonuses as required by development standards</i>
<b>23.49.016</b>	<b>Open Space</b>
B C.2	20 SF required per 1000 GSF Office floor area Includes Green Street setback and ROW improvements <i>Public open space will be provided as Green Street improvements on Terry Avenue. Private open space will include a landscaped plaza and level 2 terrace.</i>
<b>23.49.018</b>	<b>Overhead Weather Protection</b>
A	Not required on Stewart per A.1-3, Not required on Terry per A.3. Required on Virginia.  <i>Glass canopies are planned to delineate building entry and public programs like the café and museum.</i>

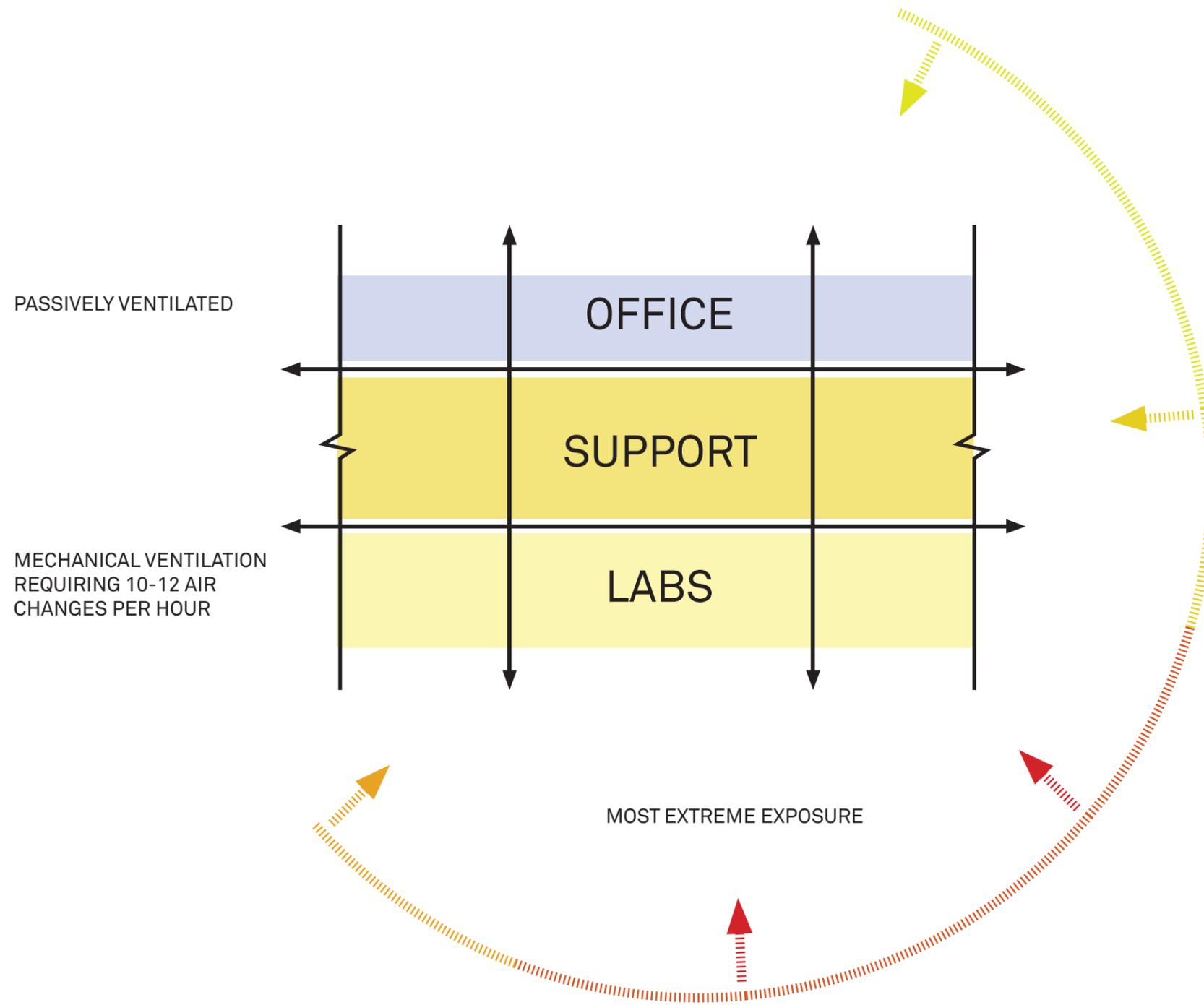
Standard	Description
<b>23.49.019</b>	<b>Parking</b>
A.1. C	No parking required 1:1000 Max Office use <i>Below grade parking will be provided below the maximum allowable.</i>
E & F	Bike parking and Shower facilities required <i>Bicycle parking and showers will be provided per development standards</i>
G	Off Street Loading per SMC 23.54.035, Table A <i>(4) off street loading berths will be provided off the alley.</i>
<b>23.49.022</b>	<b>Minimum Sidewalk Width</b>
Map 1C	Stewart: 18', Terry: Variable, subject to Green Street Standards, Virginia: 12' <i>The existing sidewalks on Stewart and Virginia meet the standard. The Terry Avenue sidewalk width will be determined through the Green Street development process with SDOT.</i>
<b>23.49.056</b>	<b>Street Facades, Landscape, and setbacks</b>
A.1/Table A	Per 23.46.338-1F, Pedestrian Street Classification as follows: 25' minimum façade height, Stewart & Terry 15' minimum façade height, Virginia <i>The proposed façade heights exceed the minimums</i>
B.1	Setback Limits for property line facades <i>The proposed exterior, open space is not considered part of the setback area</i>
C	Façade Transparency = 60% minimum, Stewart & Terry, 30%, Virginia <i>Façade transparency will exceed the minimums</i>
D	Blank façade 15' wide max, Stewart & Terry, 30' max on Virginia  <i>(1) blank wall on Terry Avenue will exceed 15'</i>

Standard	Description
<b>23.49.056</b>	<b>(Continued)</b>
E	Street Trees required on Stewart, Terry, and Virginia
F.1	Landscaping on Stewart = 1.5 SF per 1 LF of lot line
F.2	Landscaping on Terry per Green Street standards
F.3	Any setback on Stewart to be landscaped per calculation <i>Landscaping will be provided on all frontages per development standards</i>
F.4	Green Street Setback = 2' from street lot line, 50% landscaped <i>Setback provided</i>
<b>23.49.058</b>	<b>Upper level development standards</b>
B	Maximum length of unmodulated façade within 15' of the property line: 0-85 feet above grade = no max length 86-160 feet = 155 feet max length 161-240 feet = 125 feet max length 241-500 feet = 100 feet max length <i>The applicant will seek a departure for façade modulation on Terry Avenue</i>
E4	For towers over 160 feet, all portions of the tower that exceed 125 feet must be separated by 60 feet from adjacent towers that are above 125 feet in height. <i>There are no other towers on the block.</i>
F2	15' continuous setback on Terry above a height of 45' due to green street designation <i>The applicant will seek a departure from the development standards for the upper-level green street setback</i>
<b>23.53.030</b>	<b>Alley Improvements</b>
D	Minimum R.O.W. for downtown zones is 20'
F.1	If the existing Alley does not meet the minimum width, a dedication of 2 feet is required. Underground and overhead portions of the structure may be allowed to extend into the dedication area per SDOT approval. Alley must be improved per section E.1. <i>At minimum, a 2 foot dedication 4' below grade and 26' above grade will be provided.</i>

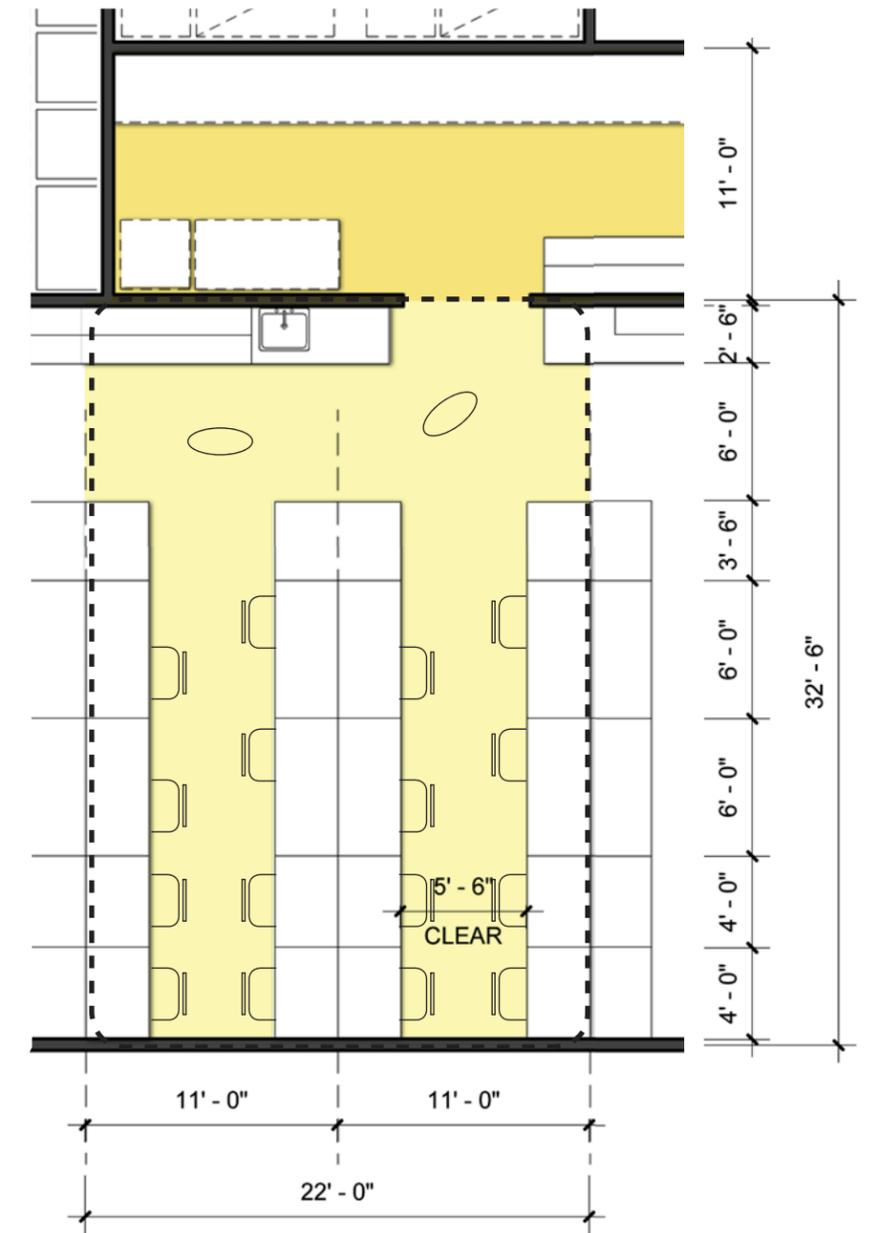
# 04. MASSING ENVELOPE



# 04. LAB PLANNING CRITERIA



LAB PROGRAM



PROGRAM MODULE

## 04. LAB PLANNING CRITERIA

### LAB PLANNING CRITERIA

#### LAB PROGRAM RELATIONSHIPS AND SOLAR ORIENTATION

Ideal siting of the research program places the mechanically intensive open bench toward the harshest conditions for solar heat gain on the south and west. Offices, which may be passively ventilated are best located to the north and east.

#### THE LAB PROGRAM MODULE

The basic lab module is based on a 22' wide by 32'-6" open bench. The bench is composed of two 4' tech stations, two 6' lab benches, 3'-6" end cap for shared equipment, a 6' corridor, and a 2'-6" wet wall.

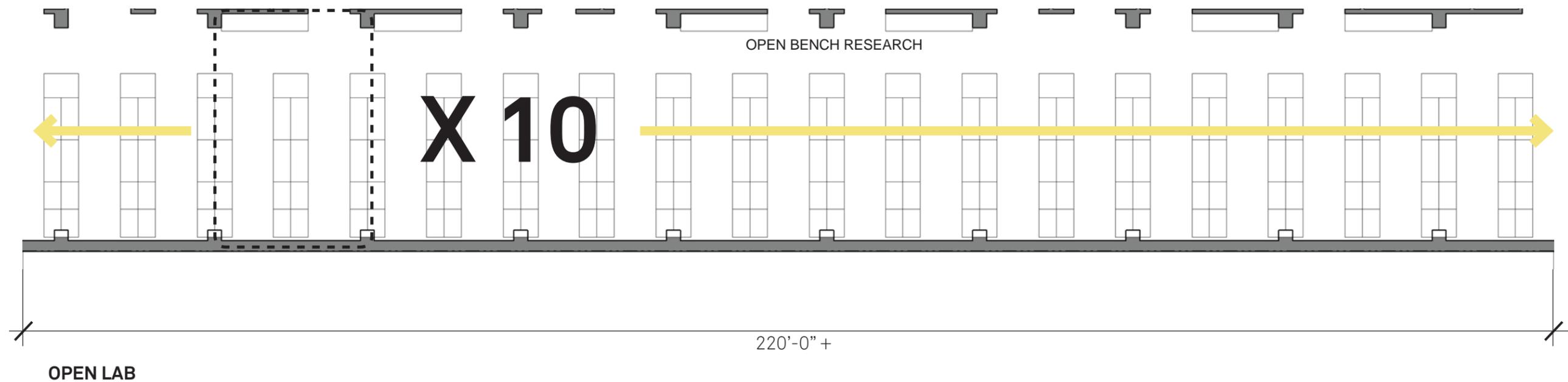
#### THE OPEN LAB

A large, open lab is critical to support the ever-changing needs of research. The introduction of walls, setbacks of the facade, or other monuments has serious effects on the productivity, flexibility and longevity of the research lab. Through an extensive programming process, a 10 module open lab is ideal for Children's research program.

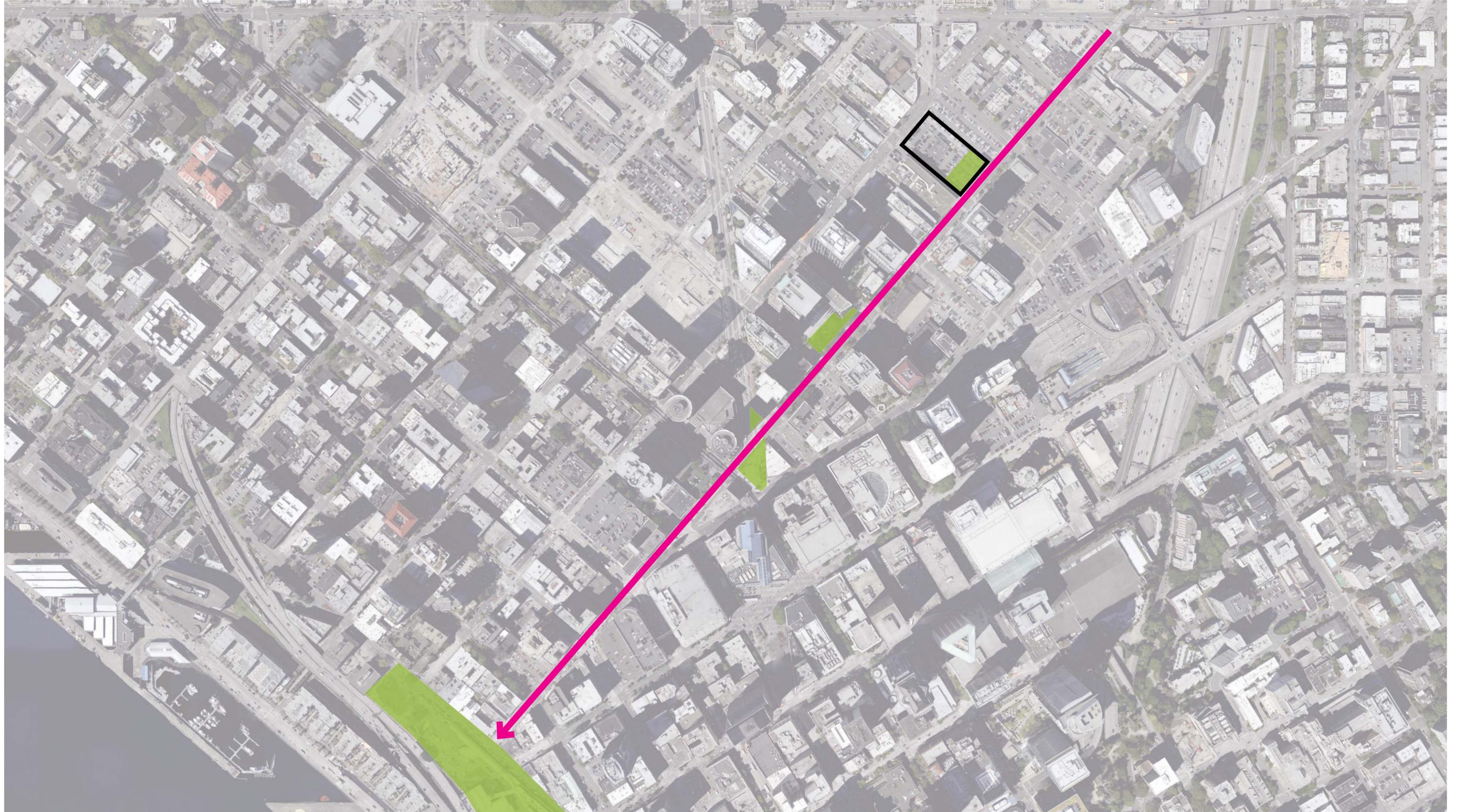
*"Our eight interdisciplinary centers address areas central to pediatric health and use an 'open lab' format to foster a rich collaborative environment. Investigators draw from different departments, divisions and disciplines to find new cures for childhood diseases more quickly." - SCRI*



