

Bethesda Downtown Design Advisory Panel (DAP)

Submission Form (Revised March 2020)

PROJECT INFORMATION

Project Name	4405 East-West Highway
File Number(s)	
Project Address	4405 East-West Highway, Bethesda, MD 20814

Plan Type ☐ Concept Plan ☒ Sketch Plan ☐ Site Plan ☐ Consultation w/o Plan

APPLICANT TEAM

	Name	Phone	Email
Primary Contact	John Camera, Perseus TDC	202-617-2143	john.camera@perseustdc.com
Architect	SK+I Architecture (Chris Huffer), 240-479-7484, chuffer@skiarch.com		
Landscape Architect	Parker Rodriguez (Trini Rodriguez), 703-548-5010, trodriguez@parkerrodriguez.com		

PROJECT DESCRIPTION

	Zone	Proposed Height	Proposed Density (SF/FAR)	Requested BOZ Density (SF/FAR)	MPDU %
Project Data	CR-1.5, C-1.5, R-1.5, H-100'	100'	356,419 SF / 5.96 FAR	266,666 SF / 4.46 FAR	15%
Proposed Land Uses	Commercial, Multi-Family Residential				

DESIGN ADVISORY PANEL SUBMISSION PROCESS & REQUIREMENTS

1. Schedule a Design Advisory Panel review date with the Design Advisory Panel Liaison.
2. At least two weeks prior to the scheduled Panel meeting, provide via email to the Design Advisory Panel Liaison the completed Submission Form and required drawings in PDF format. Incomplete applications will be returned for revision. **Applications deemed incomplete by the Liaison may result in the loss of the scheduled meeting date if not returned complete within the above time frame.**
3. Concept Plan and Sketch Plan applications must include the following, at a minimum:
 - Property location plan showing three-block context radius
 - Illustrative site plan showing two-block context radius
 - Perspective images of all building faces from a 3-D model that show the proposal in the built context, as well as with nearby buildings approved by the Planning Board. (Bring the 3-D model to the Panel review.)
 - 3-D building massing diagrams illustrating:
 - both strict conformance with the design guidelines and the proposed design, indicating where the proposal does not conform and how the alternative treatments meet the intent of the guidelines
 - the maximum standard method of development density on site
 - the maximum mapped density on site
 - Precedent images showing scale, architectural character, materiality, etc. (Concept & Sketch Plans only).

Except as noted, Site Plan applications must include all of the above, as well as, at a minimum:

- Floor plans for parking level(s), ground floor, typical floor, roof, and unique conditions
- Building/site sections showing full adjacent street sections with opposite building face
- Elevations for each façade
- Key perspective views expressing character of the building elevations and streetscape.



DESIGN GUIDELINES CONFORMANCE

The primary goal of the DAP is to provide advice and recommendations that will heighten design excellence and improve the quality of architecture, urban design, and landscape architecture in Downtown Bethesda. Simple compliance with the numerical standards in the Design Guidelines does not in itself achieve Design Excellence.

STREET TYPE(S): Urban Boulevard (East-West Highway)

	Recommended	Provided	Alternative Compliance?
Sidewalk Zone			
Planting/Furnishing Zone	6-10 ft.	8 ft	
Pedestrian Thorough Zone	10-20 ft.	11 ft.	shared use path
Frontage Zone	0-10 ft.	6 ft. tree panel & 15'	sidewalk
Building Placement			
Build-to Line (from street curb)	25-30 ft.	40 ft.	
Building Form			
Base Height	3-6 stories	2 stories	
Step-Back	10- 15 ft.		alt. methods to reduce

DOES THE PROJECT INCLUDE A THROUGH-BLOCK CONNECTION OR TRAIL?

☐ Yes ☒ No

- If yes, please provide sectional diagrams demonstrating conformance with Section 2.1.9 of the Guidelines

DOES THE PROJECT INCLUDE A SECTOR-PLAN RECOMMENDED PARK OR OPEN SPACE?

☐ Yes ☒ No

- If yes, please provide diagrams demonstrating conformance with Section 2.2 of the Guidelines

BUILDING FORM

	Recommended	Provided	Alternative Compliance?
Tower			
Separation Distance	45-60'	35'-8" to West, 55'-2" to East	
Step-Back	Per Street Type	12' @ 5th floor and 12' @ 7th Floor on North Side of building	
Bulk Reduction Methods	Unique Geometry, Varying Tower Heights, Modulate and Articulate Facades, Limit Apparent Face		

IS THE PROJECT LOCATED IN A DISTRICT IDENTIFIED IN CHAPTER 3 OF THE DESIGN GUIDELINES?

☐ Yes ☒ No

- If yes, please provide diagrams demonstrating conformance with the District-Specific Guidelines

EXCEPTIONAL DESIGN POINTS REQUESTED (MIN: 10, MAX: 30): 20

- 10 Points: Generally consistent with the Design Guidelines and meets four of the CR Guideline Criteria
- 20 Points: Superlative design that in a uniquely compelling way meets the Design Guidelines or overcomes a significant site or similar constraint; a top example of design within Montgomery County
- 30 Points: Singular design that exemplifies the highest intent of the Design Guidelines and may be considered a top example of design within the Mid-Atlantic region



**4405 East-West Highway Bethesda, Maryland
Design Advisory Panel
Sketch Plan**

I. Introduction

4405 East West Highway Owner, LLC, an affiliate of Perseus TDC (the “Applicant”) is submitting this application to receive input from the Design Advisory Panel (“DAP”) on the Sketch Plan for the property located at 4405 East-West Highway in Bethesda, Maryland (the “Property”). The Applicant proposes to redevelop the Property with a multi-family residential building with ground floor retail uses (the “Project”).

The Project is notable in that it will be only the second Sketch Plan approved for the Pearl District since the adoption of the *2017 Approved and Adopted Bethesda Downtown Plan* (the “Downtown Plan”) and very likely the first project to be developed in the Pearl Street District.

II. Property Description

The inverted “L” shaped Property is located on the north side of East-West Highway just east of the intersection of East-West Highway and Pearl Street and just west of Bethesda- Chevy Chase High School, just over 1,000 feet from the Bethesda Metro Station. The Property contains a total of 59,838 square feet of gross tract area and is zoned CR 1.5, C 1.5, R 1.5 H 100 and is subject to the Bethesda Overlay Zone. The Property is currently improved with a five-story 65,060 square foot office building and surface parking, a portion of which is located directly in the front of the building, between the building and the sidewalk.

III. Proposed Development

Furthering the goal of the Downtown Plan to increase the number of residential units within walking distance of the Metro Station, the Applicant proposes redeveloping the Property with up to 350,000 square feet of residential use to accommodate up to 350 units, including 15 percent moderately priced dwelling units (“MPDUs”) and approximately 6,419 square feet of ground floor retail. Consistent with the Downtown Plan recommendations, the building will be 100 feet in height (11 floors of residential uses with ground floor retail) along the East-West Highway northern façade and will step down to a height of 51 feet along the southern façade as measured from the adjacent grade and 39 feet as measured from East-West Highway.

The Project is located within the Pearl Street District, identified in the Downtown Plan as an emerging center. The Project promotes a number of the goals and recommendations of the Downtown Plan, with the most notable being the following:

Gateway to Bethesda: The building will likely be the first developed in the Pearl District under the Downtown Plan, and given the Property’s prominent location, it will serve as a gateway to Bethesda. The building is designed with its highly visible location in mind, with additional care and attention paid to the design of the eastern elevation.

Transformation of the Streetscape: A prominent component of the Project will be its transformation of the existing Property frontage. The existing “streetscape” section from the back of curb is comprised of a sidewalk with overhead utilities adjacent to the surface parking. The Property frontage contains no green space, except a one-two foot wide strip of grass next to a small portion of the building and one lone tree. This barren frontage will be replaced with the Bethesda streetscape standards that will include an eight-foot tree lined buffer, a shared use bike path, a second row of trees and a 15-foot-wide sidewalk, thus transforming the suburban auto-centric existing conditions of the Property to a more urbanized, inviting landscaped streetscape. The new streetscape will also promote the connectivity goals of the Downtown Plan by providing a quality pedestrian experience. This is particularly important given the number of students that walk almost every day along the frontage of the Property from B-CC High School just to the east to downtown Bethesda.

