

Tuesday, September 19, 2023

Heather Stouder
Department of Planning & Development
City of Madison
215 Martin Luther King, Jr. Blvd.
Madison, WI 53710-2985

The attached formal submittal packet for the Johnson & Broom project, submitted on behalf of Core Madison Broom, LLC, outlines the request for the rezoning and redevelopment of a new multifamily project located along West Johnson Street, West Gorham Street, and North Broom Street. This project is designed to meet the recommendations of the adopted plans while creating much needed new student focused residential housing with a range of configurations, including student-oriented affordability.

# **Project Description**

- Rezone parcels from Planned Development (PD) to Urban Mixed Use (UMX)
- Conditional Use

New construction greater than 20,000 square feet New construction of building in UMX District greater than 8 units Rooftop outdoor recreation

- Downtown Height Map district boundary clarification
- Demolition of existing structures
- CSM to create one lot for development

#### **Project Proposal**

The proposed project is a 14/8 story multi-family building with 453 units (studios to five-bedroom units), commercial uses along West Gorham Street, and lobby/amenity space along North Broom Street and West Johnson Street. This project implements the adopted downtown plan, downtown design guidelines, and downtown height map with well-articulated urban architecture, vibrant activates streetscapes, and mixed-use opportunities.

The overall project is organized into four distinct building expressions with two distinct towers. This approach creates unique massing and diverse architectural character throughout the building. The overall character also carefully responds to the adjoining buildings and design datum of the neighborhood.

Downtown Height Ordinance/Affordability

The project seeks to utilize the recently adopted downtown height ordinance amendment to incorporate additional floors with the delivery of affordable student housing. The affordability ordinance identifies the opportunity for voluntary income and rent restricted units through the potential contribution of the surplus engineering parcel located at the corner of West Gorham Street and North Broom Street. Affordable student housing is proposed for the project, utilizing the "Oliv Model", with 10% of the beds (in 2-bedroom double occupancy units) receiving a 40% discount versus market rate for students of need, through cooperation with the University of Wisconsin Office of Financial Aid and the City of Madison.

The resulting design of the project reflects the overall height allowed in the downtown height map while avoiding encroachment into the Capital View Preservation Limit.

## Sustainability

Sustainability is a key element of the design of the building with a design goal of LEED Silver equivalent design.

# **Applicant**

Core Madison Broom, LLC. 1643 North Milwaukee Street Chicago, IL 60647

#### **Owners**

304 North Broom Street 408 West Johnson Street 412 West Johnson Street 414 West Johnson Street JDM Properties 101 North Mills Street Madison, WI 53715

308 North Broom Street
312 North Broom Street
314 North Broom Street
318 North Broom Street
407 West Gorham Street
Madfish on Broom

Attn: Madison Property Management

1202 Regent Street Madison, WI 53715

431 West Gorham Street 430 West Johnson Street Johnson Associates LLP Attn: Forward Management 826 North Star Drive Madison, WI 53718

416 West Johnson Street 422 West Johnson Street Mullins Apartments LLC 401 North Carroll Street Madison, WI 53703

# **Design Team**

Architecture:

**Antunovich Associates** 224 West Huron Street

Suite 7E

Chicago, Illinois 60654

Engineering:

Vierbicher 999 Fournier Drive Madison, WI 53717

Landscape: Site Design 888 South Michigan Avenue Chicago, IL 60605

Charlotte, NC 28204

Lighting:

Hartranft Lighting Design 401 Hawthorne Lane Suite 110-269

Entitlement:

Vandewalle & Associates 120 East Lakeside Street Madison, WI 53715

Site Data		Existing	Square		
Address	PIN	Zoning	Footage	Units	Beds
304 North Broom Street	0709-231-0501-3	UMX	3,432	2	2
308 North Broom Street	0709-231-0502-1	UMX	3,960	1	
312 North Broom Street	0709-231-0503-9	UMX	3,960	3	
314 North Broom Street	0709-231-0504-7	UMX	2,178	4	
318 North Broom Street	0709-231-0505-5	UMX	2,178	2	
407 West Gorham	0709-231-0507-1	UMX	4,356	2	
431 West Gorham	0709-231-0515-4	PD	13,068	60	
408 West Johnson	0709-231-0529-5	UMX	1,716	2	
412 West Johnson	0709-231-0528-7	PD	4,356	9	
414 West Johnson	0709-231-0527-9	PD	4,356	2	
416 West Johnson	0709-231-0526-1	UMX	4,356	3	
422 West Johnson	0709-231-0525-3	UMX	8,712	28	
430 West Johnson	0709-231-0524-5	PD	13,068	42	

Total Site Acreage: 1.62 acre (70,659 sq. ft.) Rezoning Acreage: .80 acre (34,848 sq. ft.)

**Existing Units:** 160 units **Existing Bedrooms:** 257 bedrooms

# **Project Requests:**

Zoning/Conditional Use Request

The project seeks to rezone the existing Planned Development (PD) to Urban Mixed Use (UMX) with a conditional use request for the following elements:

Building greater than 20,000 square feet and more than 4 stories in height Building in UMX greater than 8 units Outdoor recreation/rooftop amenities

## Downtown Height Ordinance/Affordability

The project meets the standards of the recently adopted downtown height ordinance through the delivery of affordable student housing in cooperation with the City of Madison and University of Wisconsin Office of Financial Aid.

#### Downtown Plan Recommendations:

The project design continues the primarily high-density student residential uses identified in the Johnson Street Bend District along with the recommendations focused on redeveloping under-utilized parcels with active and engaging street frontages. The project concept seeks to implements these recommendations through the utilization of the new downtown height definitions with affordable housing, placement of active uses along the street edges (amenities, lobbies, and retail uses) and seeks to expand & improve the existing open space at the corner of West Gorham Street & North Broom Street.

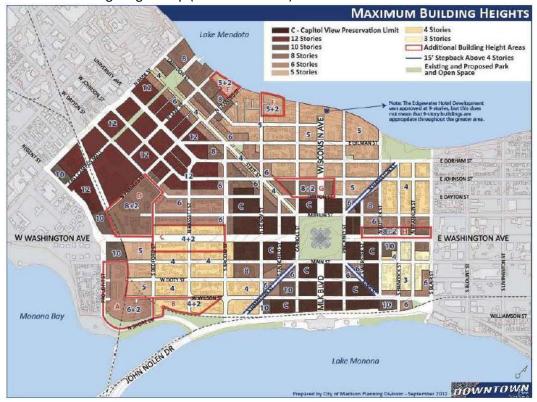
The Downtown Plan Maximum Building Height Map identifies this site as 12 stories with a 6 story section adjacent to North Broom Street. These are further defined as 6 stories/88 feet and 12 stories/172 feet within the recently adopted amendments to the zoning code. This site is also subject to the Capital Viewshed Preservation Limit which caps the building height at total elevation 1,032 or 159'-10" above Broom Street. The proposed project is designed to meet the height standards by incorporating affordable student housing in a building less than 88'/172' and below the Capital Viewshed Preservation Limit.

# Downtown Height Map Boundary Clarification

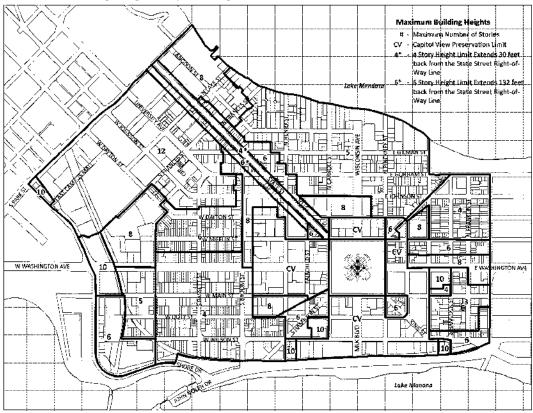
The project seeks to clarify the downtown plan and zoning code maximum building height maps by aligning the height map recommendations. Both plans show 12 story heights for the majority of the site with 6 stories along Broom Street. The Downtown Plan Maximum Building Height Map shows a straight line between the two heights parallel to North Broom Street approximately 65' back from the ROW. The Zoning Code Maximum Building Height Map shows the line following the parcel lines, resulting in a jog in the height boundary.

The applicant requests that the Zoning Code Maximum Building Height Map be amended to follow the recommendation of the downtown plan with the boundary being a straight line from West Gorham Street to West Johnson Street ~65' back from the Broom Street Right of Way.

## Maximum Building Height Map (Downtown Plan):



# Maximum Building Height Map (Zoning Code):



# **Project Summary**

The proposed project is a 14/8 story multi-family building with 232 units ranging from studios to five bedroom units, commercial uses along Gorham Street, and lobby/amenity space along Broom and Johnson Street.

## Proposed Use:

Multi-Family Housing	453 units
1 bedroom	56
2 bedroom	140
3 bedroom	15
4 bedroom	97
5 bedroom	104
Studio	35
Townhomes	6

Total number of beds 1,671

Retail 3,736 square feet

#### Affordable Housing:

10% of the beds within the building will be offered within the 2 bedroom/double occupancy units (Suite+) at a 40% discount versus market rate for qualifying needs-based students, patterned after the adopted affordability agreements in the Oliv project across the street from the site. These units will be allowed throughout the building on every floor within the Suite + unit type.

Details of this program are included in a separate Memorandum of Understanding with the University of Wisconsin and Land Use Restriction Agreement with the City of Madison.

Total Affordable Beds: 168

## Access:

Pedestrian access will be served by a primary lobby fronting onto the corner of Gorham and Broom Street, a lobby onto Johnson Street (building 4 lobby) and secondary entrances off of Gorham Street, the pedestrian walkway and Johnson Street (building 2/3).

Vehicular access for tenants, drop-offs, delivery and refuse pickup is organized off of Johnson Street with an off-street drop off and access to the lower-level parking on site.

Bicycle access and storage is spread throughout the building to deliver secured parking options for tenants with ample bike storage capacity in close proximity and easily accessible to units.

Vehicle Parking:

LL1 6 delivery/drop off spaces 53 spaces (32 tandem)

Delivery/loading zone

LL2: 71 spaces (56 tandem)

Total Car Spaces 122

**EV Parking Stalls:** 

EV Installed 3 EV Ready 127

Bike Parking:

Guest Parking (short term): 45 spaces

First Floor 5 LL1 40

Tenant Parking (long term): 721 spaces

LL1 280 standard

121 structured

LL2 162 standard

158 structured

Total Spaces 766

Lot Coverage: 88%

Loading:

All loading, deliveries, and trash/recycling collection will take place within the site, accessed from the West Johnson Street entrance.

Car share pickup and deliveries will have access to 6 designated short-term parking stalls within the lower-level parking area.

Usable Open Space:

Usable open space will be delivered through a ground level plaza at West Gorham Street and North Broom Street, a mid-block walkway, balconies, and rooftop patios with a range of amenities and configurations.

Open Space Required (10 sq. ft./bedroom): 13,510 sq. ft.

Open Space Provided:

Mid-Block Walkway: 3,157 sq. ft.
Entry Plaza: 7,496 sq. ft.
Rooftop amenity: 13,507 sq. ft.
Balconies: 3,566 sq. ft.
Total 27,726 sq. ft.

Green Roof Supplied: 12,392 sq. ft.

2026 Occupancy

# **Exhibit A: Legal Description**

Part of Lots 4, 8, 9 and 15, Block 40 and all of Lots 5, 10, 11, 12, 13 and 14, Block 40, Original Plat of Madison as recorded in Volume A of Plats, on Page 3, as Document Number 102 and located in the Northwest Quarter of the Northeast Quarter of Section 23, Township 07 North, Range 09 East, City of Madison, Dane County, Wisconsin, more fully described as follows:

Commencing at the North quarter corner of said Section 23; thence S88°46'41"E, along the north line of the Northeast Quarter of said Section 23, a distance of 352.04 feet; thence S01°13'19"W, 359.41 feet to southeasterly right-of-way line of West Gorham Street and the point of beginning of this description; thence N52°35'38"E, along said southeasterly right-of-way line, 17.55 feet to a point of curvature; thence 16.56 feet along said southeasterly right-of-way line and the arc of a curve to the right having a radius of 90.00 feet and a chord bearing N56°08'08"E, 16.54 feet to the northeasterly line of said Lot 8, Block 40; thence S43°43'50"E, along said northeasterly line, 59.01 feet to the southerly line of the northwesterly half of said Lot 9, Block 40; thence N46°32'49"E, along said southerly line, 62.17 feet to the southwesterly right-of-way line of North Broom Street and a point of curvature; thence 28.88 feet along said southwesterly right-of-way line and the arc of a curve to the right having a radius of 90.00 feet and a chord bearing S52°22'13"E, 28.76 feet; thence S43°41'10"E, along said southwesterly right-of-way line, 168.71 feet to the intersection with the northwesterly right-of-way line of West Johnson Street; thence S45°38'32"W, along said northwesterly right-of-way line, 365.14 feet; thence N43°35'15"W, 135.09 feet; thence N43°46'43"W, 135.19 feet to the aforementioned southeasterly right-of-way line of West Gorham Street; thence N46°37'05"E, along said southeasterly right-of-way line, 99.42 feet; thence S43°45'55"E, 134.54 feet; thence N46°13'00"E, 165.90 feet; thence N43°59'58"W, 129.89 feet to said southeasterly right-of-way line of West Gorham Street and the point of beginning.

Said description contains 70,659 square feet or 1.622 acres, more or less.

# Exhibit B: Adopted Plan Standards Conditional Use Standards

1. The establishment, maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety, or general welfare.

The proposal for multi-family housing is consistent with the historic use of the site and the surrounding area.

2. The City is able to provide municipal services to the property where the conditional use is proposed, given due consideration of the cost of providing those services.

The site is well served with readily available municipal services adjacent to the site.

3. The uses, values and enjoyment of other property in the neighborhood for purposes already established will not be substantially impaired or diminished in any foreseeable manner.

The proposed building is consistent with the previous use of the site and reflects the recommendations of the Comprehensive Plan and Downtown Plan.

4. The establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

The proposal will not preclude development or improvement of the surrounding properties.

5. Adequate utilities, access roads, drainage, parking supply, internal circulation improvements, including but not limited to vehicular, pedestrian, bicycle, public transit and other necessary site improvements have been or are being provided.

The proposal incorporates the necessary site improvements to support the project.

6. Measures, which may include transportation demand management (TDM) and participation in a transportation management association have been or will be taken to provide adequate ingress and egress, including all off-site improvements, so designed as to minimize traffic congestion and to ensure public safety and adequate traffic flow, both on-site and on the public streets.

The project submittal includes the City of Madison TDMP spreadsheet, illustrating that the project exceeds the required transportation components.

- 7. The conditional use conforms to all applicable regulations of the district in which it is located.

  The project meets the standards of the UMX zoning district and downtown plan.
- 8. When applying the above standards to an application by a community living arrangement, the Plan Commission shall:

Not Applicable.

9. When applying the above standards to any new construction of a building or an addition to an existing building the Plan Commission shall find that the project creates an environment of sustained aesthetic desirability compatible with the existing or intended character of the area and the statement of purpose for the zoning district. In order to find that this standard is met, the Plan Commission may require the applicant to submit plans to the Urban Design Commission for comment and recommendation. (Am. by ORD-14-00030, 2-18-14)

The project has been presented for informational review with the Urban Design Commission on May 10, 2023 & July 27, 2023 (UDC) to gather input on the design direction and will seek UDC approval as part of the review of the project.

10. When applying the above standards to an application for a reduction in off-street parking requirements, the Plan Commission shall consider and give decisive weight to all relevant facts, including but not limited to, the availability and accessibility of alternative parking; impact on adjacent residential neighborhoods; existing or potential shared parking arrangements; number of residential parking permits issued for the area; proximity to transit routes and/or bicycle paths and provision of bicycle racks; the proportion of the total parking required that is represented by the requested reduction; the proportion of the total parking required that is decreased by Sec. 28.141. The characteristics of the use, including hours of operation and peak parking demand times design and maintenance of off-street parking that will be provided; and whether the proposed use is now or a small addition to an existing use.

The proposal meets the parking requirements for the Urban Mixed Use (UMX) zoning district. This site is well served with pedestrian and bicycle routes and transit service, as illustrated by the submitted TDMP spreadsheet.

- 11. When applying the above standards to telecommunication facilities, the Plan Commission shall consider the review of the application by a professional engineer required by Sec. 28.143.

  Not Applicable.
- 12. When applying the above standards to an application for height in excess of that allowed in the district, the Plan Commission shall consider recommendations in adopted plans; the impact on surrounding properties, including height, mass, orientation, shadows and view; architectural quality and amenities; the relationship of the proposed building(s) with adjoining streets, alleys, and public rights of ways; and the public interest in exceeding the district height limits.

  Not applicable.
- 13. When applying the above standards to lakefront development under Sec. 28.138, the Plan Commission shall consider the height and bulk of principal buildings on the five (5) developed lots or three hundred (300) feet on either side of the lot with the proposed development.

  Not applicable.
- 14. When applying the above standards to an application for height in excess of that allowed by Section 28.071(2)(a) Downtown Height Map for a development located within the Additional Height Areas identified in Section 28.071(2)(b), the Plan Commission shall consider the recommendations in adopted plans, and no application for excess height shall be granted by the Plan Commission unless it finds that all of the following conditions are present:
  - a. The excess height is compatible with the existing or planned (if the recommendations in the Downtown Plan call for changes) character of the surrounding area, including but not limited to the scale, mass, rhythm, and setbacks of buildings and relationships to street frontages and public spaces.
  - b. The excess height allows for a demonstrated higher quality building than could be achieved without the additional stories.
  - c. The scale, massing and design of new buildings complement and positively contribute to the setting of any landmark buildings within or adjacent to the projects and create a pleasing visual relationship with them.

- d. For projects proposed in priority viewsheds and other views and vistas identified on the Views and Vistas Map in the City of Madison Downtown Plan, there are no negative impacts on the viewshed as demonstrated by viewshed studies prepared by the applicant. Not applicable.
- 15. When applying the above standards to an application to redevelop a site that was occupied on January 1, 2013 by a building taller than the maximum building height allowed by <u>Section 28.071(2)(a)</u> Downtown Height Map, as provided by <u>Section 28.071(2)(a)1.</u>, no application for excess height shall be granted by the Plan Commission unless it finds that all the following additional conditions are also present:
  - a. The new building is entirely located on the same parcel as the building being replaced.
  - b. The new building is not taller in stories or in feet than the building being replaced.
  - c. The new building is not larger in total volume than the building being replaced.
  - d. The new building is consistent with the design standards in <u>Section 28.071(3)</u> and meets all of the dimensional standards of the zoning district other than height.
  - e. The Urban Design Commission shall review the proposed development and make a recommendation to the Plan Commission.
     Not applicable.
- 16. When applying the above standards to an application for limited production and processing use, the Plan Commission shall consider the effect of such a use on the surrounding properties, including the effects of odors, noise, vibration, glare, hours of operation, and other potential side effects of a manufacturing process. (Cr. by ORD-15-00124, 11-11-15)

  Not Applicable

## **Downtown Design Guidelines**

Site Design + Building Placement

#### Orientation

The project creates a strong and permeable street wall with minimal setback along all three adjoining streets while employing a setback to allow for a larger terrace/sidewalk zones along all adjoining. Useable entrances front out to each street frontage with expansive windowpanes integrated into the first floor to reinforce activity and transparency along the sidewalk.

#### Access + Circulation

The site parking and loading is accessed through an off street vehicular court along West Johnson Street to minimize disruption on regional vehicular and bicycle corridors. Guest parking/delivery is located within the building with 6 spots available for short term use. Long term parking and bicycle parking is located on throughout building within the lower levels, with direct access to a majority of the secured stalls.

## Usable Open Space -Residential Development

The project offers resident both balcony and roof top useable open space with a variety of activity areas.

## Landscaping

The landscape design of the ground level offers a mid block promenade, expanded entry plaza at West Gorham and North Broom Street, outdoor seating and gathering areas, urban foundation plantings,

expanded sidewalk/terrace area, and buffers from adjoining developments. The overall design seeks to bring color & texture to the streetscape by using landscape and hardscape to further define commercial/public vs. residential/private entrances to the building.

## Lighting

Building lighting is proposed to provide appropriate levels of light while maintaining a safe and enjoyable residential environment.

#### Architecture

## Massing

The massing implements the adopted plans and recommendations of the Downtown Height Map with the building mass broken into two towers with four distinct architectural expressions.

## **Building Components**

The ground level of the building incorporates setbacks to create a pedestrian focused activation along each streetscape while clearly establishing a "base" condition for the building and grounding the architecture to the street. The upper-level design utilizes a grid structure that creates visual interest and a framework for setbacks & balconies to further divide the facades into distinct expressions that span from first floor to the rooftop.

#### Visual Interest

The overall design of the building, based on UDC feedback, creates a varied and articulated expression along all sides of the building with different treatments in the four different buildings.

## **Door and Window Openings**

The overall design of the project fits into the context of the adjoining development while implementing a unique design expression that creates architectural diversity within the overall neighborhood.

#### **Building Materials**

The building uses high quality durable materials throughout the four-sided design.

## Terminal Views and Highly-Visible Corners

Not applicable.

#### **Awnings and Canopies**

The project entries are highlighted with architectural features to clearly denote the primary pedestrian entrances.

#### Signage

Signage for the building will be integrated into the project through future submittals and will be consistent with the signage ordinance.

# **Exhibit C: Existing Building photos**

304 North Broom Street

Student Housing 2 unit multi-family

Date of Construction: 1870





















Student Housing single-family rental

Date of Construction: 1885



















Student Housing 3 unit multi-family

Date of Construction: 1898





















Student Housing 2 unit multi-family

Date of Construction: 1904



















Student Housing 2 unit multi-family

Date of Construction: 1875















# 407 West Gorham

Student Housing 2 unit multi-family

Date of Construction: 1894























# 431 West Gorham

Student Housing 60 unit apartment

Date of Construction: 1990

Request: Redevelopment to comprehensive recommendations







































408 West Johnson

Student Housing 2 unit multi-family

Date of Construction: 1899

























# 412 West Johnson

Student Housing 9 unit multi-family

Date of Construction: 1990

Request: Redevelopment to comprehensive recommendations







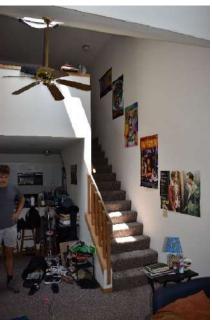












# 414 West Johnson

Student Housing 2 unit multi-family

Date of Construction: 1899

























## 416 West Johnson

Student Housing 3 unit multi-family

Date of Construction: 1914

Request: Functional obsolescence



















## 422 West Johnson

Student Housing 28 unit multi-family

Date of Construction: 1973

Request: Functional obsolescence

























## 430 West Johnson

Student Housing 42 unit multi-family

Date of Construction: 1973

Request: Functional obsolescence









































## MADISON - JOHNSON & BROOM

UDC FORMAL SUBMITTAL OCTOBER 4 2023

CORE
MADISON BROOM, LLC



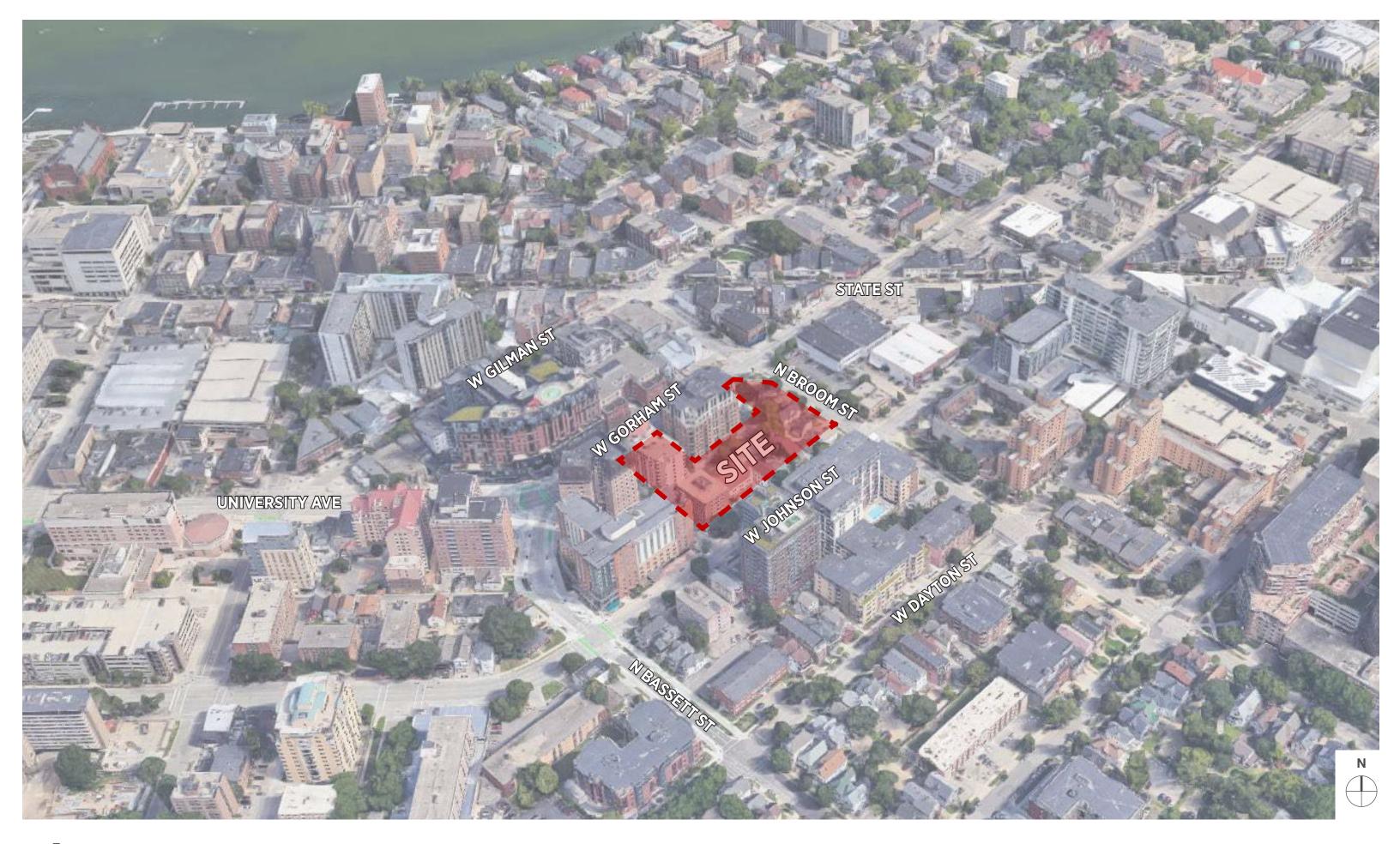


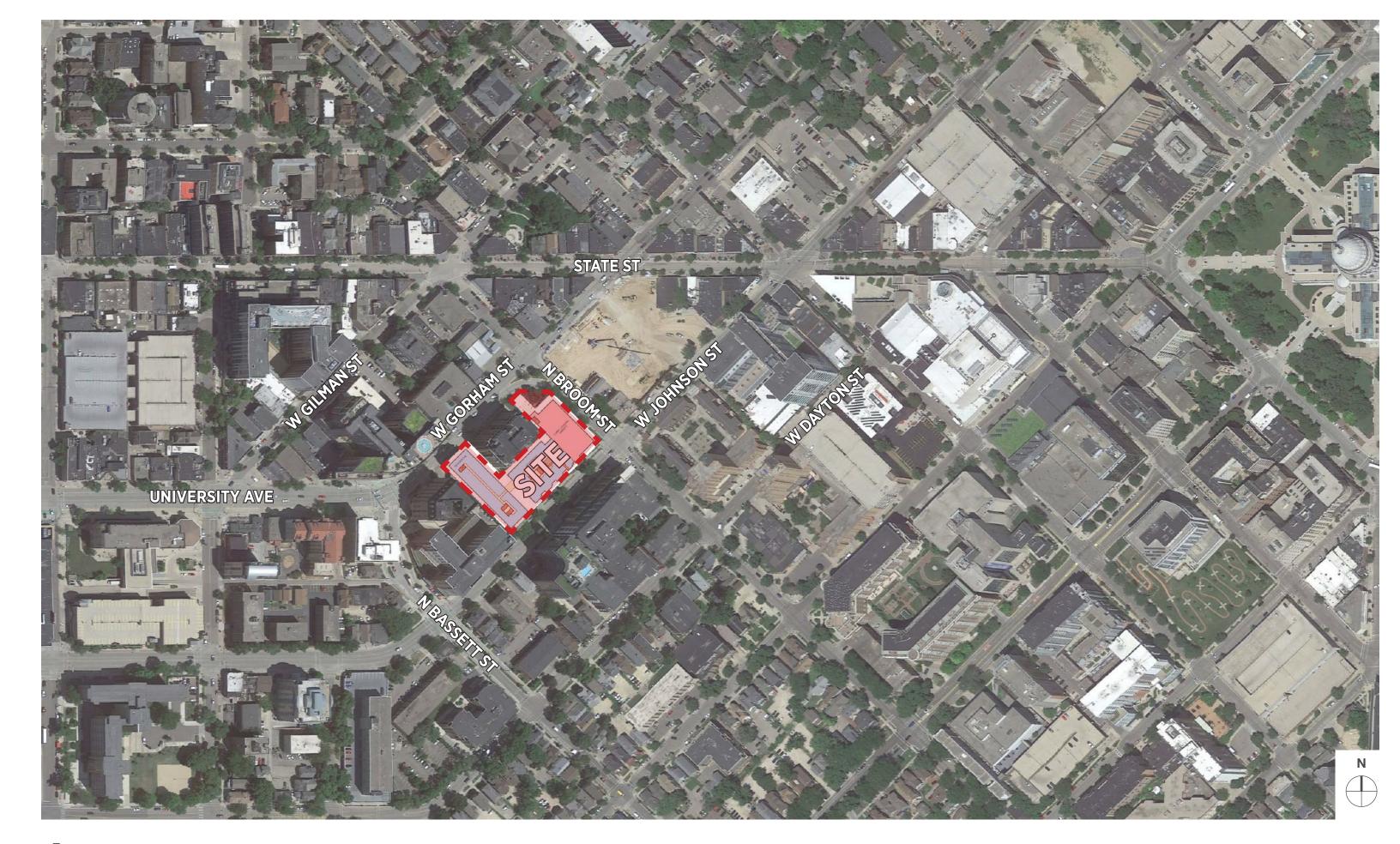














LOOKING NORTH AT W. JOHNSON ST. & N. BROOM ST.