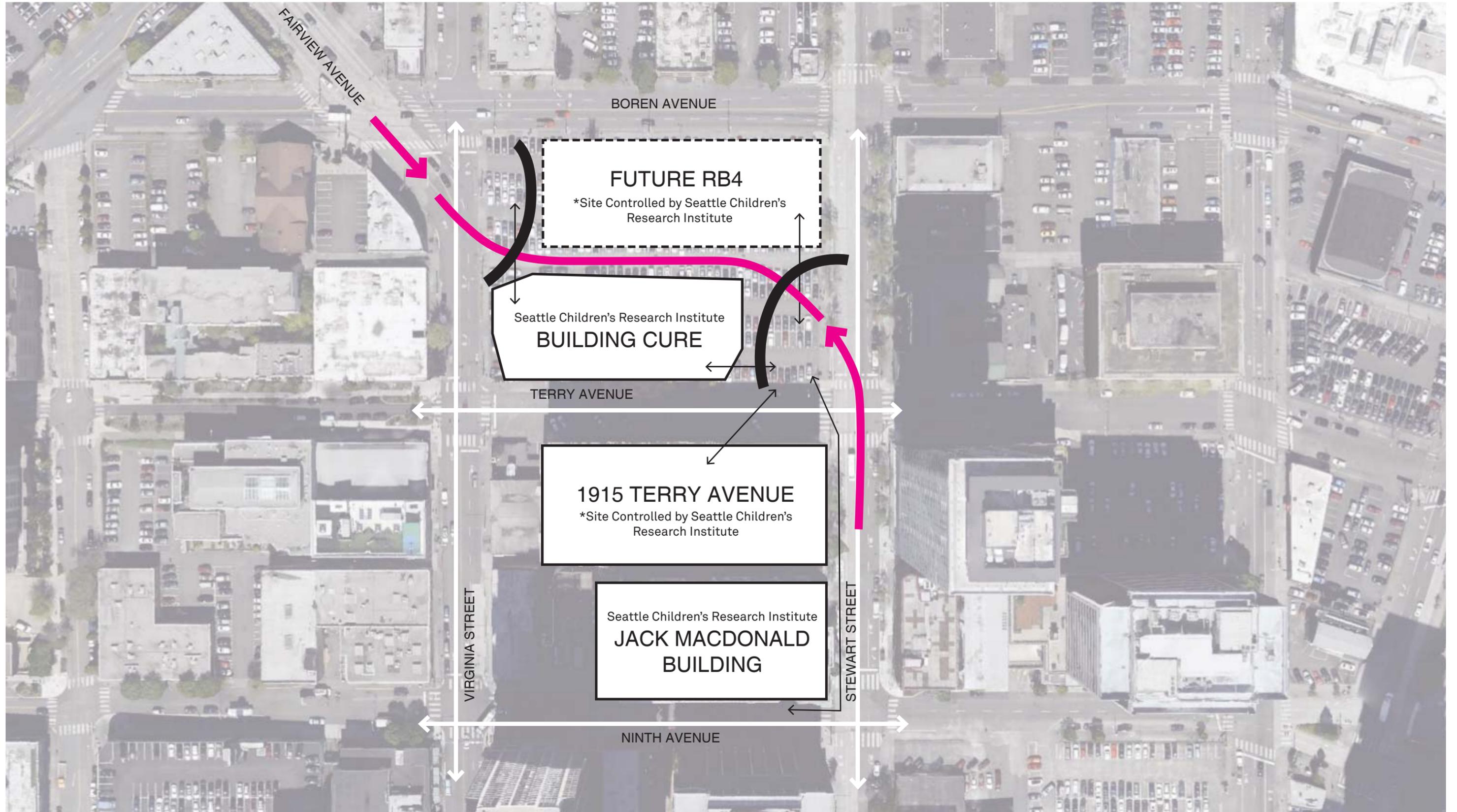
SCRI TYPICAL OPEN LAB



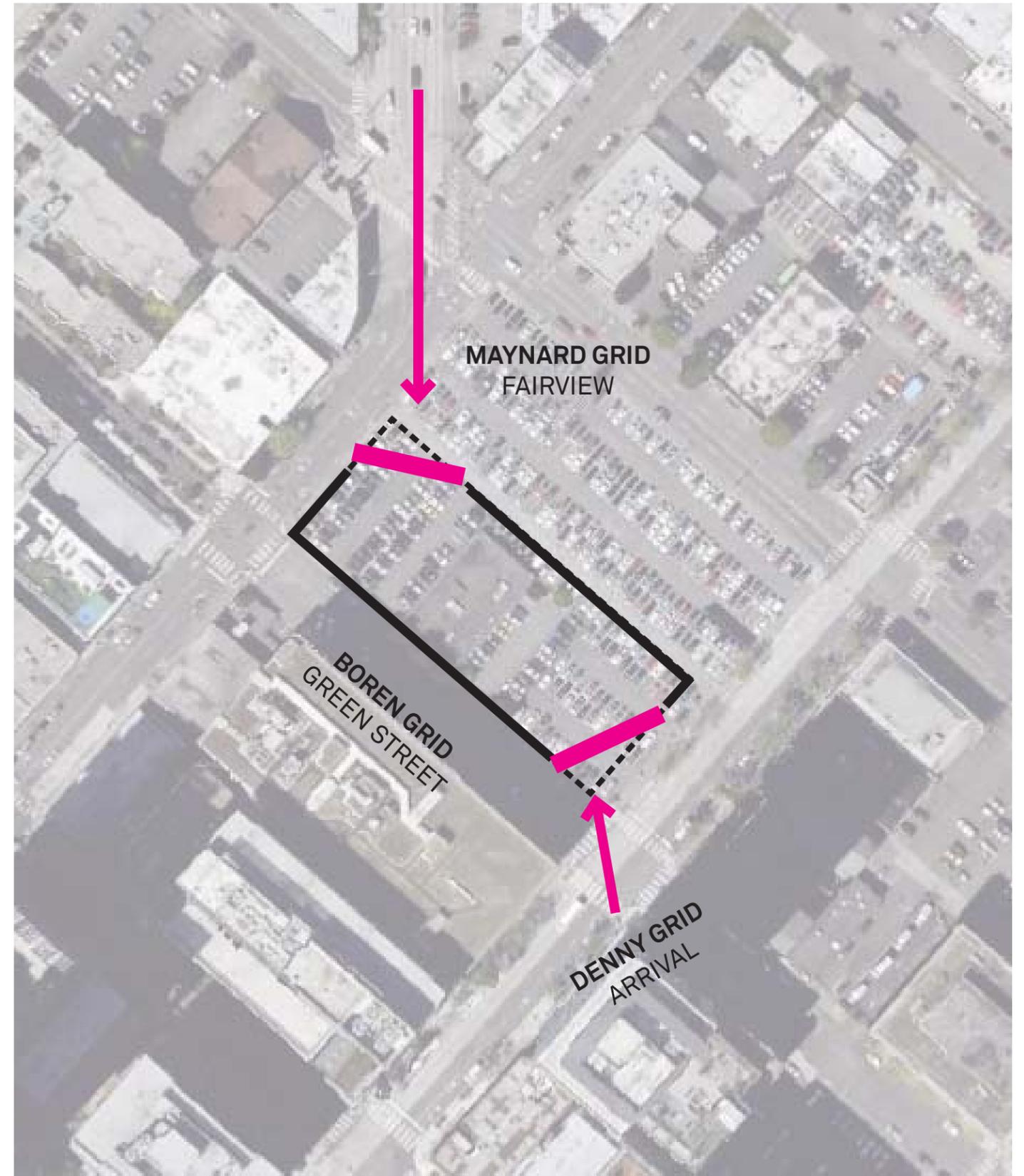
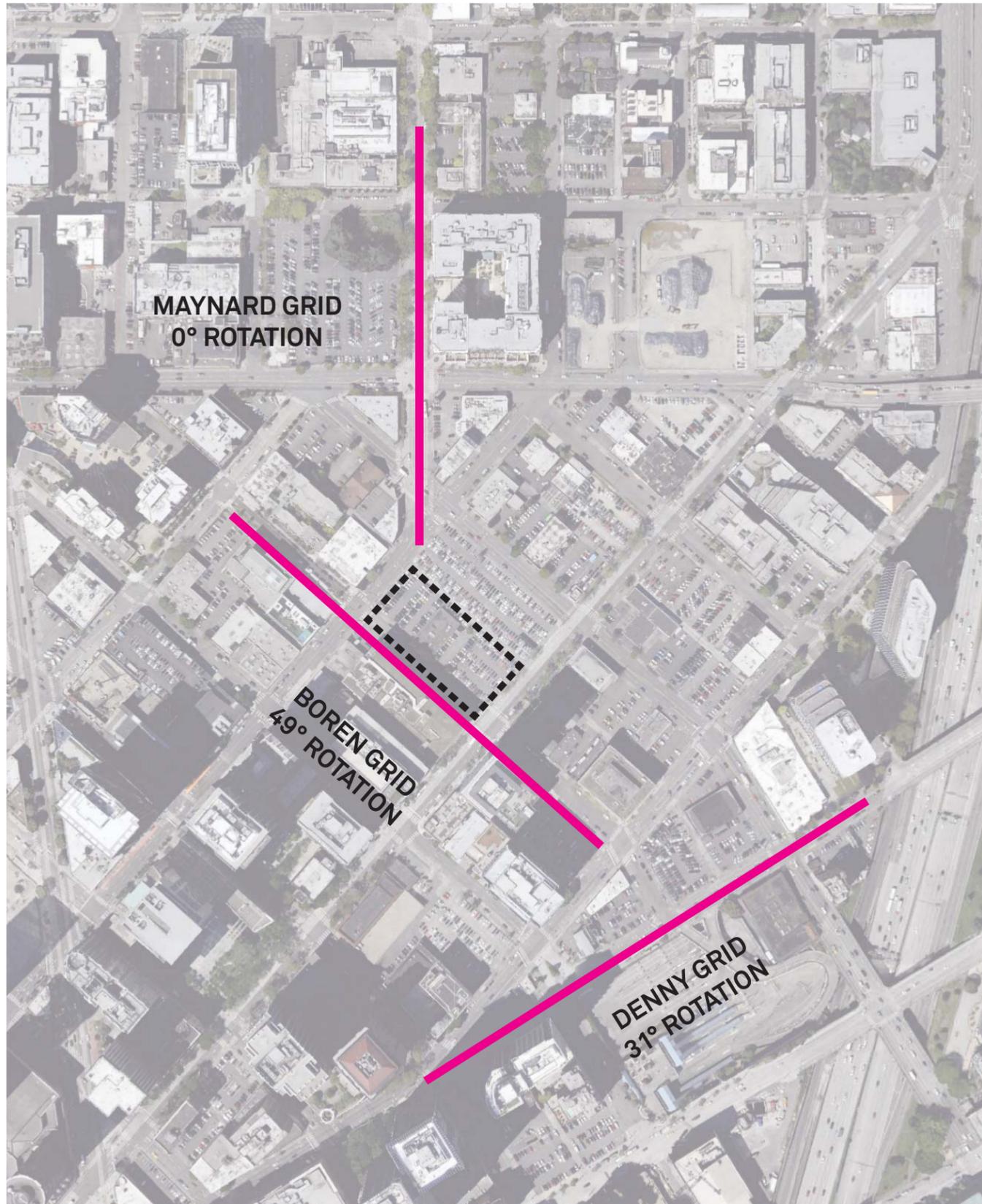
## 05. CONCEPTUAL DRIVERS : A STRING OF PEARLS



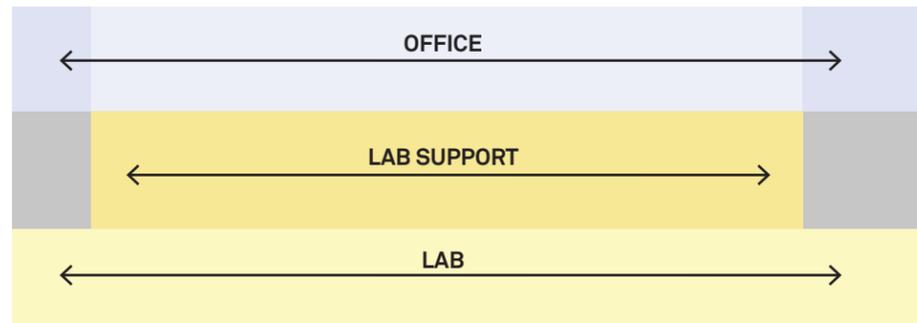
# 05. CONCEPTUAL DRIVERS : RESEARCH INSTITUTE



05. CONCEPTUAL DRIVERS : THE SHIFT

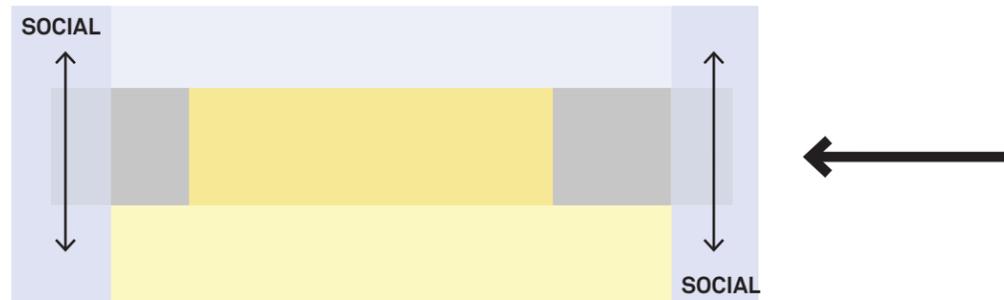


# 05. CONCEPTUAL DRIVERS : PROGRAM



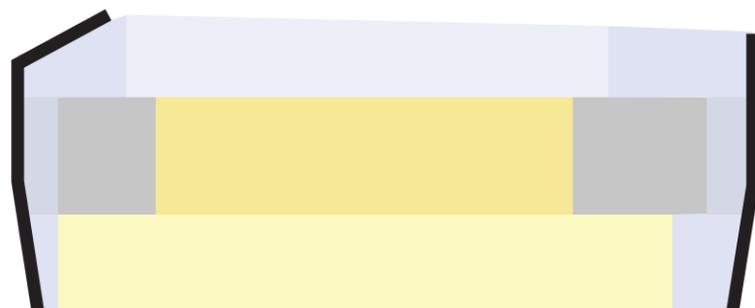
## LAMINATE

Research program is laminated and stretched across the site.



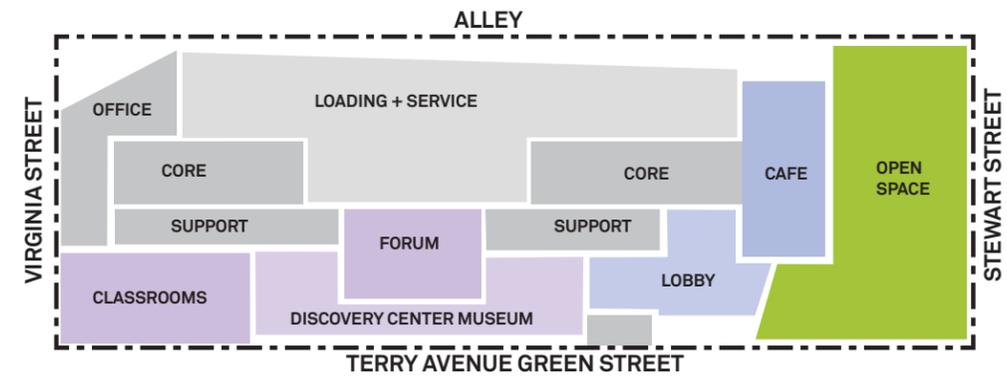
## COMPACT

The program is compacted to optimize efficiency and the social functions connect to vertical circulation at the ends of the building.



## SHAPE

The ends of the building are shaped to respond to larger urban context, arrival, and social functions.



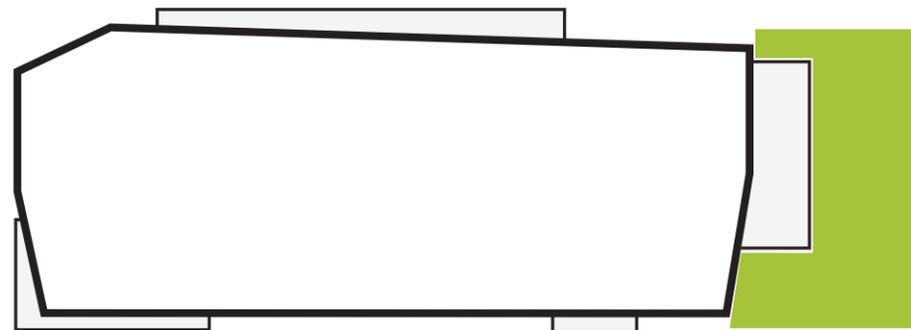
## PROGRAM

The active grade level program is located on the Stewart Street open space and the Terry Avenue green street.



## STREETSCAPE

Grounding elements define the grade level program, while transparency defines entry and activity.

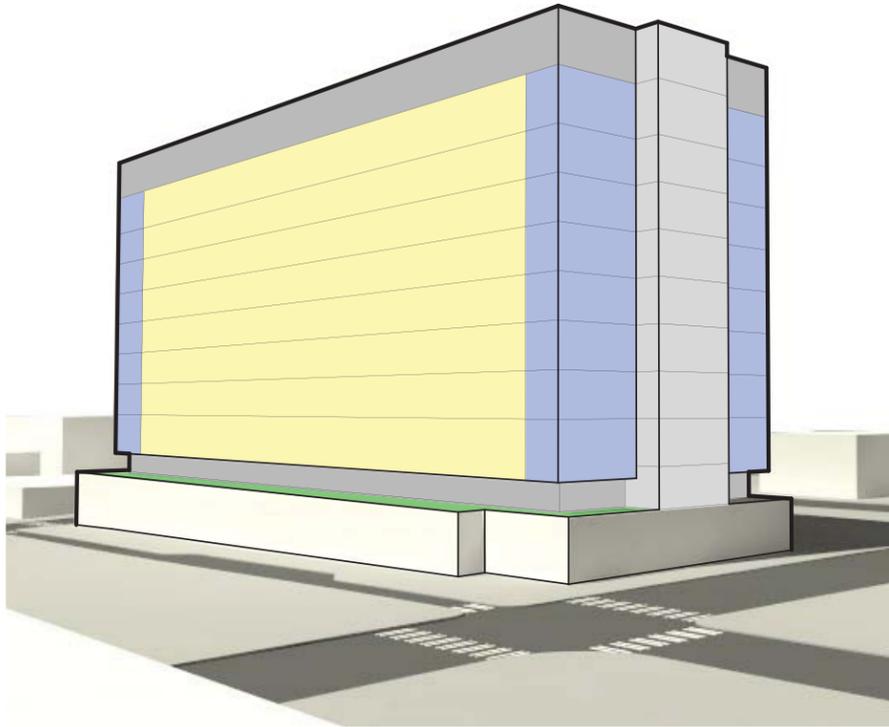


## TOWER

The faceted tower is a counterpoint to the rectilinear grounding elements

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## 05. ARCHITECTURAL MASSING : MASSING ALTERNATIVES



**OPTION 1 - LAMINATE**

**PROS**

- +Code compliant
- +Laminated program stretched across the site
- +Social spaces at the corners

**CONS**

- Floor plan is too long for the effective distribution of the program
- Limited street level open space
- Level 2 open open space is narrow and elongated



**OPTION 2 - COMPACT**

**PROS**

- +Laminated program with optimized efficiency
- +Social spaces connect across vertical circulation
- +Level 2 open space is functionally effective, with southern orientation

**CONS**

- Limited street level open space
- Requires departure from land use code for green street setback and facade modulation



**OPTION 3 - SHAPE (PREFERRED)**

**PROS**

- +Laminated program with optimized efficiency
- +Social spaces connect across vertical circulation
- +Level 2 open space above cafe
- +Chamfered corners orient view and distinguish program
- +Introduces street level open space
- +Promotes a pedestrian alley

**CONS**

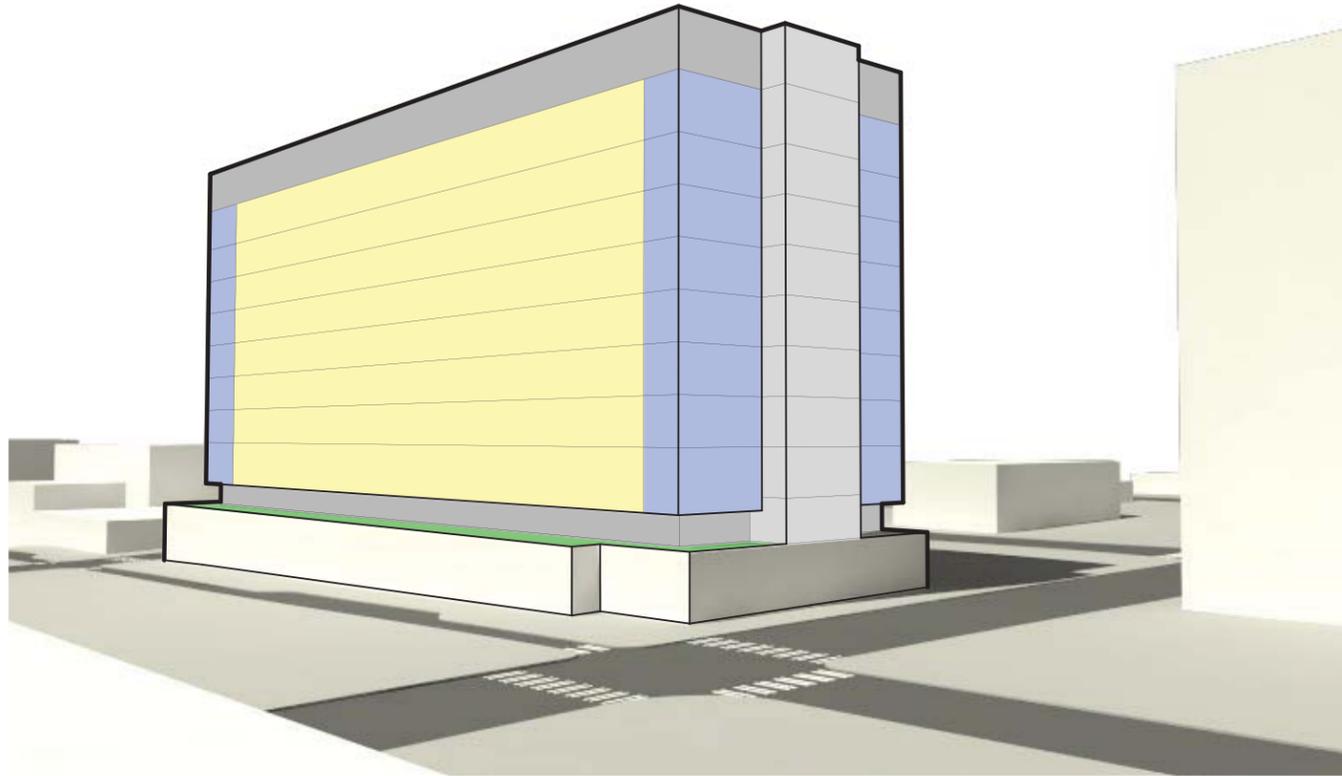
- Requires departure from land use code for green street setback, facade modulation, and street use.