Enhance Street Activity: The ground floor retail is located along the western portion of the building closer to Pearl Street, in order to help promote this intended retail corridor. In addition, replacing a dated office building with a residential building will help promote the 24-hour activity desired by the Downtown Plan.

IV. Project Design and Architectural Narrative

The Project will provide a building of exceptional design to this area of Bethesda that complies with the various recommendations of the Design Guidelines. As described below, the building employs a number of alternative “menu” options from the Design Guidelines to achieve the objectives of the Design Guidelines.

Due to the Project’s location, the East-West Highway and Eastern facades will be featured prominently as you enter Bethesda from the East. With this in mind, the 2-story Residential Lobby entrance has been located at the Southeast Corner to function as the main entry to the building but also to Bethesda. The Project focuses on activating East-West Highway with 2-story Residential Lobby and Amenity Space as well as Retail. The transparency and activity of the first 2 levels will help break down the scale of the base but also create a vibrant and energetic pedestrian experience.

The massing and articulation concept creates a simple, unified building that breaks up the length of the Eastern façade and is unified by the “wave” articulation that travels around the building. Breaking up the Eastern façade is a vertical tower that plays off the “wave” and connects the penthouse down to the ground. This anchors the main entry and gives a sense of verticality and strength to the Southeast corner. The tower also serves as a break in the undulating “wave” façade that connect the East-West Highway facade and the Eastern façade together. The undulating “wave” is a unique and dynamic element that is appropriate for the two main elevations. Not only does it create a sense of movement it also helps break down the facade to a scale and proportion suitable for the building and creates a façade that doesn’t feel long or imposing. As the “wave” moves north the massing breaks down even further by adding 2 setbacks on the north end that bring down the height of the building to a more appropriate scale adjacent to the High School. Taking advantage of the setbacks on the north end and the undulating facades around the building, recessed and projecting balconies, as well as terraces will be incorporated into the façade to give

residents highly coveted outdoor space. These elements will also add another layer of activity to the façade but also create a more dynamic elevation that will enhance the public realm.

Design Guideline Compliance

1) 2.1.10 Canopy Corridors

The Project proposes improvements to the East-West Highway streetscape to be in compliance with the future streetscape plans. A new 8-foot green street tree buffer will replace the current street adjacent sidewalk, followed by a 11-foot-wide shared use path that will taper at the sides of the property to tie into the existing location of the sidewalks on the neighboring properties. Directly next to the shared use path a 6-foot wide tree panel buffer will be added to incorporate a 2nd row of trees followed by a 15-foot-wide sidewalk directly in front of the building. The Project proposes a 40-foot building setback from the curb, which will provide this future streetscape as well as create an enhanced public realm.

2) 2.3.2 Green Cover

The Project is designed to meet the 35% Green Cover requirements with a combination of tree canopy and intensive green roof that are located above structure at the ground level, 3rd, 5th & 7th Level Terraces as well as at the Penthouse and Mechanical Penthouse levels. Bio-Retention planters will be located at various places around the ground floor.

3) 2.3.3 Servicing, Access, and Parking

The Project proposes utilizing one curb cut on the West side of the property. This curb cut serves as the access point into the site for both the residential loading and garage entry. The location of the garage and loading entries allows them to be hidden from East-West Highway, be better integrated into the façade architecture and providing an overall better and safer pedestrian experience. By placing these services on the West side of the building it allows for the project to have a continuous frontage zone that is line with retail and amenity uses that enhances the pedestrian experience.

4) 2.4.2 Base: Building Placement

The Project proposes a 40-foot building setback from the curb to provide the enhanced and pedestrian friendly streetscape. This setback provides a larger setback from the street than is recommended in the Design Guidelines but is consistent with the larger vision for the future of East-West Highway.

5) 2.4.3 Base: Street Activation

The Project proposes placing along the East-West Highway frontage a combination of 2-story Retail and Amenity uses. These uses will promote the visual transparency of the ground floor and increase the connection with the street. Above the ground floor the building will be visually engaging with a combination of an undulating façade, interconnected with balconies and terraces that face the street. This will further enhance and integrate the building with the public realm.

6) 2.4.4 Base: Variation and Articulation

The Project proposes multiple ground floor uses as mentioned above that will be articulated through different architectural languages on the façade. This, in addition to plane changes, material variation and the modulation above, will help break up the elevation, add visual interest and enhance the pedestrian experience.

7) 2.4.8 Tower: “Menu” of Methods to Reduce Bulk

The Project proposes to pursue alternative methods to reduce tower bulk in lieu of building step backs on East-West Highway because the height of the building is under 120 feet. In order to reduce bulk, the Project proposes a mix of unique geometry in combination with a modulating “wave” façade that is integrated with projecting and recessed balconies that will help reduce the apparent face of the building. The main penthouse structure is setback from the street and integrated with the overall massing concept of the building. By setting this tower back from the façade it creates the perception of different tower heights and makes the main façade feel less imposing. The massing as viewed from the street will provide a dynamic and dramatic façade that will further promote visual interest and enhance the public realm.

8) 2.4.9 Top: Tower Top

The Project’s massing has been designed to help reduce the perceived length of the North-South Façade while also creating a focal point at the Southeast corner of the building. This is achieved by setting the Penthouse Tower massing from the street creating a visual break between the street and East elevations but also creates an element that helps anchor the corner. The penthouse tower takes notes from the “wave” massing of the rest of the building to harmonize with the rest of the design while also integrating the mechanical penthouse into the architecture. By creating this vertical sculptural element at the corner, it creates a very unique and dynamic visual experience that will welcome people approaching Bethesda from the East.

9) 2.4.11 Bird-Safe Design

The Project proposes a massing and façade concept that will help create a very Bird friendly building. The façade articulation through the “wave” coupled with projecting and recessed buildings creates many opportunities for areas to produce varied shadows and help block window reflection. In addition to those architectural features, different façade treatments, materials and window sizes will be utilized throughout the building to enhance the visual aesthetic of the building and will further help reduce reflections and help avoid deadly collisions.

V. Conclusion

The Applicant is excited to deliver this exceptionally designed building to this gateway location in Bethesda. The Applicant’s design team has paid careful attention to the recommendations of the Sector Plan and the Design Guidelines and the Project furthers the design objectives of these guiding documents. We look forward to presenting the Project to the DAP.