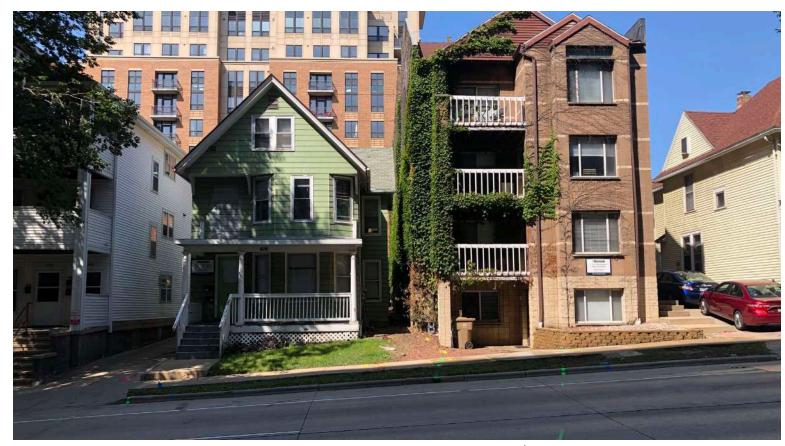
LOOKING EAST ACROSS W. JOHNSON ST.



LOOKING EAST AT N. BROOM & W. JOHNSON ST.



LOOKING NORTH ACROSS W. JOHNSON ST.



LOOKING NORTH/ WEST (TOWARDS W. GORHAM ST.)



LOOKING SOUTH / WEST DOWN W. GORHAM ST.



LOOKING NORTH / EAST DOWN W. GORHAM ST.



LOOKING NORTH DOWN W. GORHAM ST.