OPEN BENCH RESEARCH  
 LAB SUPPORT

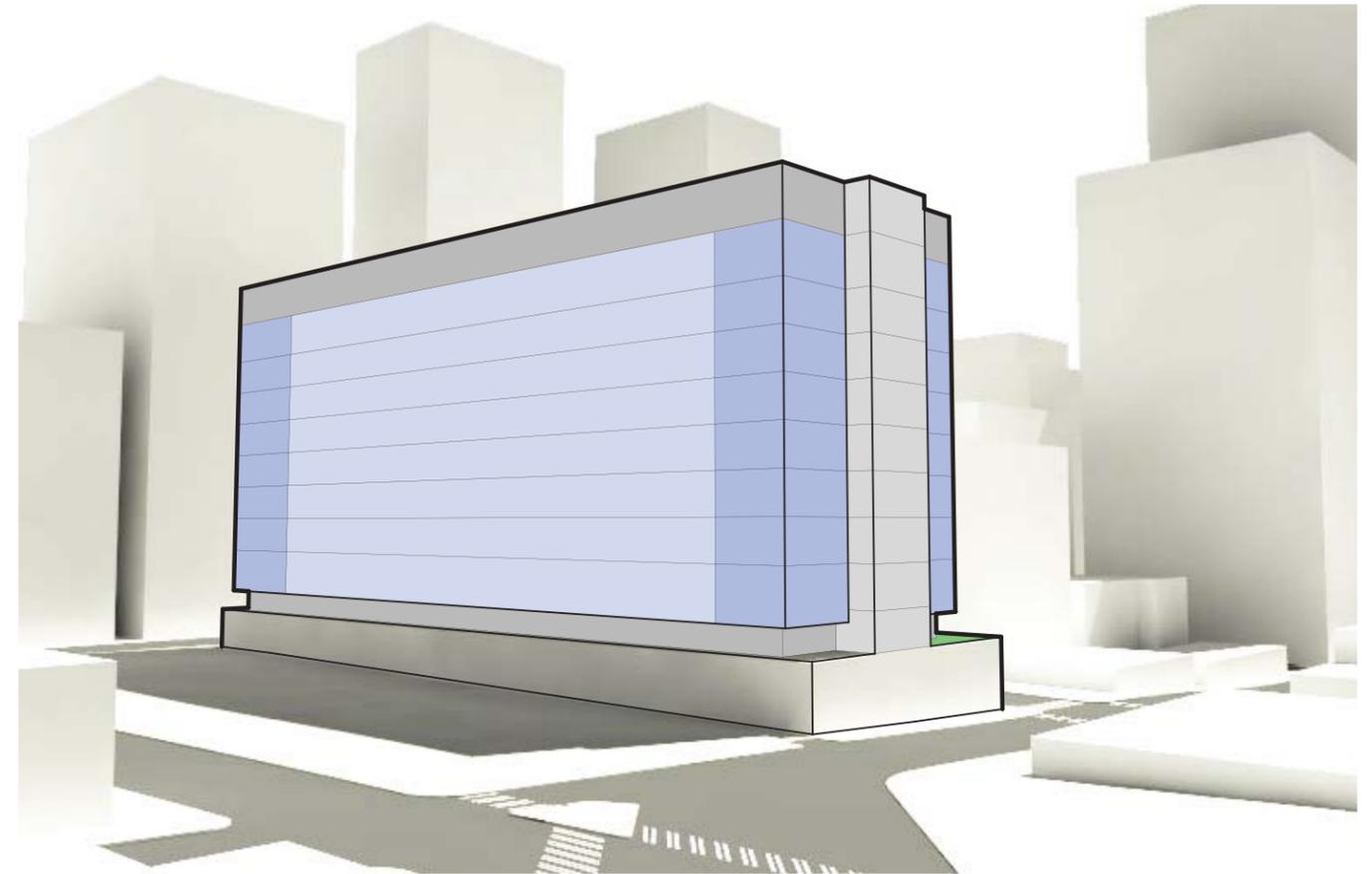
OFFICE  
 SOCIAL SPACE

BUILDING SUPPORT  
 MECHANICAL

# 05. ARCHITECTURAL MASSING : ALTERNATIVE #1 - LAMINATE (CODE COMPLIANT)

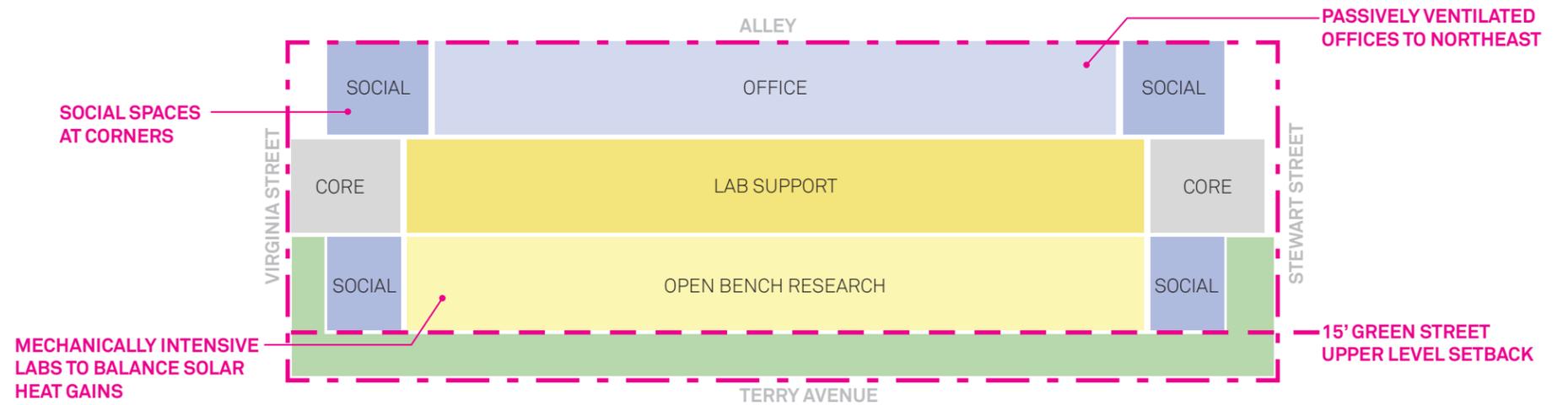


CORNER OF TERRY AVENUE + STEWART STREET



CORNER OF BOREN AVENUE + VIRGINIA STREET

BUILDING HEIGHT	179'-0"
ABOVE GRADE LEVELS	11
TYPICAL RESEARCH FLOOR AREA	~34,000 sf
TOTAL ABOVE GRADE AREA	~380,000 sf
GROUND LEVEL OPEN SPACE	0 sf
UPPER LEVEL OPEN SPACE	~7,600 sf

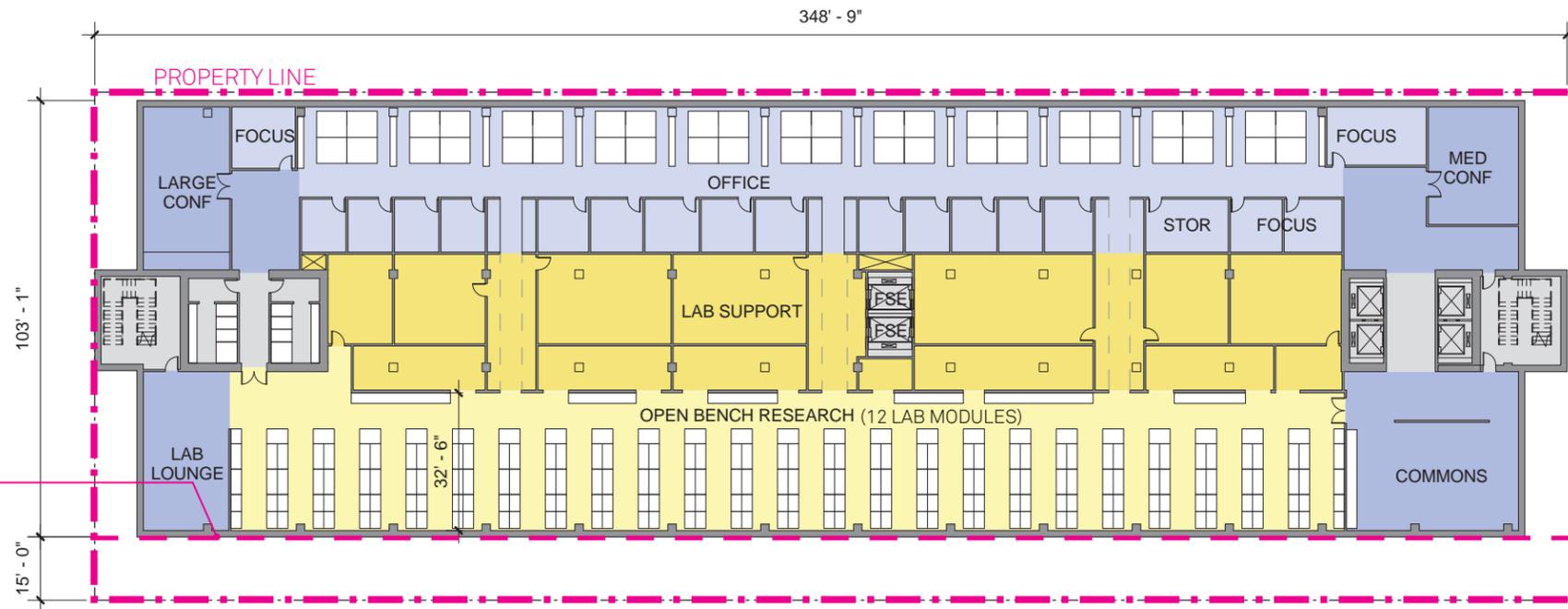


- OPEN BENCH RESEARCH
- OFFICE
- BUILDING SUPPORT
- LAB SUPPORT
- SOCIAL SPACE
- MECHANICAL



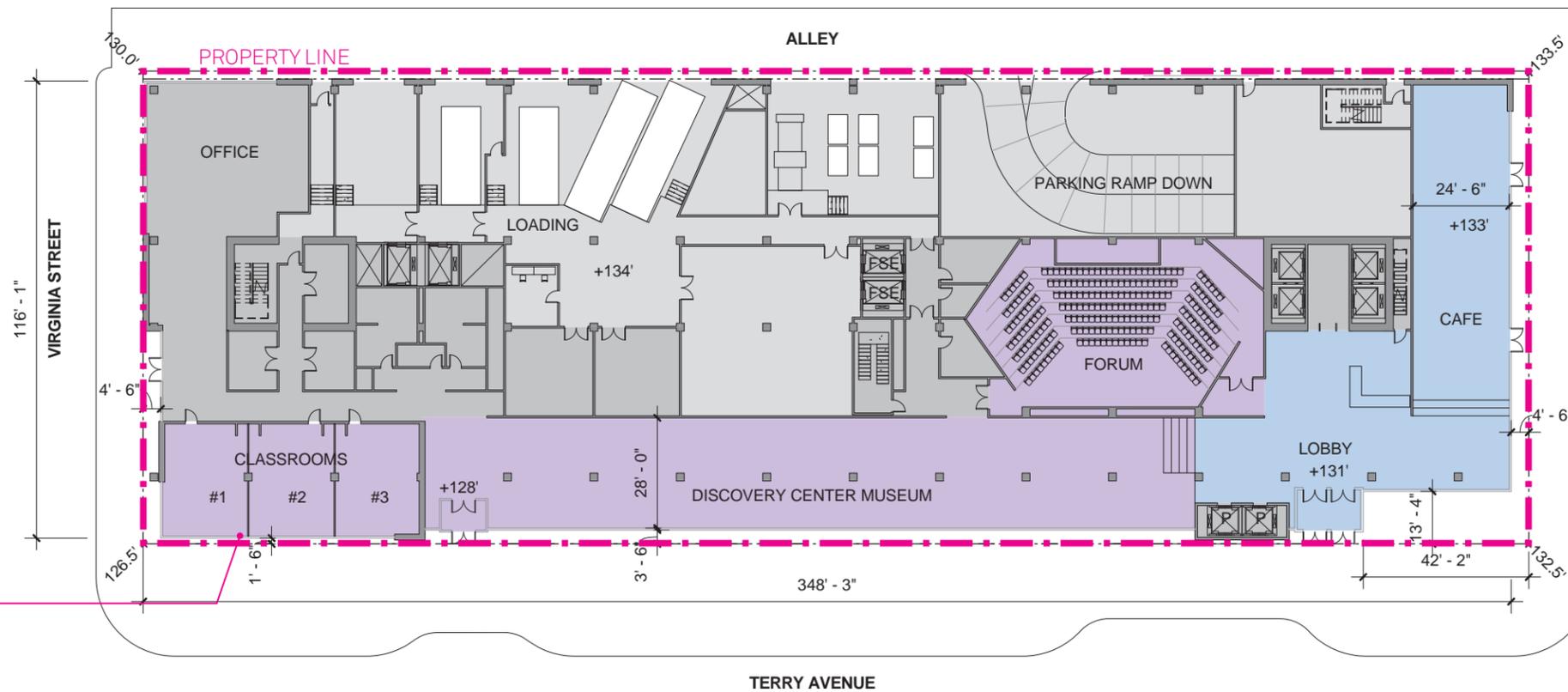
# 05. ARCHITECTURAL MASSING : ALTERNATIVE #1

15' SETBACK REQUIRED  
15' SETBACK PROVIDED



TYPICAL RESEARCH LEVEL  
0 8' 16' 32'

2' AVERAGE GREEN STREET  
SETBACK PROVIDED AT GRADE



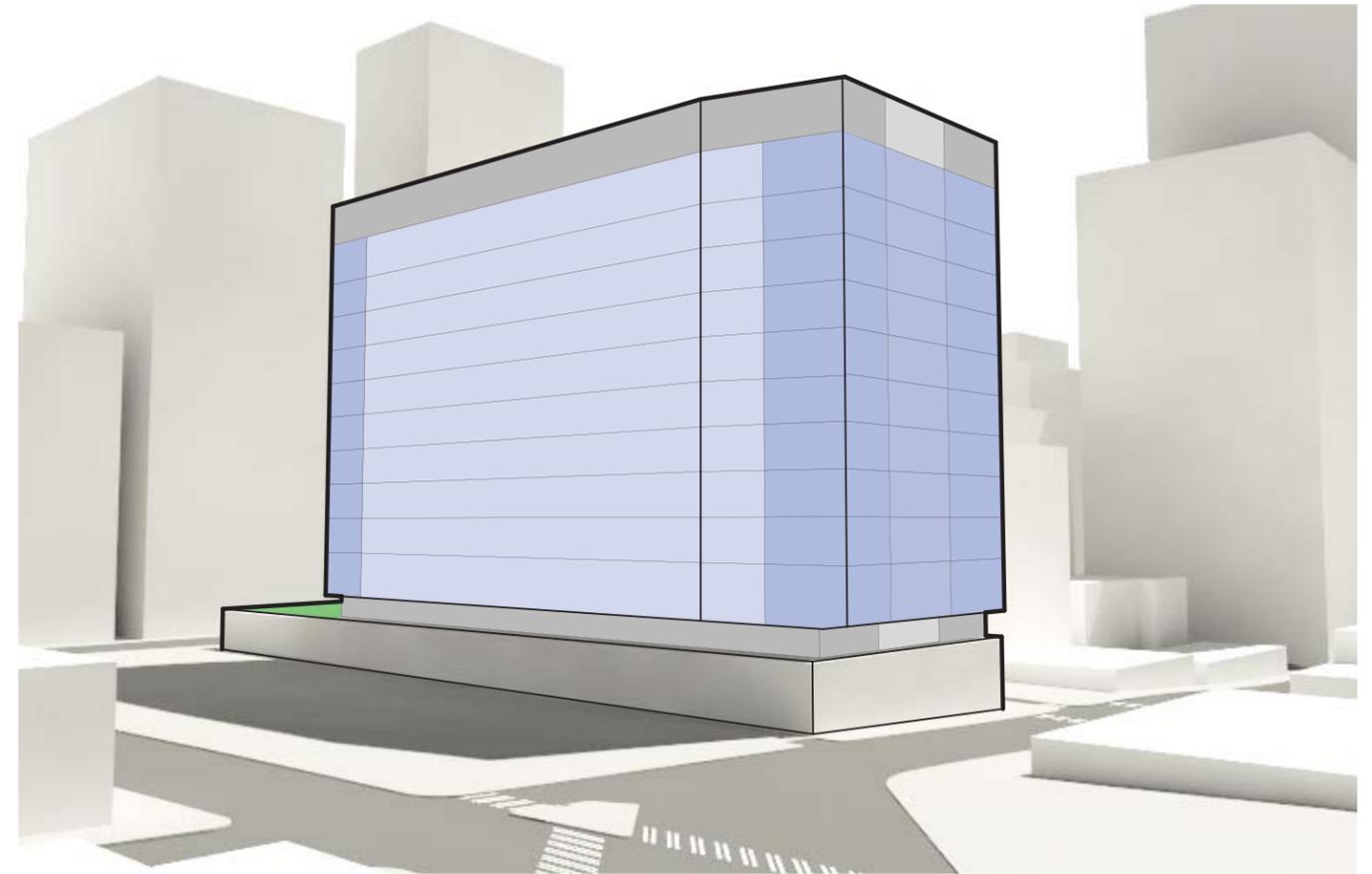
GROUND LEVEL  
0 8' 16' 32'