Sketch Plan - DAP Submission



**4405 east-west highway
bethesda, maryland**

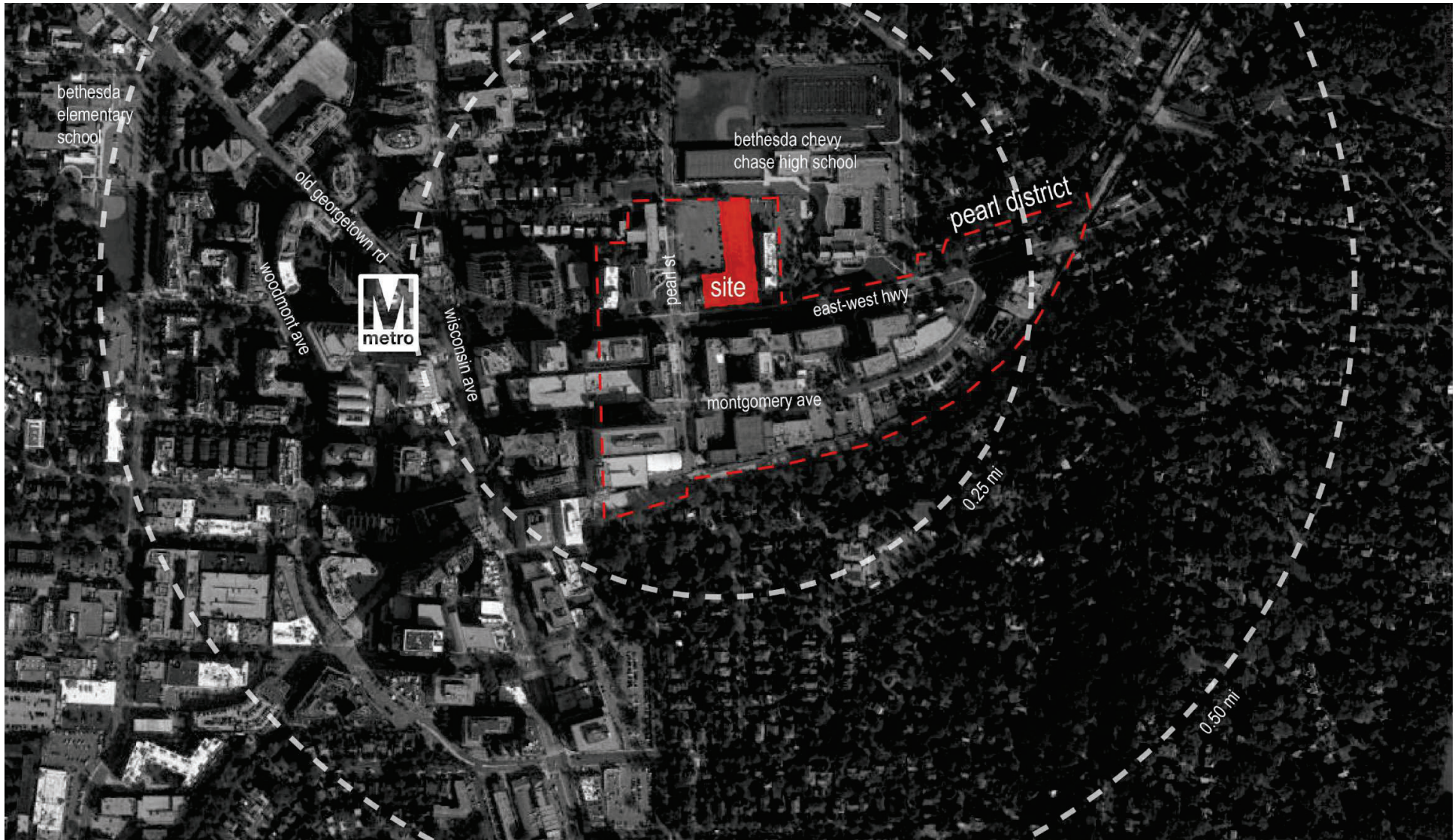
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4405 east-west highway
bethesda, md

developer
perseus - tdc

owner
4405 east-west highway owner, llc

land use counsel
lerch, early & brewer, chartered

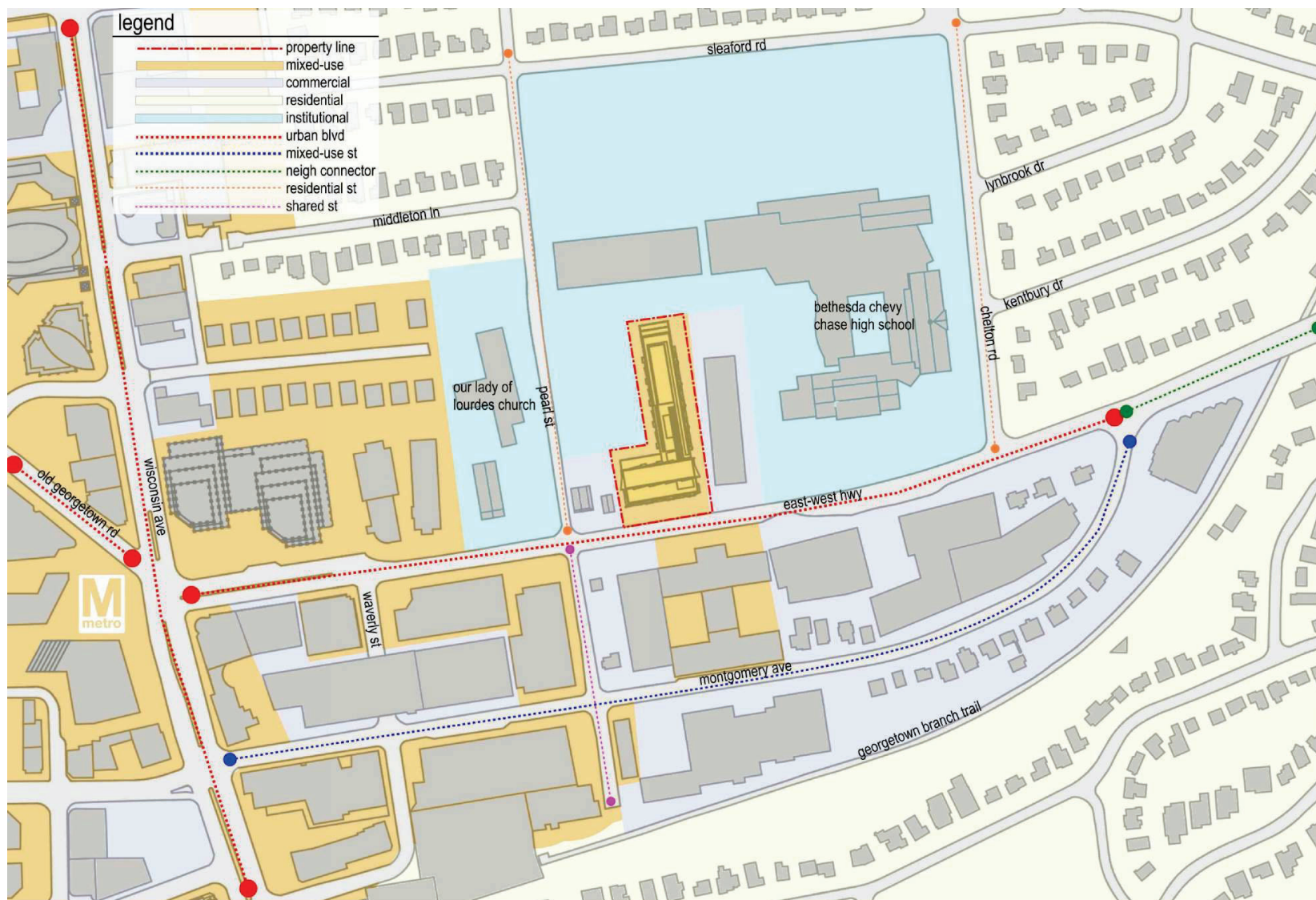
architect
sk+i architectural design group, llc



4405 East-West Highway | Bethesda, MD

May 11, 2022

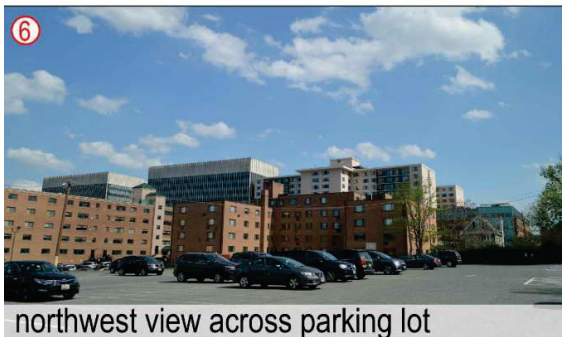
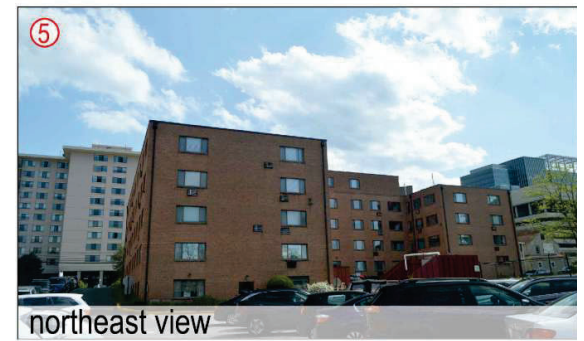
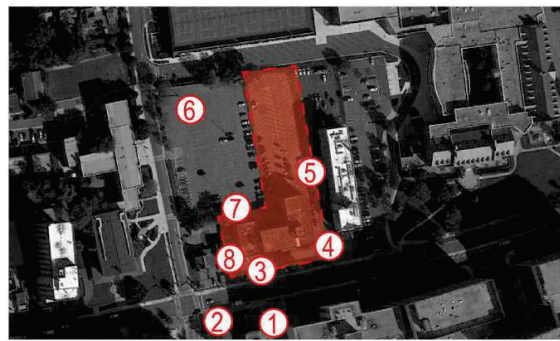
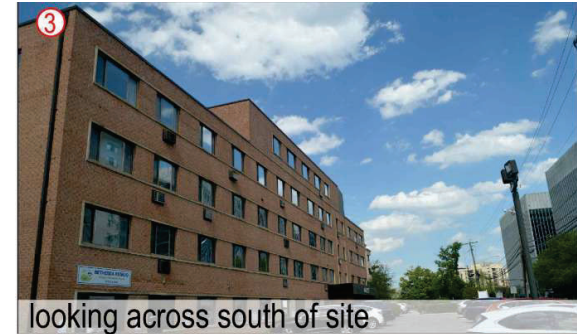
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4405 East-West Highway | Bethesda, MD