THE DOMAIN



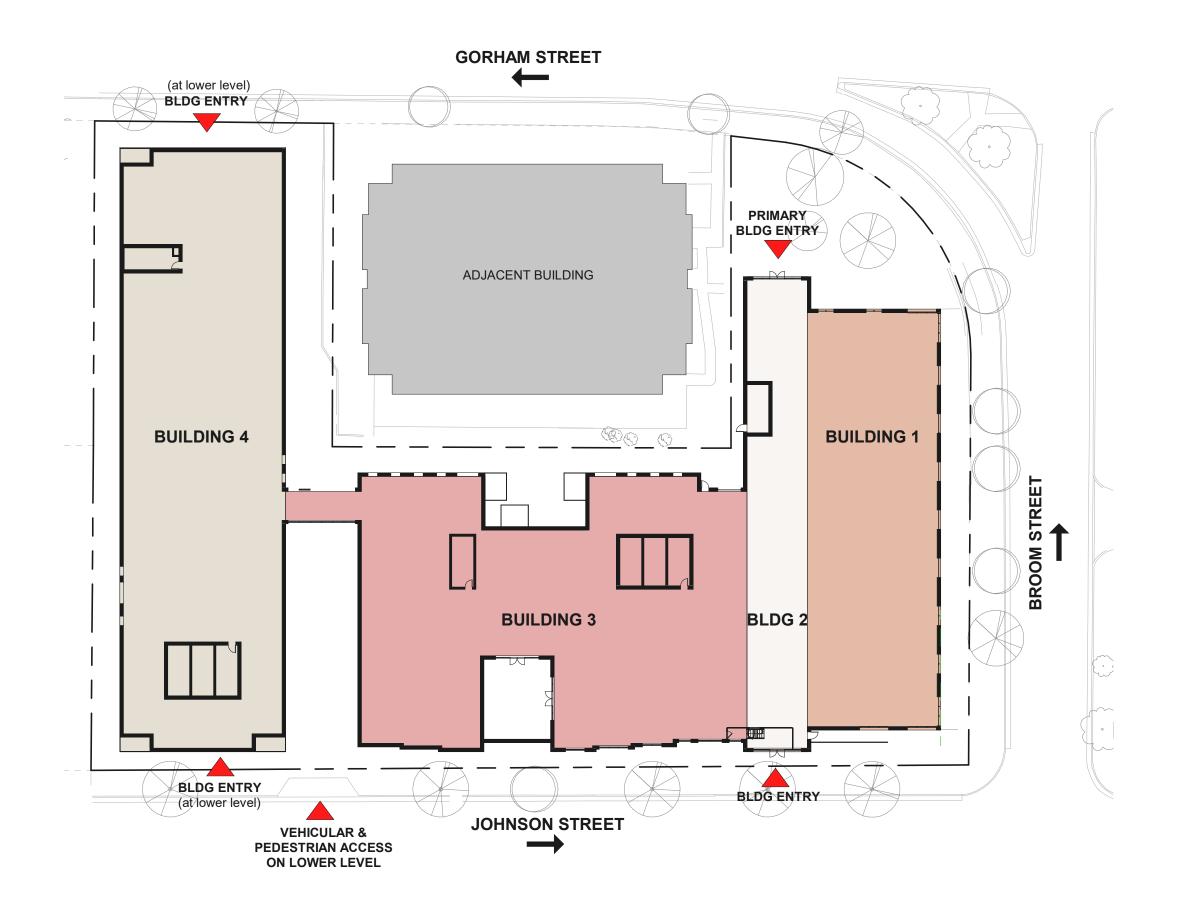
301 W JOHNSON STREET

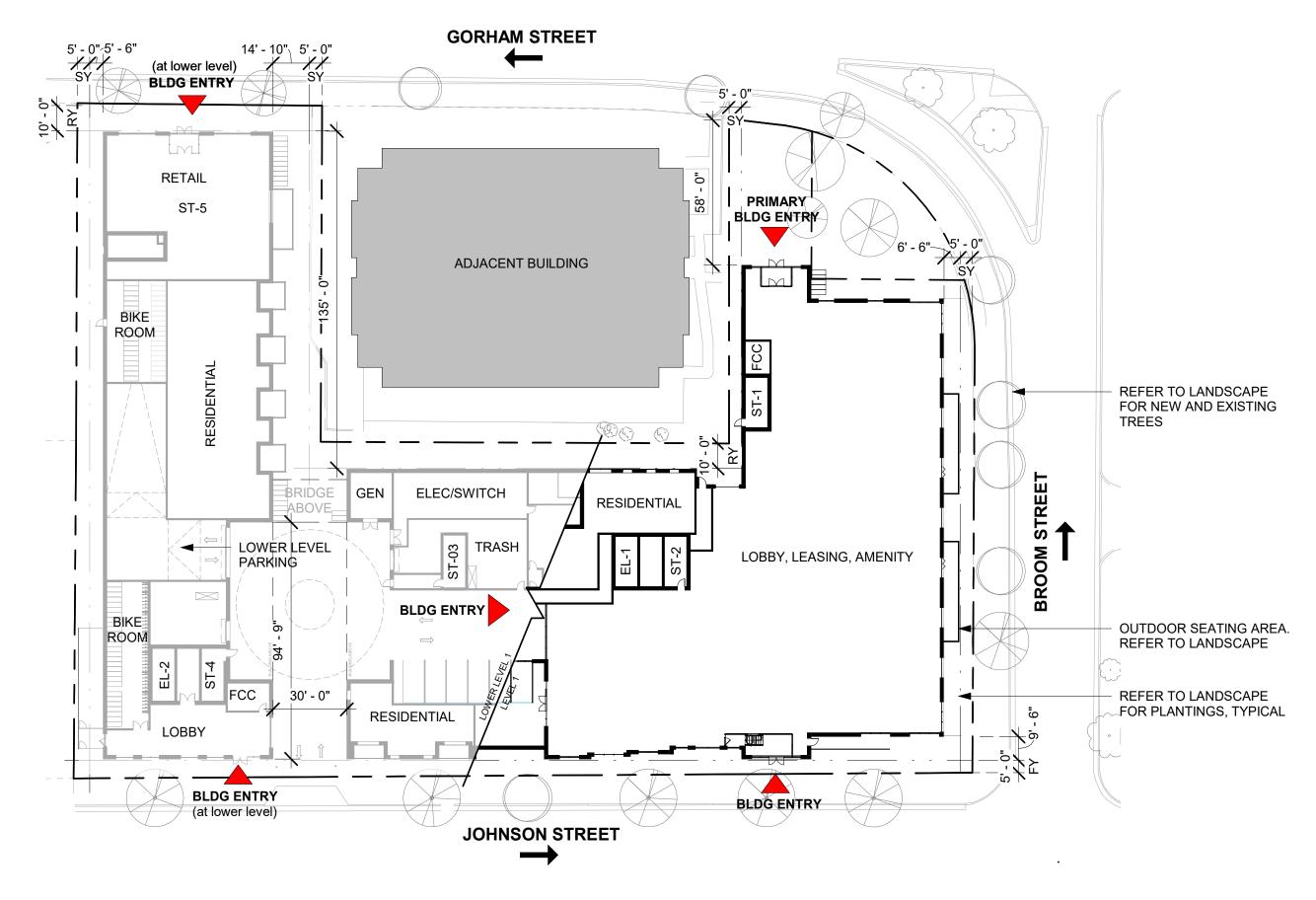


THE LUX



**EQUINOX** 

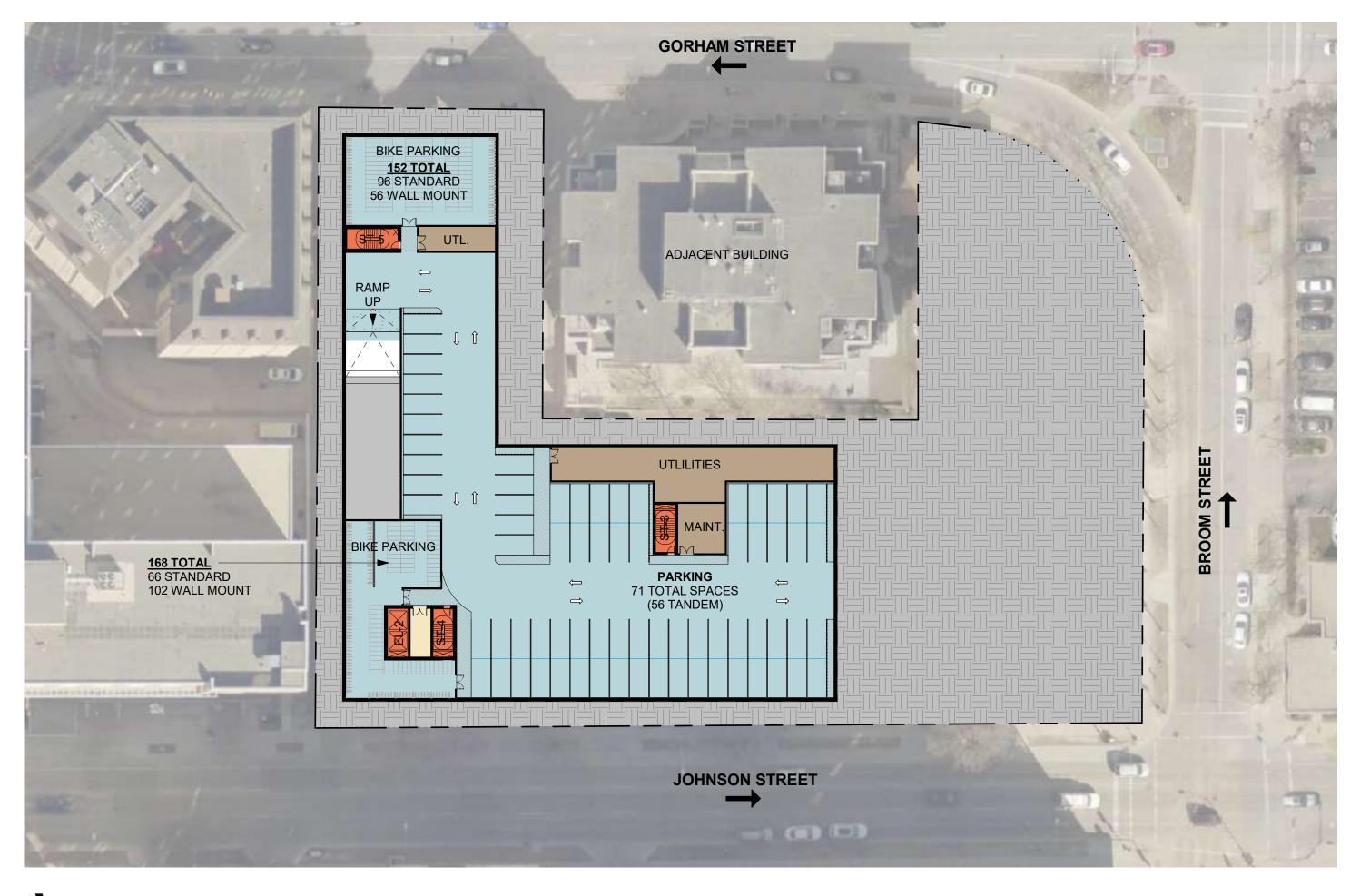






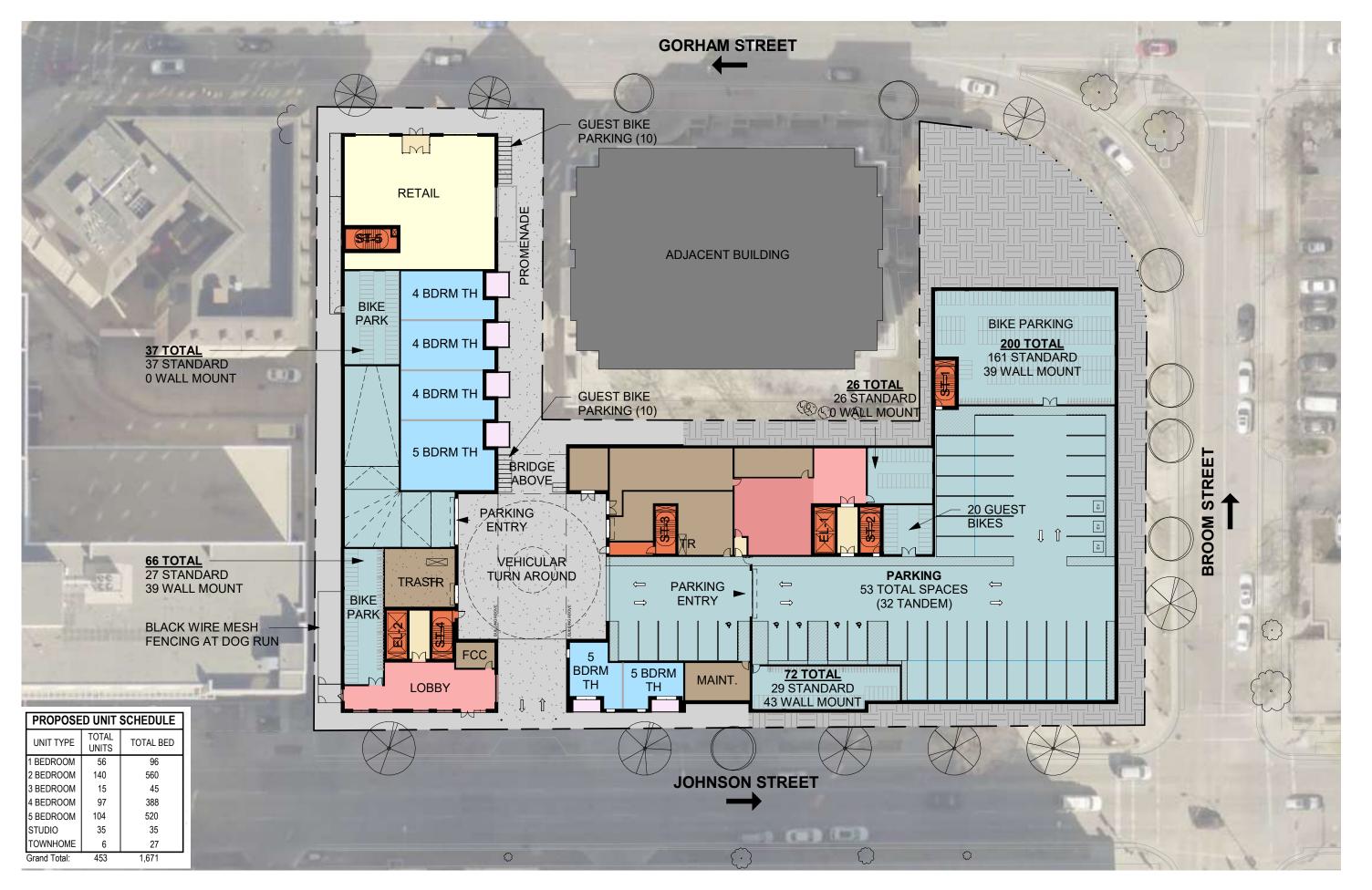


MADISON, WISCONSIN • OCTOBER 04, 2023



















11









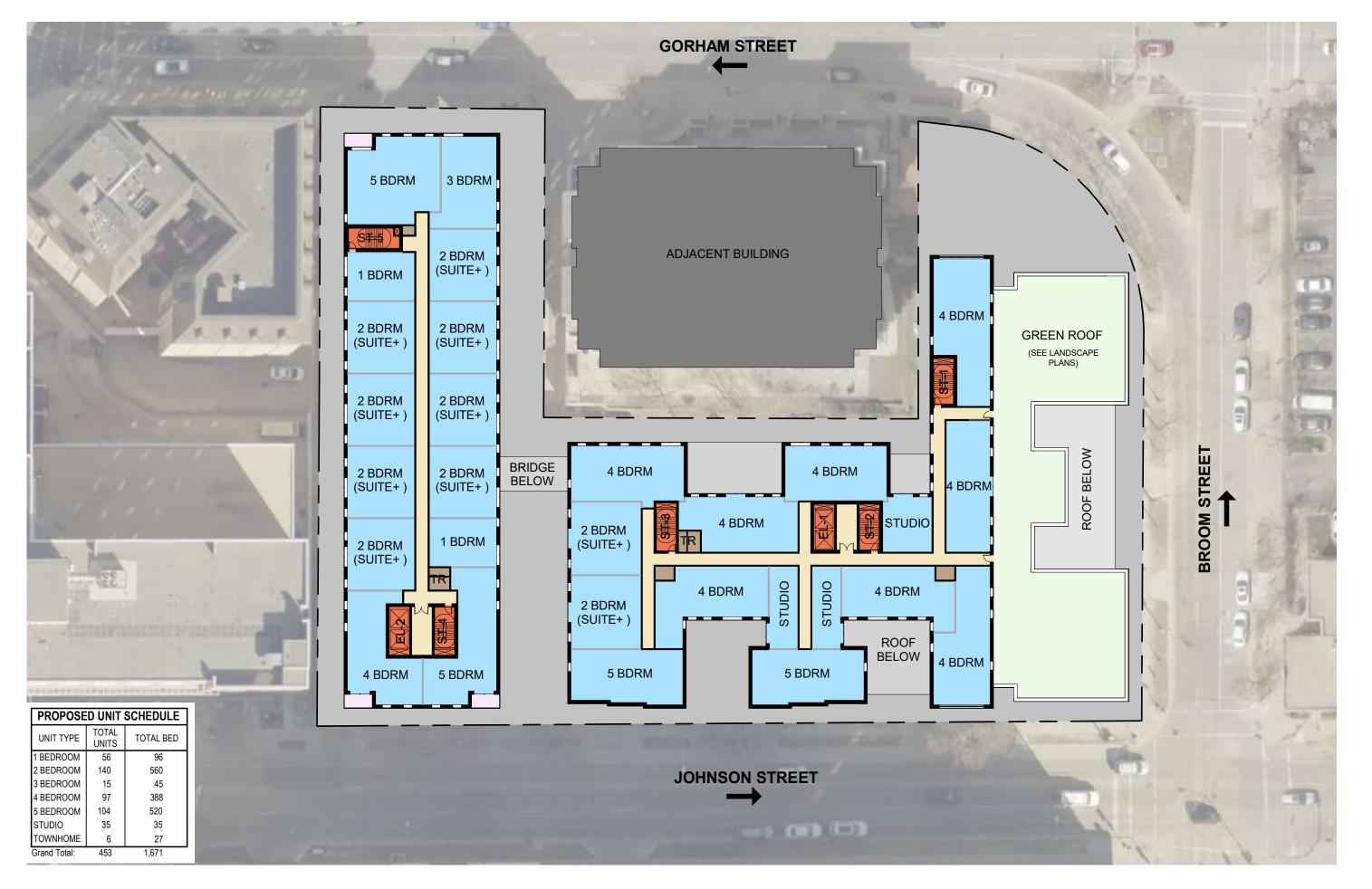
12











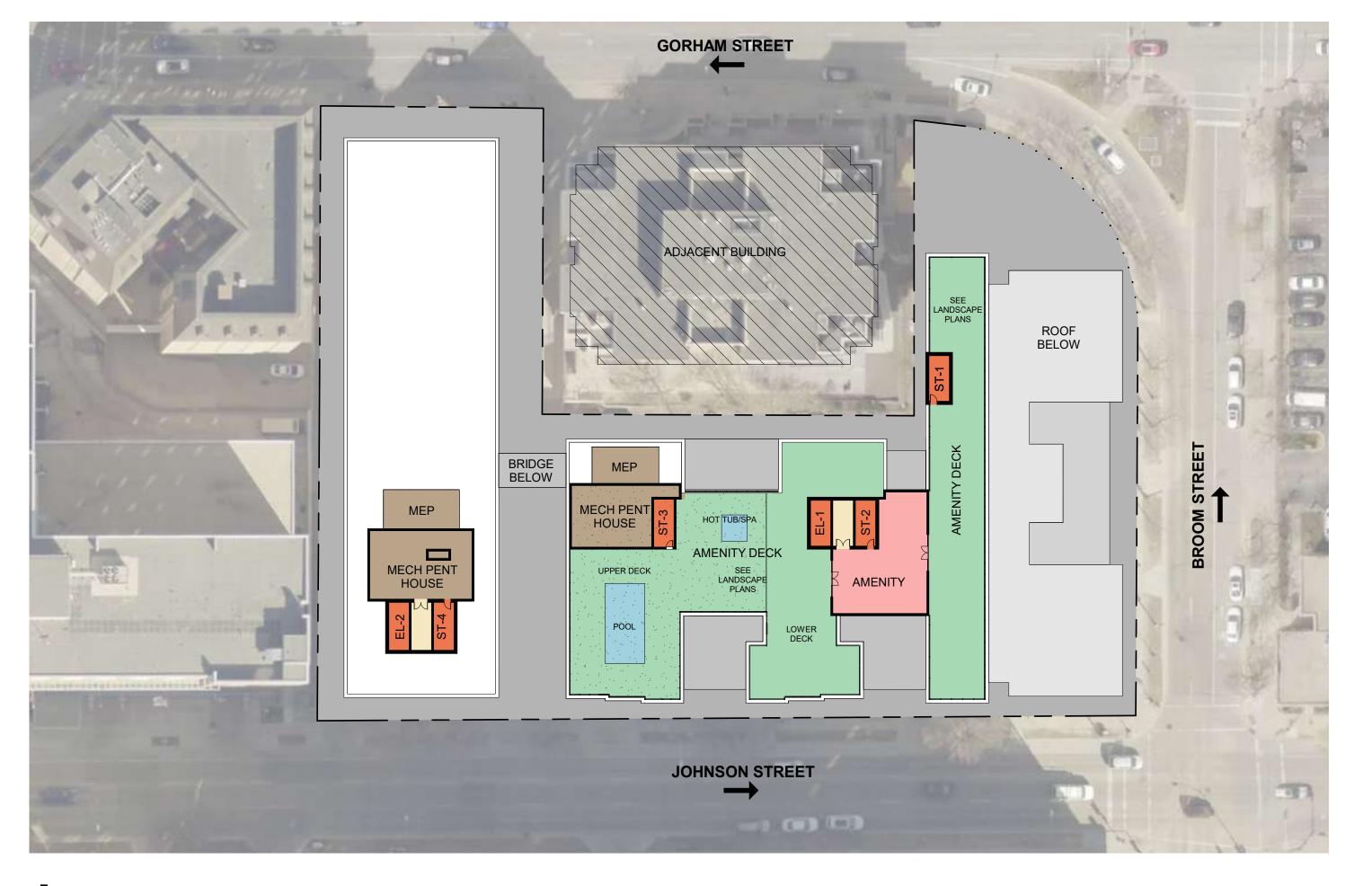
















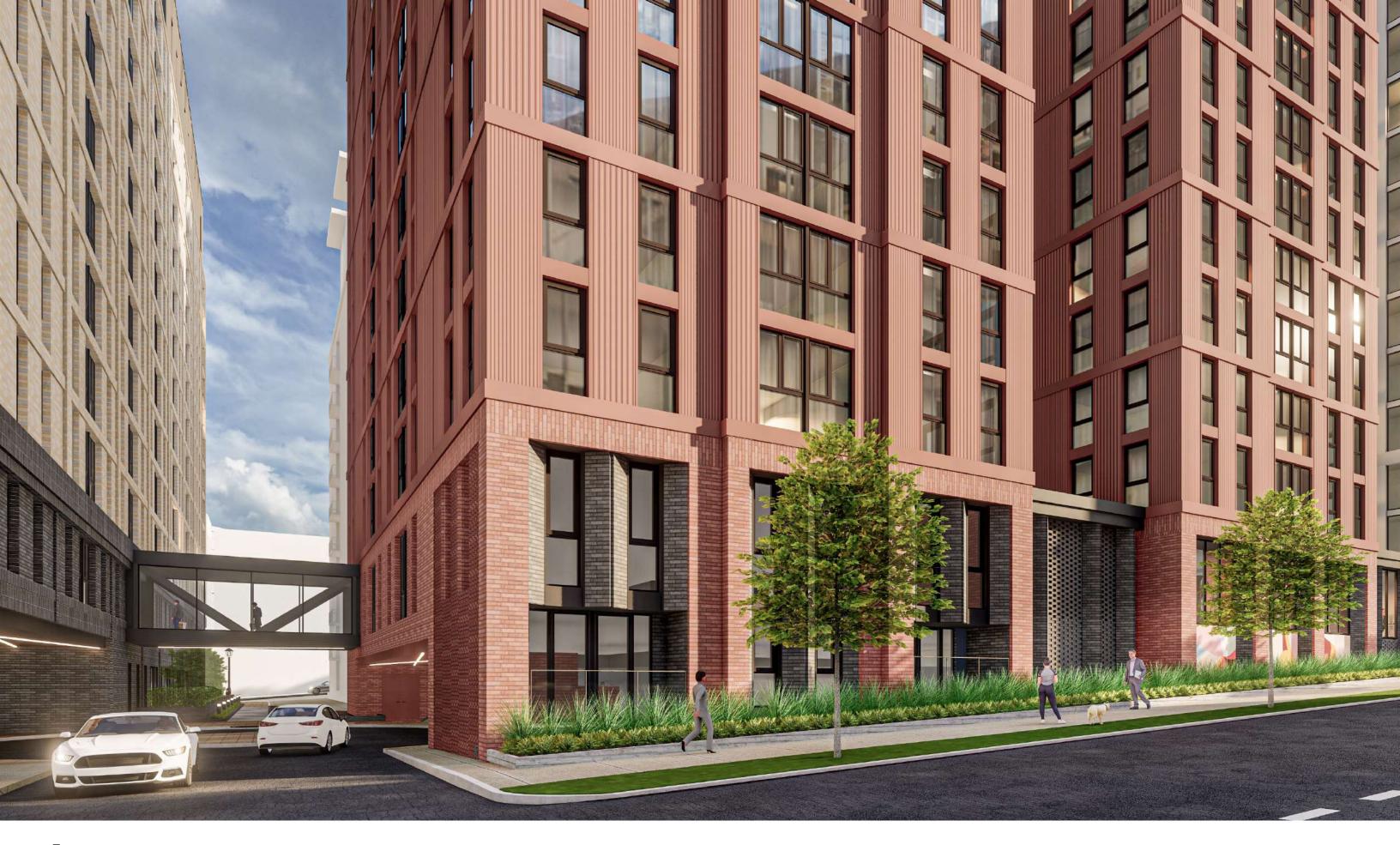










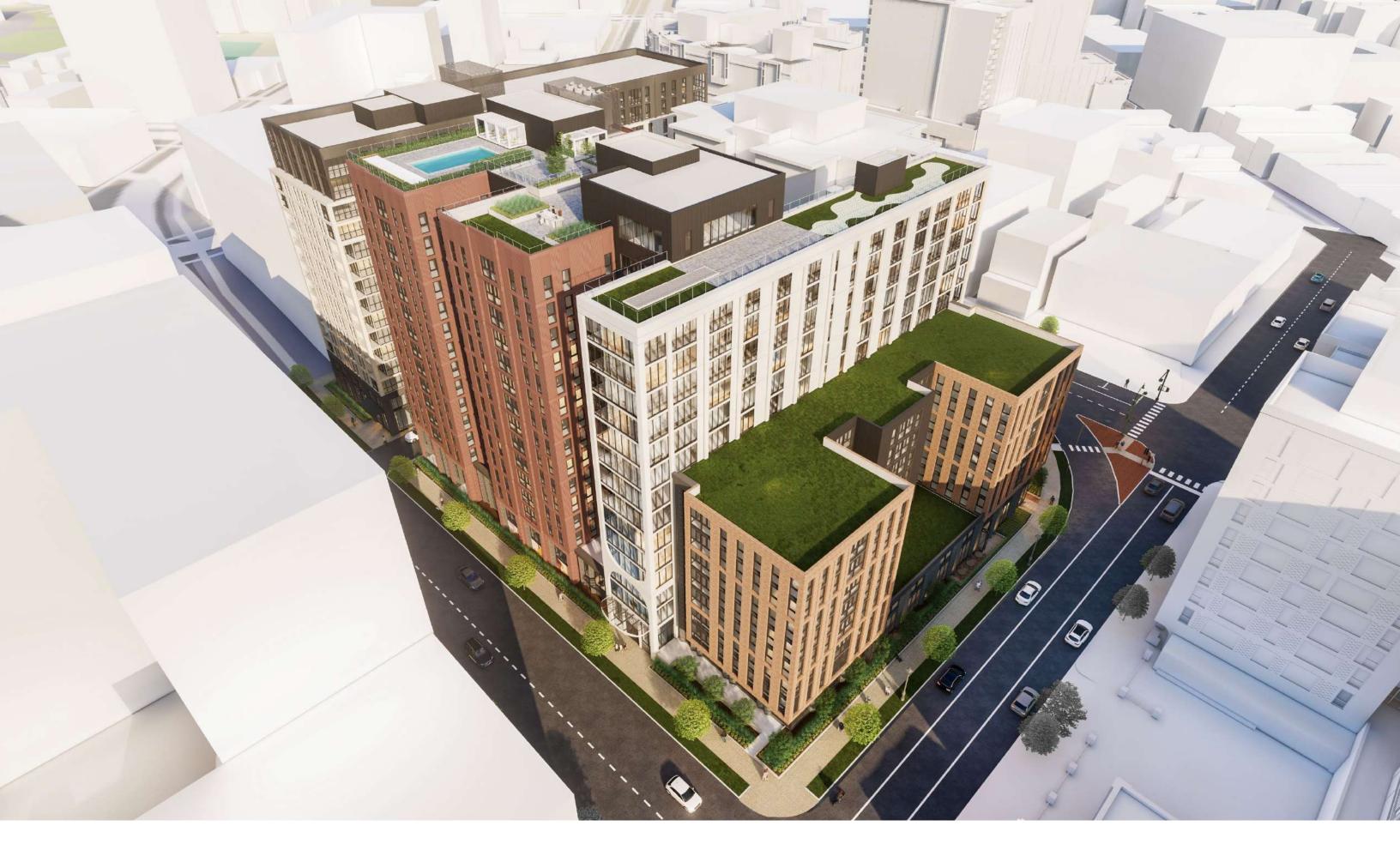






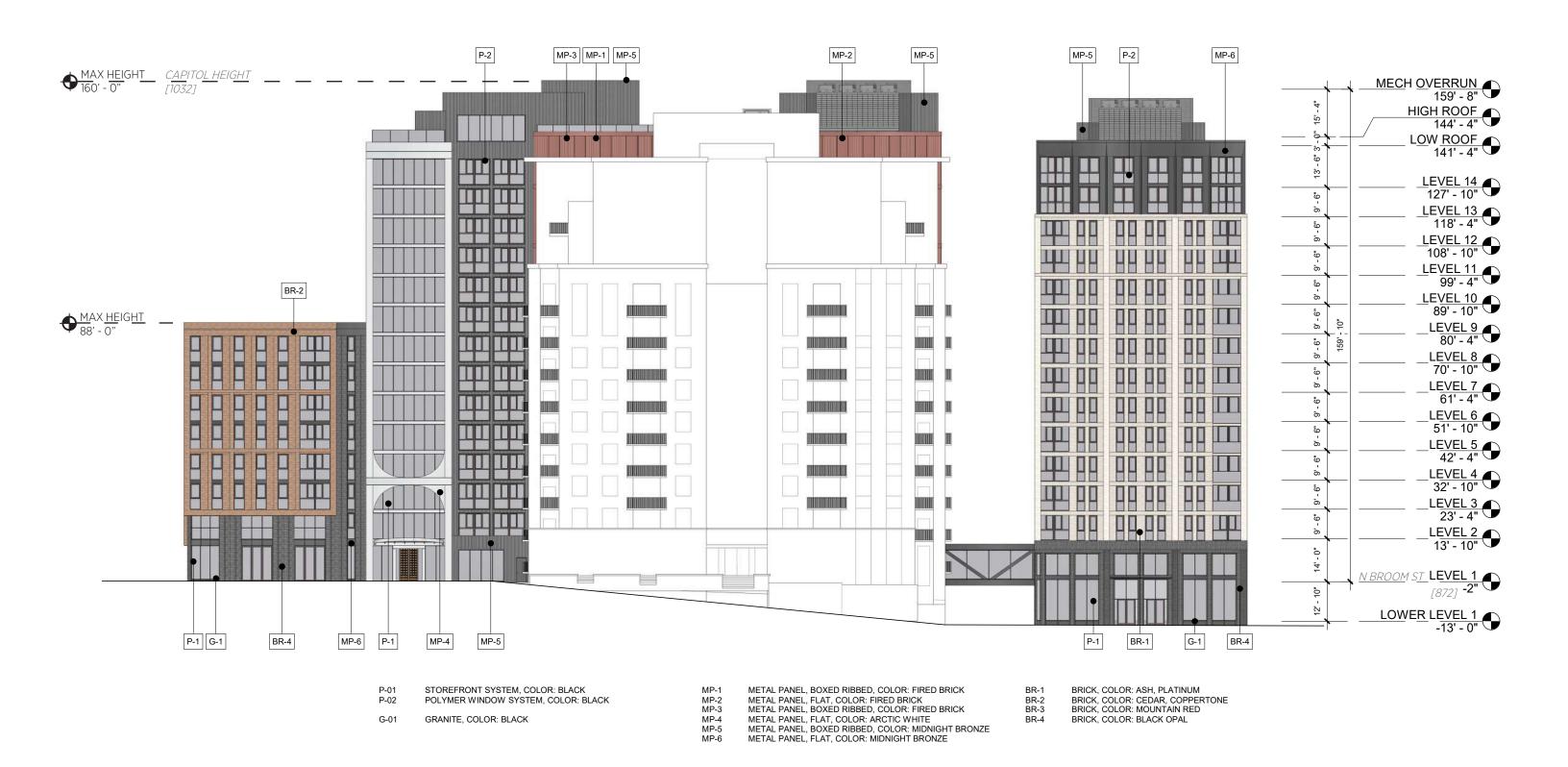














G-01

GRANITE, COLOR: BLACK

METAL PANEL, BOXED RIBBED, COLOR: FIRED BRICK

METAL PANEL, FLAT, COLOR: MIDNIGHT BRONZE

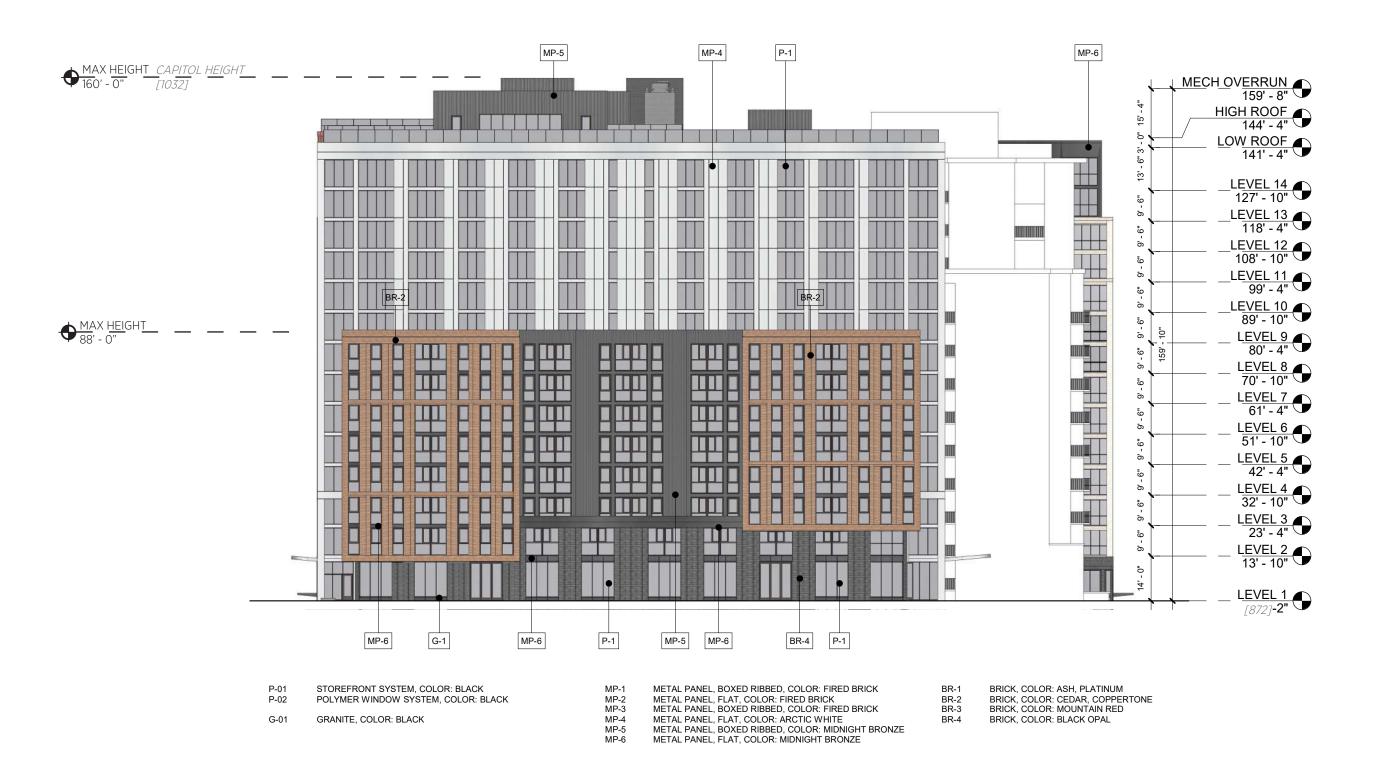
METAL PANEL, FLAT, COLOR: ARCTIC WHITE METAL PANEL, BOXED RIBBED, COLOR: MIDNIGHT BRONZE

BR-3

BR-4

BRICK, COLOR: BLACK OPAL

MP-3







P-02

G-01

POLYMER WINDOW SYSTEM, COLOR: BLACK

GRANITE, COLOR: BLACK

METAL PANEL, FLAT, COLOR: FIRED BRICK

METAL PANEL, BOXED RIBBED, COLOR: FIRED BRICK

METAL PANEL, FLAT, COLOR: MIDNIGHT BRONZE

METAL PANEL, FLAT, COLOR: ARCTIC WHITE METAL PANEL, BOXED RIBBED, COLOR: MIDNIGHT BRONZE

BR-2

BR-3

BR-4

BRICK, COLOR: CEDAR, COPPERTONE

BRICK, COLOR: MOUNTAIN RED

BRICK, COLOR: BLACK OPAL

MP-2

MP-3







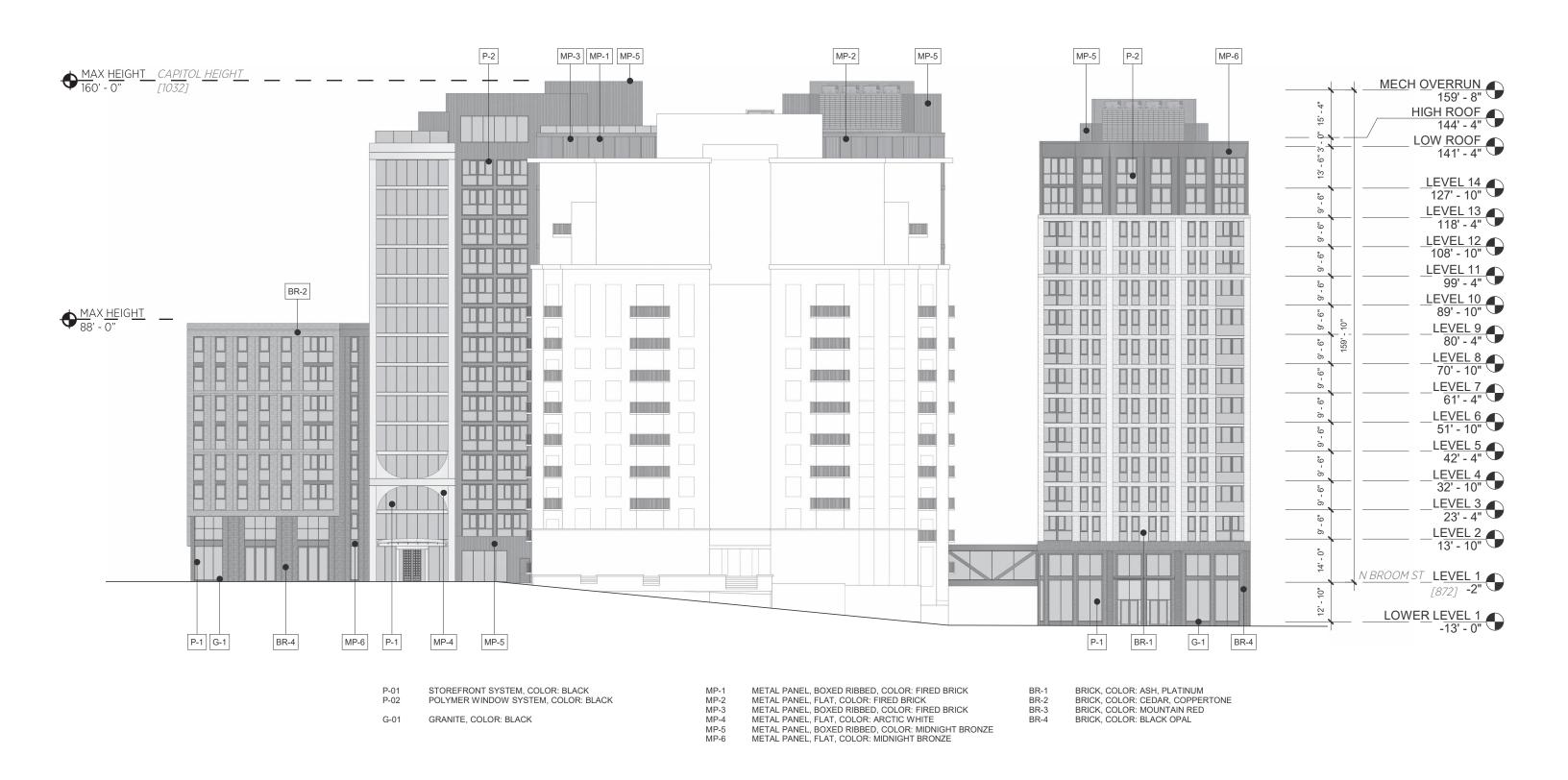
P-01 STOREFRONT SYSTEM, COLOR: BLACK P-02 POLYMER WINDOW SYSTEM, COLOR: BLACK

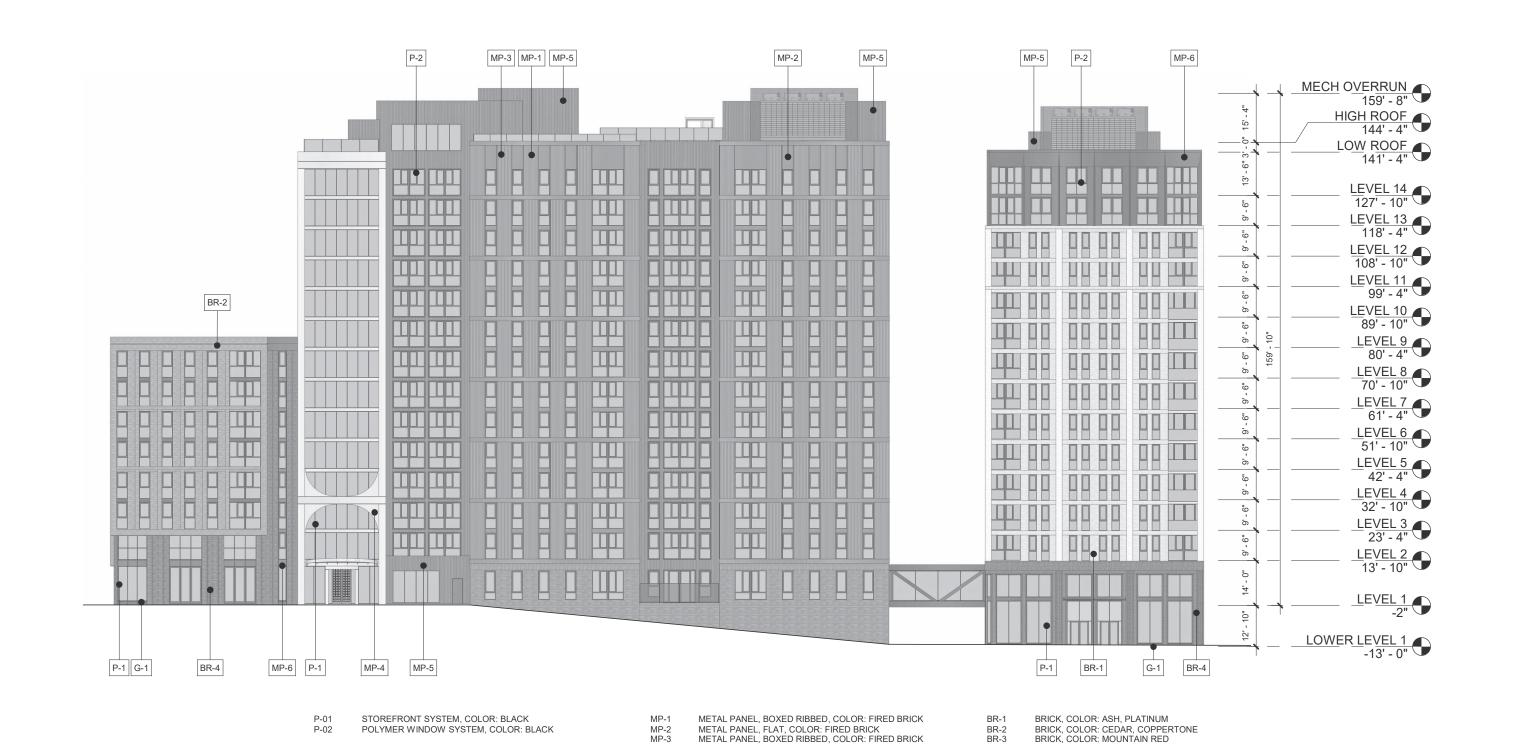
G-01 GRANITE, COLOR: BLACK

MP-1 METAL PANEL, BOXED RIBBED, COLOR: FIRED BRICK MP-2 METAL PANEL, FLAT, COLOR: FIRED BRICK

MP-3 METAL PANEL, BOXED RIBBED, COLOR: FIRED BRICK
MP-4 METAL PANEL, FLAT, COLOR: ARCTIC WHITE
MP-5 METAL PANEL, BOXED RIBBED, COLOR: MIDNIGHT BRONZE
MP-6 METAL PANEL, FLAT, COLOR: MIDNIGHT BRONZE

BR-1 BRICK, COLOR: ASH, PLATINUM
BR-2 BRICK, COLOR: CEDAR, COPPERTONE
BR-3 BRICK, COLOR: MOUNTAIN RED
BR-4 BRICK, COLOR: BLACK OPAL