# 05. ARCHITECTURAL MASSING : ALTERNATIVE #2 - COMPACT

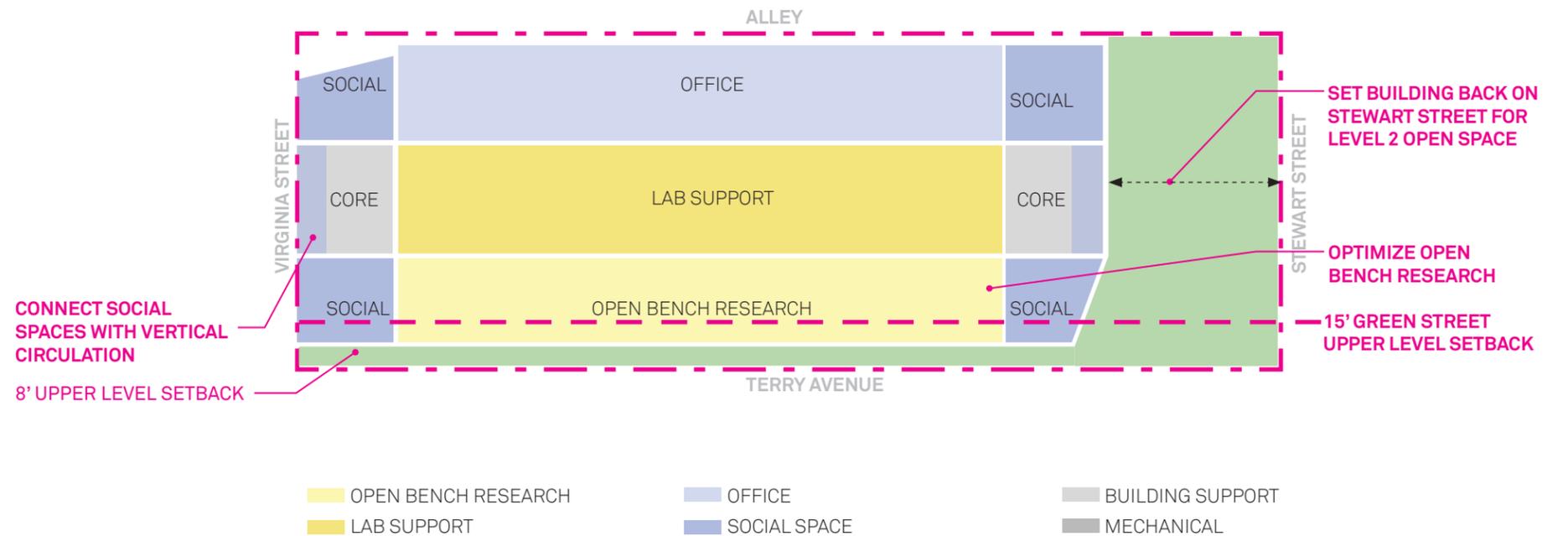


CORNER OF TERRY AVENUE + STEWART STREET

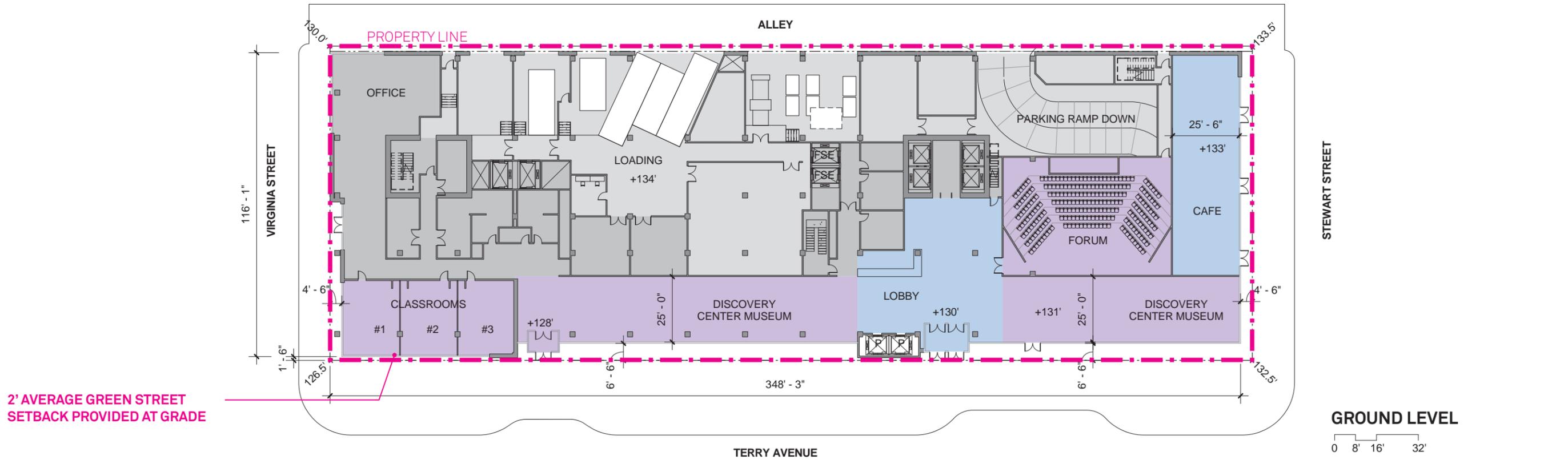


CORNER OF BOREN AVENUE + VIRGINIA STREET

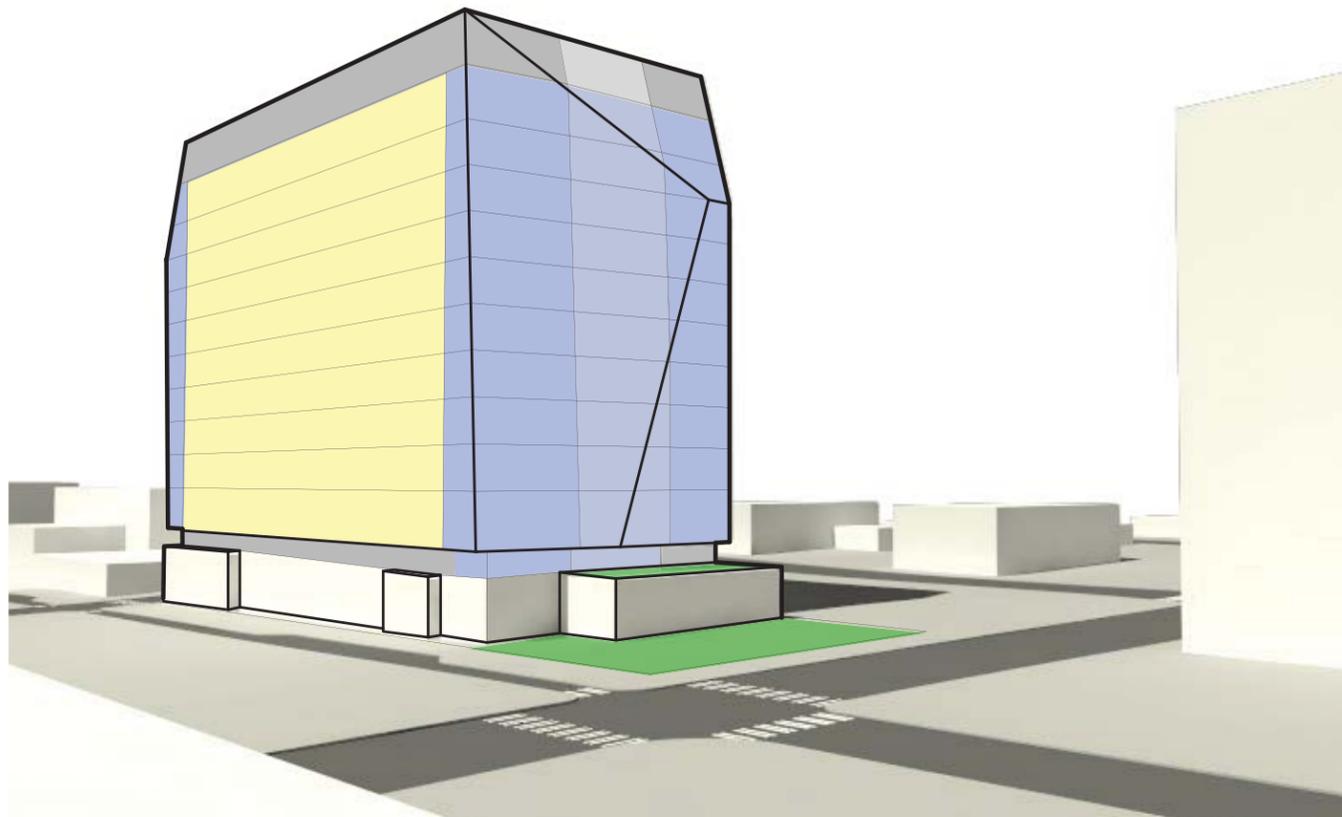
BUILDING HEIGHT	210'-0"
ABOVE GRADE LEVELS	13
TYPICAL RESEARCH FLOOR AREA	~30,000 sf
TOTAL ABOVE GRADE AREA	~380,000 sf
GROUND LEVEL OPEN SPACE	0 sf
UPPER LEVEL OPEN SPACE	~7,500 sf



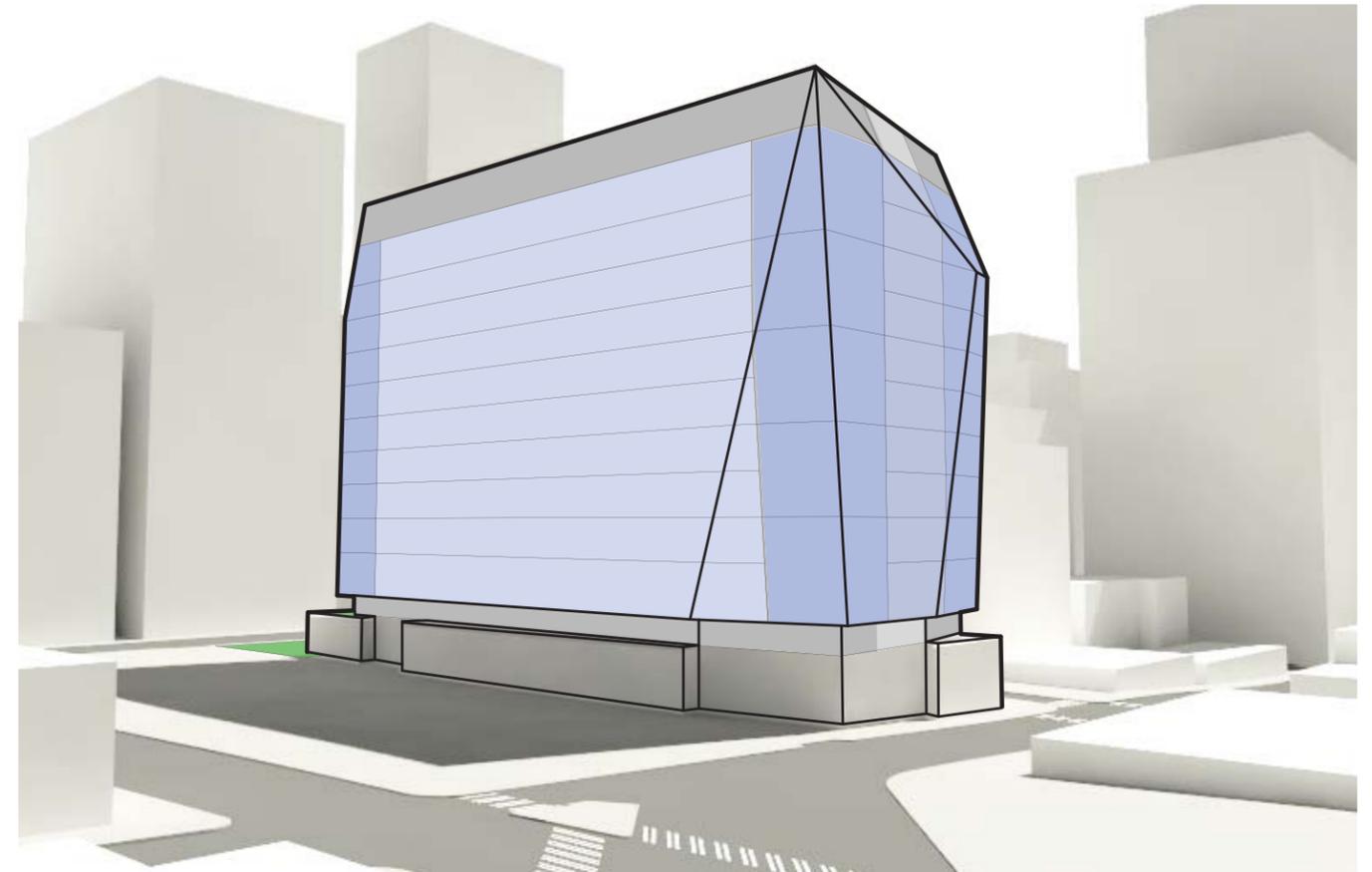
# 05. ARCHITECTURAL MASSING : ALTERNATIVE #2



# 05. ARCHITECTURAL MASSING : PREFERRED ALTERNATIVE #3 - SHAPE

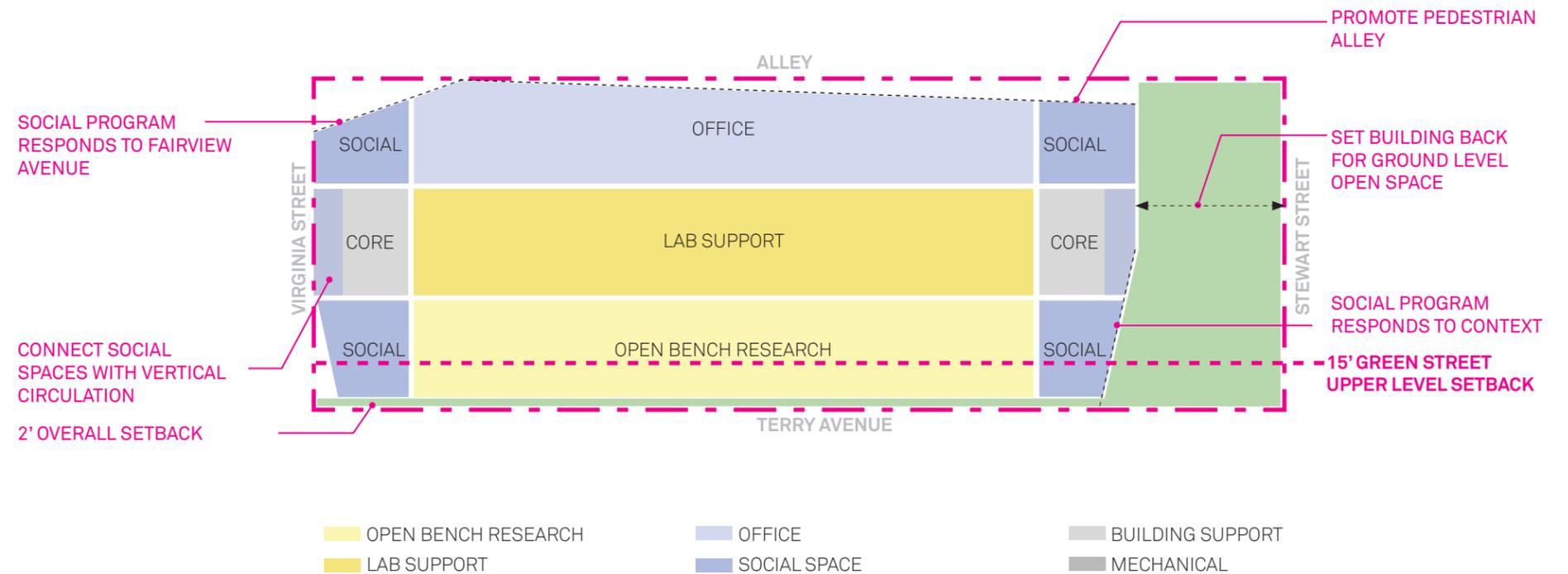


CORNER OF TERRY AVENUE + STEWART STREET

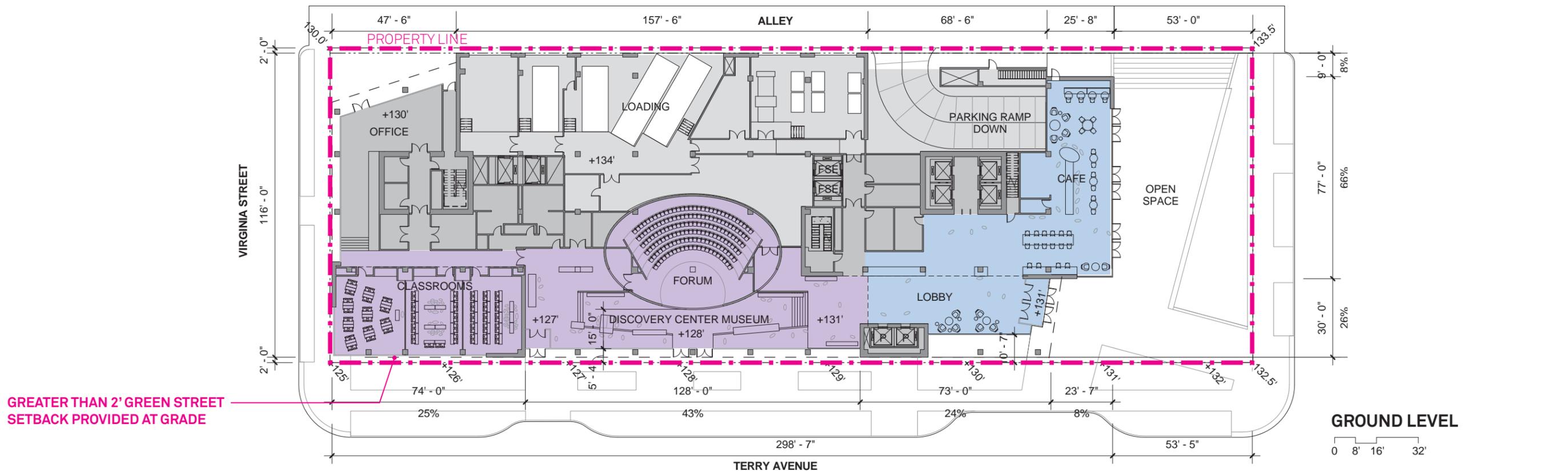


CORNER OF BOREN AVENUE + VIRGINIA STREET

BUILDING HEIGHT	210'-0"
ABOVE GRADE LEVELS	13
TYPICAL RESEARCH FLOOR AREA	~30,000 sf
TOTAL ABOVE GRADE AREA	~390,000 sf
GROUND LEVEL OPEN SPACE	5000-7000sf
UPPER LEVEL OPEN SPACE	1,000-2000 sf

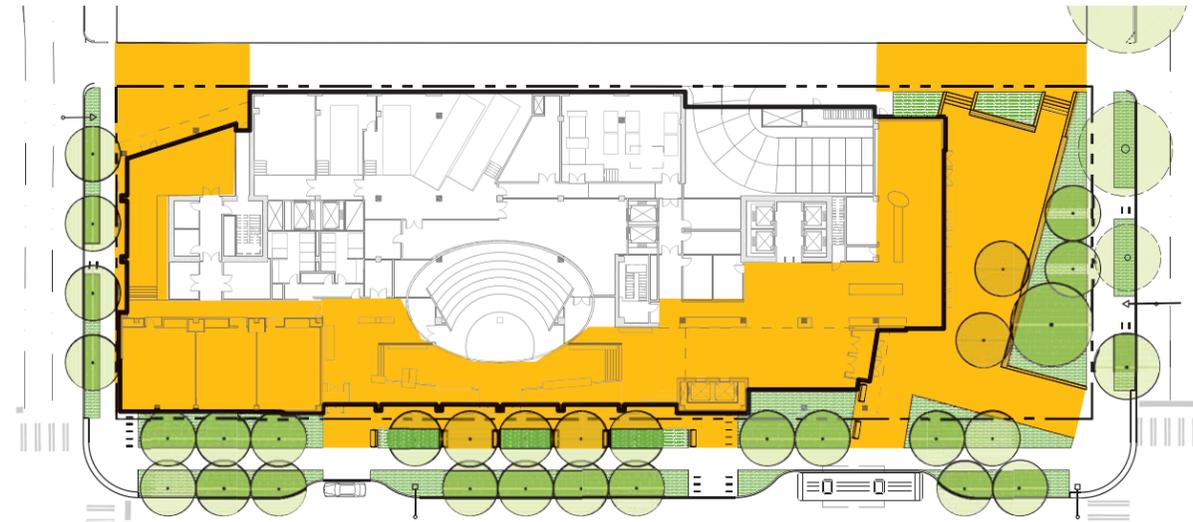


# 05. ARCHITECTURAL MASSING : PREFERRED ALTERNATIVE #3



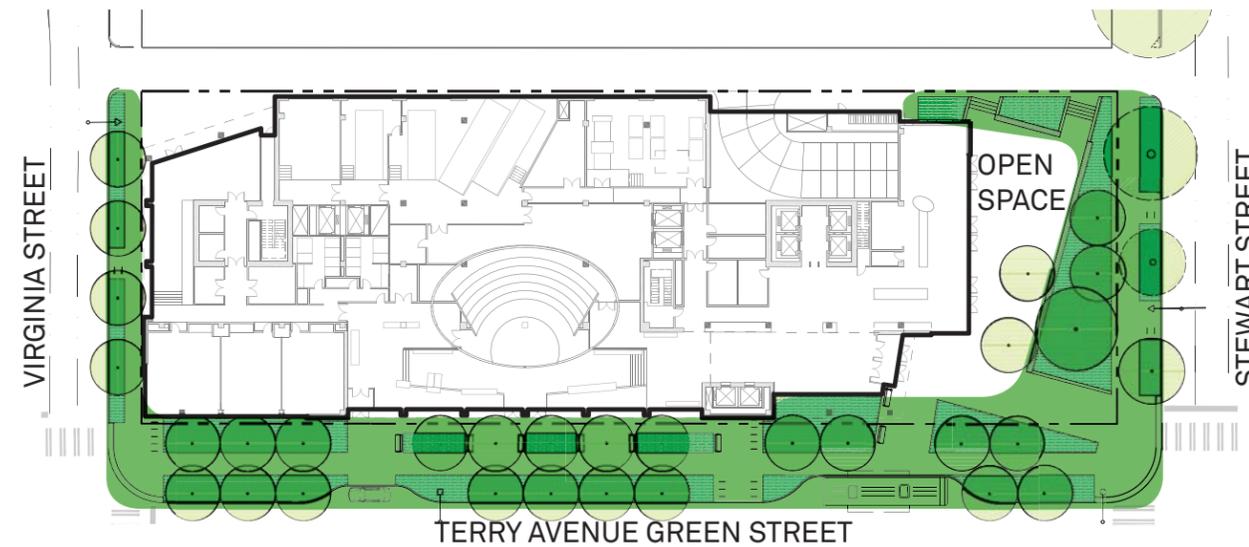
**+ CONTINUOUS GROUNDPLANE**

+ To unite the interior and exterior spaces, a conceptually continuous groundplane will create a strong connection between the building's interior program and its urban surroundings.