May 11, 2022

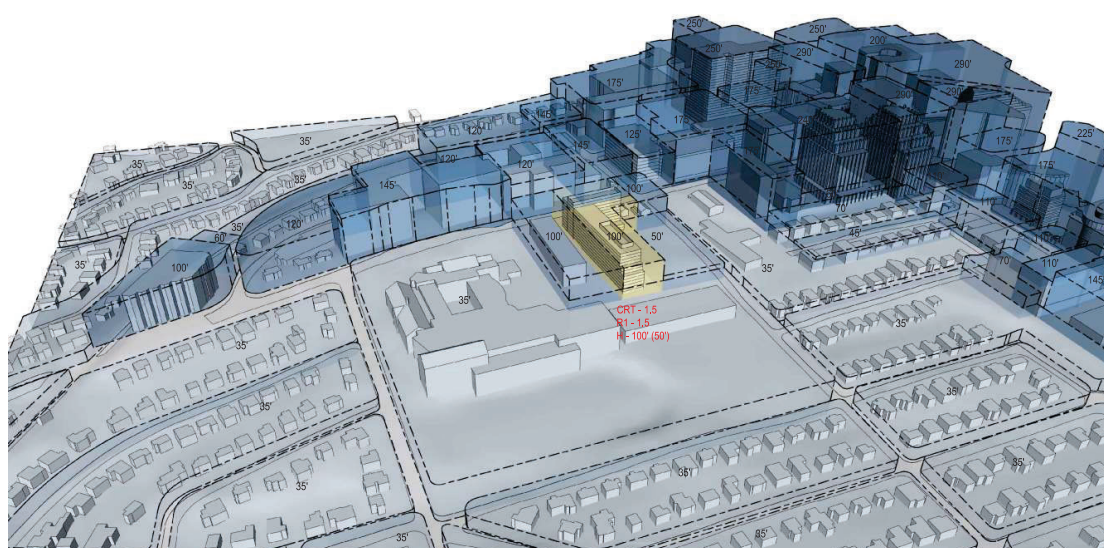
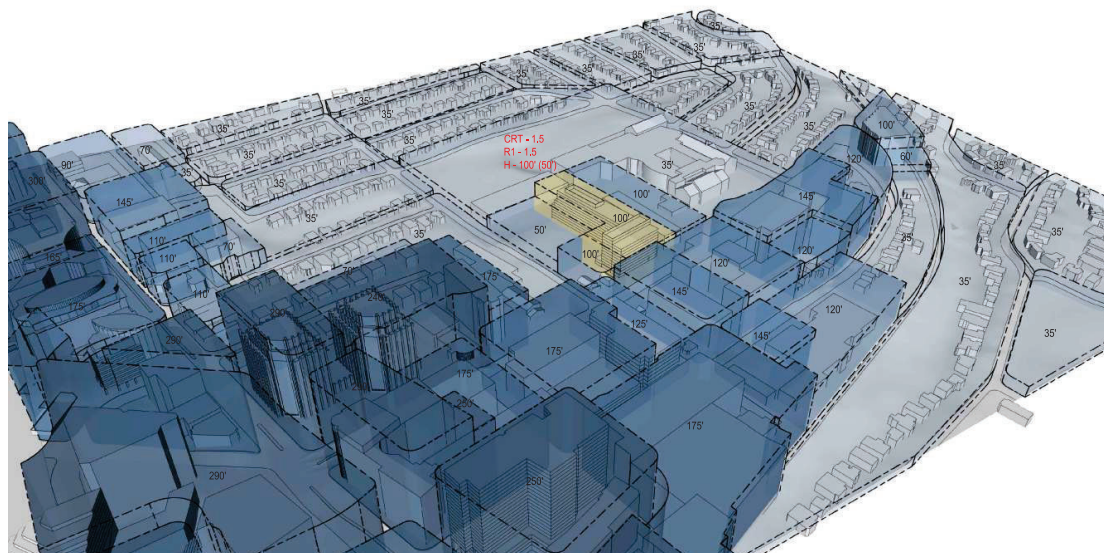
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site photos

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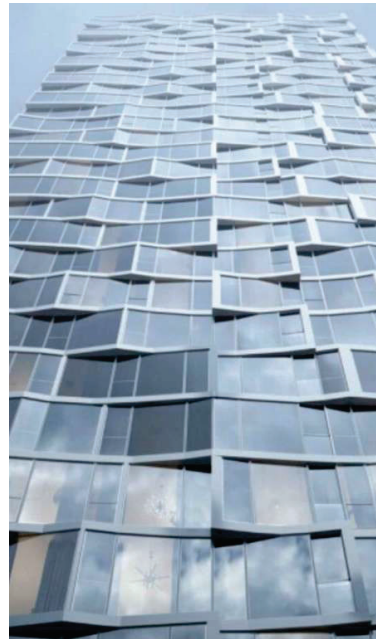
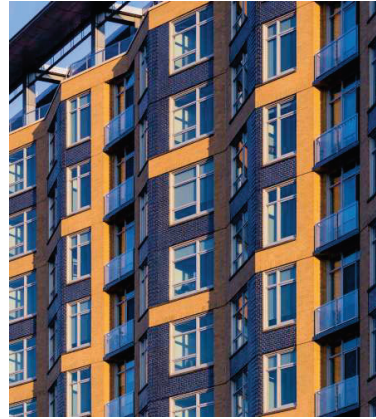
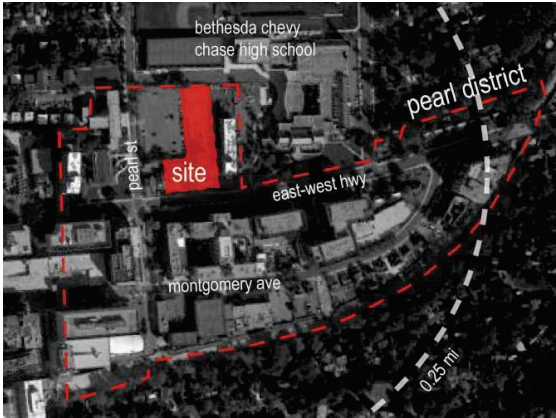
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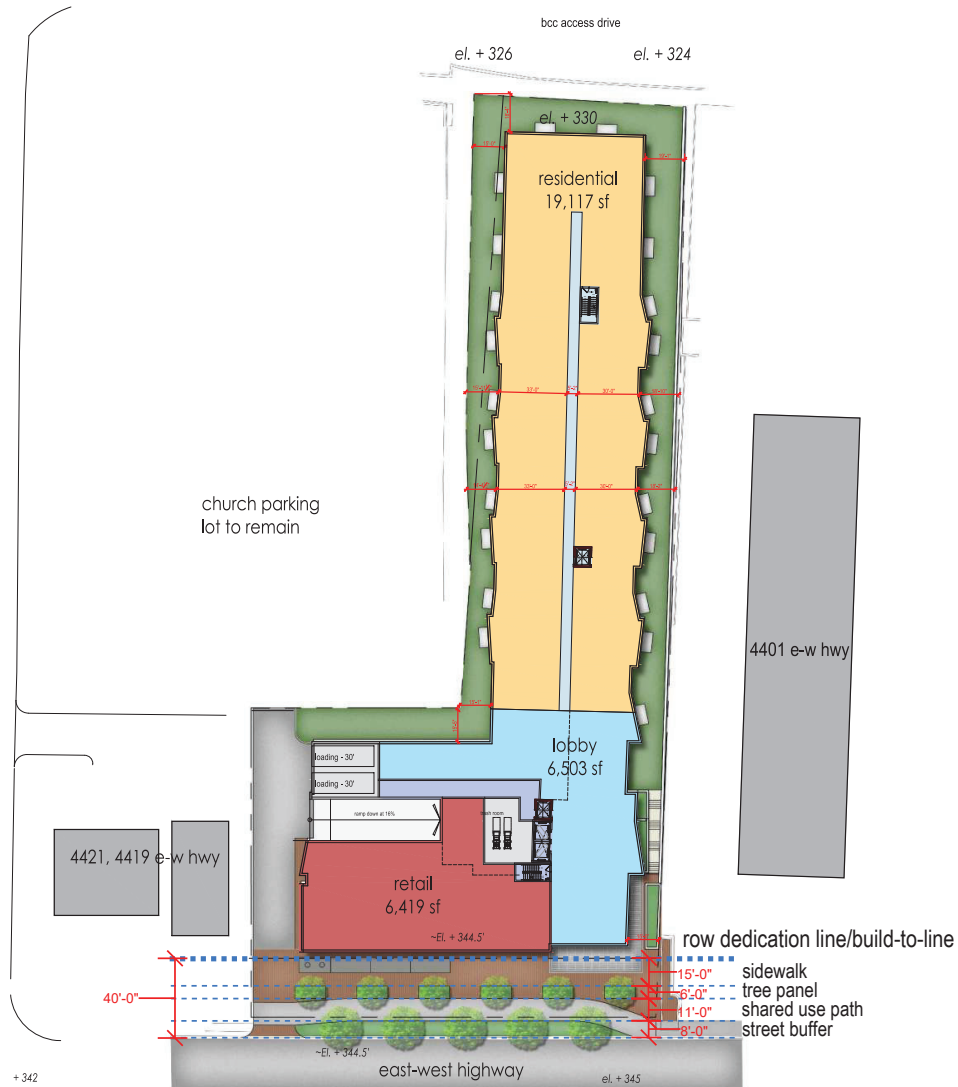
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design goals