MP-3

MP-4

G-01

GRANITE, COLOR: BLACK

BR-3

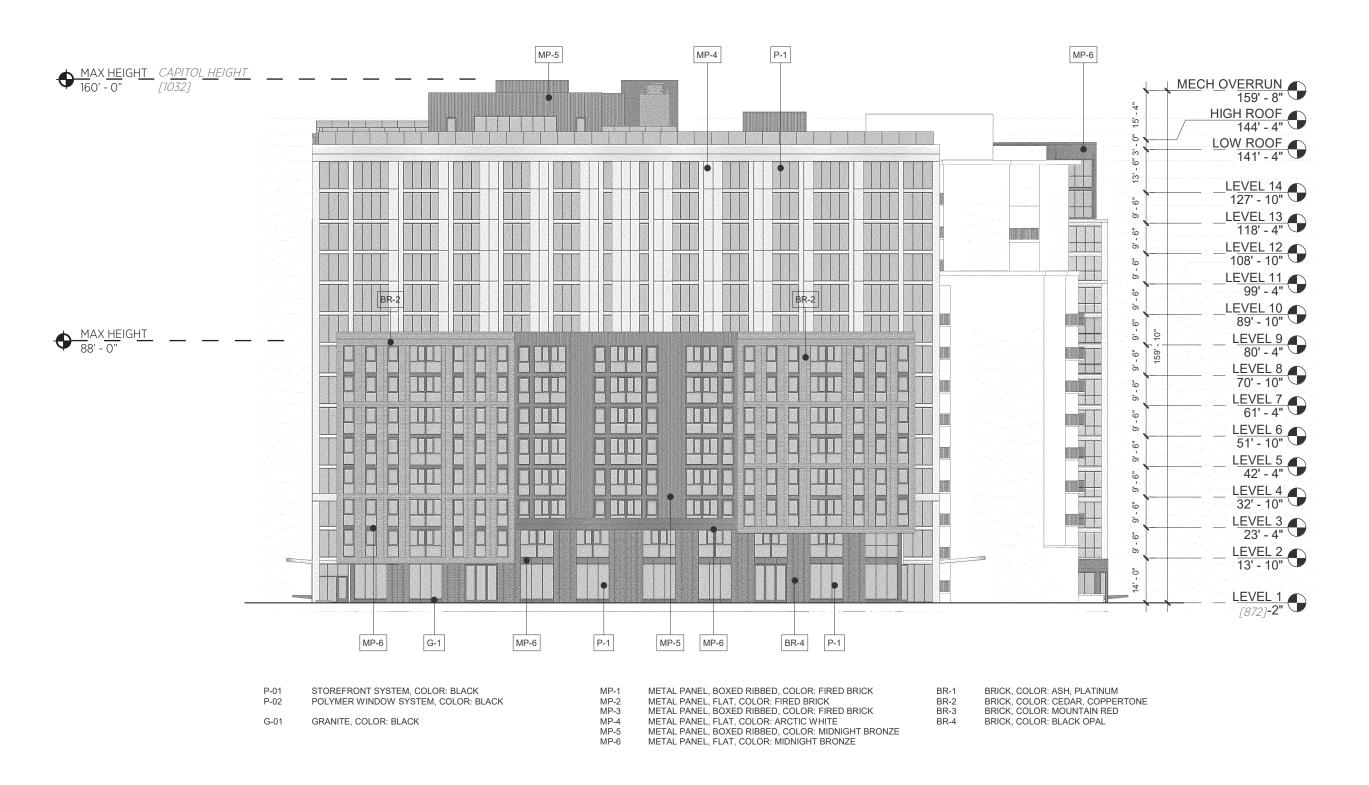
BR-4

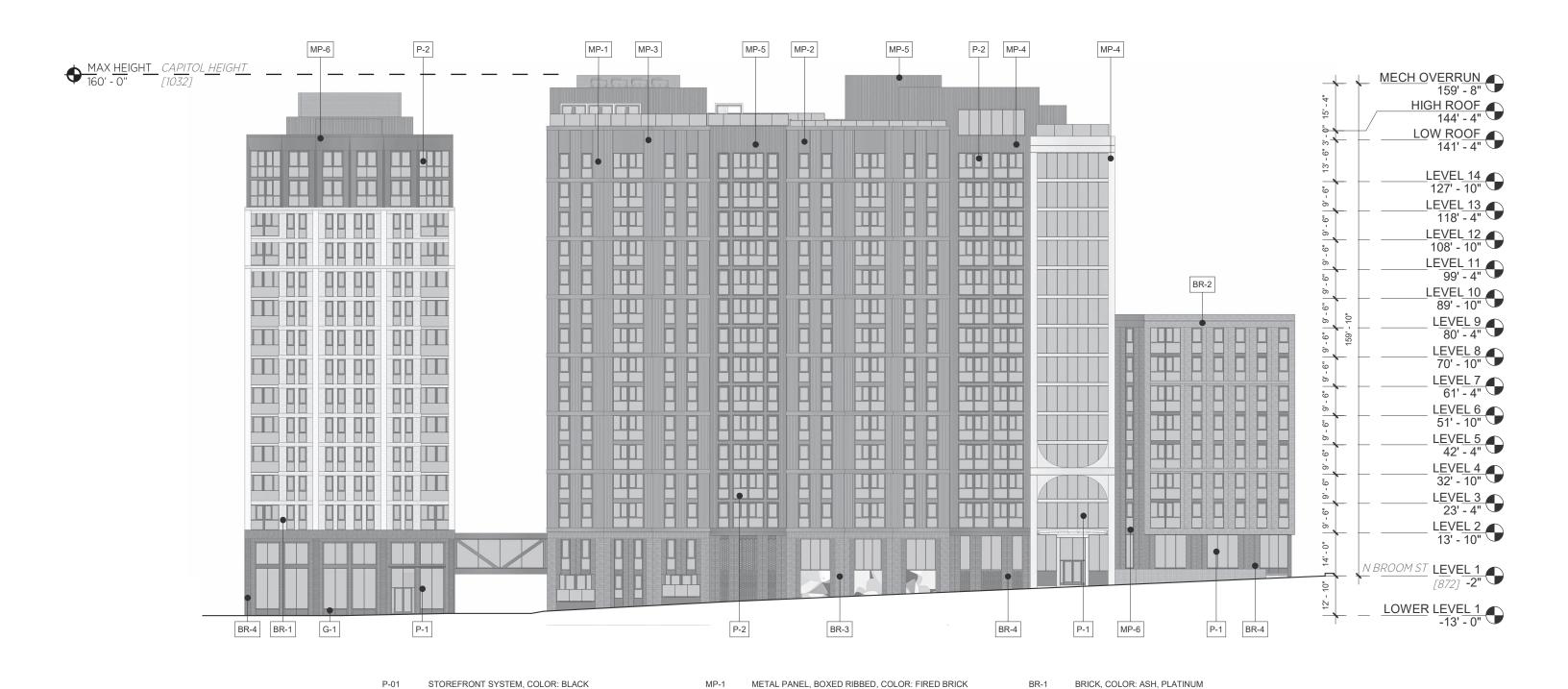
BRICK, COLOR: BLACK OPAL

METAL PANEL, BOXED RIBBED, COLOR: FIRED BRICK

METAL PANEL, FLAT, COLOR: MIDNIGHT BRONZE

METAL PANEL, FLAT, COLOR: ARCTIC WHITE METAL PANEL, BOXED RIBBED, COLOR: MIDNIGHT BRONZE







P-02

G-01

POLYMER WINDOW SYSTEM, COLOR: BLACK

GRANITE, COLOR: BLACK

METAL PANEL, FLAT, COLOR: FIRED BRICK

METAL PANEL, BOXED RIBBED, COLOR: FIRED BRICK

METAL PANEL, FLAT, COLOR: MIDNIGHT BRONZE

METAL PANEL, FLAT, COLOR: ARCTIC WHITE METAL PANEL, BOXED RIBBED, COLOR: MIDNIGHT BRONZE

BR-2

BR-3

BR-4

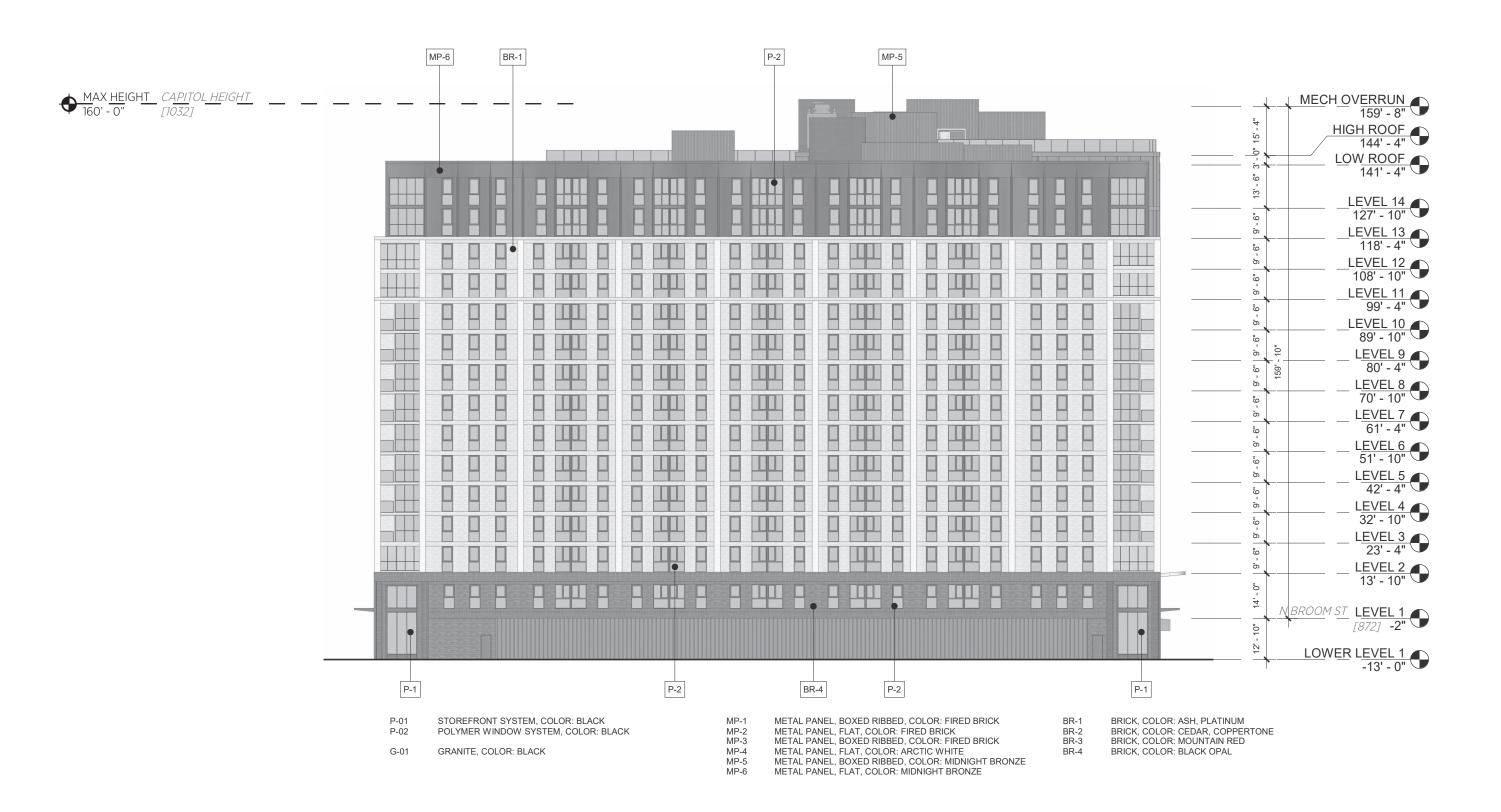
BRICK, COLOR: CEDAR, COPPERTONE

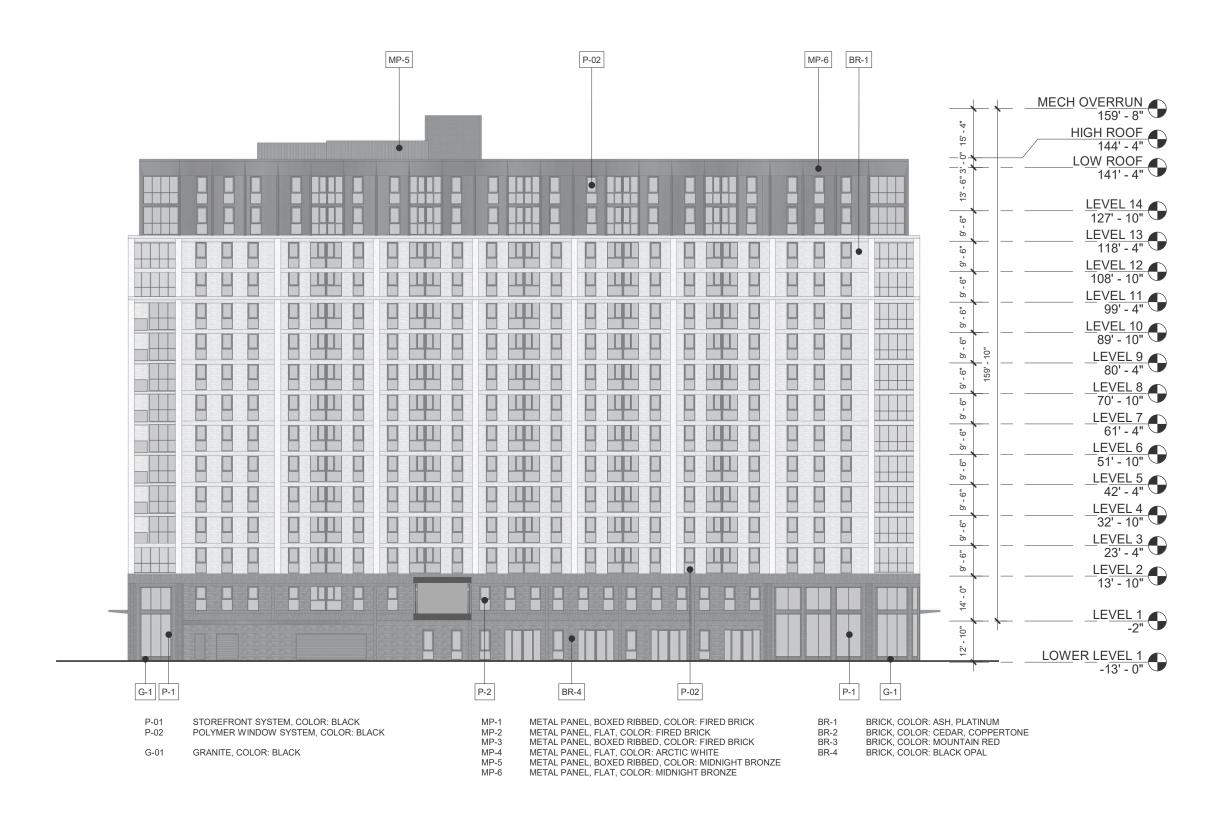
BRICK, COLOR: MOUNTAIN RED

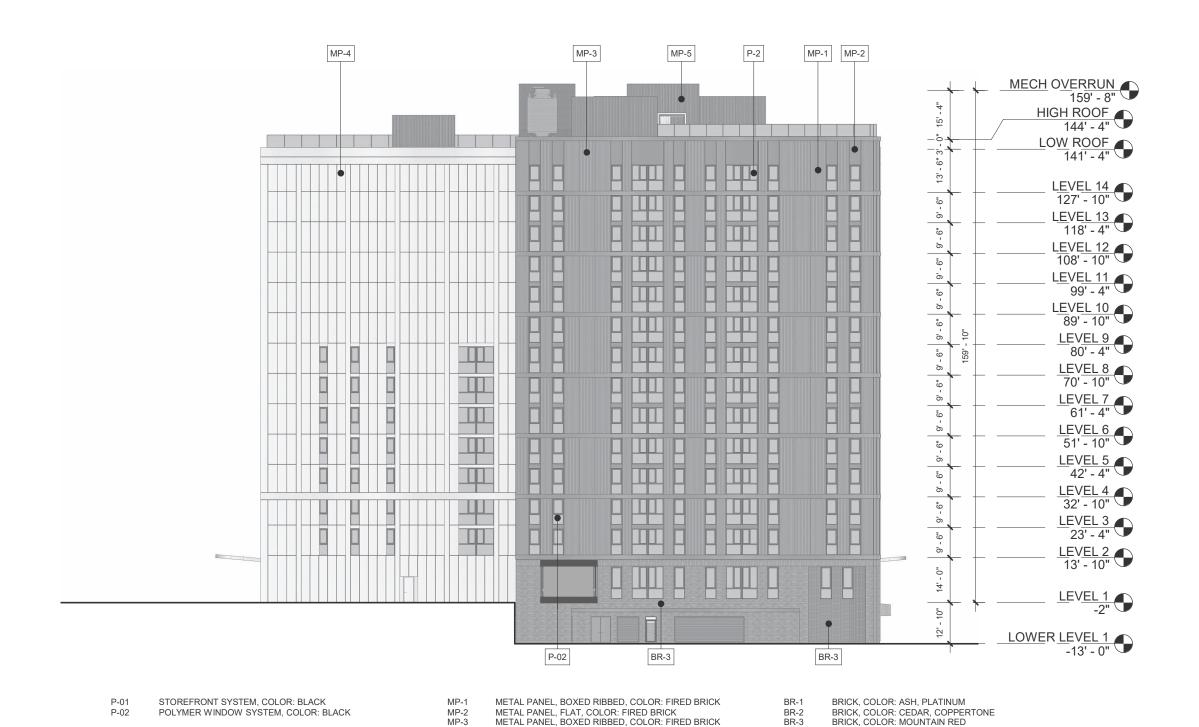
BRICK, COLOR: BLACK OPAL

MP-2

MP-3







METAL PANEL, FLAT, COLOR: ARCTIC WHITE METAL PANEL, BOXED RIBBED, COLOR: MIDNIGHT BRONZE

METAL PANEL, FLAT, COLOR: MIDNIGHT BRONZE

BR-3

BR-4

BRICK, COLOR: BLACK OPAL



G-01

GRANITE, COLOR: BLACK

MP-4

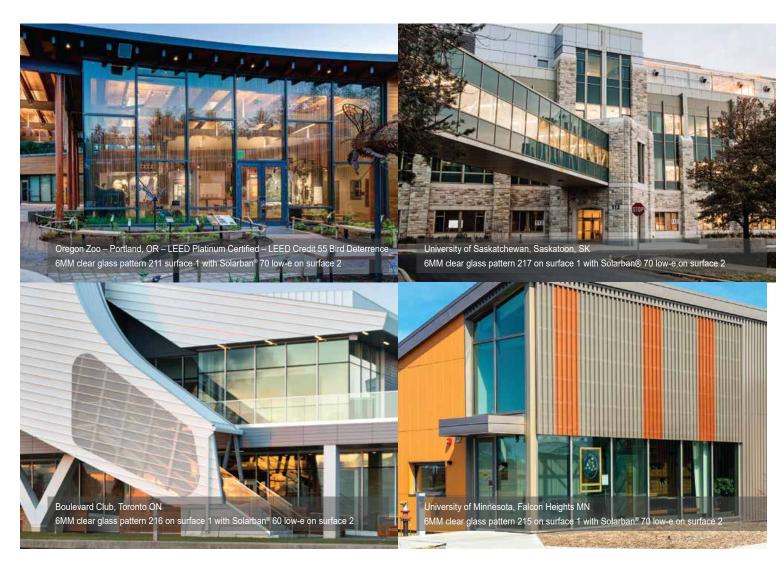


# **AviProtek®E**

Walker bird friendly glass with Vitro high-performance Solarban® low-e

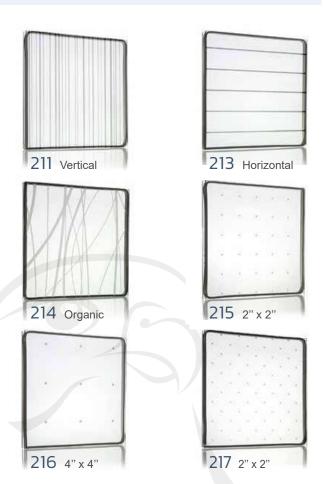


Proven to be effective time and time again...



## Saving birds and energy!

### Patterns on surface 1



### Low-e coatings on surface 2

#### Solarban® Solar Control Low-e Glass Products by Vitro Architectural Glass

Solarban® glass is a spectrally selective glass option which reduces long and short wave (infrared) heat energy, while at the same time allowing visible light to be transmitted through the glass. Solarban® glass products by Vitro Glass let you specify larger spans of glass that maximize natural daylighting without sacrificing thermal efficiency.

With a range of options, the Solarban® family of glass products feature a clear aesthetic with among the highest light-to-solar gain (LSG) ratios in the industry.





AviProtek Pattern (1)	VLT		_R	NFRCU / Winter		SHGC	LSG
with		Ext.%	Int.%	Night-time	Argon		
Solarban® 60 (2) + Clear	70	11	12	0.29	0.24	0.39	1.79
Solarban® 70 (2) + Clear	64	12	13	0.28	0.24	0.27	2.37

Due to the low density of the AviProtek® patterns, they have no significant impact on the

Other coatings are available on demand. Please contact your Walker

Bird collisions with glass building facades are the major cause of bird mortality, claiming the lives of hundreds of millions of birds each year. The magnitude of the problem is such that an important trend in making buildings safer for birds has emerged across North America. Municipalities, states and provinces have, and continue to enact bird deterrence legislation. Leading scientists have proven that the use of visual markers on the exterior (1st) surface of the glass provides birds with the best chance to identify a solid barrier and avoid collision. Furthermore, the CSA A460 standard requires the use of visual markers being placed on the exterior (1st) surface of the glass.

The AviProtek® E bird friendly glass solution combines acid-etched visual markers on the 1st surface with Vitro's Solarban® high performance low-e coatings on the 2<sup>nd</sup> surface, creating the most effective bird friendly glazing solution on the market. Architects and building owners alike can now achieve their environmental goals and earn LEED credits while meeting solar performance targets.



#### Sustainable solution

The AviProtek® E is the ONLY bird friendly glass product available that possesses an EPD – Environmental Product Declaration. Our environmentally responsible solution allows architects to secure an additional LEED point for their projects using Pilot Credit 55 related to bird deterrence. It also meets California building legislation requirement (AB262) to be enacted in 2020.

### **Product Specifications**

Thickness: 6MM (1 /4") Dimension: 96" x 130" only

Substrates: Clear and Starphire Ultra-Clear™ glass, standard tints available on demand subject to glass availability.

Availability: AviProtek® E glass products are only available from members of the Vitro Certified™ Network.

Quantity: Subject to a minimum of one block of 4,000 lbs or 1,000 sq ft of glass.

Low-e: Available with Solarban® 60 VT, Solarban® 70 VT by Vitro Glass, other coatings are available on demand.

Warranty for the acid-etching: 10 year limited warranty on surface degradation. For all terms and conditions of the Walker Textures® warranty,

please contact our Customer Service Department.

Warranty for the low-e coating: For more information, please contact the Vitro Glass Customer Service Department.

Solarban, Starphire, Starphire Ultra-Clear, Vitro and Vitro Certified are trademarks owned by Vitro