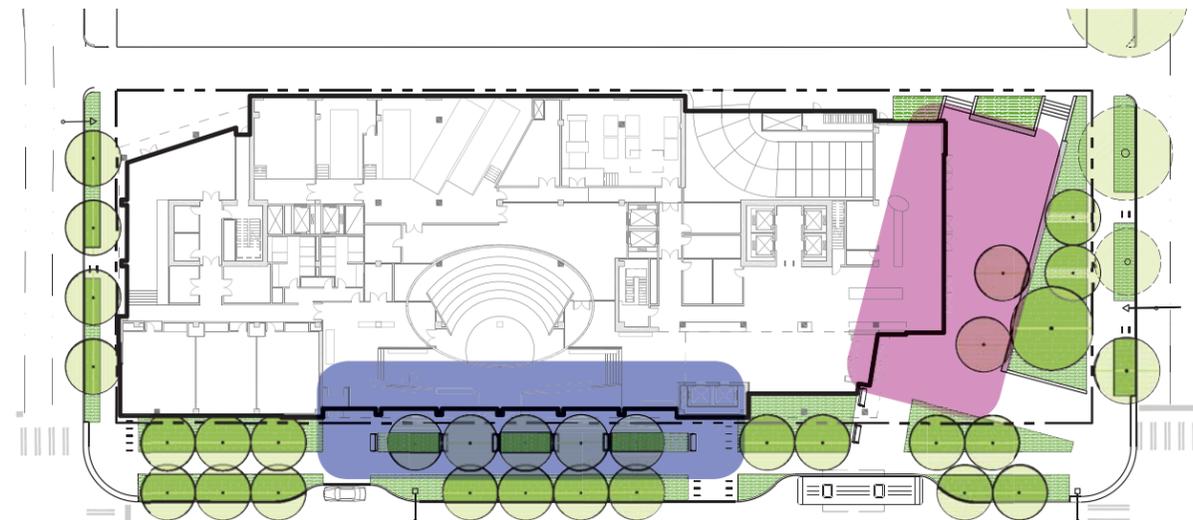
**+ GREEN EDGE**

+ To enhance the pedestrian experience, to create a visible identity of health and beauty for Children's, and to buffer the Open Space and Green Street spaces from traffic, the Building Cure site edge maximizes planting while maintaining functionality.



**+ MULTIPLE GATHERING SPACES**

+ Two gathering spaces serve the building's users, enhance the public realm, and take advantage of solar access. Daytime gathering and lunching will occur in the Open Space, while evening events will spill out onto the Green Street spaces.



# 06. STREETSCAPE EXPERIENCE : LANDSCAPE + STREETSCAPE CONCEPTS



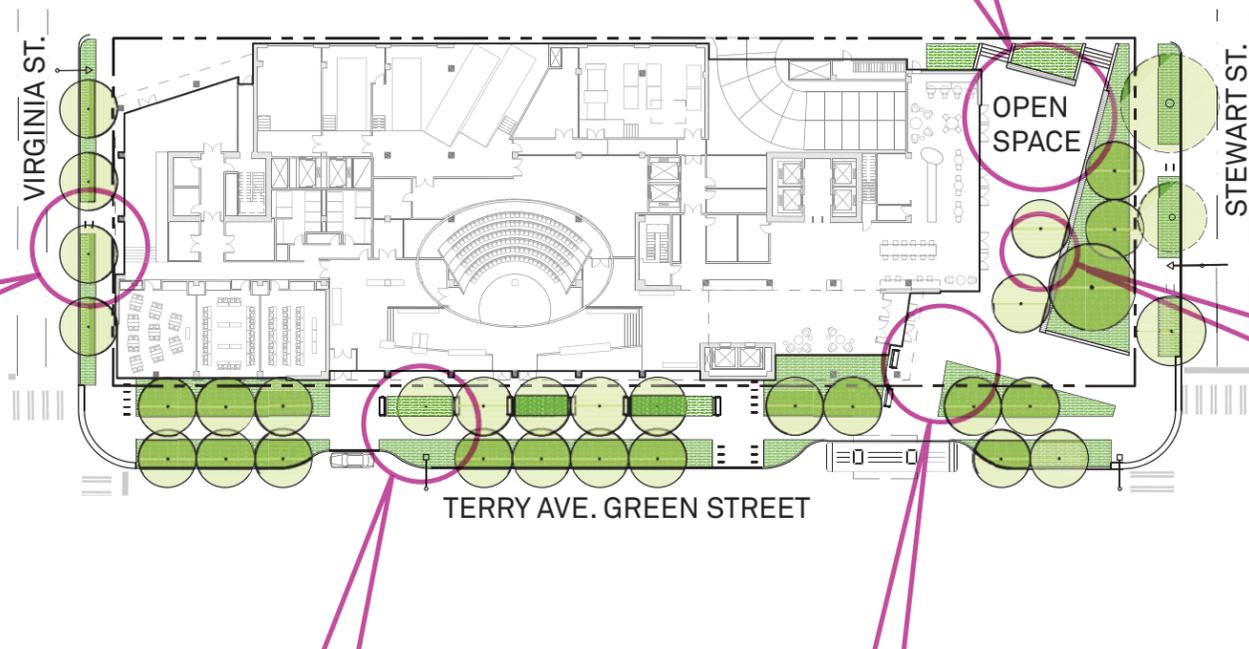
+ Wide sidewalks, planting protection fences, and a robust, native planting palette create a healthy urban environment.

+The streetscape provides a variety of furnishings along the Terry Avenue Green Street and in the Open Space that allow for sitting and bike parking.



## STREETSCAPE CHARACTER

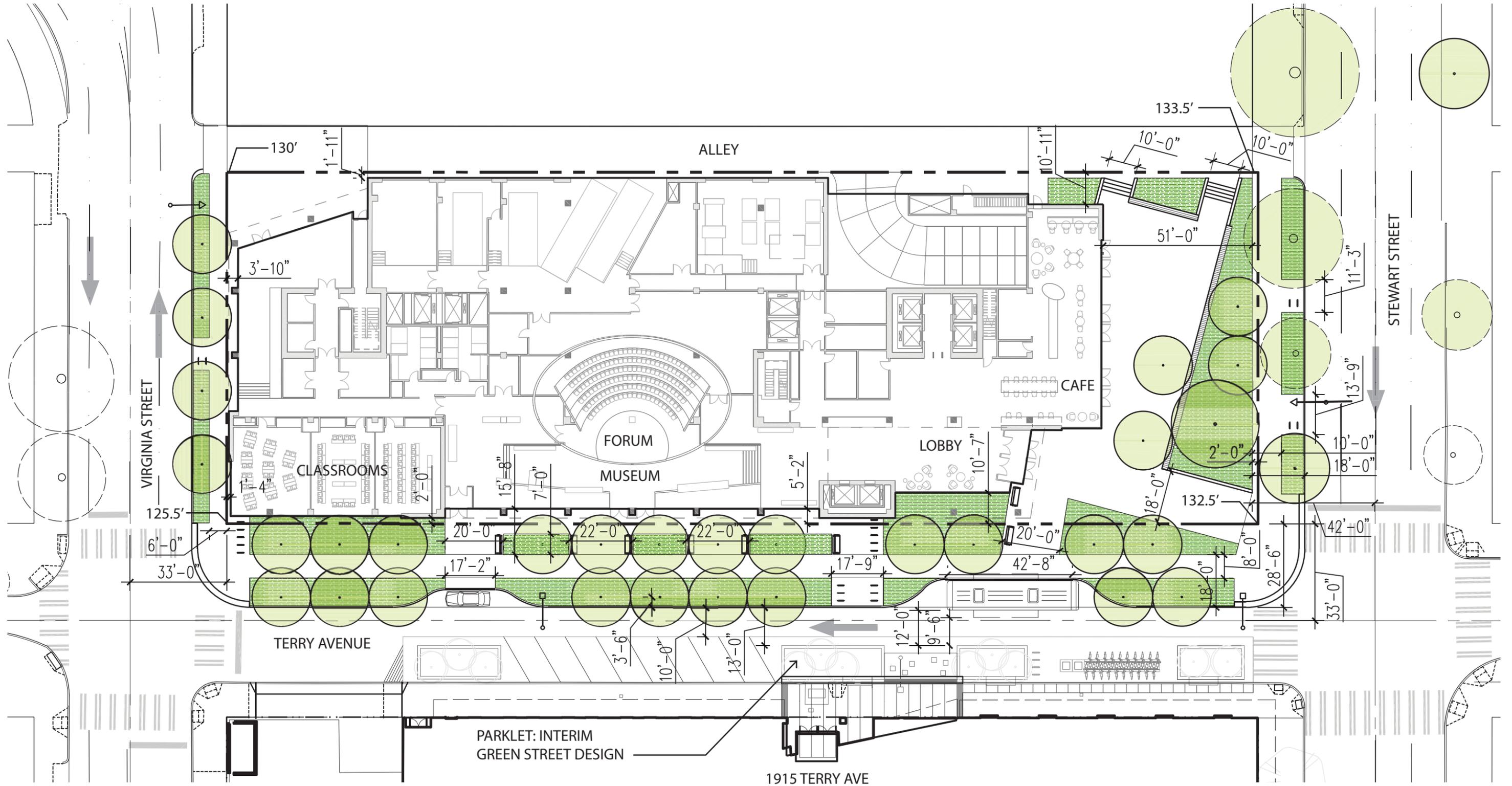
+ Lush understory planting on the sidewalk and in the Open Space creates a beautiful environment for the public and building users the same.



+ A balance of paved and planted areas presents an urban environment that allows for special events and everyday use in the flexible Open Space.

+ Trees and planting are designed to allow high visibility and activity in a comfortable urban experience.

06. STREETSCAPE EXPERIENCE : LANDSCAPE + STREETSCAPE CONCEPTS



SCALE  
1/32" = 1'-0"



## 06. STREETSCAPE EXPERIENCE : LANDSCAPE + STREETSCAPE CONCEPTS

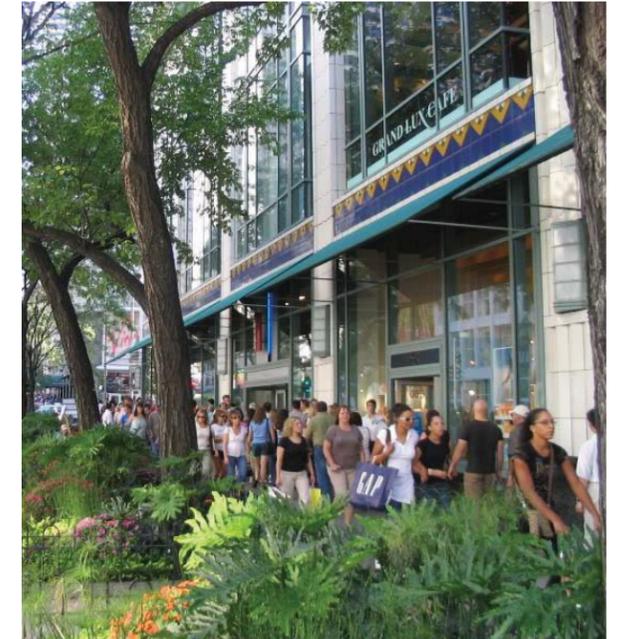
### FURNISHING AND HARDSCAPES

- + Use high quality pedestrian paving that provides continuity with the City fabric
- + Integrate seating appropriate for pausing, bike racks, and other street furniture within the streetscape to provide pedestrian comfort and amenities
- + Use paving materials to provide key areas of texture and interest in the streetscape
- + Use materials that artfully enhance and highlight the movement of water in the landscape

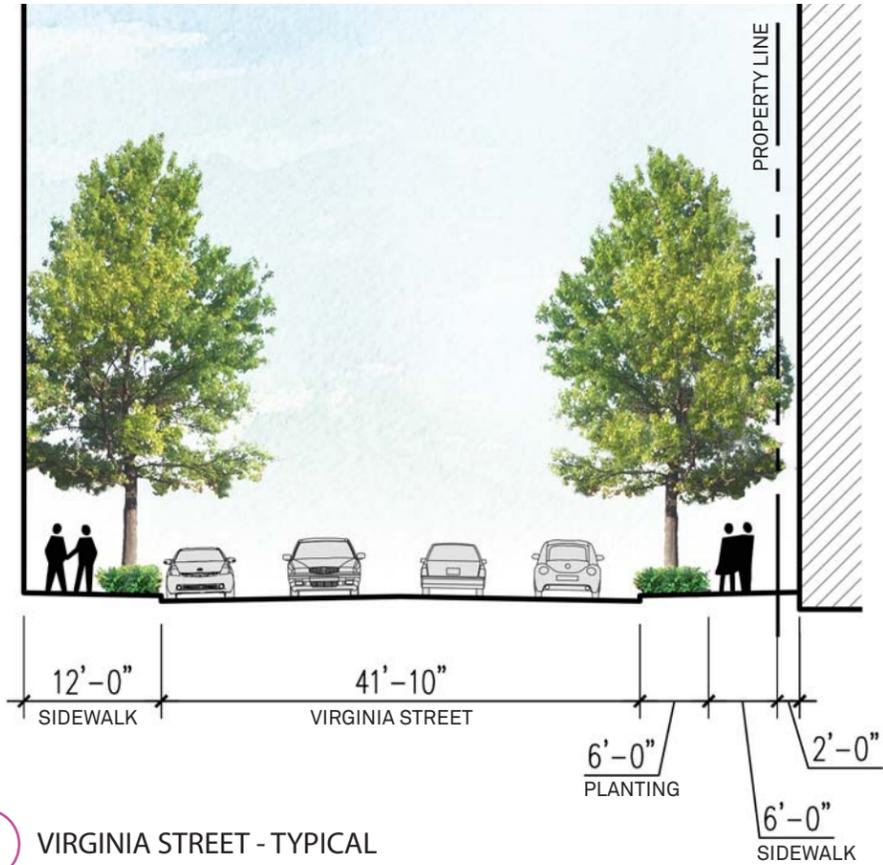


### PLANTING

- + Provide street tree canopy that continues the tree canopy established on adjacent city blocks
- + Use lush understory planting to enhance the character of the district and promote healthier city sidewalks
- + Implement the best tree planting practices for improved urban tree health and sidewalk maintenance
- + Integrate stormwater collection and treatment within the landscape



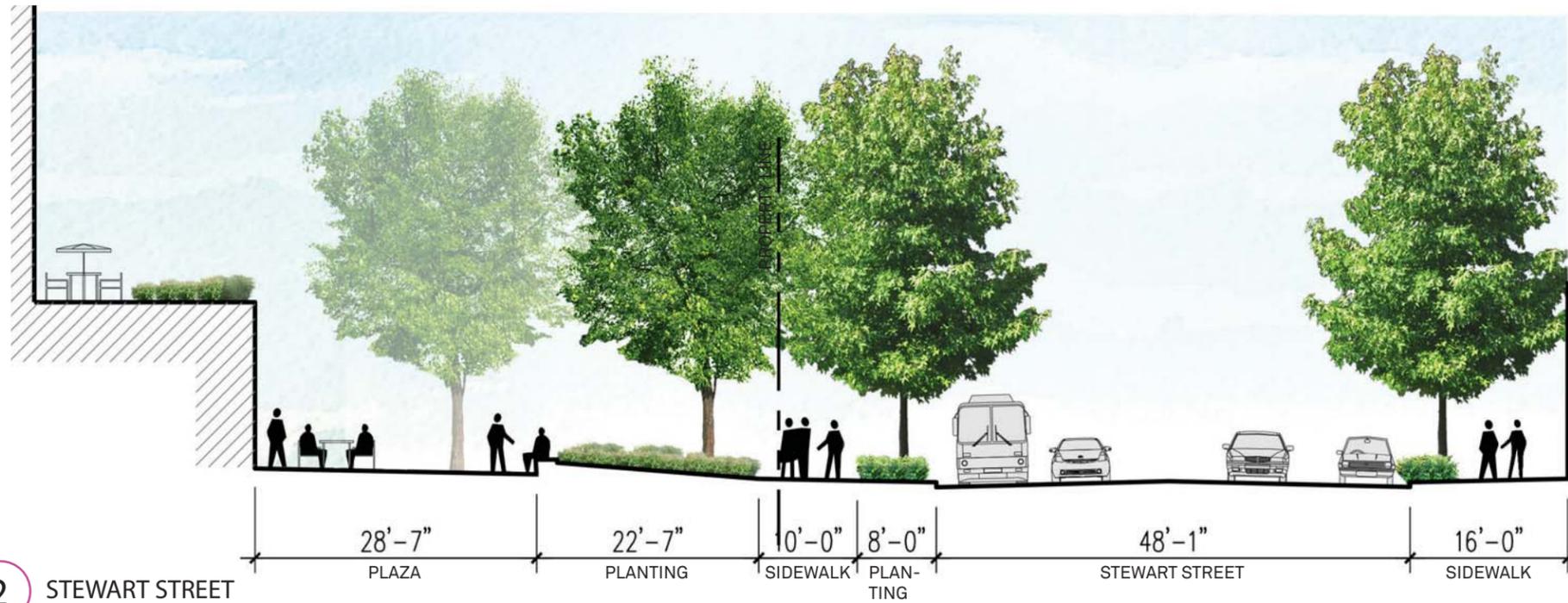
# 06. STREETScape EXPERIENCE : LANDSCAPE VIGNETTE SKETCHES



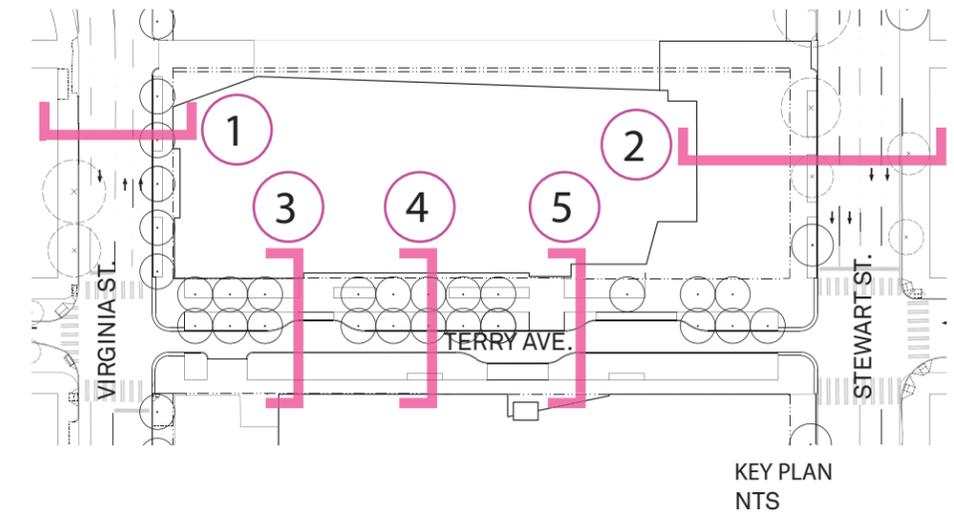
1 VIRGINIA STREET - TYPICAL

## VIRGINIA STREET & STEWART STREET:

- + Lush understory planting in planters
- + Street tree species maintain continuity with adjacent city street trees
- + Generous planted pedestrian buffer between the sidewalk and the curb