- achieve the design goals of the bethesda plan and provide a dynamic, sustainable and inclusive signature address through:
 - building placement
 - street activation
 - base variation and articulation
 - reduction of bulk
 - tower top design
- create a signature residential tower that is scaled, approachable that engages and enhances the pedestrian experience that supports the transformation of the pearl district



2.1.2 Urban Boulevard

Urban Boulevards typically carry a significant amount of pedestrian, bus and vehicular traffic, and connect to major transit nodes. These streets are predominantly lined by high-rise buildings with a mix of commercial and residential uses. Examples of Urban Boulevards include Wisconsin Avenue and Old Georgetown Road.

Intent: Building and sidewalk design along Urban Boulevards should ensure both efficient pedestrian flow and comfort despite the prominence of large-scale buildings and streets.

Table 2.01: Urban Boulevard

Sidewalk Zones

- A. Planting/Furnishing Zone: 6- 10 ft.
- B. Pedestrian Through Zone: 10- 20 ft.
- C. Frontage Zone*: 0- 10 ft.

Building Placement

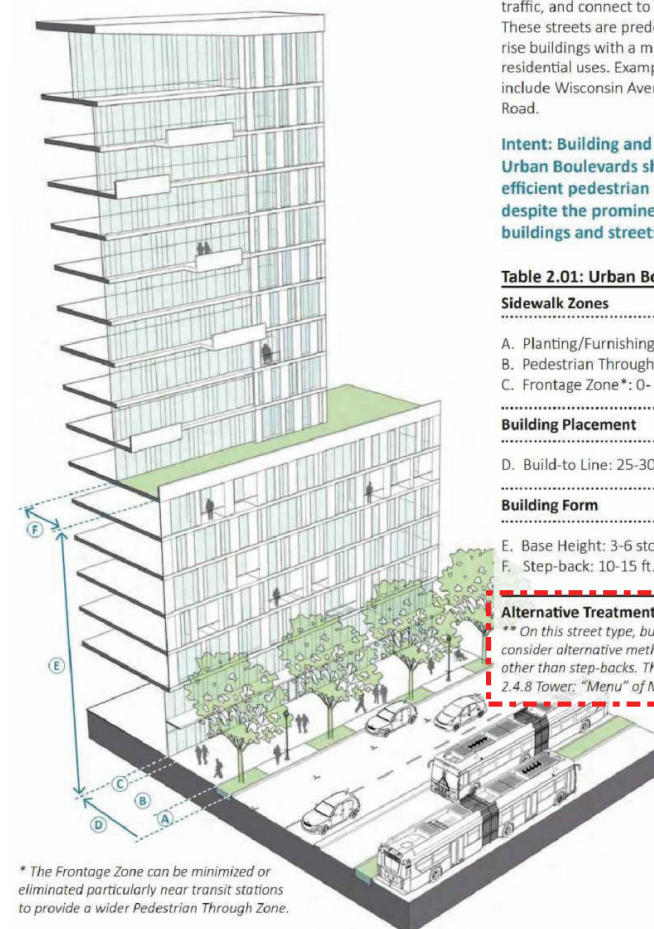
- D. Build-to Line: 25-30 ft. from street curb

Building Form

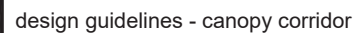
- E. Base Height: 3-6 stories (35-70 ft.)
- F. Step-back: 10-15 ft.**

Alternative Treatments

** On this street type, buildings under 120 ft. may consider alternative methods to reduce tower bulk other than step-backs. These are outlined in Section 2.4.8 Tower: "Menu" of Methods to Reduce Bulk.



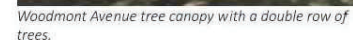
* The Frontage Zone can be minimized or eliminated particularly near transit stations to provide a wider Pedestrian Through Zone.



Intent: The Canopy Corridor recommendations in the Sector Plan aim to create green corridors that connect parks, trails, stream buffers and the denser forest networks beyond the Bethesda boundaries.

Guidelines:

- A. Prioritize street tree planting along existing and proposed bicycle networks to expand linear green corridors.
- B. Use appropriate plant species that will thrive in various site conditions and climates. Species should be a combination of native and locally adaptive species lessening water demand while providing biological benefits.
- C. Provide soil volumes for canopy trees of no less than 600 cubic feet, as recommended in the Sector Plan. This volume may be achieved through amended soil panels, and where possible, utilize street tree panels for greater soil volumes.
- D. Design buildings to allow streets to receive sufficient sunlight to maintain healthy trees along these corridors.
- E. Provide the maximum sidewalk width possible to allow for larger canopy, and consider opportunities for double rows of trees.
- F. Include additional locations for trees on both private and public property, right-of-way and medians wherever possible.



2.3.2 Green Cover

Intent: The green cover guidelines are intended to increase overall tree canopy cover, expand green corridors, reduce heat island effect, improve air quality and carbon sequestration capacity and improve ecological biodiversity. See the Sector Plan Section 2.4.1 Urban Green.

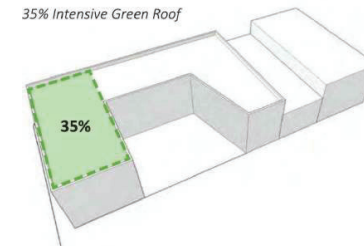
Guidelines:

On private property, provide a minimum of 35 percent* green cover, which may include singularly or a combination of the following:

- A. Intensive green roof (6 inches or deeper) on 35 percent of rooftop.
- B. Tree canopy cover on 35 percent of landscape.
- C. A combination of tree canopy and intensive green roof for a total green cover of 35 percent or greater.