**UDC FORMAL SUBMITTAL** 

Walker Glass Co. Ltd., 9551 Ray Lawson Blvd., Montreal QC H1J 1L5 Canada



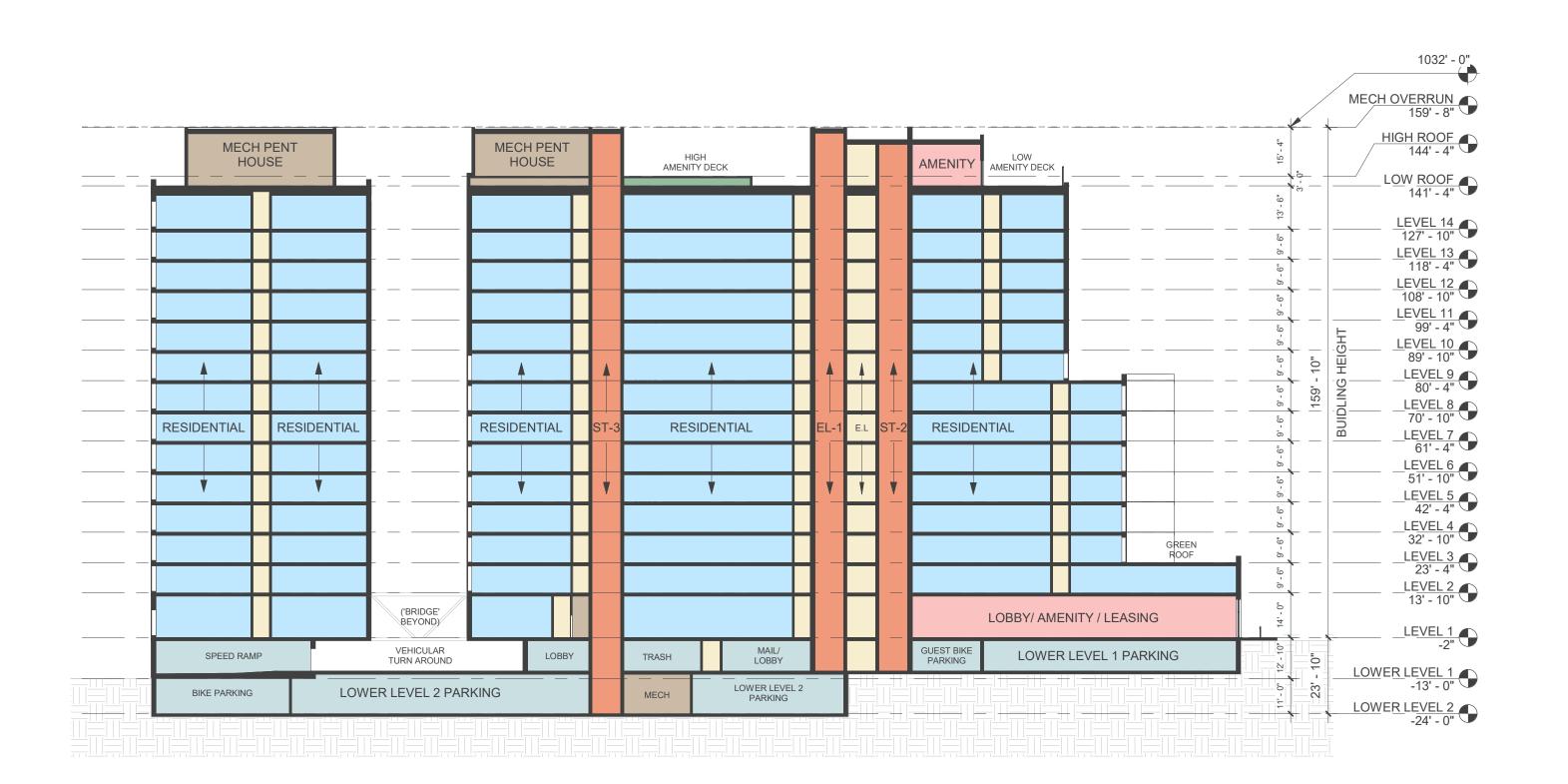
BIRD FRIENDLY GLAZING

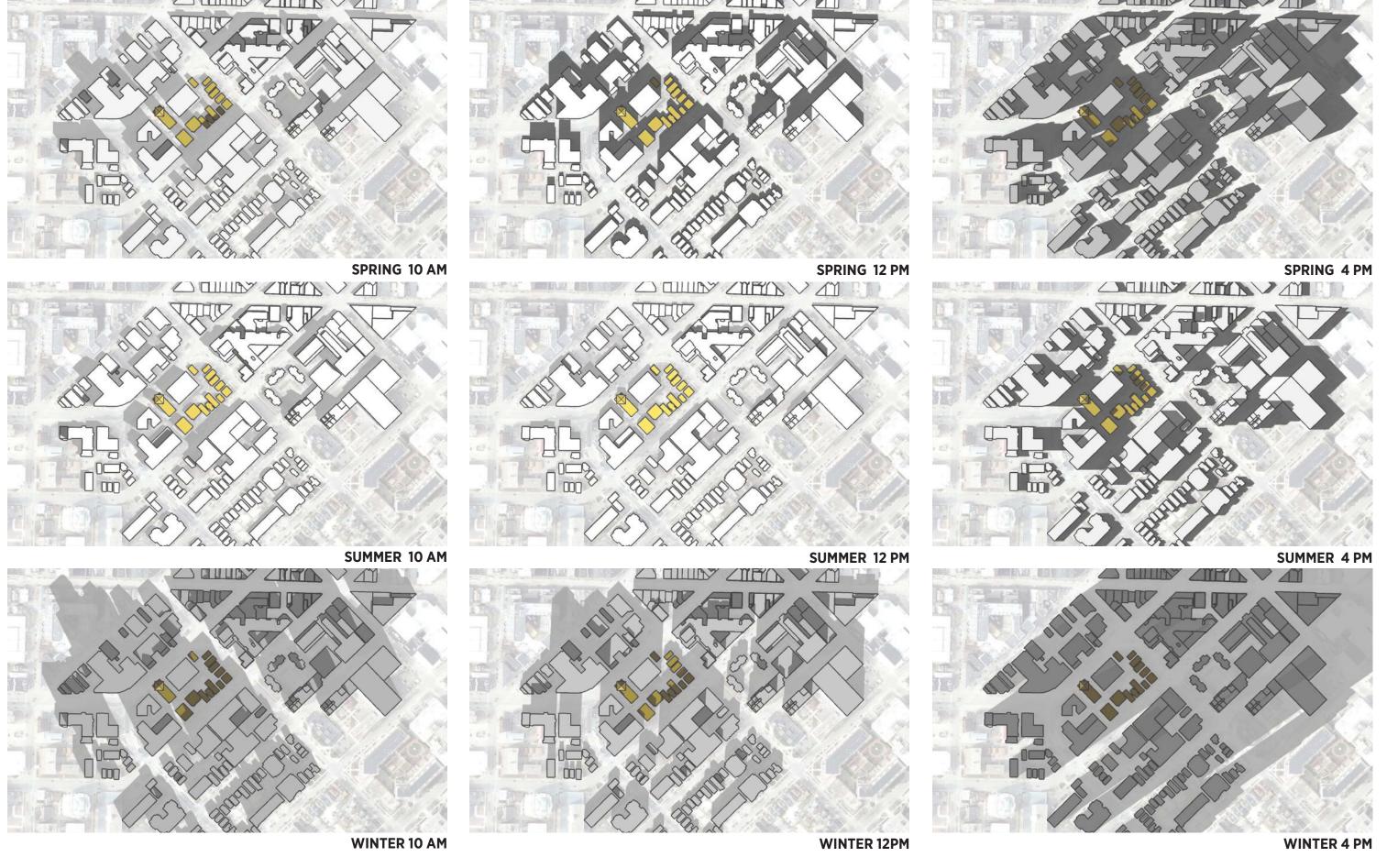


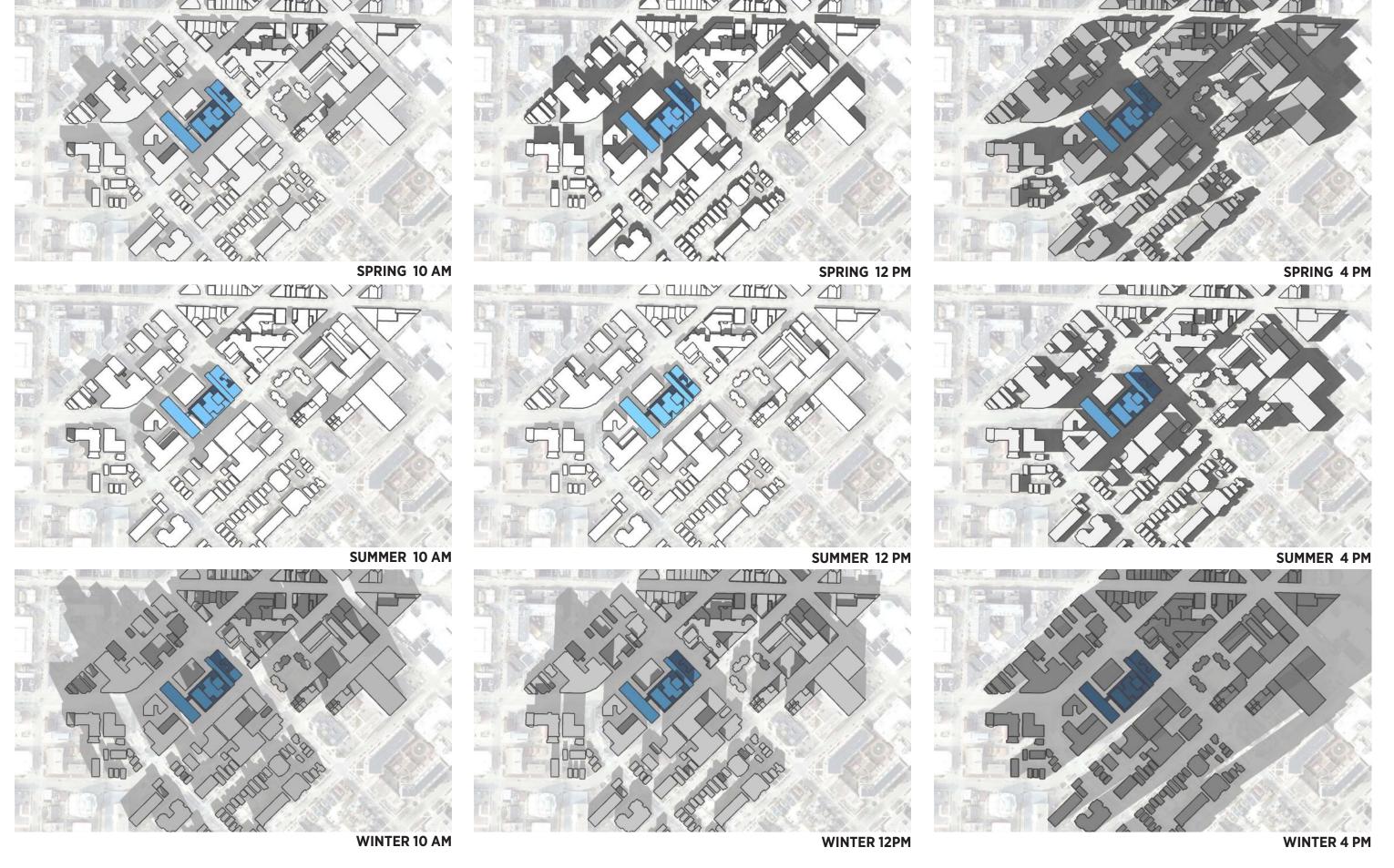
BIRD FRIENDLY GLAZING



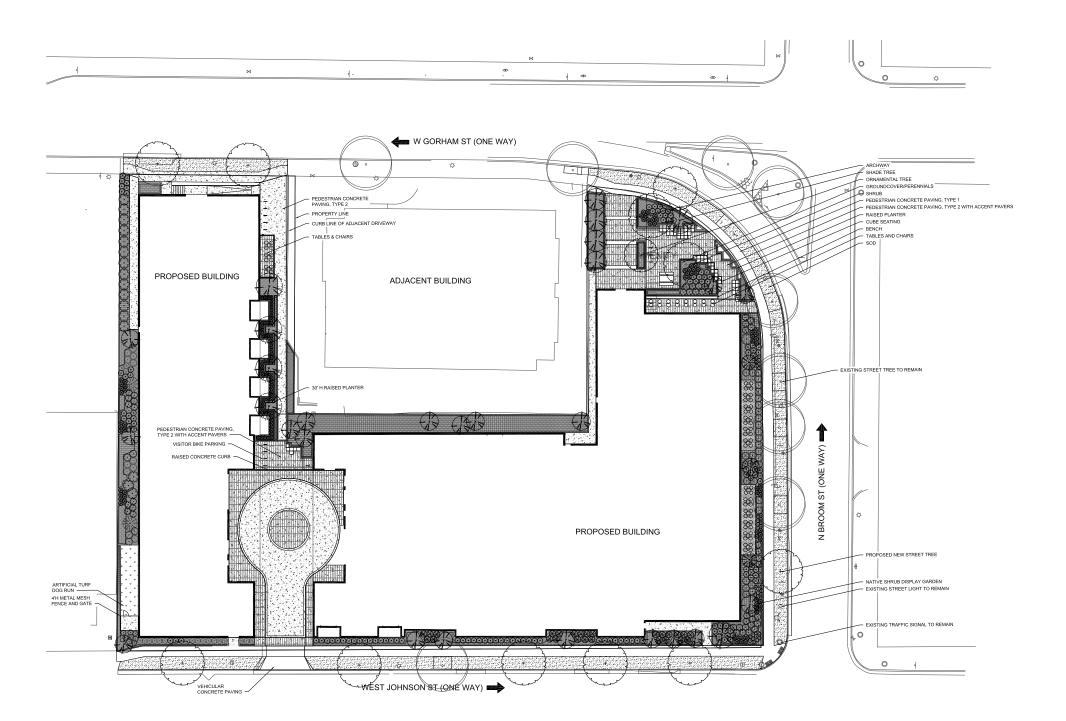
BIRD FRIENDLY GLAZING



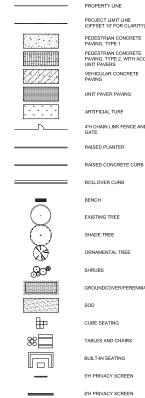








## LEGEND

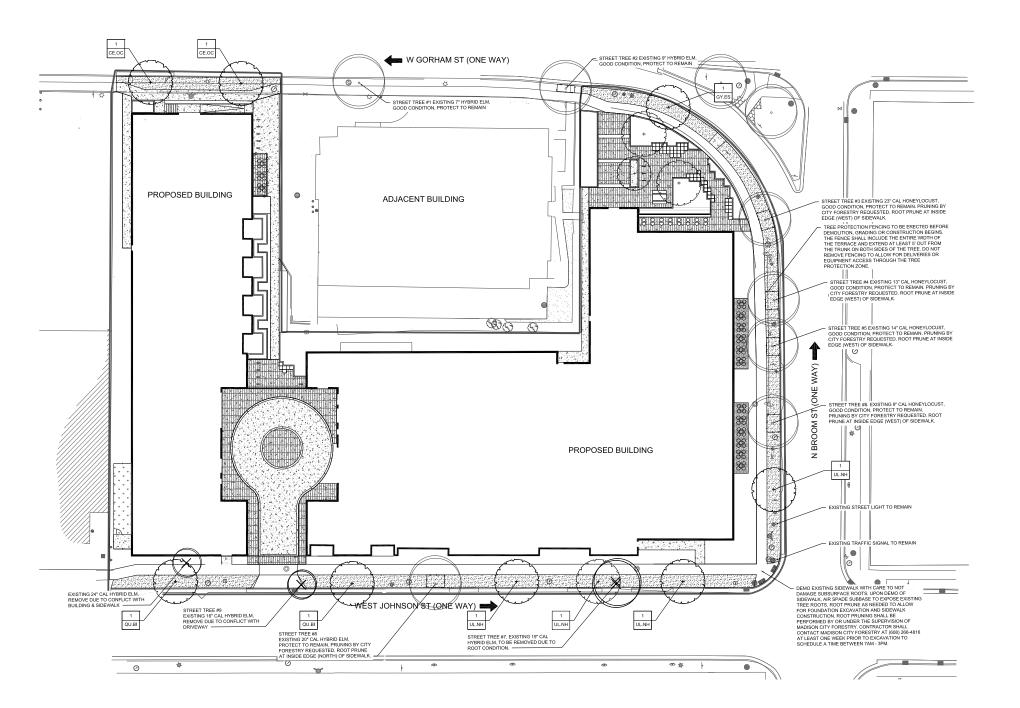




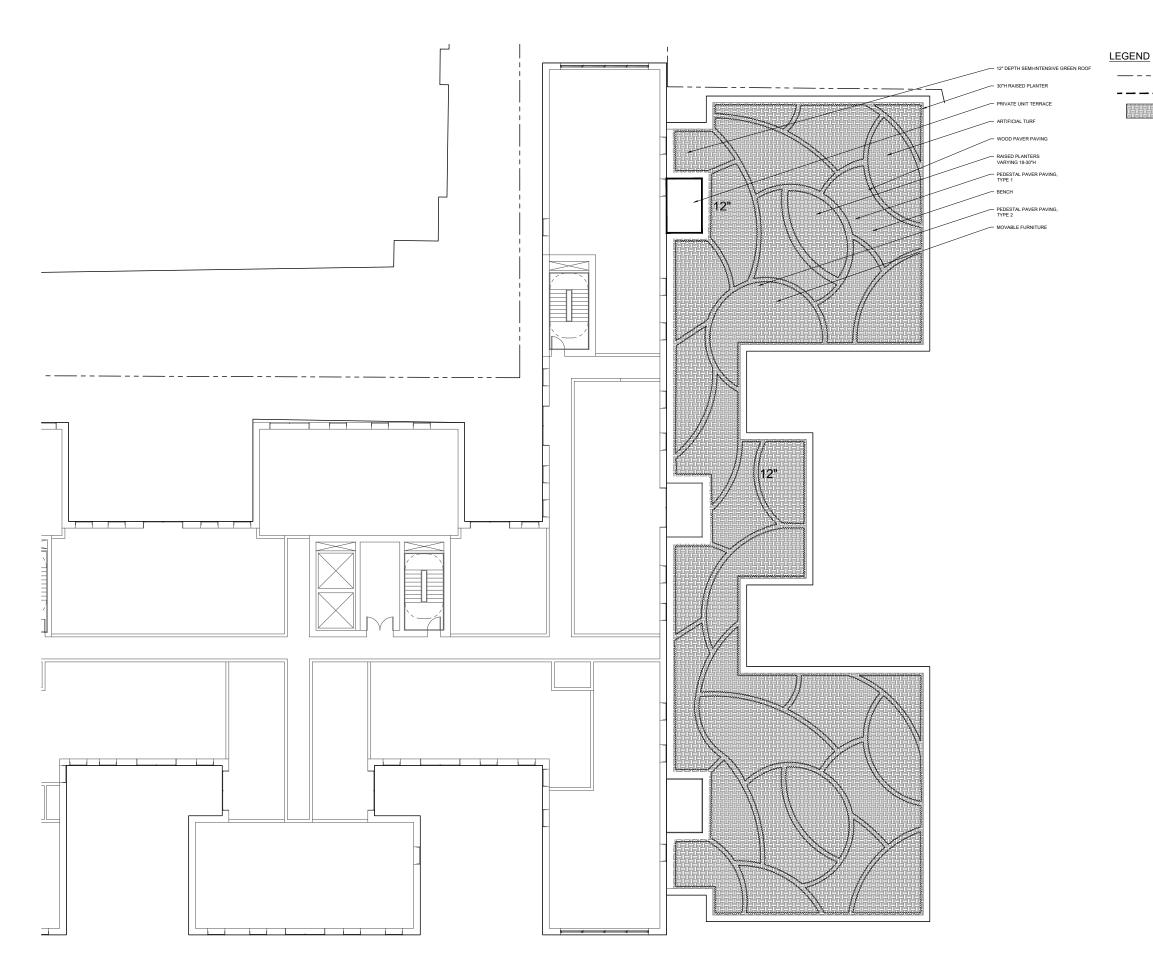
PLANT SCI	HEDU	LE - GROUND FLOOR				
CODE O	-Y	BOTANGAL VIME	COMMON NAME	ROOT	5.ZI	REMARKS
PARKWAY	DECL	DUDUS TREES				
GF OC	2	Cellis accidentalis	Common Hackberry	BAB	7.5" ca	Maching horas
GYLS		Gymerolietes dinore Represso	Espresso Kamucky Coffeetree	8&8	2.5° ca	Matching heads
QUBI "	2	Oversus picolor	Swamp While Oak	'88B	2.5° ca	Macohing heads
JL.NH	4	Olinus New Horzon'	New Horizon Hybrid Ein:	BAB	2.5° ca	Matching lesses