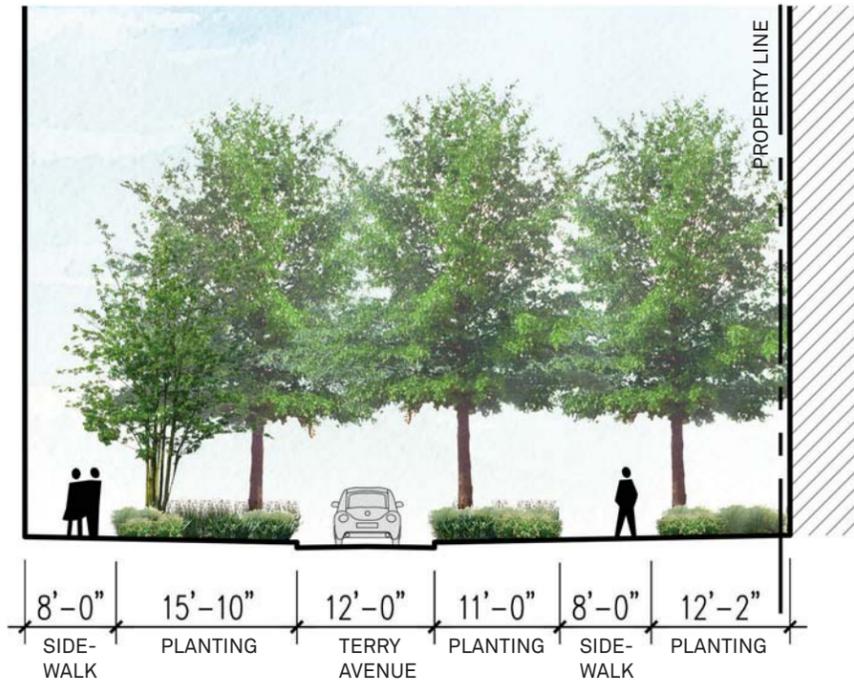
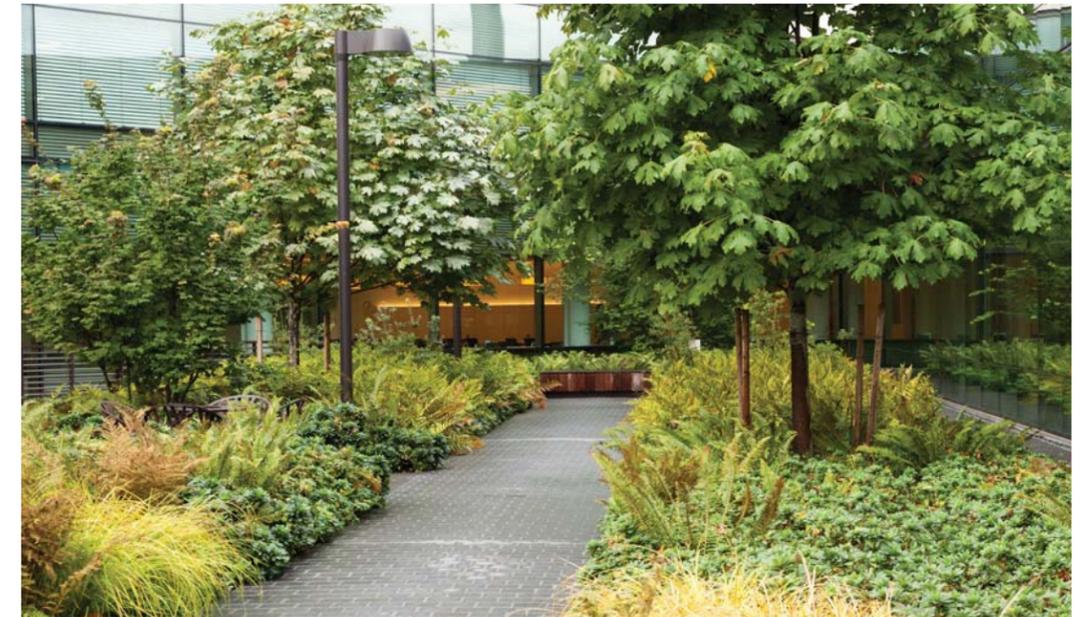
2 STEWART STREET



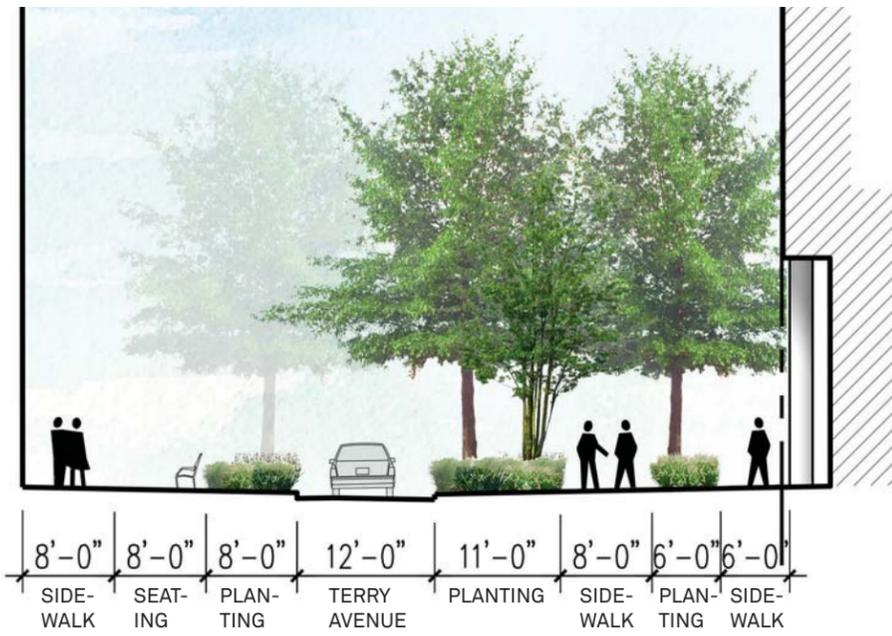
# 06. STREETScape EXPERIENCE : LANDSCAPE VIGNETTE SKETCHES

## TERRY AVENUE - GREEN STREET

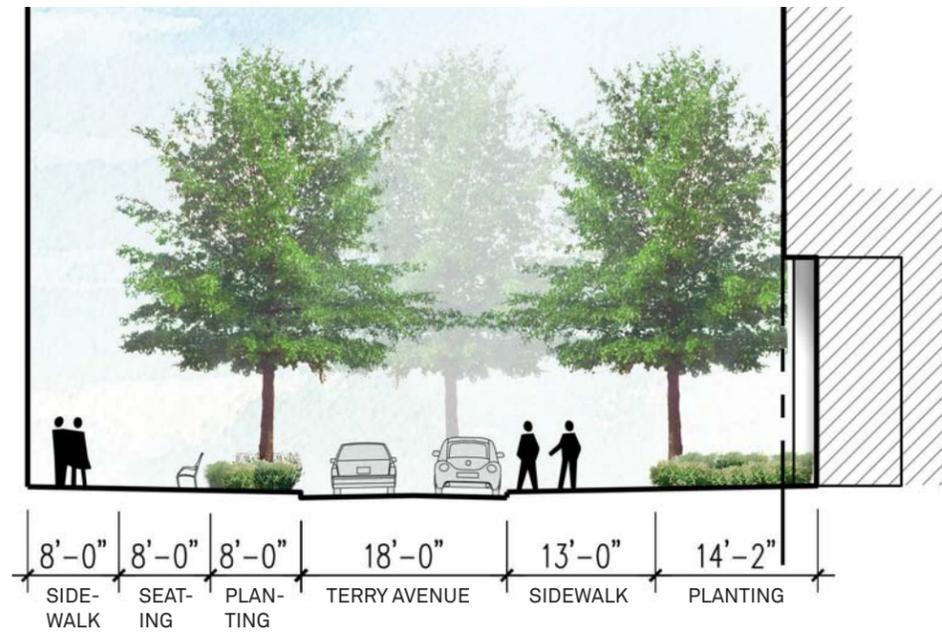
- + Lush understory planting on both sides of the sidewalk.
- + Tree canopy that complements adjacent Green Street blocks and enhances the character of the street
- + Integrated stormwater collection and treatment within the landscape



3 TERRY AVENUE AT PLANTED FACADE



4 TERRY AVENUE AT FORUM



5 TERRY AVENUE AT DROP-OFF

06. STREETScape EXPERIENCE : VIGNETTE SKETCHES



06. STREETScape EXPERIENCE : VIGNETTE SKETCHES



06. STREETScape EXPERIENCE : VIGNETTE SKETCHES



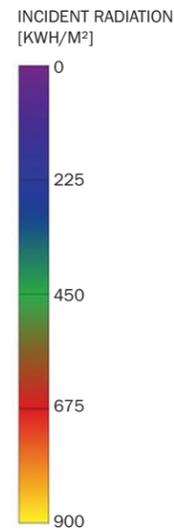
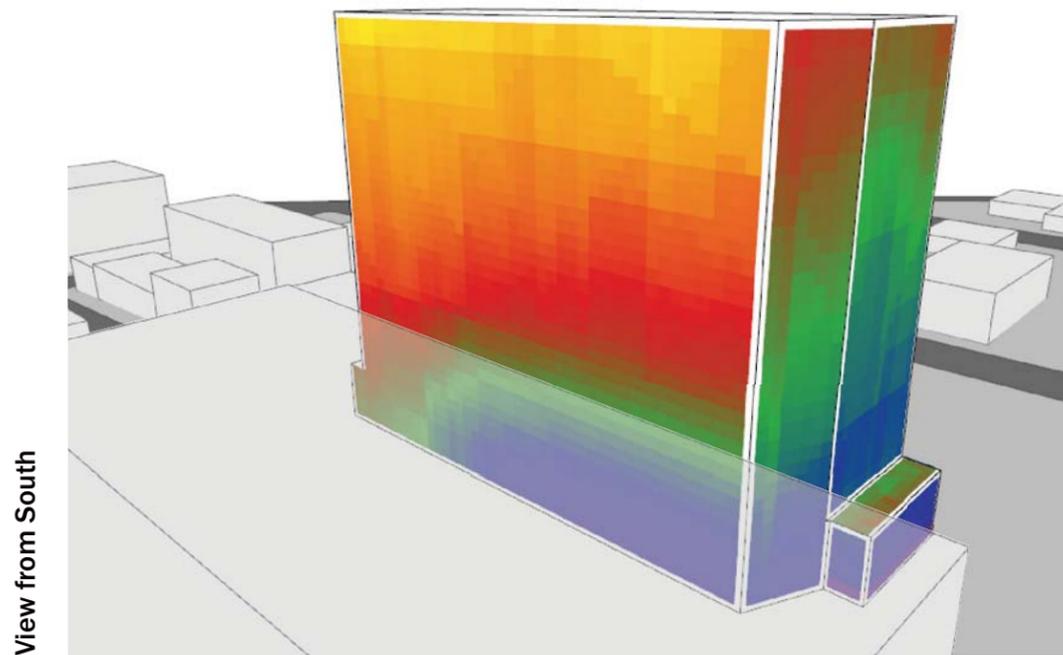
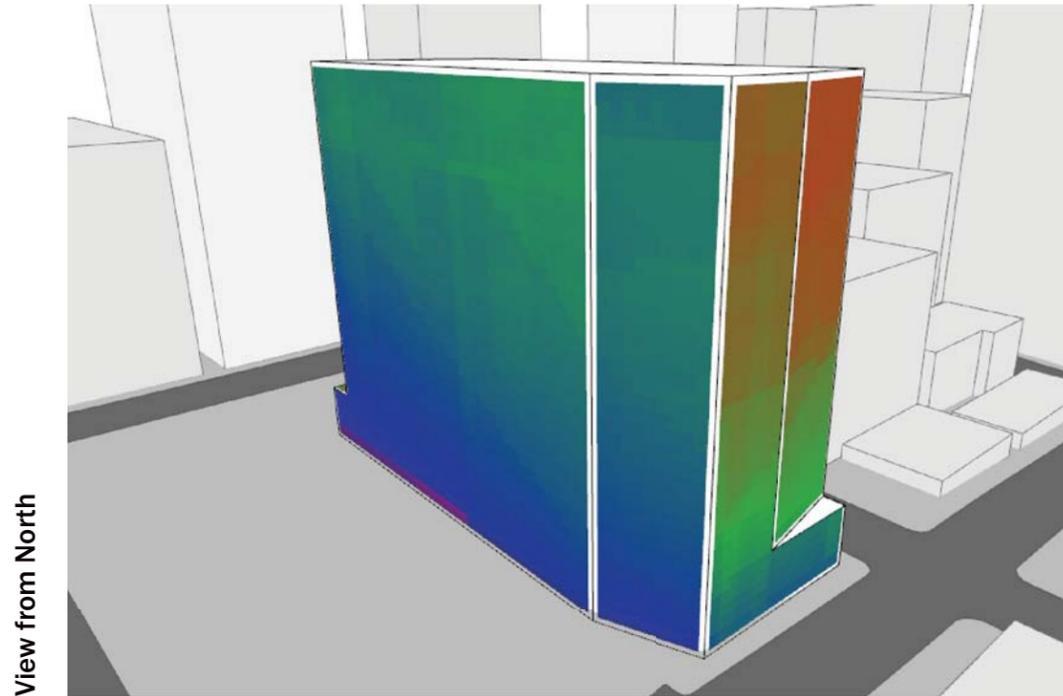
06. STREETScape EXPERIENCE : VIGNETTE SKETCHES



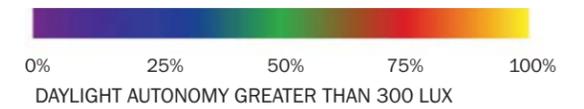
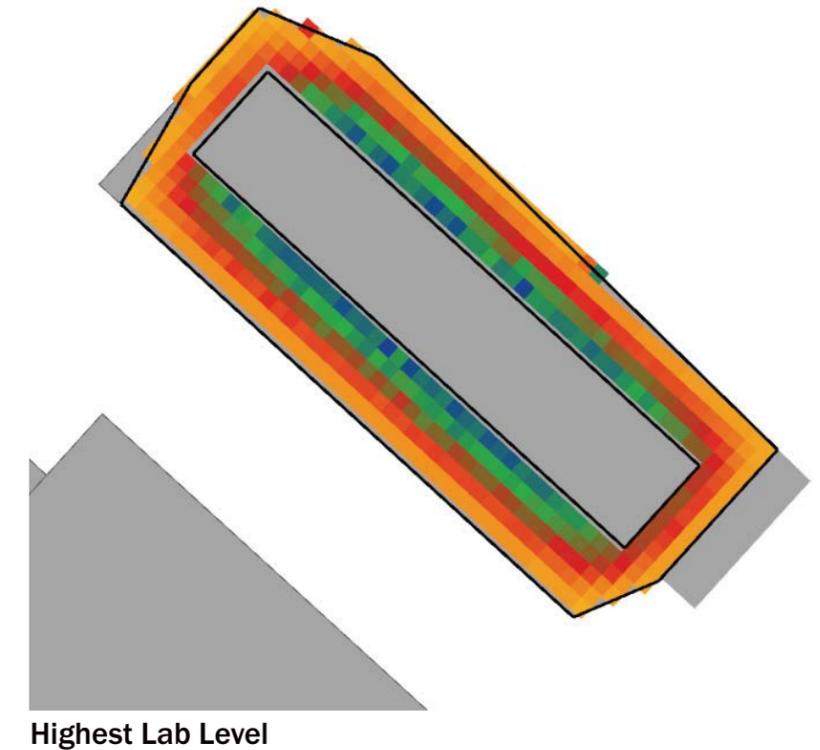
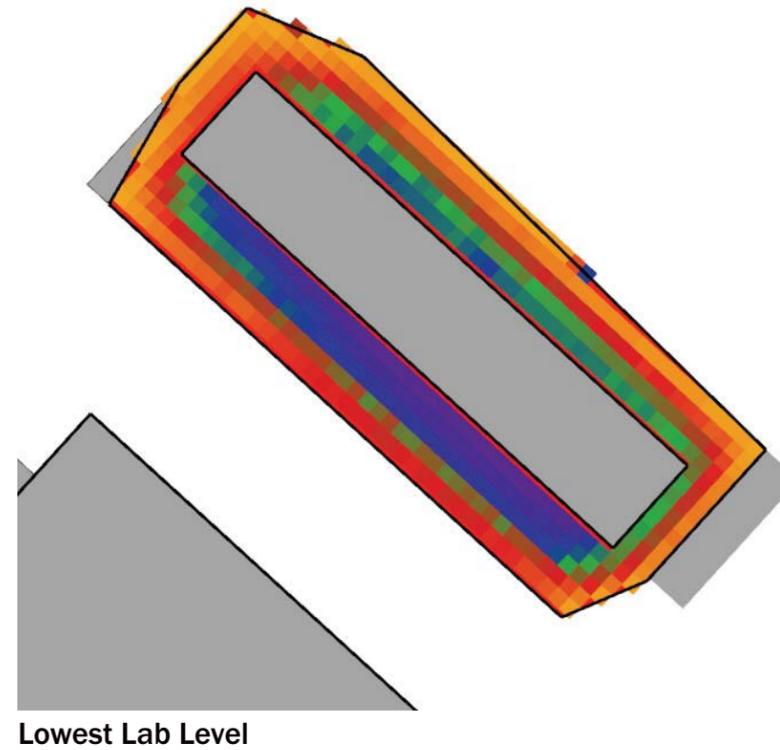
# 06. CONCEPTUAL DRIVERS : ENVIRONMENTAL RESPONSE

## INCIDENT INSOLATION

With Proposed Surrounding Buildings



## DAY LIGHTING



## OCCUPANT COMFORT

The initial conceptual approach to the envelope is that the building responds to solar orientation and occupant comfort.

The key drivers for Occupant Comfort are:

- Temperature
- Glare
- Day lighting
- Ventilation

Each of these will influence the facade depending on orientation, exposure, elevation, and programmatic use.

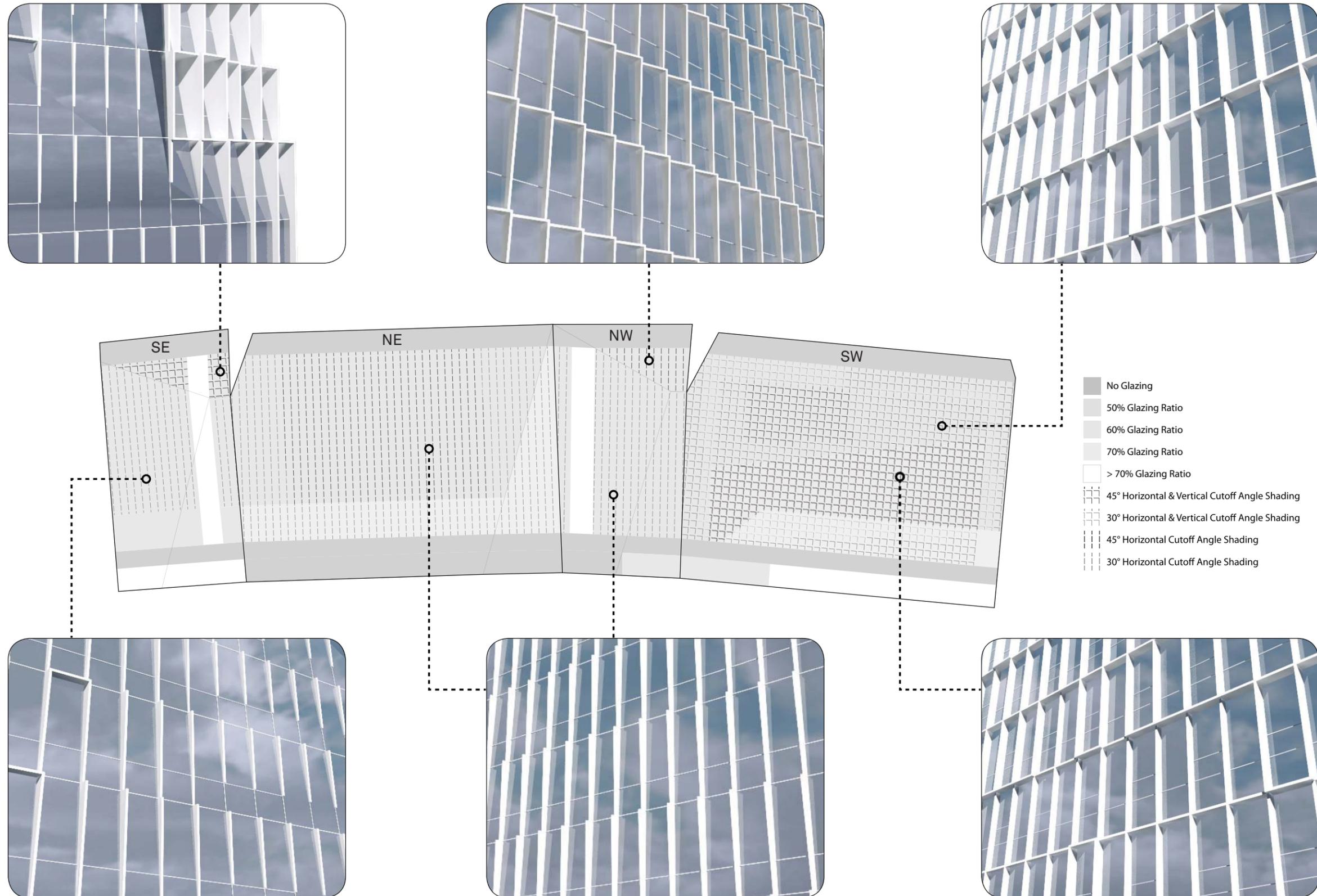
Providing optimal occupant comfort is achieved through a combination of strategies including the percentage of glazing, the type and extent of shading, and the location and size of operable vents.