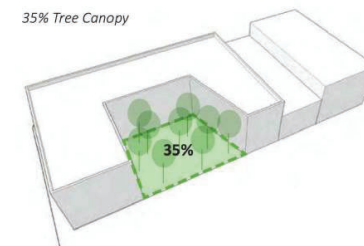
* If on-site energy generation requires the use of the roof or open space, accommodations for these features may alter the 35 percent minimum green cover requirement.

35% Intensive Green Roof



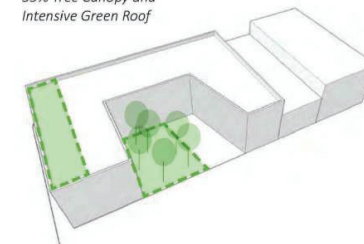
OR


35% Tree Canopy

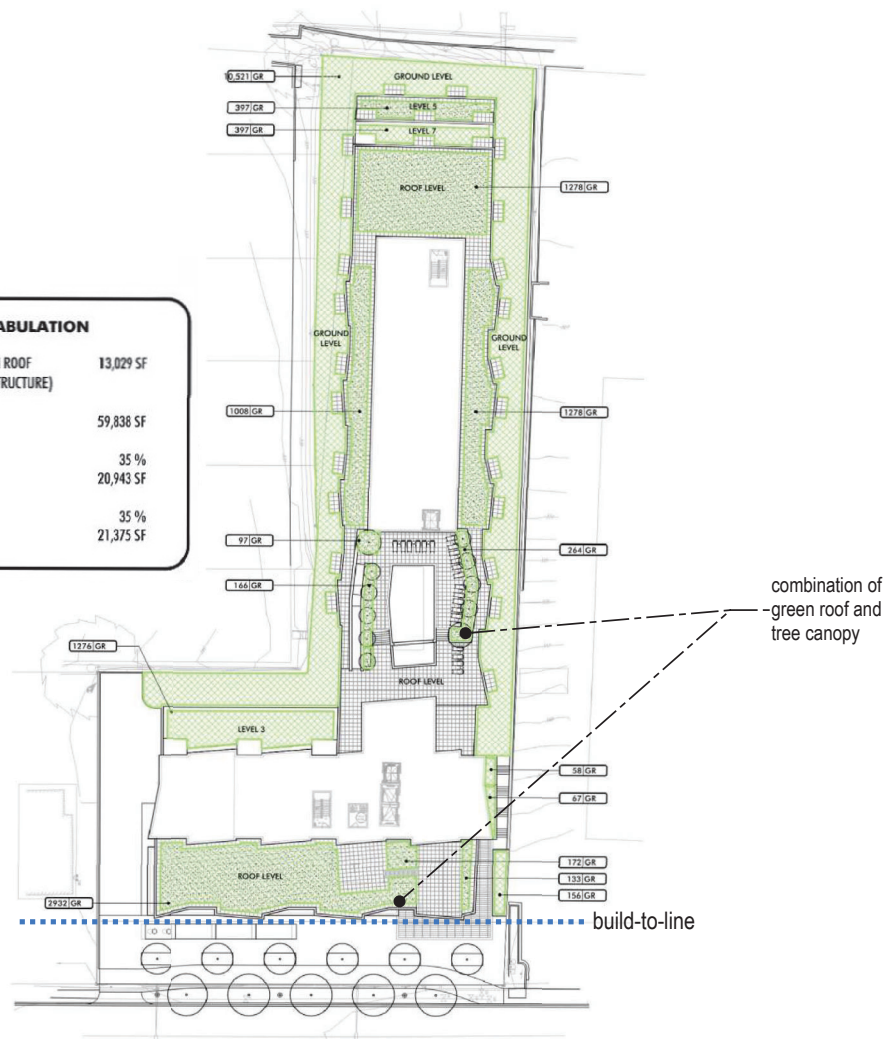


OR

35% Tree Canopy and Intensive Green Roof



GREEN COVER TABULATION		
	GREEN ROOF (ON STRUCTURE)	13,029 SF
NET LOT AREA:		59,838 SF
PERCENT REQUIRED:	35 %	
AREA REQUIRED:	20,943 SF	
PERCENT PROVIDED:	35 %	
AREA PROVIDED:	21,375 SF	

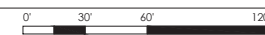


4405 East-West Highway | Bethesda, MD

design guidelines - green cover

May 11, 2022

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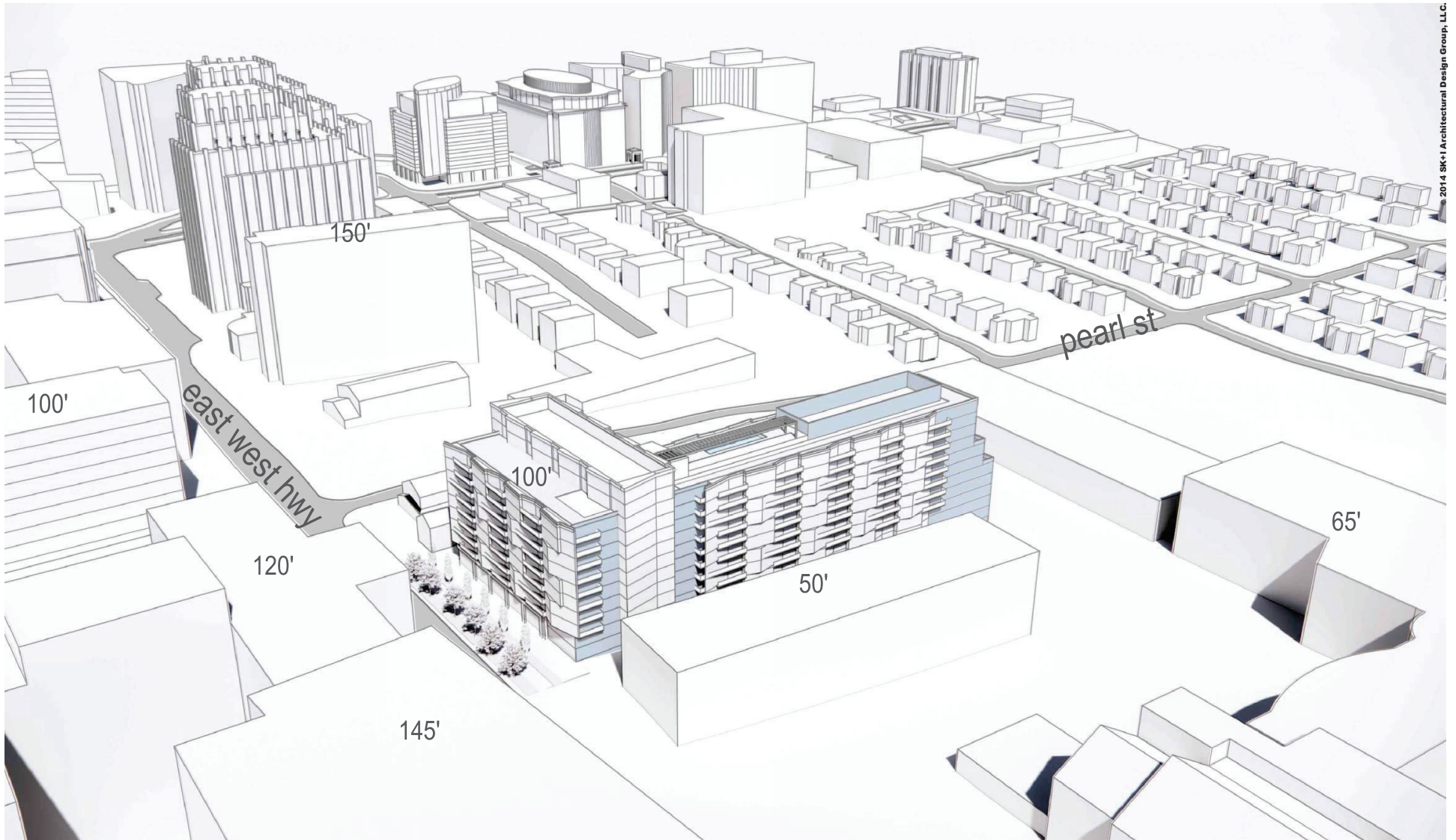


Intent: Loading, servicing and parking should be designed to minimize conflicts between vehicles, pedestrians and cyclists and reduce the visual impacts of vehicle access and parking on the Public Realm. Site design should prioritize the public sidewalk and bikeways over private vehicular crossings.