TES: FINAL STREET TREE QUANITITES, LOCATIONS AND SPECIES TO BE APPROVED BY MADISON CITY FORE

#### LEGEND

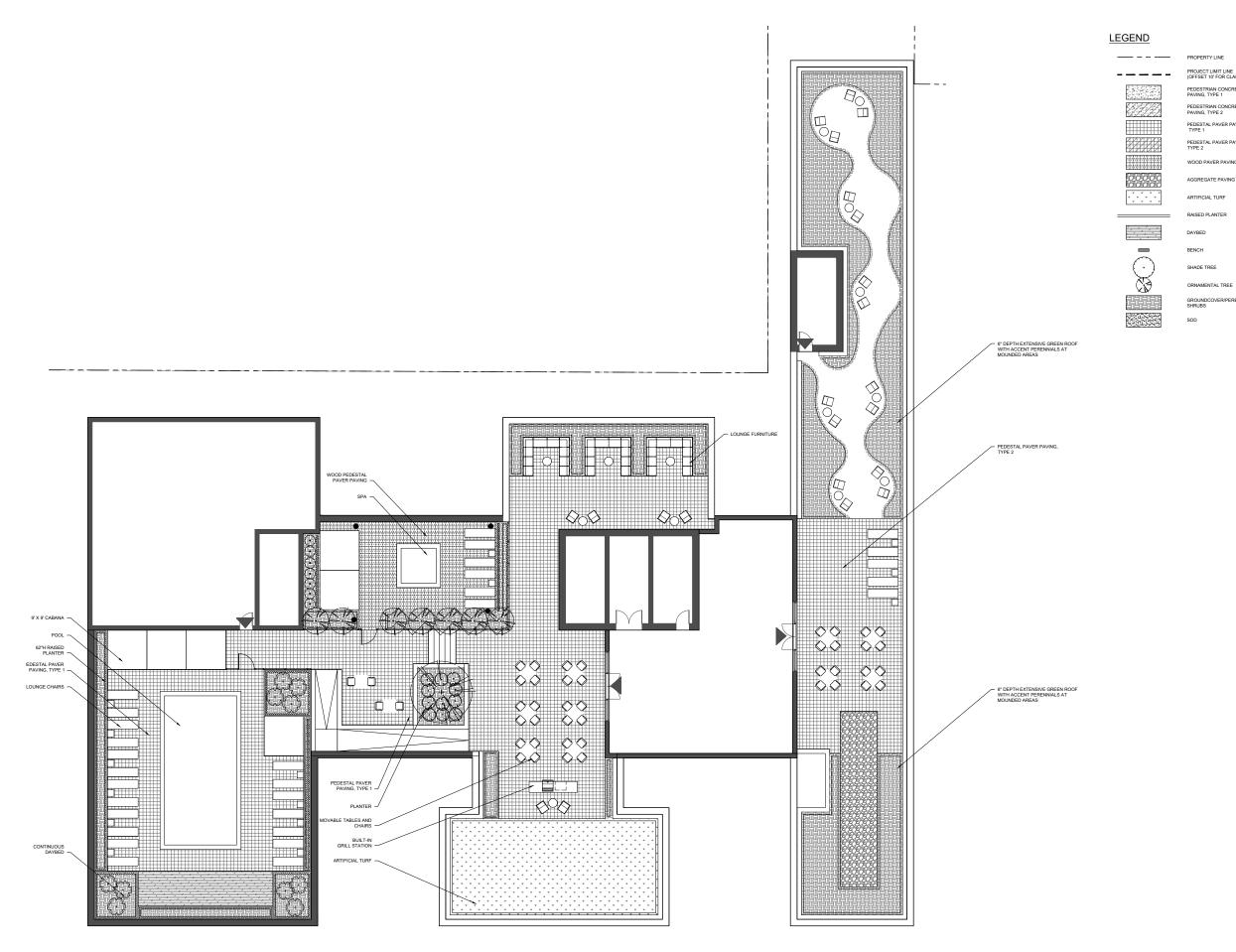




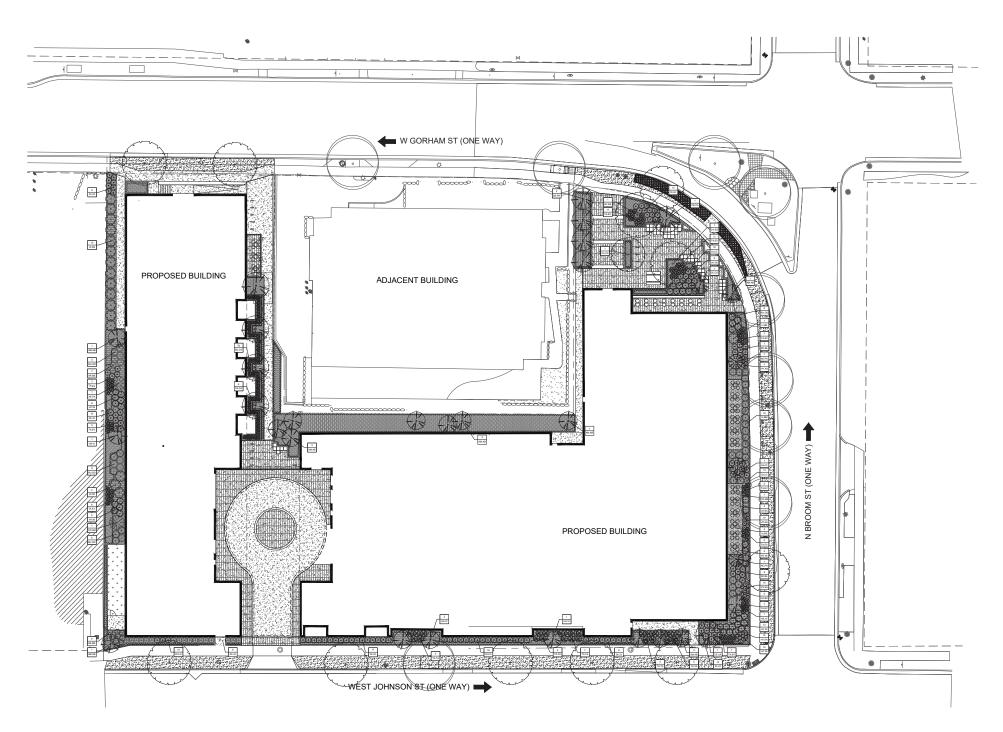


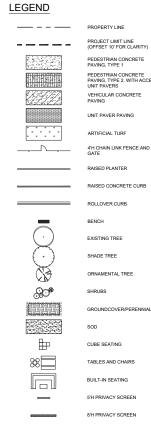




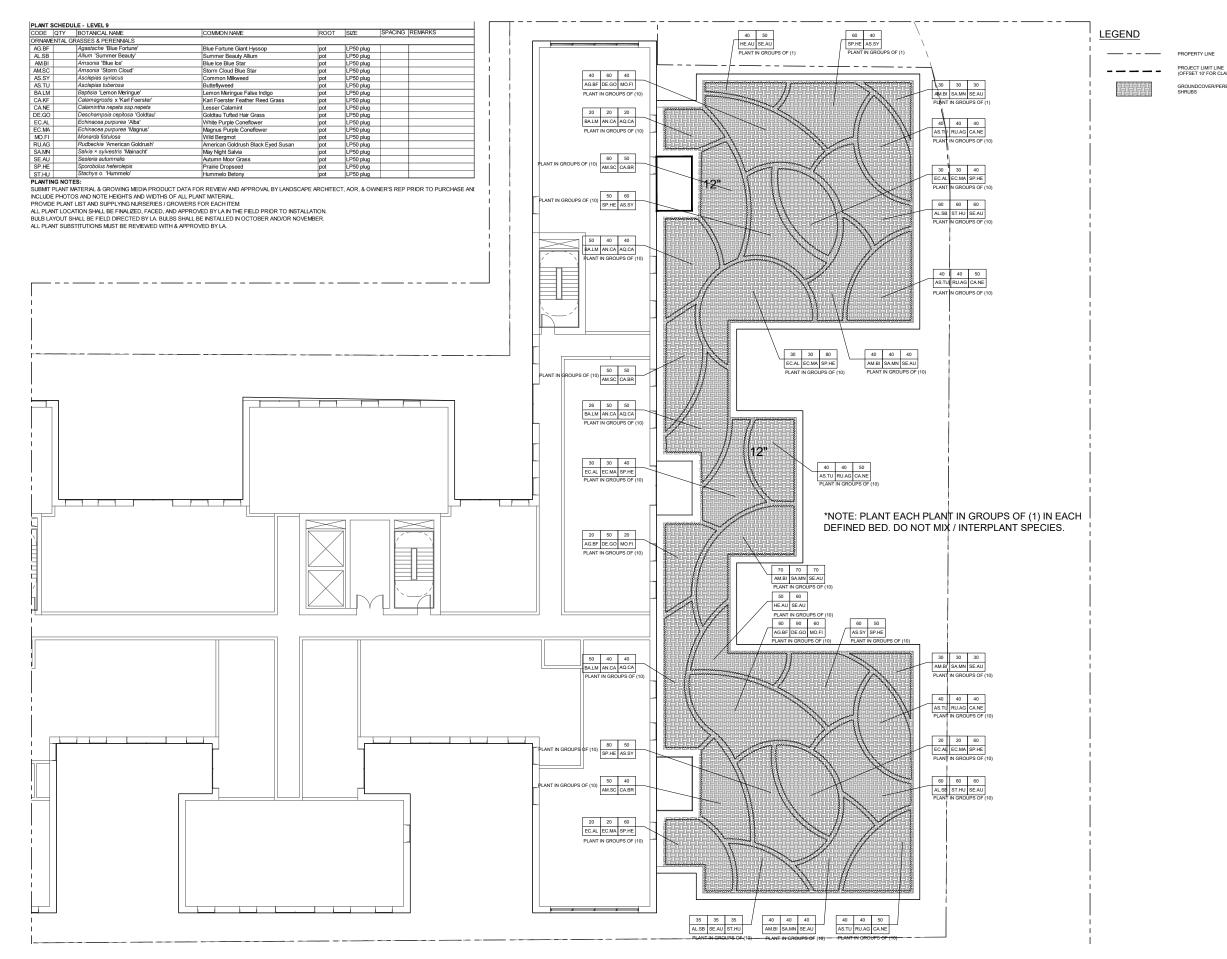




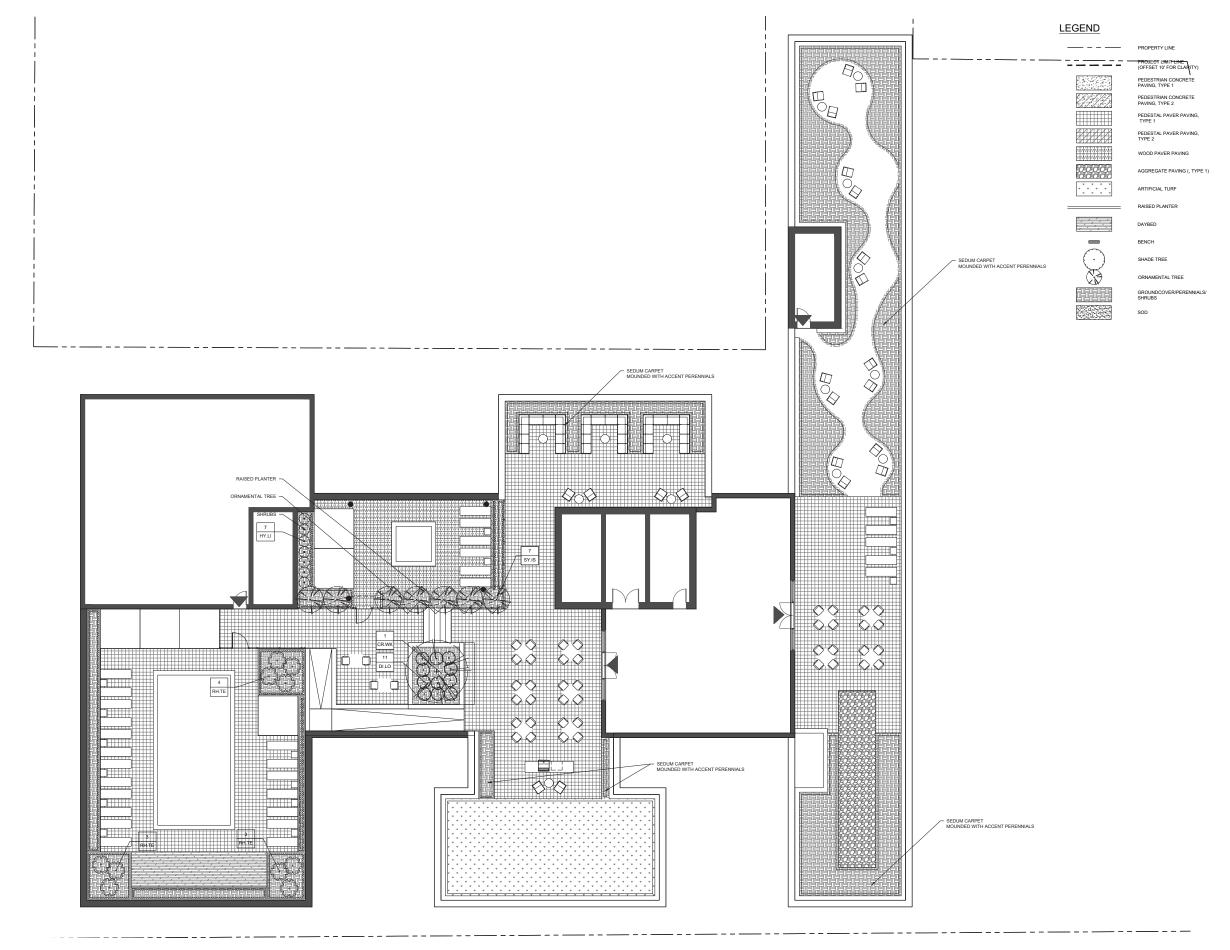














PLANT S	CHEDUL	E - GROUND FLOOR				
CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	REMARKS
PARKWA	Y DECID	UOUS TREES	<u> </u>		1	'
CE.OC	2	Celtis occidentalis	Common Hackberry	B&B	2.5" cal	Matching heads
GY.ES	1	Gymnocladus diocus 'Espresso'	Espresso Kentucky Coffeetree	B&B	2.5" cal	Matching heads
QU.BI	2	Quercus bicolor	Swamp White Oak	B&B	2.5" cal	Matching heads
UL.NH	3	Ulmus 'New Horizon'	New Horizon Hybrid Elm	B&B	2.5" cal	Matching heads
	OUS TREE	ES	•			
GY.ES		Gymnocladus diocus 'Espresso'	Espresso Kentucky Coffeetree	B&B	2.5" cal	Matching heads
		RNAMENTAL TREES		Dab	2.0 001	Iviatoriing ricado
ONDERG	101(170	THE WILLIAM THE CO				
AM.AB	9	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	B&B	6' ht	Multi-stemmed 5-8 canes. Matching heads
BE.PA	4	Betula papyrifera 'Oenci'	Renaissance Oasis Paper Birch	B&B	10' ht	Multi-stemmed 3-5 canes. Matching heads
CA.CA	5	Carpinus caroliniana	American Hornbeam	B&B	2.5" cal	
						Single Stem, Northern
CE.CA	2	Cercis canadensis	Eastern Redbud	B&B	2" cal	Strain
CE.CO	1	Cercis canadensis 'Covey'	Lavender Twist Redbud	B&B	2" cal	Weeping Form
HA.VI	7	Hamamelis virginiana	Common Witchhazel	B&B	5' ht	
	EEN SHR	UBS			1	_
BU.GV	40	Buxus 'Green Velvet'	Green Velvet Boxwood	B&B	21"-24" w	24" oc
TA.EV	73	Taxus × media 'Everlow'	Everlow Yew	cont	18" w	30" oc
TA.TA	35	Taxus × media 'Tautonii'	Taunton Yew	cont/B&B	24" w	48" oc
	OUS SHR	UBS	1.00.000			
AE.PA	3	Aesculus parviflora	Bottlebrush Buckeye	B&B	48" ht x w	per plan
AR.ME		Aronia melanocarpa	Black Chokeberry	cont	#3, min 18" ht	36" oc
CO.AM	3	Corylus americana	American Hazelnut	B&B	48" ht x w	per plan
CO.BC	9	Cornus sericea 'Bergeson Compact'	Bergeson Compact Redtwig Dogwood	cont	#5, min 30" ht	42" oc
DI.LO	123	Diervilla Ionicera	Dwarf Bush Honeysuckle	cont	#3, min 18" ht	36" oc
HY.IN		Hydrangea arborescens 'Abetwo'	Incrediball Smooth Hydrangea	cont	#5, min 30" ht	42" oc
HY.KA		Hypericum kalmianum	Kalm St. John's Wort	cont	#3, min 18" ht	24" oc
LI.BE	2	Lindera benzoin	Spicebush	B&B	48" ht x w	6' oc
RO.BL		Rosa blanda	Meadow Rose	cont	#5, min 30" ht	48" oc
RU.OD		Rubus odoratus	Purple Flowering Raspberry	cont	#5, min 30" ht	48" oc
VI.BM	19	Viburnum dentatum 'Christom'	Blue Muffin Arrowwood Viburnum	cont	#5, min 30" ht	48" oc
VI.DIVI	19	Viburnum prunifolium 'McKRouge'	Forest Rouge Blackhaw Viburnum	B&B	min 5' ht x w	6' oc
		ASSES & PERENNIALS	i orest rouge blacknaw viburium	DGD	IIIII 3 IICXW	0 00
AM.BI	INTAL GR	Amsonia 'Blue Ice'	Blue Ice Blue Star	laant	#1	12" oc
AN.CA		Anemone canadensis	Meadow Anemone	cont	#1	12" oc 15" oc
CA.PE		Carex pensylvanica	Penn Sedge	cont	#1	15" OC
CA.PE		Carex radiata	Eastern Star Wood Sedge	cont	#1	12" oc
DR.MA		Dryopteris marginalis	Marginal Wood Fern	cont	#1	18" oc
EU.DI		Eurybia divartica	White Wood Aster	cont	#1	18" oc
GE.BE		Geranium 'Bevan's Variety'	Bevans Cranesbill	cont	#1	12" oc
HE.AB	4,000 SF	Heuchera 'Autumn Bride'	Autumn Bridge Heuchera	cont	#1	12" oc
HO.HB		Hosta 'Hadspen Blue'	Hadspen Blue Hosta	cont	#1	24" oc
HE.AB		Heuchera 'Autumn Bride'	Autumn Bride Alumroot	cont	#1	18" oc
PH.BM		Phlox divaricata 'Blue Moon'	Blue Moon Woodland Phlox	cont	#1	15" oc
PO.AC		Polystichum acrostichoides	Christmas Fern	cont	#1	12" oc
SE.AU		Sesleria autumnalis	Autumn Moor Grass	cont	#1	15" oc
TI.CO		Tiarella cordifolia	Foamflower	cont	#1	12" oc
11.00		riarciia cordiiolia	i daimiowei	COIIL	TT	1.2 00

SUBMIT PLANT MATERIAL & GROWING MEDIA PRODUCT DATA FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT, AOR, & OWNER'S REP PRIOR TO PURCH/INCLUDE PHOTOS AND NOTE HEIGHTS AND WIDTHS OF ALL PLANT MATERIAL.

PROVIDE PLANT LIST AND SUPPLYING NURSERIES / GROWERS FOR EACH ITEM.
ALL PLANT LOCATION SHALL BE FINALIZED, FACED, AND APPROVED BY LA IN THE FIELD PRIOR TO INSTALLATION.

BULB LAYOUT SHALL BE FIELD DIRECTED BY LA. BULBS SHALL BE INSTALLED IN OCTOBER AND/OR NOVEMBER. ALL PLANT SUBSTITUTIONS MUST BE REVIEWED WITH & APPROVED BY LA.

#### PLANTING SCHEDULE - GROUND FLOOR

/							
	PI	ΔNT	SCHE	ווור	F.	I FVE	

CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	SPACING	REMARKS
ORNAME	NTAL GR	ASSES & PERENNIALS		•	•		
AG.BF		Agastache 'Blue Fortune'	Blue Fortune Giant Hyssop	pot	LP50 plug		
AL.SB	]	Allium 'Summer Beauty'	Summer Beauty Allium	pot	LP50 plug		
AM.BI		Amsonia 'Blue Ice'	Blue Ice Blue Star	pot	LP50 plug		
AM.SC		Amsonia 'Storm Cloud'	Storm Cloud Blue Star	pot	LP50 plug		
AS.SY		Asclepias syriacus	Common Milkweed	pot	LP50 plug		
AS.TU		Asclepias tuberosa	Butteflyweed	pot	LP50 plug		
BA.LM		Baptisia 'Lemon Meringue'	Lemon Meringue False Indigo	pot	LP50 plug		
CA.KF		Calamagrostis x 'Karl Foerster'	Karl Foerster Feather Reed Grass	pot	LP50 plug		
CA.NE	7,200 SF	Calamintha nepeta ssp.nepeta	Lesser Calamint	pot	LP50 plug		
DE.GO	7,200 31	Deschampsia cepitosa Goldiau	Goldtau Tufted Hair Grass	pot	LP50 plug		
EC.AL		Echinacea purpurea 'Alba'	White Purple Coneflower	pot	LP50 plug		
EC.MA		Echinacea purpurea 'Magnus'	Magnus Purple Coneflower	pot	LP50 plug		
MO.FI		Monarda fistulosa	Wild Bergmot	pot	LP50 plug		
RU.AG		Rudbeckia 'American Goldrush'	American Goldrush Black Eyed Susan	pot	LP50 plug		
SA.MN		Salvia × sylvestris 'Mainacht'	May Night Salvia	pot	LP50 plug		
SE.AU		Sesleria autumnalis	Autumn Moor Grass	pot	LP50 plug		
SP.HE	]	Sporobolus heterolepis	Prairie Dropseed	pot	LP50 plug		
ST.HU		Stachys o. 'Hummelo'	Hummelo Betony	pot	LP50 plug		
PLANTIN	IG NOTE	S:					

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PLANTING SCHEDULE - LEVEL 9

PLANT S	CHEDUL	E - ROOF					
CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	SPACING	REMARKS
ORNAME	NTAL TR	EES					
CR.WK	1	Crataegus viridis 'Winter King'	Winter King Hawthorn	B&B	10' w		Multi-stemmed
SY.IS	7	Syringa reticulata 'Ivory Silk'	lvory Silk Japanese Tree Lilac	B&B	2" cal		Single Stem
ECIDU	OUS SHR	UBS				•	
DI.LO	23	Diervilla lonicera	Dwarf Bush Honeysuckle	cont	24" w	36" oc	
HY.LO		Hydrangea arborescens 'NCHA8'	Limetta Smooth Hydrangea	cont	18" ht	30" oc	
RH.TE	5	Rhus typhina 'Bailtiger'	Tiger Eyes Sumac	con/t/B&B	48" ht	48" oc	
ORNAME	NTAL GR	ASSES, PERENNIALS, & GROUNDCOVERS					
AL.SB		Allium 'Summer Beauty'	Summer Beauty Ornamental Onion	cont	#1	15" o.c.	
AM.BI		Amsonia 'Blue Ice'	Blue Ice Bluestar	cont	#1	15" o.c.	
AS.TU		Asclepias tuberosa	Butterflyweed	cont	#1	18" o.c.	
BO.CU		Bouteloua curtipendula	Sideoats grama	cont	#1	18" o.c.	
CA.NE		Calamintha nepeta subsp. nepeta	Lesser Calamint	cont	#1	15" o.c.	
DE.GO		Deschampsia cepitosa 'Goldtau'	Goldtau Tufted Hair Grass	cont	#1	18" o.c	
EC.KK		Echinacea 'Kim's Knee High'	Kim's Knee High Purple Coneflower	cont	#1	18" o.c	
ER.YU		Eryngium yuccifolium	Rattlesnake Master	cont	#1	18" o.c.	
RU.AG		Rudbeckia 'American Goldrush'	American Goldrush Black Eyed Susan	cont	#1	18" o.c.	
SA.WE		Salvia nemorosa 'Wesuwe'	Wesuwe Sage	cont	#1	15" o.c.	
SC.SO		Schizachyrium scoparium 'Standing Ovation'	Standing Ovation Little Bluestem	cont	#1	18" o.c.	
SE.KA		Sedum kamtschaticum	Orange Stonecrop	pot	quart	10" o.c.	
SE.AU		Sesleria autumnalis	Autumn Moor Grass	cont	#1	15" o.c.	
SP.HE		Sporobolus heterolepis	Prairie Dropseed	cont	#1	21" o.c.	
YU.FI		Yucca filamentosa	Adam's Needle	cont	#3	24" o.c.	

SUBMIT PLANT MATERIAL & GROWING MEDIA PRODUCT DATA FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT, AOR, & OWNER'S REP PRIOR TO PURCHASE AND INSTALLATION

INCLUDE PHOTOS AND NOTE HEIGHTS AND WIDTHS OF ALL PLANT MATERIAL. PROVIDE PLANT LIST AND SUPPLYING NURSERIES / GROWERS FOR EACH ITEM.

ALL PLANT LOCATION SHALL BE FINALIZED, FACED, AND APPROVED BY LA IN THE FIELD PRIOR TO INSTALLATION. BULB LAYOUT SHALL BE FIELD DIRECTED BY LA. BULBS SHALL BE INSTALLED IN OCTOBER AND/OR NOVEMBER.

ALL PLANT SUBSTITUTIONS MUST BE REVIEWED WITH & APPROVED BY LA.



### PLANTING SCHEDULE - ROOF

ODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	REMARKS
						min. 95% coverage a
-	2,250 SF	Sedum mat with 1 accent plant per 2 SF	As supplied by SemperGreen or approved equal			time of installation
-		Achillea millefolium 'Moonshine'	Moonshine Yarrow	4" pot	plug	accent
-		Agastache x 'Blue Fortune'	Blue Fortune Anise Hyssop	4" pot	plug	accent
-		Allium cernuum	Nodding Onion	4" pot	plug	accent
-		Allium schoenoprasum 'Forescate'	Forescate Chives	4" pot	plug	accent
-		Armeria maritima 'Dusseldorf Pride'	Dusseldorf Pride Sea Thirft	4" pot	plug	accent
-		Coreopsis verticillata 'Moonbeam'	Moonbeam Coreopsis	4" pot	plug	accent
-		Dianthus 'Bewitched'	Bewitched Pinks	4" pot	plug	accent
-		Echinacea purpurea 'Pixie Meadowbrite'	Pixie Meadowbrite Purple Coneflower	4" pot	plug	accent
-		Rudbeckia fulgida 'Early Bird Gold'	Early Bird Gold Orange Coneflower	4" pot	plug	accent
-		Sesleria autumnalis	Autumn Moor Grass	4" pot	plug	accent
-	-	Sedum acre 'Aureum'	Aureum Stonecrop	carpet	-	
-	-	Sedum acre 'Goldmoss'	Goldmoss Stonecrop	carpet	-	
-	-	Sedum album 'Coral Carpet'	Coral Carpet Stonecrop	carpet	-	
-	-	Sedum album 'Murale'	Murale Stonecrop	carpet	-	
-	-	Sedum hybridum 'Immergrunchen'	Little Evergreen Stonecrop	carpet	-	
-	-	Sedum hispanicum	Spanish Stonecrop	carpet	-	
-	-	Sedum kamtschaticum	Orange Stonecrop	carpet	-	
		Sedum kamtschaticum var. floriferum				
-		'Weihenstephaner Gold'	Weihenstephaner Gold Orange Stonecrop	carpet	-	
-	-	Sedum kamtschaticum 'Variegatum'	Variegated Orange Stonecrop	carpet	-	
-	-	Sedum subsp. rupestre 'Angelina'	Angelina Stonecrop	carpet	-	
-	-	Sedum subsp. rupestre 'Blue Spruce'	Blue Spruce Stonecrop	carpet	-	
-		Sedum sexangulare	Tasteless Stonecrop	carpet	-	
-		Sedum spurium 'Fuldaglut'	Fuldaglut Caucasian Stonecrop	carpet	-	
-		Sedum spurium 'John Creech'	John Creech Caucasian Stonecrop	carpet	-	
-	-	Sedum spurium 'Red Carpet'	Red Carpet Caucasian Stonecrop	carpet	-	
-	-	Sedum stefco	Blushing Stonecrop	carpet	-	
-	-	Sedum takesimensis 'Golden Carpet'	Golden Carpet Takeshima Stonecrop	carpet	-	
te: Ac	cent plugs	may be pre-grown into sedum mats in lieu of being '	plugged' into sedum mats on site.			
te: La	yout of acc	ent plants in sedum mat to be approved by landscap	e architect prior to installation.			
		t to be approved by landscape architect in the field p				
		s at the direction of landscape architect in the field.				

**UDC FORMAL SUBMITTAL** 

SUBMIT PLANT MATERIAL & GROWING MEDIA PRODUCT DATA FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT, AOR, & OWNER'S REP PRIOR TO PUINCLUDE PHOTOS AND NOTE HEIGHTS AND WIDTHS OF ALL PLANT MATERIAL.

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BULB LAYOUT SHALL BE FIELD DIRECTED BY LA. BULBS SHALL BE INSTALLED IN OCTOBER AND/OR NOVEMBER

PLANTING SCHEDULE - ROOF SEDUM MAT (4)



**59** 











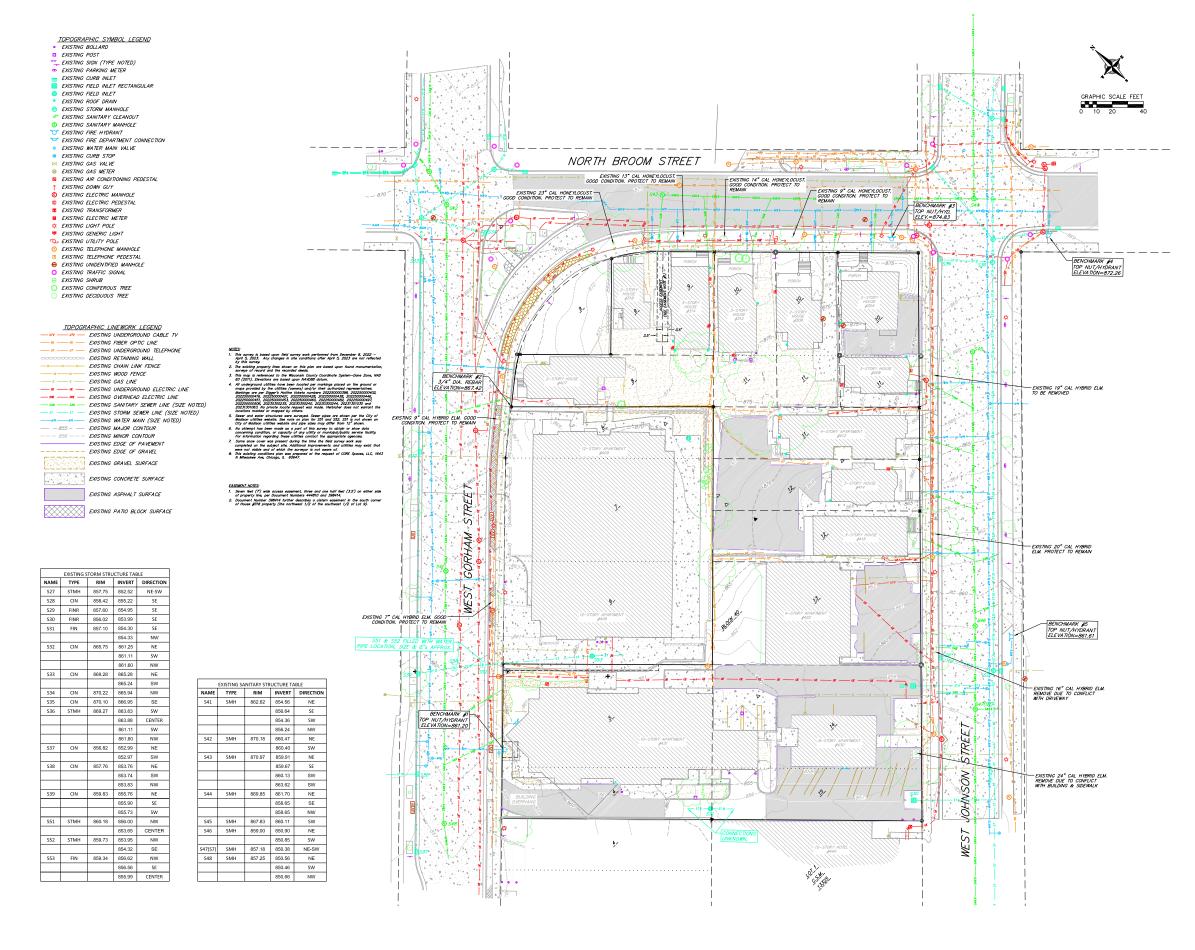












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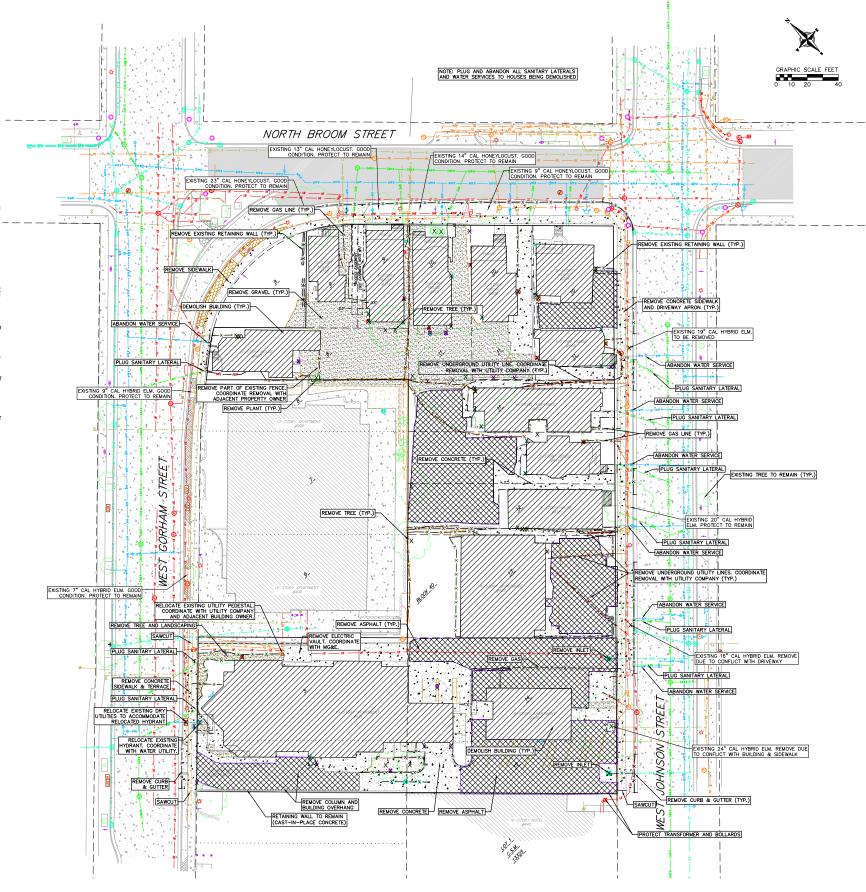




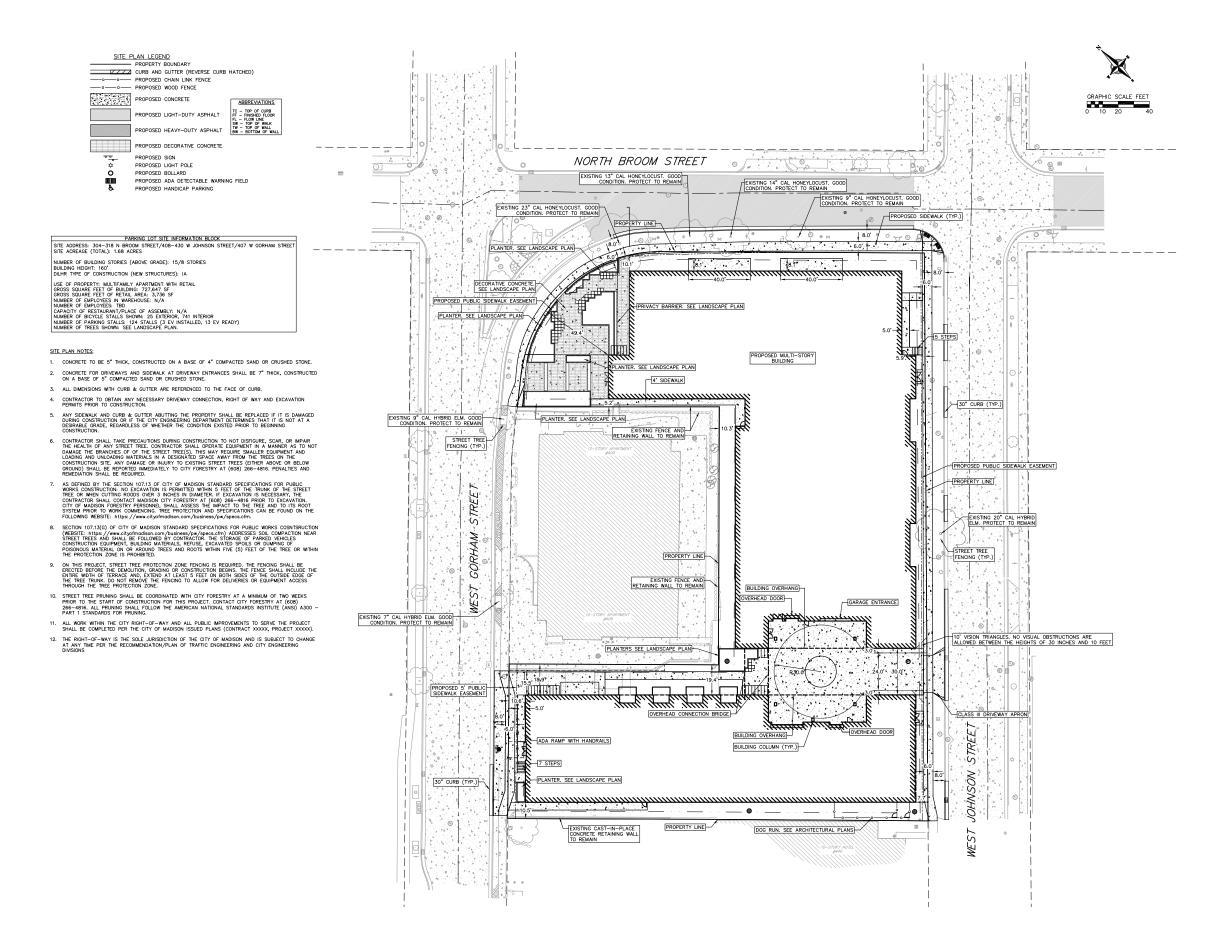
#### DEMOLITION/EROSION CONTROL NOTES:

- CONTRACTOR SHALL KEEP ALL CITY STREETS FREE AND CLEAR OF CONSTRUCTION RELATED DIRT/DUST/DEBRIS.
- COORDINATE EXISTING UTILITY REMOVAL/ABANDONMENT WITH LOCAL AUTHORITIES AND UTILITY COMPANIES HAVING JURISDICTION.