The design team is studying strategies of vertical and horizontal shading as well as glazing percentage, targeted to orientation and use. This creates variability in the facade both horizontally and vertically per facade.



# 06. CONCEPTUAL DRIVERS : ENVIRONMENTAL RESPONSE

Analysis of potential maximum glazing ratios and shading for optimal occupant comfort. Actual glazing/shading will vary based on Seattle Energy Code.



## 06. STREETScape EXPERIENCE : VIGNETTE SKETCHES (PREFERRED OPTION #3 SHOWN)



The faceted building mass responds to the broader city context and gives shape and dynamism to the building program.

The material density of the facades will evolve with orientation, elevation, and program to maximize occupant comfort and environmental response.

LEFT - Viewed from the corner of Stewart and Terry at the open space looking due north.

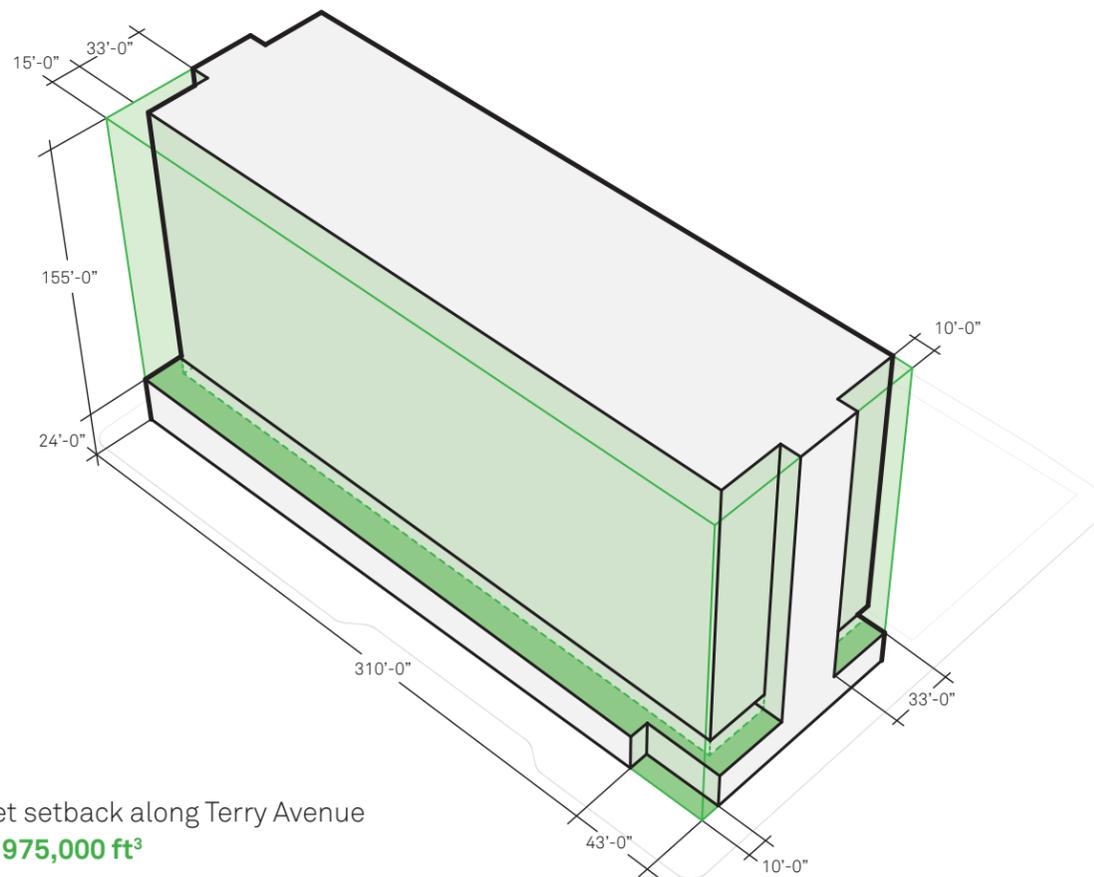
RIGHT - Viewed from Fairview Avenue looking due south.

06. STREETScape EXPERIENCE : VIGNETTE SKETCHES (PREFERRED OPTION #3 SHOWN)

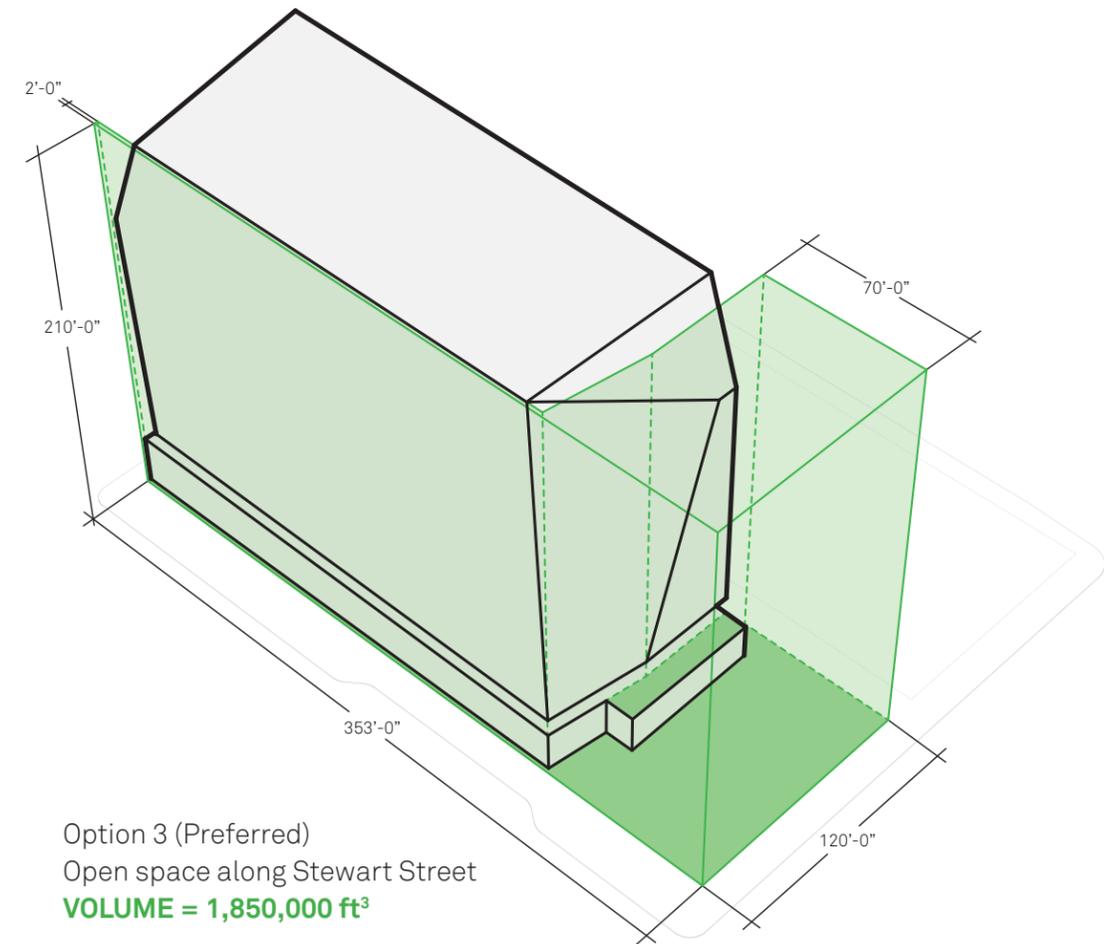


# 07. POTENTIAL DEPARTURES : GREEN STREET SETBACK

	DEVELOPMENT STANDARD	REQUIREMENT	DEPARTURE	RATIONALE (Design Guidelines promoted by the departure in parentheses)
1	23.49.058-F2 Upper Level Development, Upper Level Setback at Green Street	When a lot in a DMC or DOC2 zone is located on a designated green street, a continuous upper-level setback of fifteen (15) feet shall be provided on the street frontage abutting the green street at a height of forty-five (45) feet.	2' setback along Terry Avenue	<p>Setting back at the southern street level of the site provides a lively, <b>expansive open space (D-1)</b>, relieving pedestrians from the heavy traffic of Stewart Street (<b>D-6</b>). A 2 foot setback on Terry Avenue is more consistent with nearby <b>neighborhood context (B-1)</b>, whereas the Aspira Tower and 1007 Stewart (across Stewart to the south) are built on or very near, the property line.</p> <p>The <b>streetscape experience is improved (D-2)</b> for both the Green Street and Stewart by bringing more light and air to the ground. The preferred option better meets the intent of the setback and provides much needed grade level open space in a rapidly developing neighborhood.</p> <p>The departure of the setbacks along Terry Avenue allow for the compaction of the program, reducing the overall length of the building (B-3, B-4) and allows room for the open space. The grade level open space may only be achieved by departure of any setback along Terry.</p>

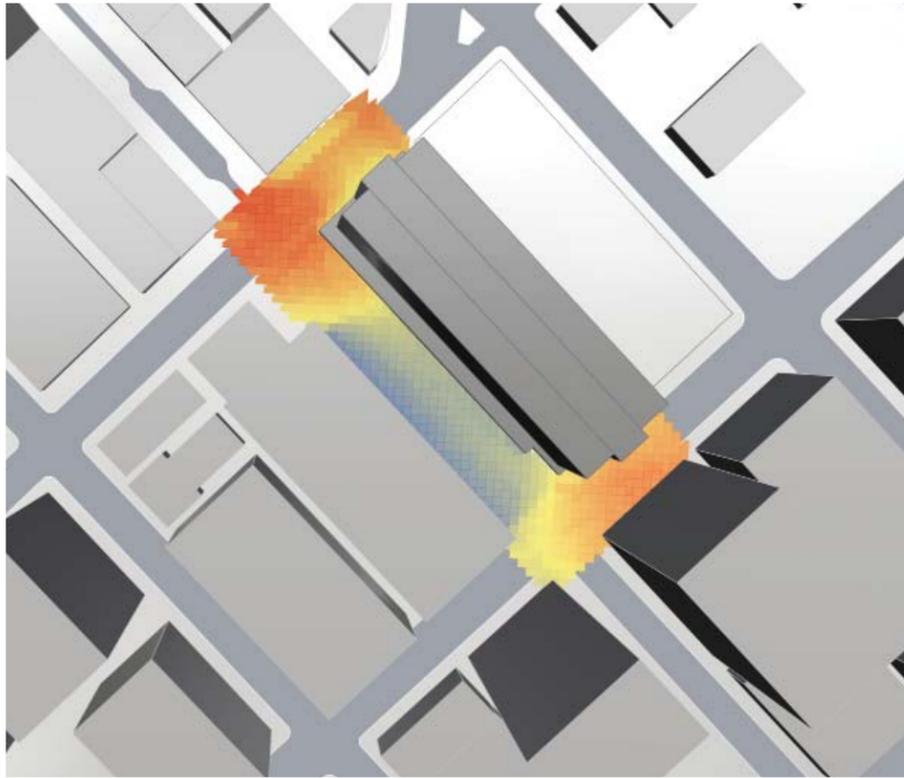


Option 1  
Green street setback along Terry Avenue  
**VOLUME = 975,000 ft<sup>3</sup>**



Option 3 (Preferred)  
Open space along Stewart Street  
**VOLUME = 1,850,000 ft<sup>3</sup>**

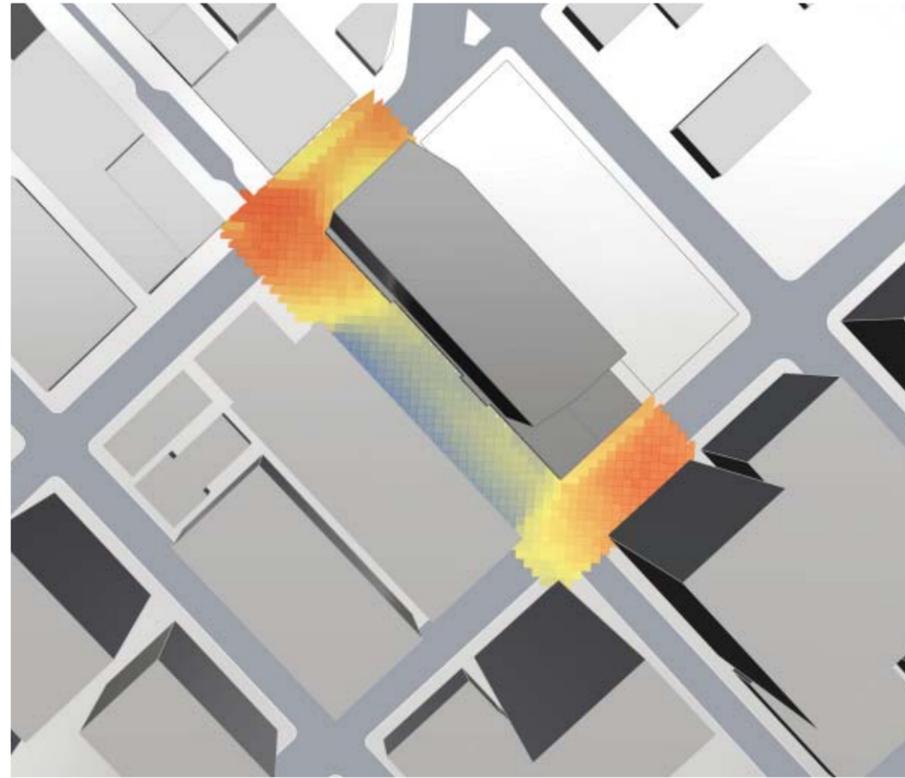
# 07. POTENTIAL DEPARTURES : GREEN STREET SETBACK



Option 1

Code compliant, 15' Green Street setback

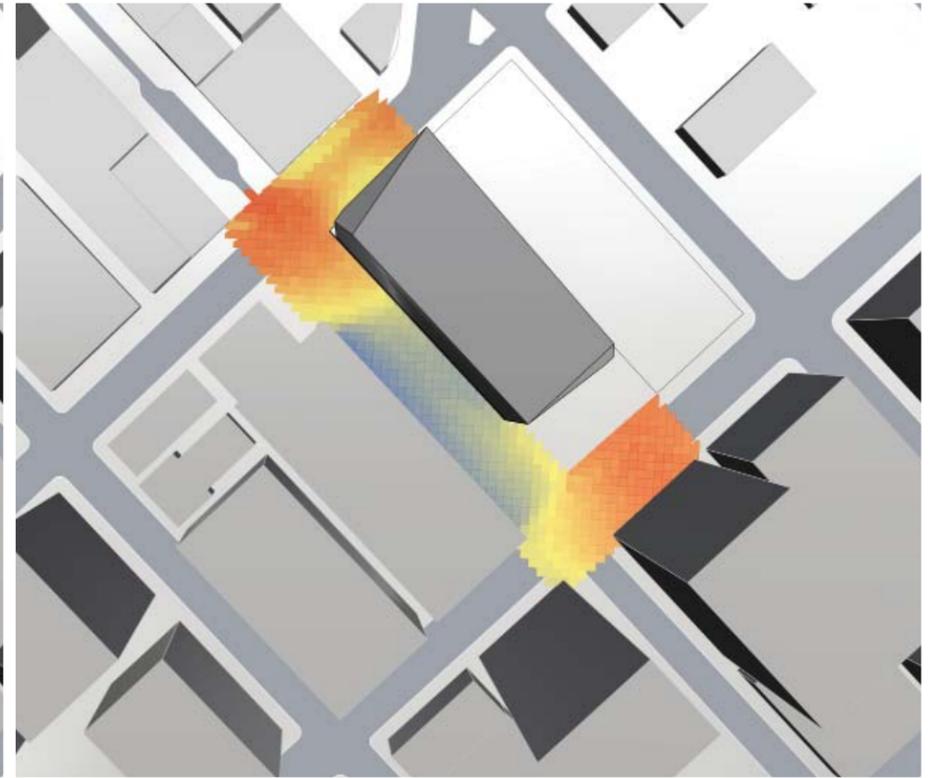
**BASELINE INSOLATION = 100%**



Option 2

7.5' encroachment into the Green Street setback, second level open space on Stewart

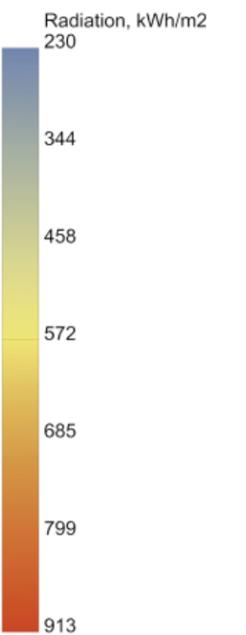
**INSOLATION = 100.6% OF BASELINE**



Option 3 (Preferred)

13' encroachment into the Green Street setback, grade level open space on Stewart