- A. Line the ground floor of structured parking with retail or other uses with transparency to maintain an active building edge. Where active uses are infeasible, avoid exposed parking floors along the street through measures outlined in the Zoning Ordinance *Section 6.2.9.D.1 Structured Parking Requirements*.
- B. Design exterior of the garage portion of the building to be compatible with the rest of the building facade, in order to enhance the overall architectural quality of the building.
- C. Provide a continuous, level and clearly delineated Pedestrian Through Zone across driveways to encourage drivers to yield to pedestrians. Consider applying the same materials across these vehicle access points as the sidewalk, such as brick pavers.
- D. Locate loading and servicing within the interior of a building at the rear whenever possible. Service alleys are also recommended where setbacks are required from the side or rear property lines for building code.
- E. Avoid placing entries to loading docks, service areas and parking garages on neighborhood residential streets when alternative access is feasible.
- F. Minimize the width and height of driveways and vehicular entrances. Where possible, combine loading dock and garage access.
- G. Screen vehicle and servicing access areas and trash storage with landscaping or other vertical

- H. Vehicle access points should not be located adjacent to a public open space other than through-block connections.
- I. Coordinate location of access points with adjacent and confronting properties where possible to ensure a comfortable sidewalk environment and limited conflicts.
- J. Provide loading spaces for pick-up and drop-off where feasible to reduce idling in the travel lane.
- K. Design structured parking floors to be flexible for future retrofit to other uses where possible.
- L. Ensure continuous tree canopy along service areas and lay-by areas to the greatest extent feasible.
- M. While not recommended in Downtown Bethesda, surface parking should be designed according to the following:
 - Locate the parking on the back of the building, with the building fronting the primary streets and sidewalks.
 - For interim lots, design the parking to provide flexibility for temporary events such as pop-up events and public gatherings to maintain an active street edge. See *Section 2.5 Creative Placemaking*.

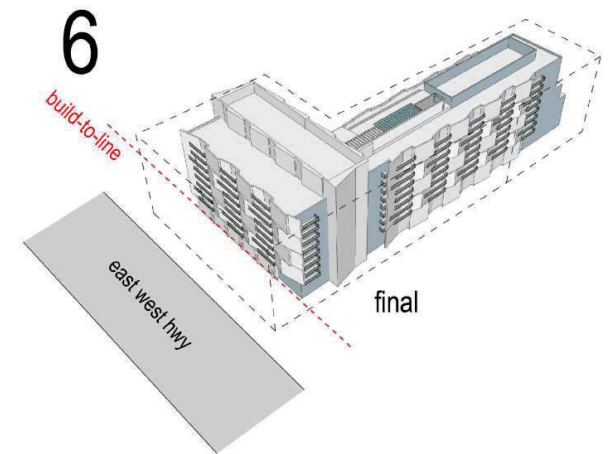
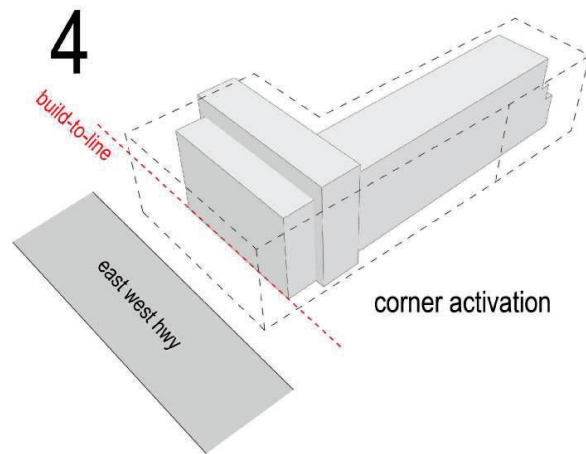
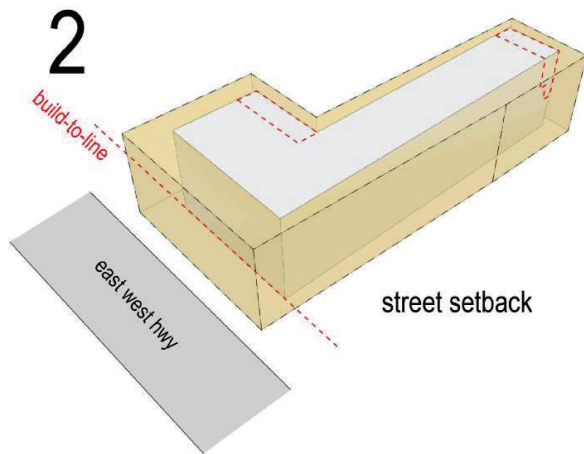
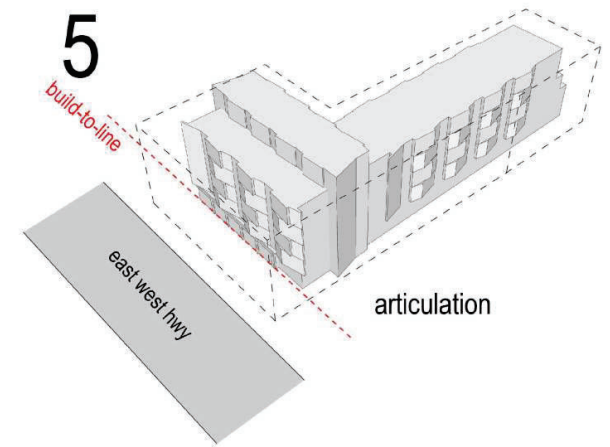
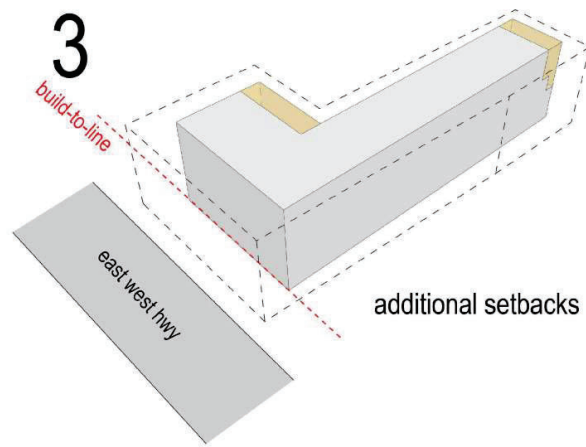
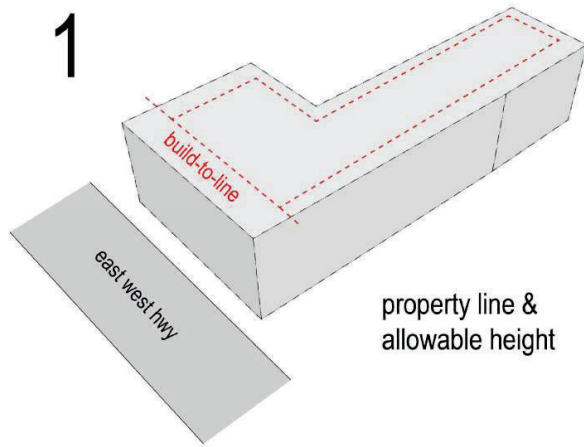
The dense urban grid presents both challenges and opportunities for loading and trash collection. Without alleys, trucks and other delivery vehicles have to make complex maneuvers on the streets to access the buildings' loading areas where they exist or simply operate from the streets themselves when the buildings they serve don't have off-street loading facilities. When trucks must access buildings from streets, especially high volume corridors, the loading areas create conflicts with pedestrians. When loading