- 8. CONTRACTOR SHALL CLOSE ALL ABANDONED DRIVEWAYS BY REPLACING THE CURB IN FRONT OF THE DRIVEWAYS AND RESTORING THE TERRACE WITH GRASS.
- 9. CONTRACTOR SHALL OBTAIN ANY NECESSARY DEMOLITION AND UTILITY PLUGGING PERMITS.
- O. THE LOCATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLANS HAS BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONVENIENCE OF THE DURING CONSTRUCTION. THE STATE OF THE THAT THAT HAS THE PROPERTY OF THE STATE OF THE THAT HAS THAT LOCATION FOR THOSE WHICH ARE SHOWN MAY BE ENCOUNTEED, AND THAT ACTUAL LOCATION OF THOSE WHICH ARE SHOWN MAY BE DIFFERENT FROM THE LOCATION AS SHOWN ON THE PLANS.
- 12. CONTRACTOR SHALL TAKE PRECAUTIONS DURING CONSTRUCTION TO NOT DISFIGURE, SCAR, OR IMPAIR THE HEALTH OF ANY STREET TREE. CONTRACTOR SHALL OPERATE COUPMENT IN A MANNER AS TO NOT DAMAGE THE BRANCHES OF OF THE STREET TREE(S). THIS MAY REQUIRE SMALLER EQUIPMENT AND LOADING AND UNLOADING MATERIALS IN A DESIGNATED SPACE WAY FROM THE TREES ON THE CONSTRUCTION SITE. ANY DAMAGE OR INJURY TO EXISTING STREET TREES (CHITER ABOVE OR BELOW
- ALL WORK WITHIN THE CITY RIGHT-OF-WAY AND ALL PUBLIC IMPROVEMENTS TO SERVE THE PROJECT SHALL BE COMPLETED PER THE CITY OF MADISON ISSUED PLANS (CONTRACT XXXXXX, PROJECT XXXXXX).









GRADING LEGEND

STATEMENT OF THE PROPOSED MINOR CONTOURS

GRAD

PROPOSED MINOR CONTOURS

DISTURBED LIMITS

BERM

DRAINAGE DIRECTION
PROPOSED SLOPE ARROWS
EXISTING SPOT ELEVATIONS

STONE WEEPER

STONE WEEPER

STONE WEEPER

STONE WEEPER

PROPOSED SINOR ARROWS
EXISTING SPOT ELEVATIONS

STONE WEEPER

PROPOSED SINOR ARROWS
EXISTING SPOT ELEVATIONS

STONE WEEPER

STONE WEEPER

PROSION MAT CLASS II, TYPE A

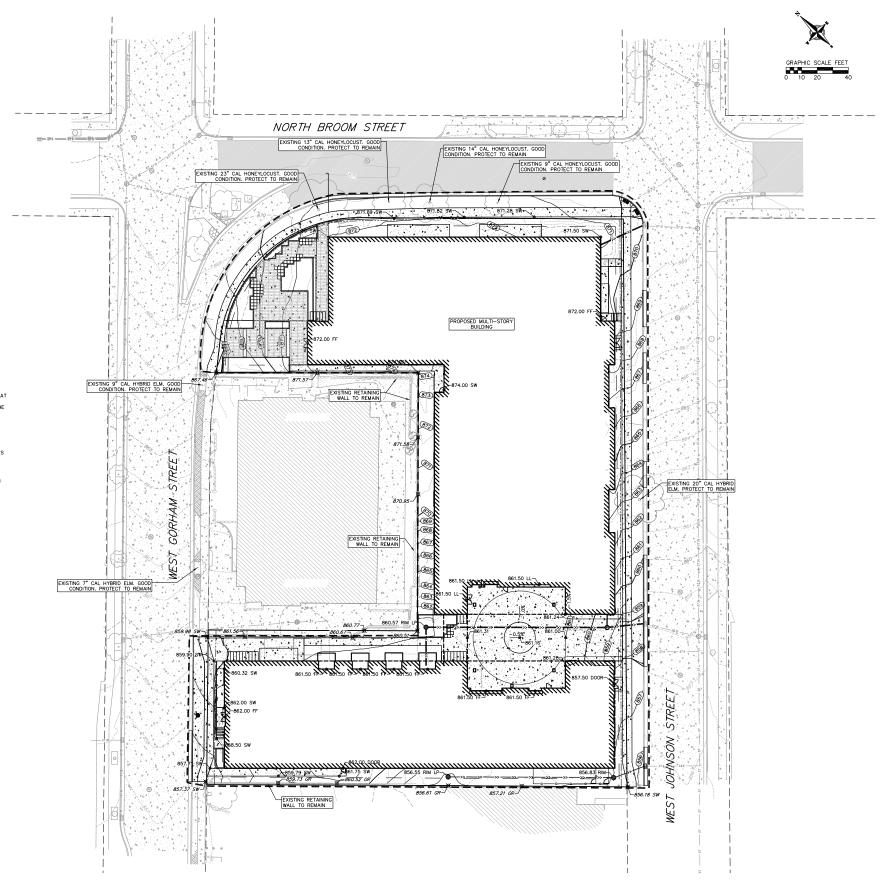
EROSION MAT CLASS II, TYPE A

TRACKING PAD

RIP RAP

#### GRADING NOTES:

- CONTOURS ARE SHOWN FOR PURPOSES OF INDICATING ROUGH GRADING, FINAL GRADE SHALL BE ESTABLISHED ON PAVED SURFACES BY USING SPOT GRADES ONLY.
- 2. SEE DETAIL SHEETS FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE
- ALL WORK WITHIN THE CITY RIGHT-OF-WAY AND ALL PUBLIC IMPROVEMENTS TO SERVE THE PROJECT SHALL BE COMPLETED PER THE CITY OF MADISON ISSUED PLANS (CONTRACT XXXXX, PROJECT XXXXX).
- 4. THE RIGHT-OF-WAY IS THE SOLE JURISDICTION OF THE CITY OF MADISON AND IS SUBJECT TO ACHINA ANY TIME PER THE RECOMMENDATION/PLAN OF TRAFFIC ENGINEERING AND CITY EMGINEERING DIMISON 5. CONTRACTOR SHALL TAKE PRECAUTIONS DURING CONSTRUCTION TO NOT DISSIDIENCE, SCAR, OR IMPHAIN HEALTH OF ANY STREET IREE CONTRACTOR SHALL DEPRAYE IN A MANNER AS TO NOT DAMAGE THE RIGHARDLES OF OF THE STREET TIREED, THIS MAY REQUIRE SMALLER EQUIPMENT AND CONSTRUCTION SITE ANY DAMAGE OR HUNRY TO EXISTING STREET TREES (CITHER ABOVE OF BELOW GROUND) SHALL BE REPORTED IMMEDIATELY TO CITY FORESTRY AT (608) 266-4816. PENALTIES AND REMEDIATION SHALL BY REQUIRED.
- 6. AS DEFINED BY THE SECTION 107.13 OF CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION: NO EXCAVATION IS PERMITTED WITHIN 5 FEET OF THE TRUNK OF THE STREET TREE OF WHEN CUTTING ROODS OVER 3 INCHES IN DIAMETER. IF EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT MADISON (OITY FORESTRY 47 (608) 266-4816 PRIOR TO EXCAVATION. CITY OF MADISON WORK COMMENSION. SIZE OF PROTECTION AND SPECIFICATIONS CAN BE FOUND ON THE FOLIOM ON BEST OF THE PROTECTION AND SPECIFICATIONS CAN BE FOUND ON THE FOLIOMING MESSIES.





GRADING LEGEND

- 220 - EXISTING MIAJOR CONTOURS

GED - PROPOSED MIAJOR CONTOURS

GED - PROPOSED MIAJOR CONTOURS

GED - PROPOSED MIADOR CONTOURS

DITCH CENTERLINE

SILT FENCE

DESTUREED LIMITS

GERM

DRAINAGE DIRECTION

PROPOSED SLOPE ARROWS

EXISTING SPOT ELEVATIONS

PROPOSED STOPE LEVATIONS

STONE WEEPER

DETERMEND

EROSION MAT CLASS II, TYPE A

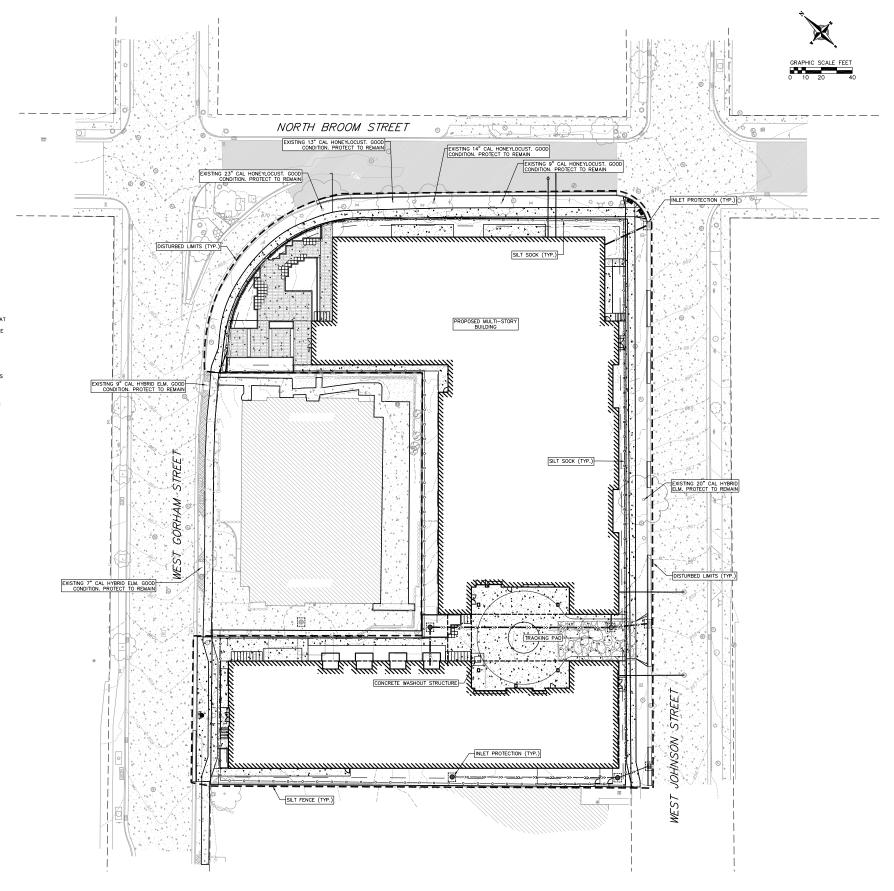
EROSION MAT CLASS III, TYPE A

TRACKING PAD

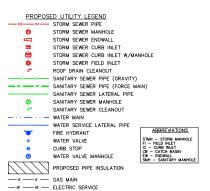
RIP RAP

#### GRADING NOTES:

- CONTOURS ARE SHOWN FOR PURPOSES OF INDICATING ROUGH GRADING. FINAL GRADE SHALL BE ESTABLISHED ON PAVED SURFACES BY USING SPOT GRADES ONLY.
- 2. SEE DETAIL SHEETS FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE.
- 3. ALL WORK WITHIN THE CITY RIGHT-OF-WAY AND ALL PUBLIC IMPROVEMENTS TO SERVE THE PROJECT
- 4. THE RIGHT-OF-WAY IS THE SOLE JURISDICTION OF THE CITY OF MADISON AND IS SUBJECT TO CHANG ANY TIME PER THE RECOMMENDATION/PLAN OF TRAFFIC ENGINEERING AND CITY ENGINEERING DIVISIONS
- 5. CONTRACTOR SHALL TAKE PRECAUTIONS DURING CONSTRUCTION TO NOT DISFIGURE. SCAR, OR IMPAIR THE HEALTH OF ANY STREET TIFEC, CONTRACTOR SHALL OPERATE EQUIPMENT IN A MANNER AS TO NOT DAMAGE THE BRANCHES OF OR THE STREET TREES). THIS MAY PEQUIPE, SMALLER EQUIPMENT AND LOADING AND UNLICADING MATERIALS IN A DESIGNATED SPACE AWAY FROM THE TREES ON THE CONSTRUCTION SITE. ANY DAMAGE OR INJURY TO EXISTING STREET TREES (EITHER ABOVE OR BELOW GROUND) SHALL BE REPORTED IMMEDIATELY TO CITY FORESTRY AT (608) 266-4816. PENALTIES AND REMEDIATION SHALL BE REQUIRED.
- 6. AS DEFINED BY THE SECTION 107.13 OF CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION: NO EXCAVATION IS PERMITTED WITHIN 5 FEET OF THE TRUNK OF THE STREET TREE OF WHEN CUTTING ROODS OVER 3 INCHES IN DIAMETER. IF EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT MADISON CITY FORESTRY AT (6,08) 266-4816 PRIOR TO EXCAVATION. CITY OF MADISON FORESTRY PERSONNEL SHALL ASSESS THE IMPACT TO THE TREE AND TO ITS ROOT SYSTEM PRIOR TO WORK COMMENCING. TREE PROTECTION AND SPECIFICATIONS CAN BE FOUND ON THE FOLLOWING WEBSIT https://www.citypidmodison.com/business/pw/specs.cfm.

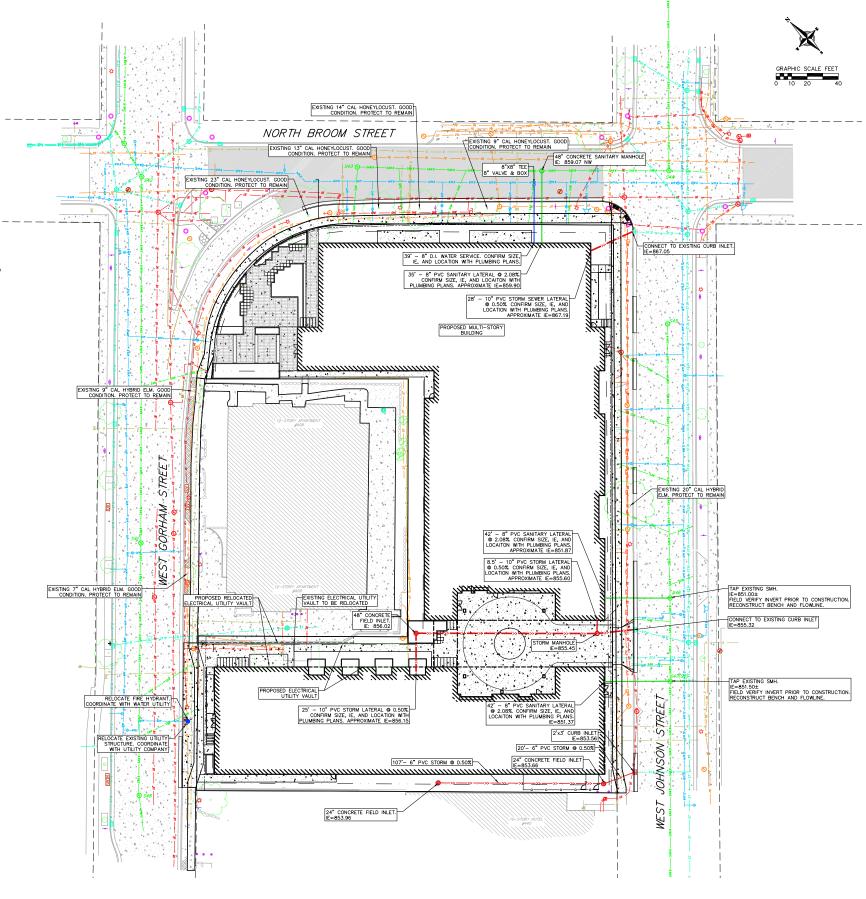


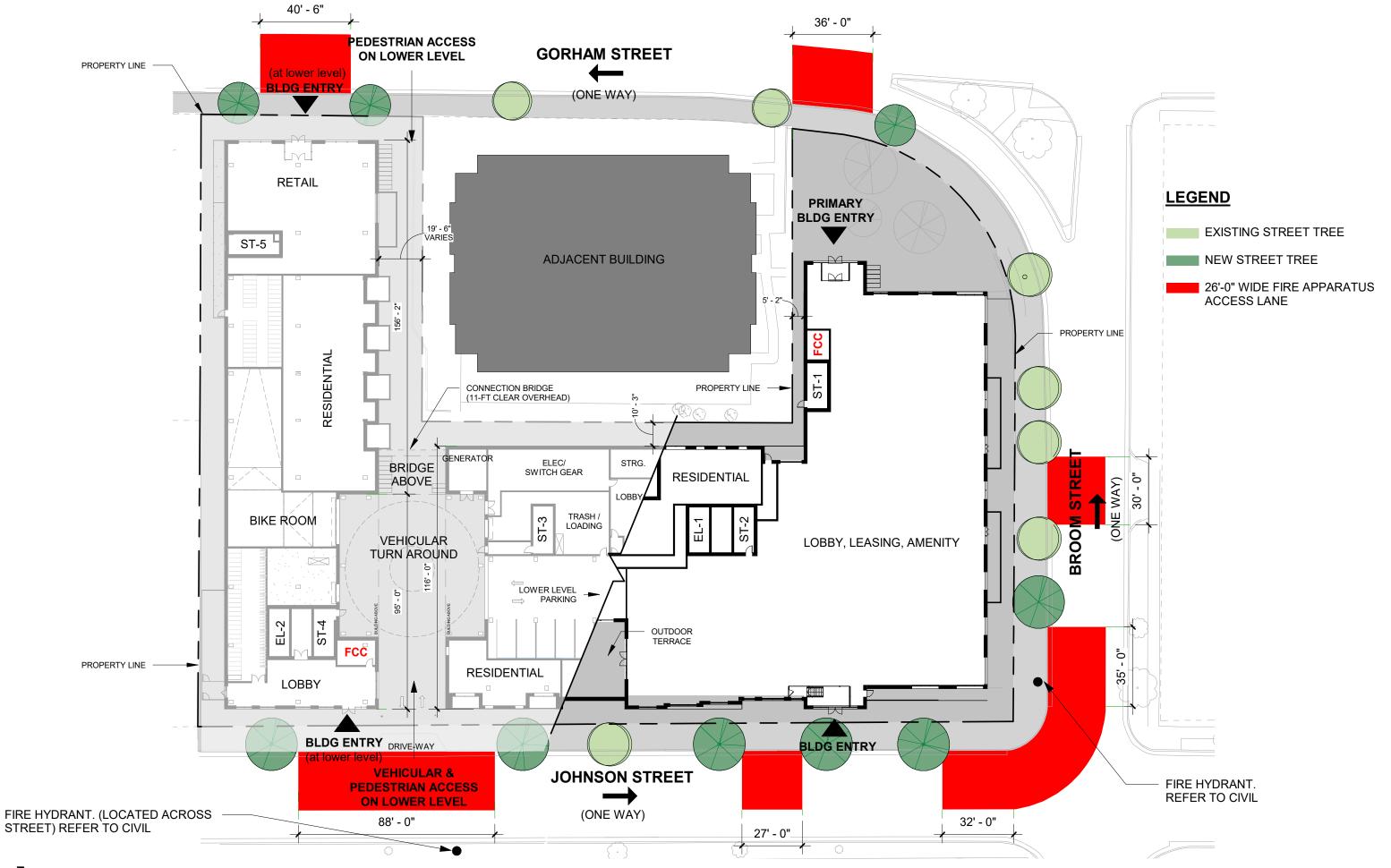


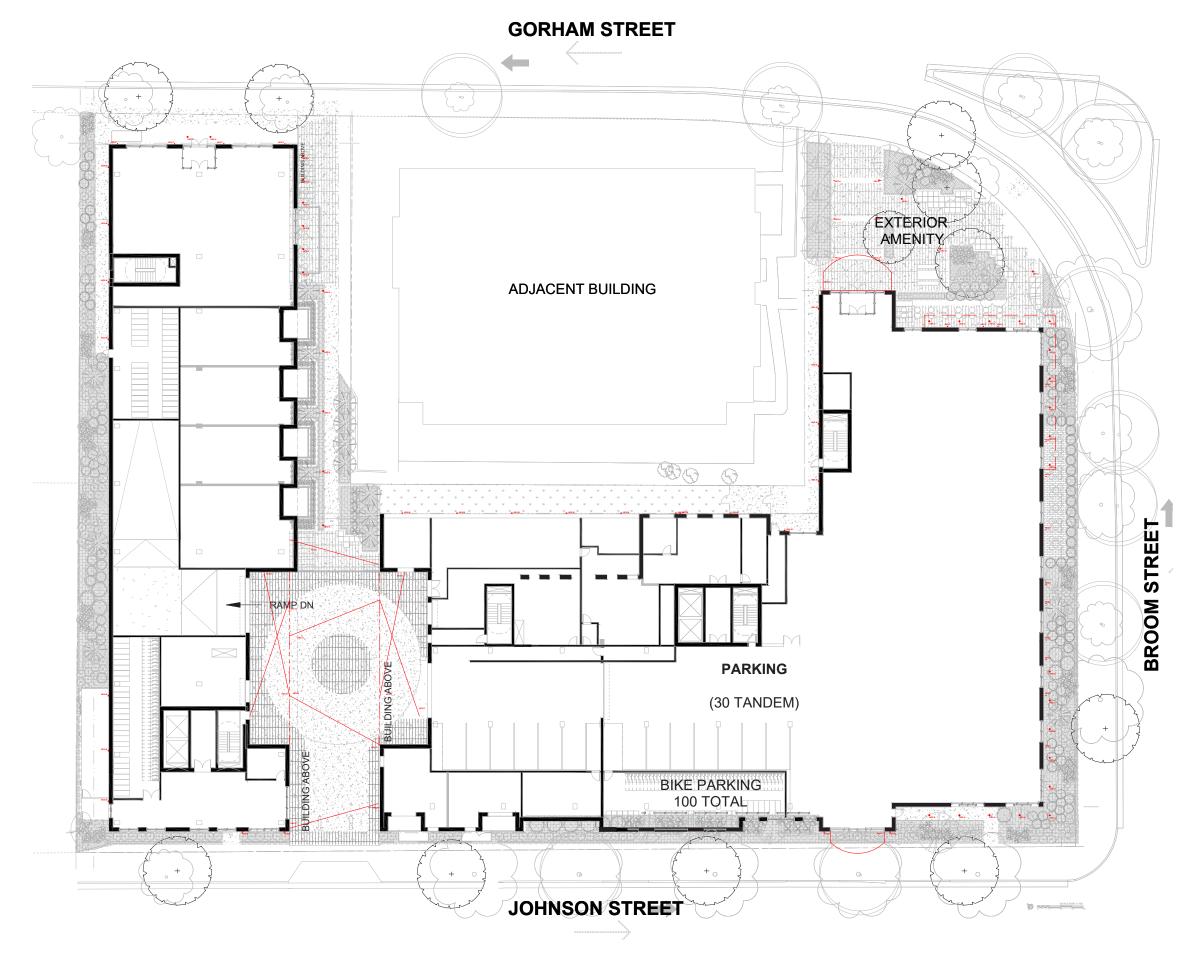


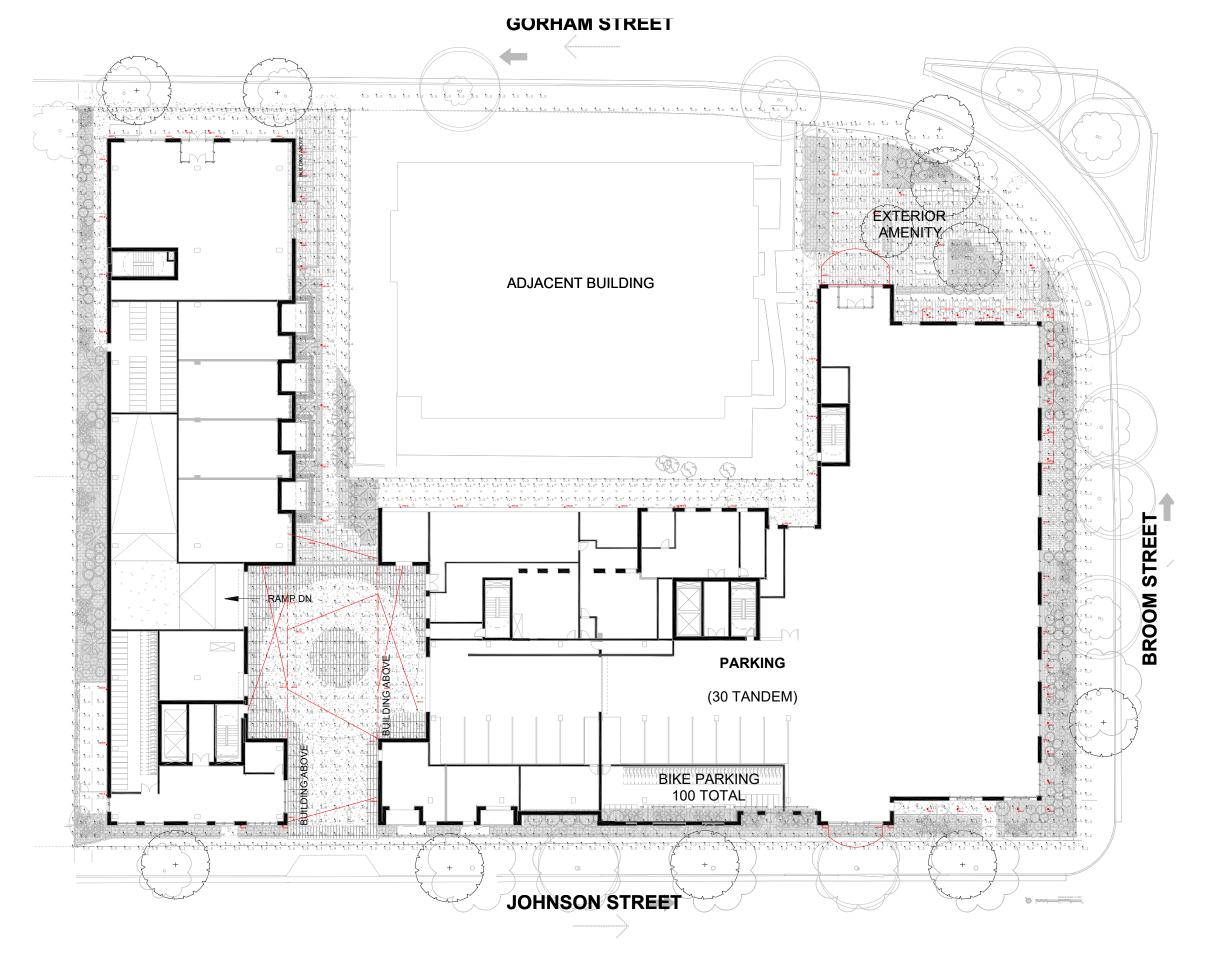
#### UTILITY NOTES:

- SANITARY & STORM SEWER LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. STORM SEWER END SECTIONS ARE INCLUDED IN THE LENGTH AND SLOPE OF THE PIPE.
- CONTRACTOR SHALL INVESTIGATE ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY CONFLICTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL UTILITY STRUCTURES (MANHOLE RIMS, WATER VALVES, AND CURB STOPS), IF NECESSARY.
- CONTRACTOR SHALL OBTAIN ANY NECESSARY WORK IN RIGHT-OF WAY, EXCAVATION, UTILITY CONNECTION, PLUGGIN ABANDONMENT, AND DRIVEWAY CONNECTION PERMITS PRIOR TO CONSTRUCTION.
- FOR ALL SEWER AND WATER MAIN CROSSINGS: PROVIDE MINIMUM 18" SEPARATION WHEN WATER MAIN CROSSES BELOW SEWER AND MINIMUM 6" SEPARATION WHEN WATER MAIN CROSSES ABOVE SEWER.
- 6. IF DEWATERING OPERATIONS EXCEED 70 GALLONS PER MINUTE OF PUMPING CAPACITY, A DEWATERING WELL PERM
- 7. A COPY OF THE APPROVED UTILITY PLANS, SPECIFICATIONS AND PLUMBING PERMIT APPROVAL LETTER SHALL BE ON—SITE DURING CONSTRUCTION AND OPEN TO INSPECTION BY AUTHORIZED REPRESENTATIVES OF THE DEPARTMEN OF SAFETY AND PROFESSIONAL SERVICES AND OTHER LOCAL INSPECTORS.
- 8. STORM BUILDING SEWER PIPE SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN TABLE 384.30-6 OF SPS 384.30(3)(c).
- 9. PRIVATE WATER SERVICES AND PRIVATE WATER MAINS SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN TABLE 384.30-7 OF SPS 384.30(4)(d).
- 10. PRIVATE WATER HYDRANTS SHALL BE YELLOW IN COLOR.
- 11. PRIVATE SANITARY SEWER AND LATERALS SHALL BE POLYVINYL CHLORIDE (PVC) ASTM D3034 SDR 35 OR APPROVED EQUAL MATERIAL THAT CONFORMS TO ONE OF THE STANDARDS LISTED IN TABLE 384.30-3 OF SP 384.33(Vs.)
- 12. A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS AND WATER SERVICES/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED PER SPS 382.10(11)(h) AI SPS 383.40(2)(A)
- 13. EXTERIOR WATER SUPPLY PIPING SETBACKS AND CROSSINGS SHALL BE IN ACCORDANCE WITH SPS 382.40(8)(b.).
- 14. NO PERSON MAY ENGAGE IN PLUMBING WORK IN THE STATE UNLESS LICENSED TO DO SO BY THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PER S.145.06.
- 15. SITE CONTRACTOR SHALL LEAVE SANITARY AND WATER LATERALS FIVE (5) FEET SHORT (HORIZONTALLY) FROM THE BULDING, BULDING PLUMBER SHALL VERIFY SIZE, LOCATION, AND INVERT ELEVATION OF PROPOSED SANITARY AND WATER LATERALS.
- 16. CONTRACTOR SHALL FIELD VERIFY THE SIZE, TYPE, LOCATION, AND ELEVATION OF EXISTING UTILITIES PRIOR TO INSTALLING ANY ON—SITE UTILITIES OR STRUCTURES. CONTACT ENGINEER PRIOR TO INSTALLATION IF DISCREPAN EXISTS WITHIN THESE PLANS.
- 17. PROPOSED UTILITY SERVICE LINES SHOWN ARE APPROXIMATE. COORDINATE THE EXACT LOCATIONS WITH THE PLUMBING DRAWNISS. COORDINATE THE LOCATIONS WITH THE PLUMBING CONTRACTOR AND/OR OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO INSTALLATION OF ANY NEW UTILITIES.
- 18. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF ANY UTILITIES ENCOUNTERED AND REPLACEMENT OF ANY UTILITIES DAMAGED WITHIN INFLUENCE ZONE OF NEW CONSTRUCTION. CONTACT ENGINEER THE EXISTING UTILITIES VARY APPRECIABLY FROM THE PLANS.
- 19. ALL WATER MAIN AND SERVICES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 6.5' FROM TOP OF FINISHED GROUND ELEVATION TO TOP OF MAIN.
- 20. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE EXISTING VALVES WILL HOLD THE PRESSURE TEST PRIOR TO CONNECTION. THE CITY IS NOT RESPONSIBLE FOR ANY COSTS INCURRED DUE TO THE CONTRACTOR NOT VERIFYING THAT THE EXISTING VALVE WILL HOLD. THE PRESSURE TEST FROR TO CONNECTION. IF A NEW VALVE IS REQUIRED, THE APPLICANT WILL BE REQUIRED TO INSTALL ONE AT THEIR EXPENSE, AT THE POINT OF CONNECTION.
- 21. CLEAN OUT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASINS AT THE COMPLETION OF CONSTRUCTION
  22. ALL WORK WITHIN THE CITY RIGHT-OF-WAY AND ALL PUBLIC IMPROVEMENTS TO SERVE THE PROJECT SHALL BE
  COMPLETED PER THE CITY OF MADISON ISSUED PLANS (CONTRACT XXXXX). PROJECT XXXXXI
- 23. THE RIGHT-OF-WAY IS THE SOLE JURISDICTION OF THE CITY OF MADISON AND IS SUBJECT TO CHANGE AT ANY TI
- 24. CONTRACTOR SHALL TAKE PRECAUTIONS DURING CONSTRUCTION TO NOT DISFIGURE, SCAR, OR IMPAIR THE HEALTH OF ANY STREET TREE; CONTRACTOR SHALL OPERATE EQUIPMENT IN A MANNER AS TO NOT DAMAGE THE BRANCHES OF OF THE STREET TREES, THIS MAY RECORD ES MALLER EQUIPMENT AND LOADING AND UNLOADING MATERIALS IN A STREET TREES, COTHER AND AND RECESSION OF THE CONSTRUCTION STEEL ANY DAMAGE OR NUMBEY TO EXISTING STREET TREES, COTHER AND OF THE CONSTRUCTION STEEL ANY DAMAGE OR NUMBEY TO EXISTING STREET TREES, COTHER AND OF THE CONSTRUCTION STEEL ANY DAMAGE OR NUMBEY TO COTY FORESTRY AT (608) STREET TREES, COTHER PREVIOLED FOR THE CONSTRUCTION IMMEDIATELY TO CITY FORESTRY AT (608)
- 25. AS DEFINED BY THE SECTION 107.13 OF CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTIONS NO EXCAVATION IS PERMITTED WITHIN 5 FEET OF THE TRINK OF THE STREET TREE OR WHEN CUITING ROODS OVER 3 INCHES IN DIAMETER. IF EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT MADISON CITY FORESTRY 4 (608) 266-4616 PRIOR TO EXCAVATION. CITY OF MADISON FORESTRY PERSONNEL SHALL ASSESS THE IMPACT TO THE TREE AND TO ITS ROOT SYSTEM PRIOR TO WORK COMMENCING. TREE PROTECTION AND SECRETICATIONS CAN BE FOUND ON THE FOLLOWING WESTED WORK COMMENCING.









Symbol	Qty	Tag	Label	Description	LLF	Luminaire	Luminaire
						Lumens	Watts
0	22	HEX-A	HEXA_EVO4 30_10 AR MWD LD	EVO4 30_10 AR MWD LD	0.900	852	8.8
0	4	HEX-B	AT7928-BK - Vesta	AT7928-BK HEX-B Opt1	0.900	1574	31.3
<u> </u>	116	HEX-C	KBL-F-V-30K-24V	KBL-F-V-30K-24V	0.225	722	14.3
	52	HEX-C1	KBL-F-V-BL-30K-IEPF-IEC-24_IE	KBL-F-V-BL-30K-IEPF-IEC-24_3	0.900	96	7.7
0	6	HEX-G	ZXL-11-A-M_IESNA2002		0.900	633	8.111
0	4	HEX-H1	SN825-L1L5	SN825-L1L5	0.900	555	12.2
0	5	HEX-K	LN601B-L10-R30	LN601B-L10-R30	0.900	1120	11
0	3	HEX-L	LC0123WCC010LD7T540K-IES	LC0123C010LD7T540K	0.900	955	10
0	15	HEX-M	WDGE1 LED P1 30K 80CRI VF	WDGE1 LED P1 30K 80CRI VF	0.900	1161	10.0002
	94	HEX-O	FN-SCS8-5W-3-27K	SL-XX-5W-3FT-27K-XX	0.720	912	16.4
•	6	HEX-U	1E345590	1E345590	0.900	550	6.1
Θ	4	HEX-V	KPLM41ZML230 SP	KPLM41ZML230 SP	0.900	611	13.5

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
DOG PARK	Illuminance	Fc	1.25	3.7	0.1	12.50	37.00
EXTERIOR AMENITY	Illuminance	Fc	1.78	5.9	0.2	8.90	29.50
INTERIOR ALLEY	Illuminance	Fc	3.51	7.9	0.7	5.01	11.29
PATHWAY_EAST	Illuminance	Fc	2.78	5.4	0.1	27.80	54.00
PATHWAY_NORTH_1	Illuminance	Fc	3.26	9.2	0.1	32.60	92.00
PATHWAY_NORTH_2	Illuminance	Fc	1.33	7.7	0.0	N.A.	N.A.
PATHWAY_SOUTH_1	Illuminance	Fc	2.02	9.5	0.0	N.A.	N.A.
PATHWAY_SOUTH_2	Illuminance	Fc	2.19	7.6	0.0	N.A.	N.A.
PATHWAY_WEST	Illuminance	Fc	2.65	6.3	0.0	N.A.	N.A.
PROMENADE	Illuminance	Fc	2.64	11.9	0.1	26.40	119.00
PROPERTY LINE_EAST	Illuminance	Fc	0.85	3.5	0.1	8.50	35.00
PROPERTY LINE_NORTH	Illuminance	Fc	1.32	12.1	0.0	N.A.	N.A.
PROPERTY LINE_SOUTH	Illuminance	Fc	1.44	8.7	0.0	N.A.	N.A.
PROPERTY LINE_WEST	Illuminance	Fc	0.08	0.2	0.0	N.A.	N.A.
SIDEWALK_BROOM	Illuminance	Fc	0.59	2.0	0.2	2.95	10.00
SIDEWALK_GORHAM	Illuminance	Fc	0.16	2.3	0.0	N.A.	N.A.
SIDEWALK_JOHNSON	Illuminance	Fc	1.26	6.6	0.0	N.A.	N.A.
TURN AROUND SPOT	Illuminance	Fc	7.31	14.1	2.0	3.66	7.05

#### **GENERAL NOTES:**

EXTERIOR LIGHTS HEX-D, E, F, G, J, K, AND L TO BE CONTROLLED VIA TIMECLOCK TO TURN ON 1 HR BEFORE SUNSET AND TURN OFF 1 HR AFTER SUNRISE.

TYPE HEX-A, B, C, AND H WILL BE CONTROLLED SEPERATELY THAN THE TIMECLOCK.

## **GENERAL CALCULATION NOTES:**

AVERAGE REFLECTANCES = 50% GROUND AND 50% WALLS

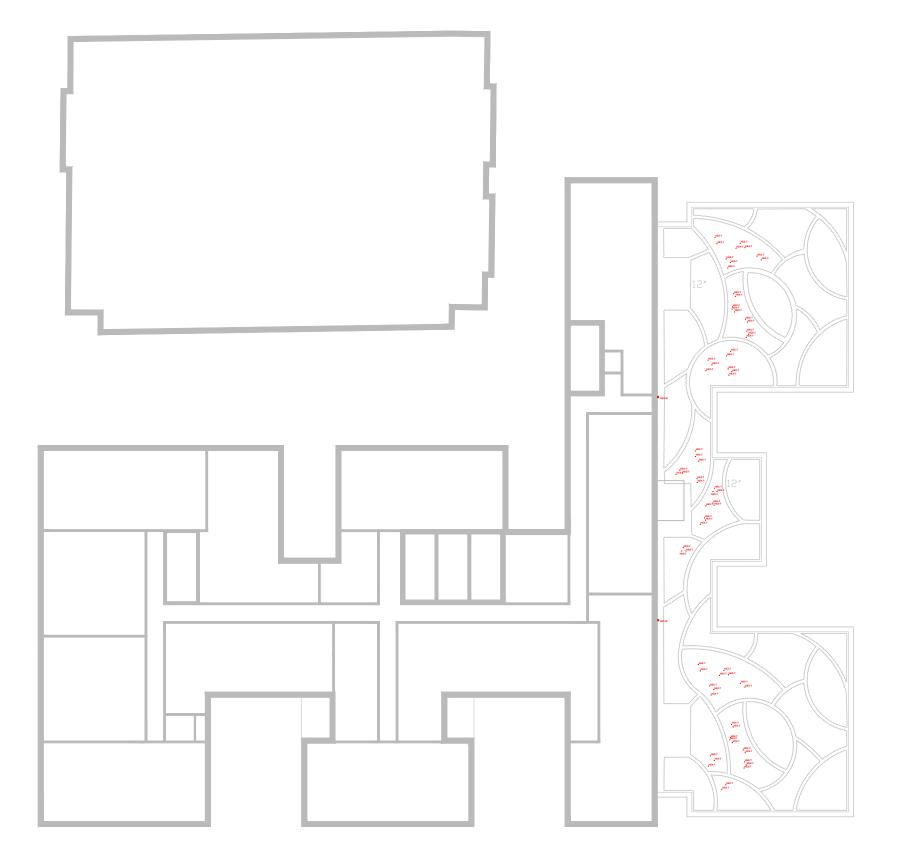
PROPERTY LINE ILLUMINANCE MEASURED AT 4'0 ABOVE GRADE ALL OTHER CALCULATIONS TAKEN AT GROUND

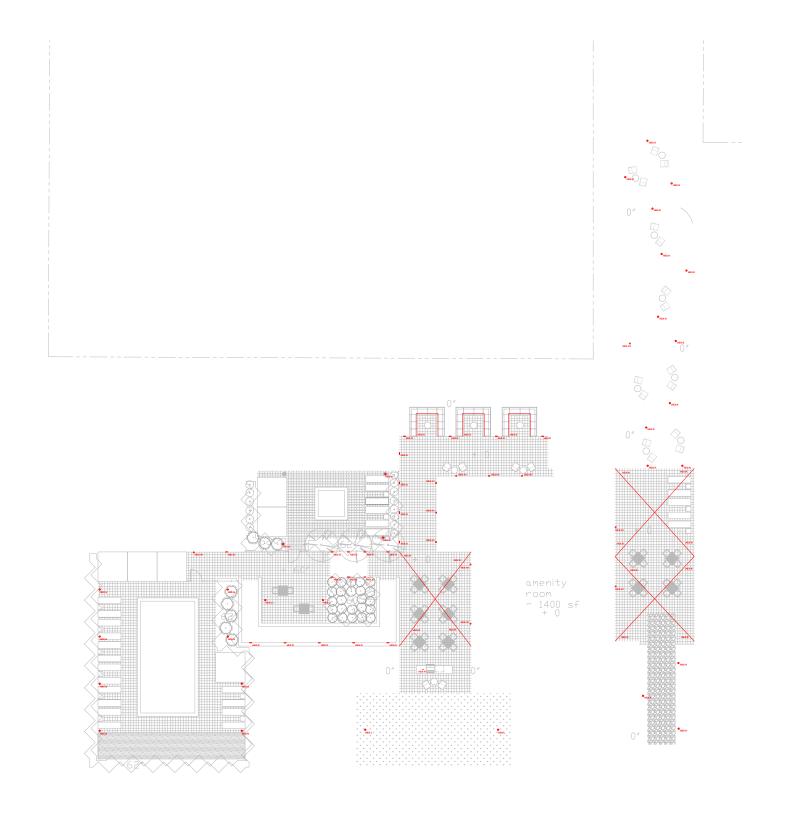
90% LUMEN MAINTENANCE

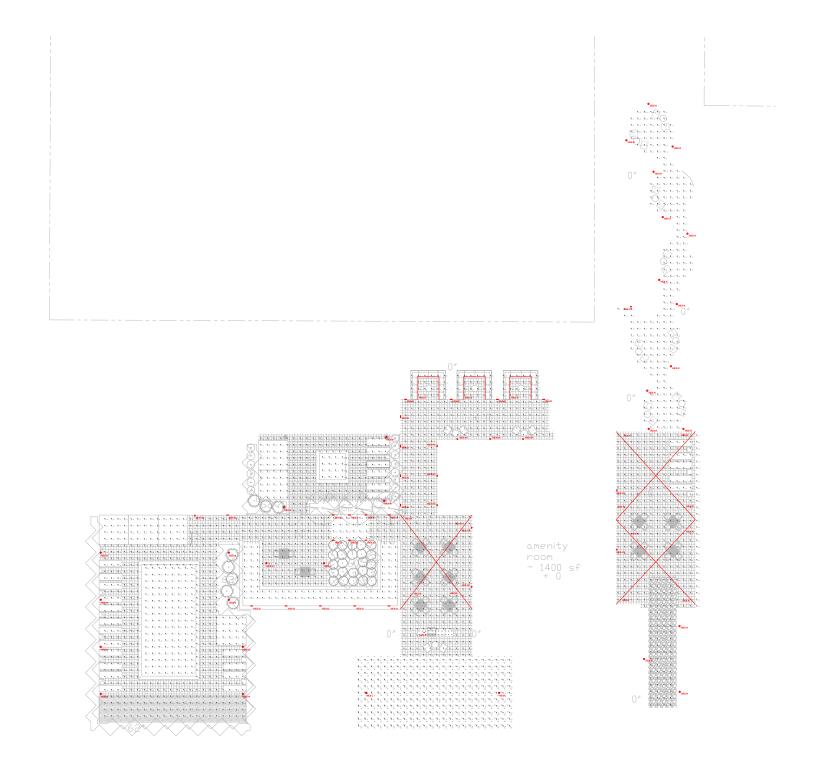
## CALCULATION DISCLAIMER:

ILLUMINANCE CALCULATIONS ARE INTENDED TO SERVE AS A VERIFICATION TOOL FOR LIGHTING DESIGN, NOT AS A GUARANTEE OF SPECIFIC ILLUMINANCE LEVELS. ALL CALCULATIONS PERFORMED BY HARTRANFT LIGHTING DESIGN, LLC ARE BASED ON STANDARDS AND METHODS APPROVED BY THE IESNA, AND PHOTOMETRY MADE AVAILABLE BY LIGHTING FIXTURE MANUFACTURERS. WHILE ALL NECESSARY STEPS HAVE BEEN TAKEN TO INSURE THE ACCURACY OF THE CALCULATIONS, ALL RESULTS ARE DIRECTLY DEPENDENT ON THE IES FORMAT PHOTOMETRIC FILE USED AS INPUT AND THE POINT-BY-POINT CAULCULATION METHOD USED BY THE SOFTWARE. COMPUTED RESULTS CAN VARY SIGNIFICANTLY (+/-20%) FROM ACTUAL LEVELS AS A RESULT OF FIELD CONDITIONS SUCH AS FINISHES AND ENVIRONMENTAL FACTORS THAT MAY AFFECT THE LIGHTING AS WELL AS HE ACCURACY OF DATA INCLUDED IN THE INPUT FILE. HARTRANFT LIGHTING DESIGN, LLC SHALL NOT BEAR RESPONSIBILITY FOR ANY DISCREPANCY BETWEEN CALCULATED LEVELS AND THOSE ULTIMATELY REALIZED UNDER FIELD CONDITIONS.

MADISON, WISCONSIN • OCTOBER 04, 2023







Luminaire Schedule										
Symbol	Qty	Tag	Label	Description	LLF	Luminaire	Luminaire			
						Lumens	Watts			
	14	HEX-D	S6240W	S6240W_14	0.900	422	13.5			
0	11	HEX-H1	SN825-L1L5	SN825-L1L5	0.900	555	12.2			
0	15	HEX-K	LN601B-L10-R30	LN601B-L10-R30	0.900	1120	11			
0	2	HEX-L	LC0123WCC010LD7T540K-IES	LC0123C010LD7T540K	0.900	955	10			
0	14	HEX-N	EQ111E039LDT430K	EQ111E039LDT430K	0.900	4261	39			
	143	HEX-R	HEX-R_7828-LSL2-B-12-S-30-C	LSL2-B-12-S-30-C	0.900	5	0.2			

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Counter_1_Top_1	Illuminance	Fc	0.54	0.6	0.5	1.08	1.20
Dining and Grills	Illuminance	Fc	2.23	23.8	0.6	3.72	39.67
Dining East	Illuminance	Fc	2.23	218.2	0.0	N.A.	N.A.
Hot Tub Deck	Illuminance	Fc	5.85	7.0	2.9	2.02	2.41
Hot Tub Surface	Illuminance	Fc	6.44	6.6	6.3	1.02	1.05
Landing_1_Planar	Illuminance	Fc	5.43	13.3	2.1	2.59	6.33
Landing_2_Planar	Illuminance	Fc	3.47	9.1	1.1	3.15	8.27
Landing_3_Planar	Illuminance	Fc	4.85	5.9	3.2	1.52	1.84
Lounge West	Illuminance	Fc	6.49	159.9	0.2	32.45	799.50
Pool Deck	Illuminance	Fc	6.98	65.0	3.0	2.33	21.67
Pool Surface	Illuminance	Fc	6.18	7.7	4.7	1.31	1.64
Raised Eating Area	Illuminance	Fc	4.36	22.6	1.1	3.96	20.55
Ramp_1_Planar	Illuminance	Fc	1.42	2.7	0.5	2.84	5.40
Ramp_2_Planar	Illuminance	Fc	4.13	15.7	0.7	5.90	22.43
Ramp_3_Planar	Illuminance	Fc	3.33	13.9	0.9	3.70	15.44
Ramp_4_Planar	Illuminance	Fc	4.71	5.8	3.4	1.39	1.71
Seating East	Illuminance	Fc	11.92	222.5	0.1	119.20	2225
Stairs	Illuminance	Fc	11.64	91.8	2.1	5.54	43.71
Turf	Illuminance	Fc	3.13	6.0	1.1	2.85	5.45

# **GENERAL NOTES:**

EXTERIOR LIGHTS HEX-F, G, M, N, AND R TO BE CONTROLLED VIA TIMECLOCK TO TURN ON 1 HR BEFORE SUNSET AND TURN OFF 1 HR AFTER SUNRISE.

# **GENERAL CALCULATION NOTES:**

AVERAGE REFLECTANCES = 50% GROUND AND 50% WALLS

PROPERTY LINE ILLUMINANCE MEASURED AT 4'0 ABOVE GRADE
ALL OTHER CALCULATIONS TAKEN AT GROUND

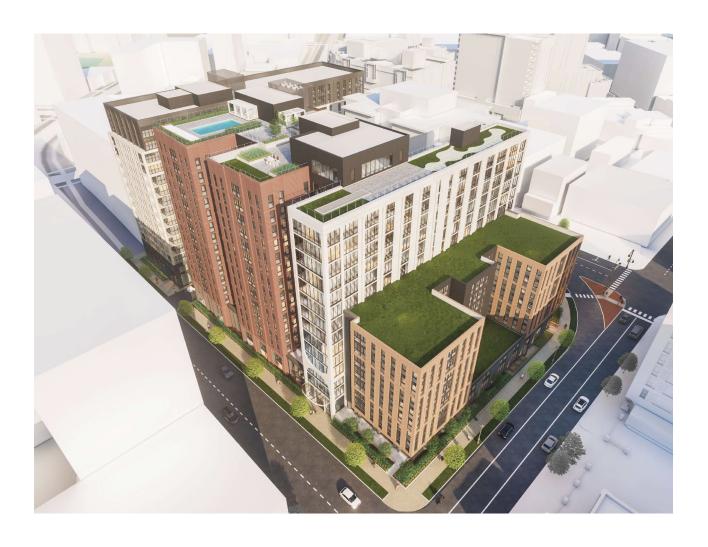
ALL OTHER CALCULATIONS TAKEN AT GROUNI

90% LUMEN MAINTENANCE

## **CALCULATION DISCLAIMER:**

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MADISON, WISCONSIN • OCTOBER 04, 2023





POLYMER WINDOW SYSTEM COLOR, BLACK



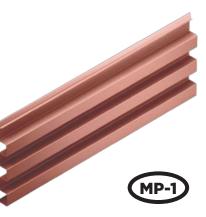
STOREFRONT SYSTEM COLOR, BLACK



GLAZING UNITS LOW IRON CLEAR



GRANITE COLOR, BLACK



METAL PANEL BOXED RIBBED COLOR, FIRED BRICK



METAL PANEL BOXED RIBBED COLOR, FIRED BRICK



METAL PANEL BOXED RIBBED COLOR, MIDNIGHT BRONZE



METAL PANEL FLAT COLOR, FIRED BRICK



METAL PANEL FLAT COLOR, ARCTIC WHITE



FLAT COLOR, MIDNIGHT BRONZE



BRICK COLOR, ASH, PLATINUM



BRICK COLOR, CEDAR, COPPERTONE



BRICK COLOR, MOUNTAIN RED



COLOR, BLACK OPAL



**PREVIOUS** 



**PREVIOUS** 



CURRENT



CURRENT



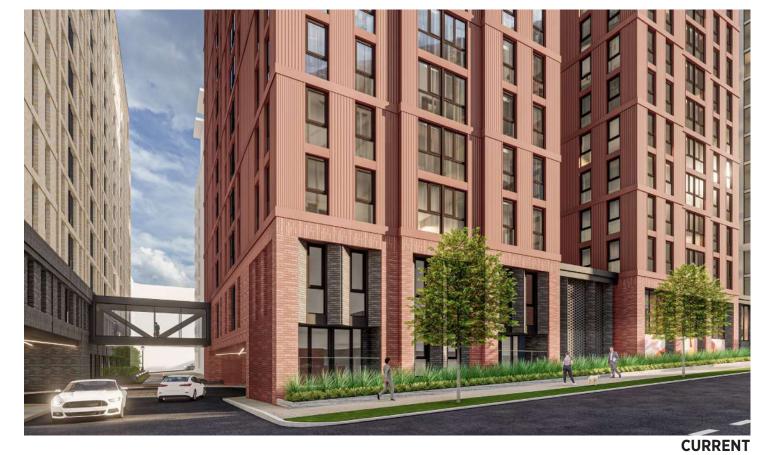




**UDC FORMAL SUBMITTAL** 



CURRENT





**PREVIOUS** 



**PREVIOUS** 



**CURRENT** 



CURRENT







**PREVIOUS** 



**CURRENT** 



**CURRENT**