**INSOLATION = 101.2% OF BASELINE**

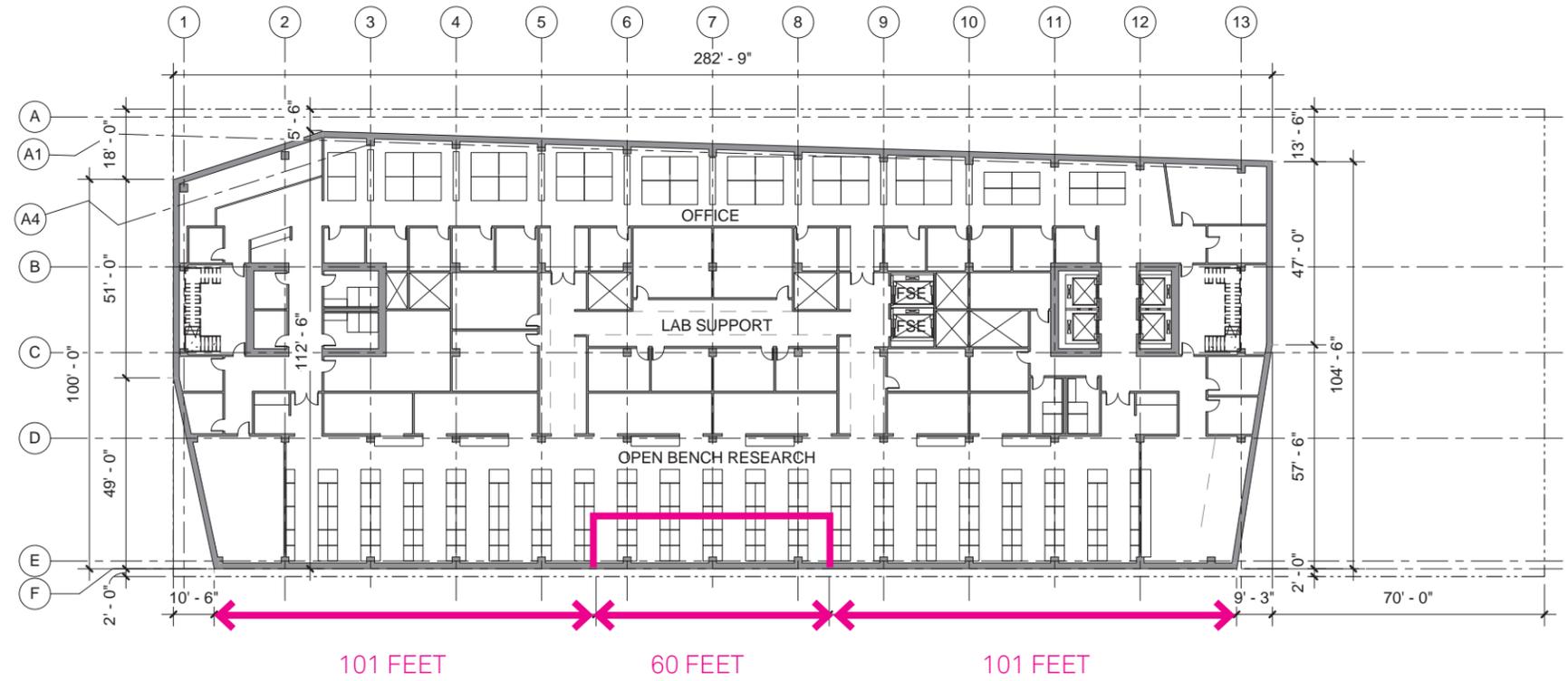
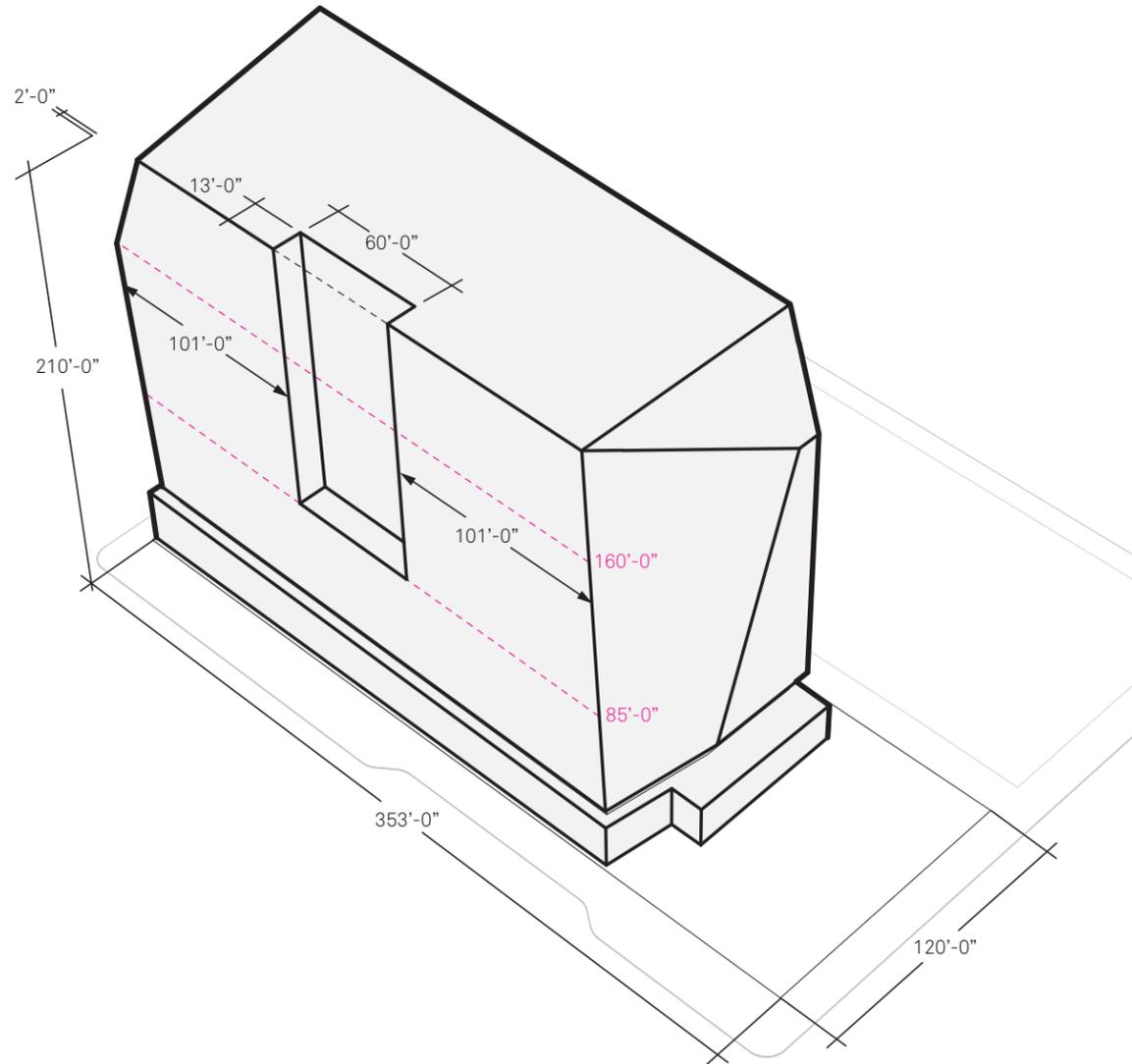


The volume of light and air on the site measured to the top of the proposed building is nearly doubled in the preferred option. The benefit of this is evidenced by an overall increase in the insolation – the amount of the sun’s energy – that reaches the ground over the course of a year. The proposed option is better than both the baseline, code-compliant setback condition and option 2.

Rhinoceros v 5.0 & DIVA for Rhino v2.2 were used for the insolation modeling and calculations.

## 07. POTENTIAL DEPARTURES - FACADE MODULATION

	DEVELOPMENT STANDARD	REQUIREMENT	DEPARTURE	RATIONALE (Design Guidelines promoted by the departure in parentheses)
2	23.49.058-B Upper Level Development, Facade Modulation	Facade modulation (15 ft deep x 60 ft long minimum) is required above a height of 85 ft above the sidewalk for any portion of a structure located within 15 ft of a street property line, to achieve a maximum facade length of 155 ft ( from 86 -160 ft height) and 125 ft (from 161-240 ft height). No modulation is required for portions of a facade set back fifteen (15) feet or more from a street property line.	No facade modulation along Terry Avenue	<p>In our design of a <b>well proportioned and unified building (B-4)</b>, the preferred option proposes a dynamic and variable building which responds to context and the physical environment. The large scale building facets respond to orientation and grid of the larger <b>urban context (A-1)</b>. The envelope is envisioned to respond dynamically to external and internal environmental factors including temperature, glare, daylighting and ventilation <b>(C-2)</b>.</p> <p>As a mid rise building, Building Cure is primarily experienced on the oblique, at street level, at the prominent ends of the building. The upper level setback as prescribed, does not enhance these views or the experience of the building; nor does it enhance the pedestrian experience.</p> <p>Any facade modulation along the critical lab bench area (Terry Avenue) is not practical for the life-saving research functions performed within the building.</p>

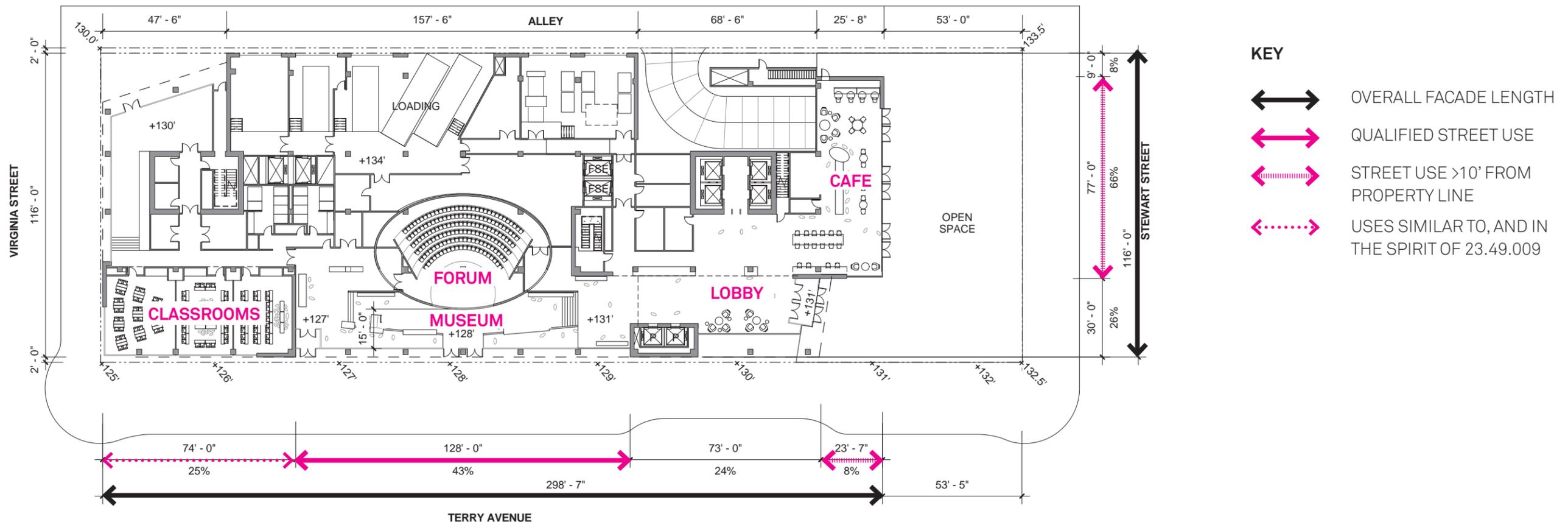


## 07. POTENTIAL DEPARTURES - FACADE MODULATION



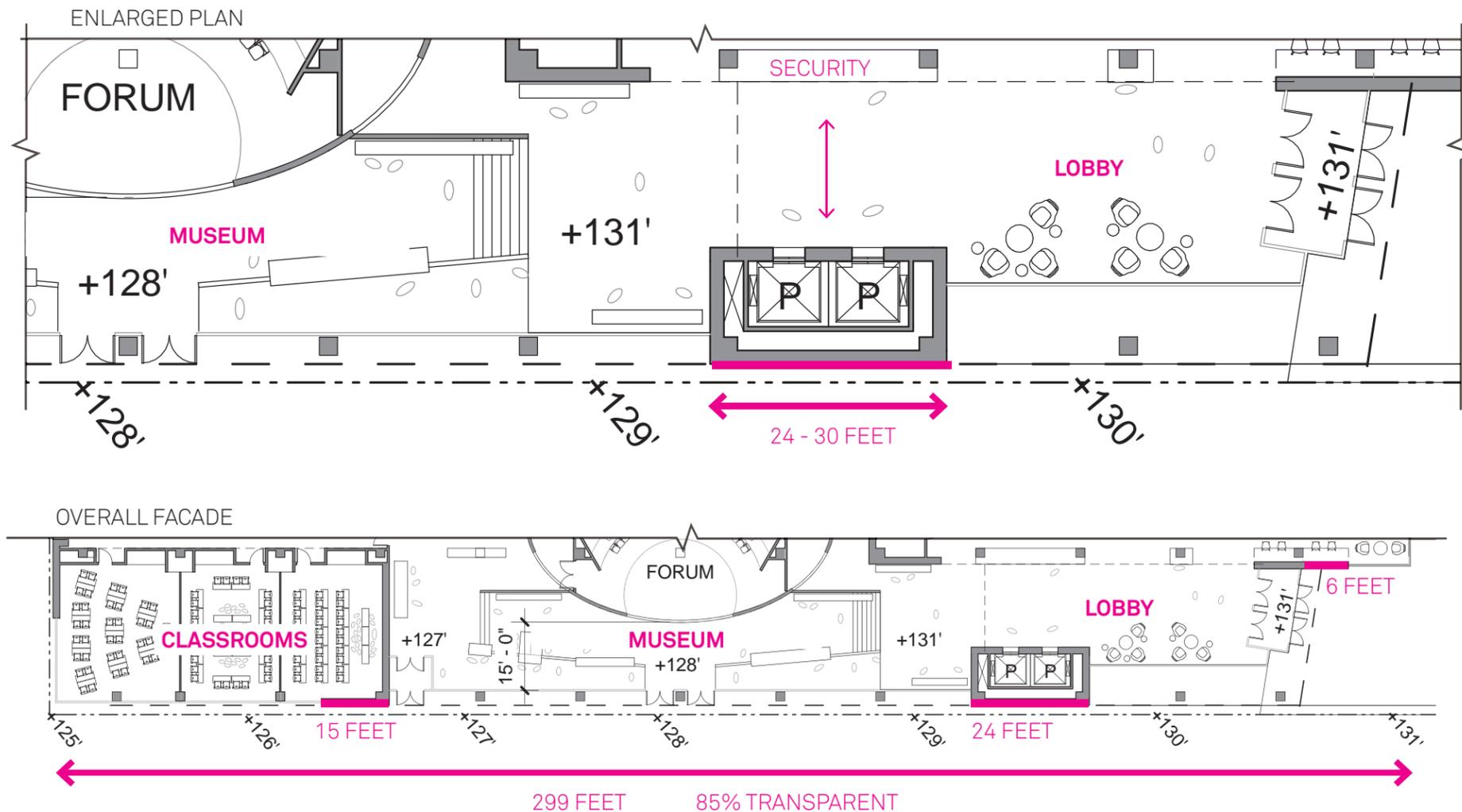
# 07. POTENTIAL DEPARTURES - STREET USE

	DEVELOPMENT STANDARD	REQUIREMENT	DEPARTURE	RATIONALE (Design Guidelines promoted by the departure in parentheses)
3	23.49.009 Street-level use requirements	75% minimum of each street frontage at street level where street level uses are required (in this case on both Terry and Stewart, per map 1G) must be occupied by the following uses:  General sales and services; Human service uses and child care centers; Retail sales, major durables; Entertainment uses; <b>Museums;</b> Libraries; <b>Elementary and secondary schools,</b> and colleges; Public atriums; <b>Eating</b> and drinking establishments; Arts facilities; Religious facilities; and Bicycle parking.	43% Street Use on Terry Avenue; Museum use per city definition 23.84A.018, Institution, 9.  Retail is proposed on 66% of Stewart Street, but 0% is within 10' of the property line.	On Stewart, the preferred alternative provides <b>inviting and usable grade level open space (C-6)</b> along the entire frontage of Stewart Street. 66% of the frontage abutting the open space is planned for a cafe to activate the open space and <b>define a sense of place (D-3)</b> . Both the cafe and the <b>open space (D-1)</b> are open to the public during business hours. The Cafe is held off of the alley property line so that the landscape may wrap the corner and <b>enhance the alley (C-6)</b> .  On Terry Avenue, there are several educational program components which <b>promote pedestrian interaction (C-1)</b> . Collectively, the Discovery Center Museum, the Forum, and the Classrooms invite, engage, and inform the public of the mission, history, and outcomes of the Institute.  While not explicitly qualified as a street use, the classrooms, serve the Science Adventure Lab - a program that brings science education to 4th - 12th grade students. On Science Days the classrooms will be a bustle of activity with students, their teachers, and Children's faculty. If the classrooms and the portion of the cafe which is greater than 10' from the property line were included in the Street Use calculation, Building Cure would exceed the minimum requirement (76%).



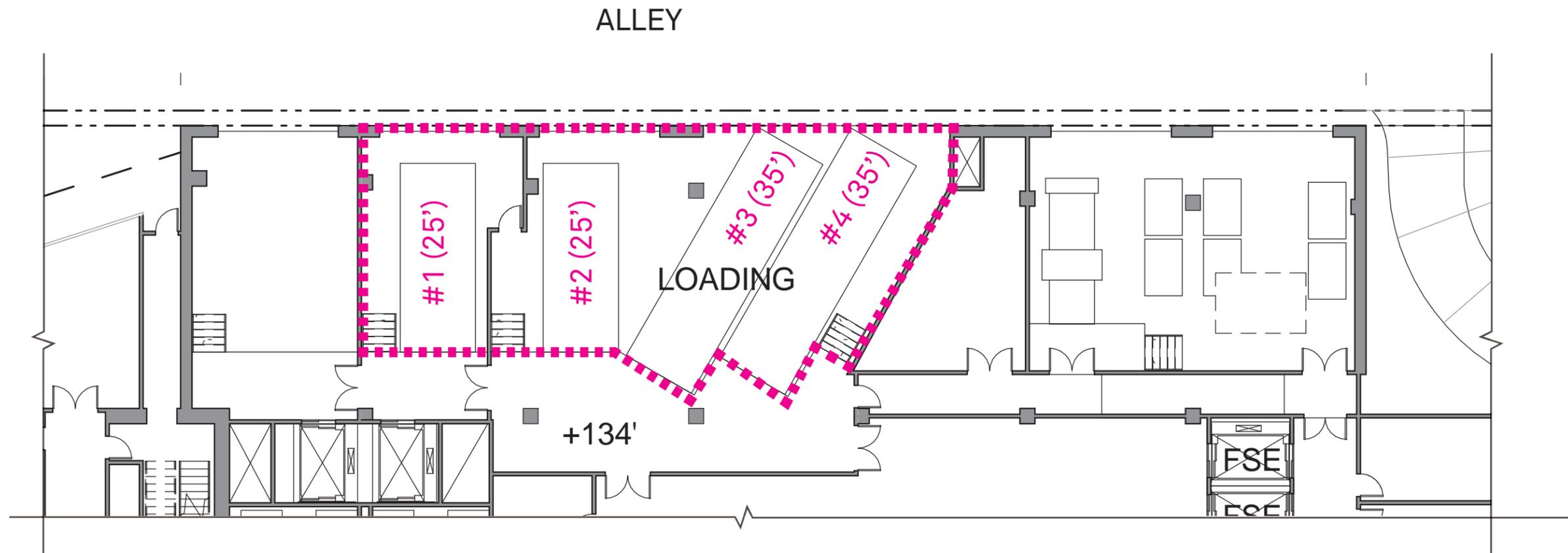
# 07. POTENTIAL DEPARTURES - BLANK FACADE

	DEVELOPMENT STANDARD	REQUIREMENT	DEPARTURE	RATIONALE (Design Guidelines promoted by the departure in parentheses)
4	23.49.056.D.2: Blank façade Limits for Class 1 (Stewart St) and Designated Green Streets (Terry Ave)	Blank facades shall be no more than 15 feet wide.  Blank facade segment width may be increased to 30 feet if the Director in a Type I decision determines that the facade segment is enhanced by features with visual interest such as architectural detailing, artwork, landscaping, or similar features.	Increase blank wall on Terry Avenue from 15' to between 24 and 30 feet.	The garage elevators are located at the perimeter to establish visibility of all visitors to the building, a critical operational concern of the Institution. The resulting blank wall surface will be artfully detailed to include the identity and messaging of Seattle Children's.  Additionally, the concept introduces "grounding elements" that give the <b>scale (C-2)</b> to the streetscape experience and serve to define the more transparent <b>building entries (C-4)</b> and the program within, <b>promoting pedestrian interaction (C-1)</b> . The relationship of the grounding elements, the transparent spaces and the tower above combine to create a <b>well proportioned and unified building (B-4)</b> .



## 07. POTENTIAL DEPARTURES - LOADING BERTH

	DEVELOPMENT STANDARD	REQUIREMENT	DEPARTURE	RATIONALE (Design Guidelines promoted by the departure in parentheses)
5	23.54.035 Loading Berth Requirements	Each loading berth for low- and medium-demand uses, shall be a minimum of thirty-five (35) feet in length.  Medium demand (Table A) 4 berths required (264,000-388,000 gsf)  C2c: Exceptions to Loading Berth Length. Low- and Medium-demand Uses. Twenty-five (25) feet.	Four total loading berths including two 35' and two 25' long berths are provided.	The loading dock is one of the grounding elements of the streetscape and will be developed in a similar expression (E-3). Shorter loading berths will reduce the length of the loading doors minimizing their presence on the facade. Service vehicles using the smaller bays are more maneuverable, creating a safer pedestrian experience (D-6).  The loading berth allocation is adequate for the projected demand of a research building.



Two 35' and two 25' loading berths provided are adequate to meet projected demand.



# BUILDING CURE

## SEATTLE CHILDREN'S RESEARCH INSTITUTE

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