4405 East-West Highway | Bethesda, MD

May 11, 2022

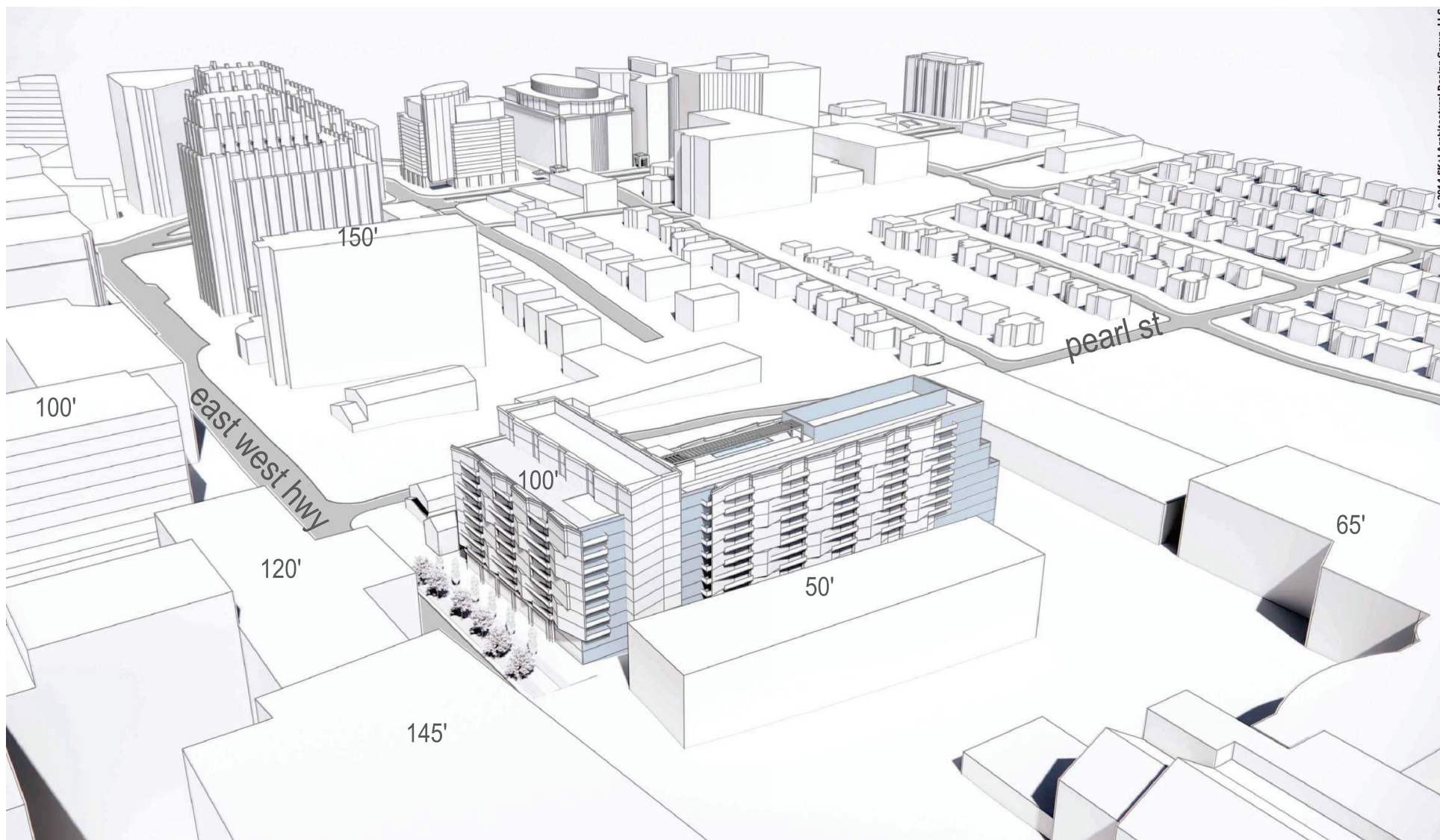
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4405 East-West Highway | Bethesda, MD

May 11, 2022

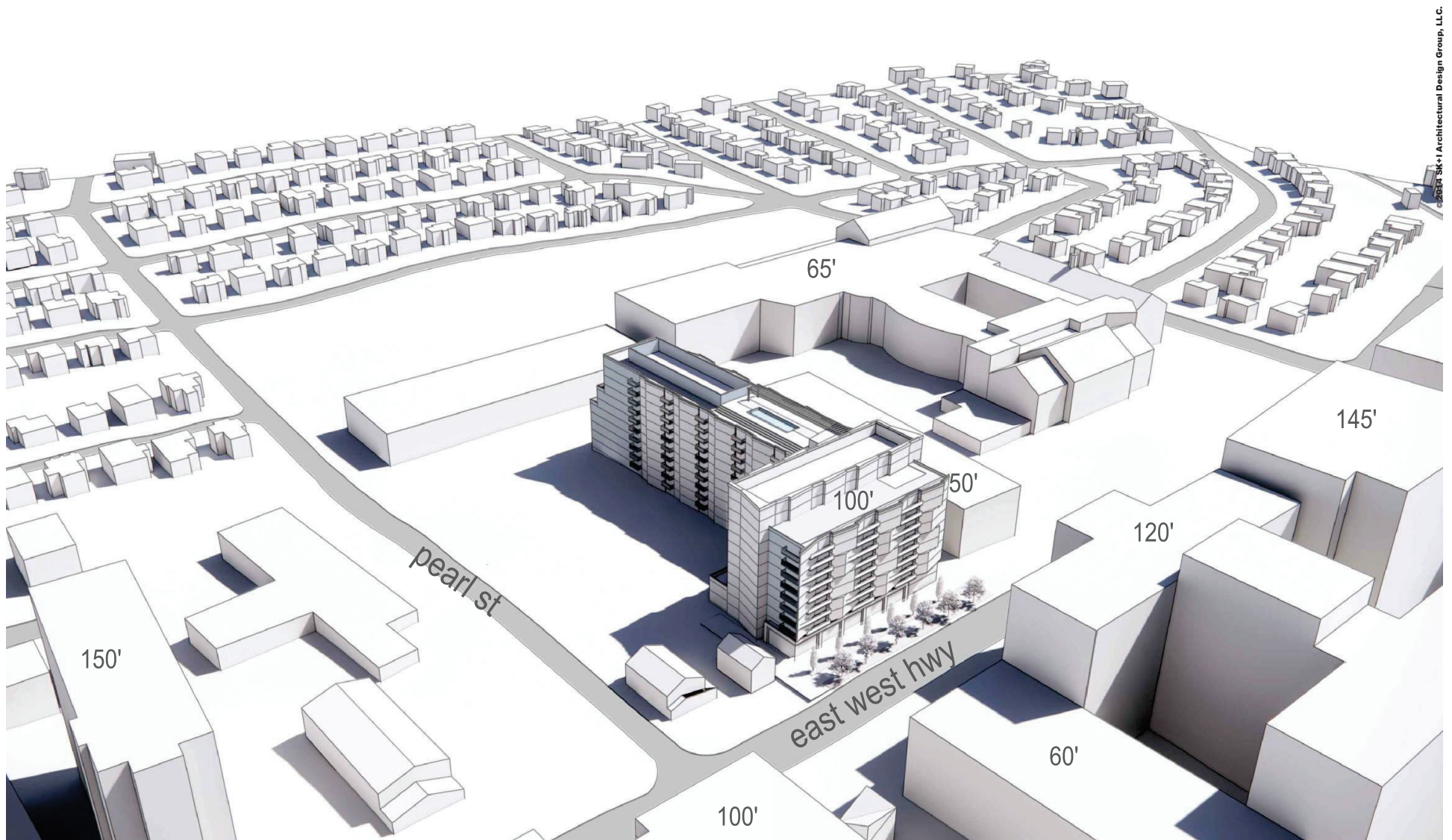
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May 11, 2022

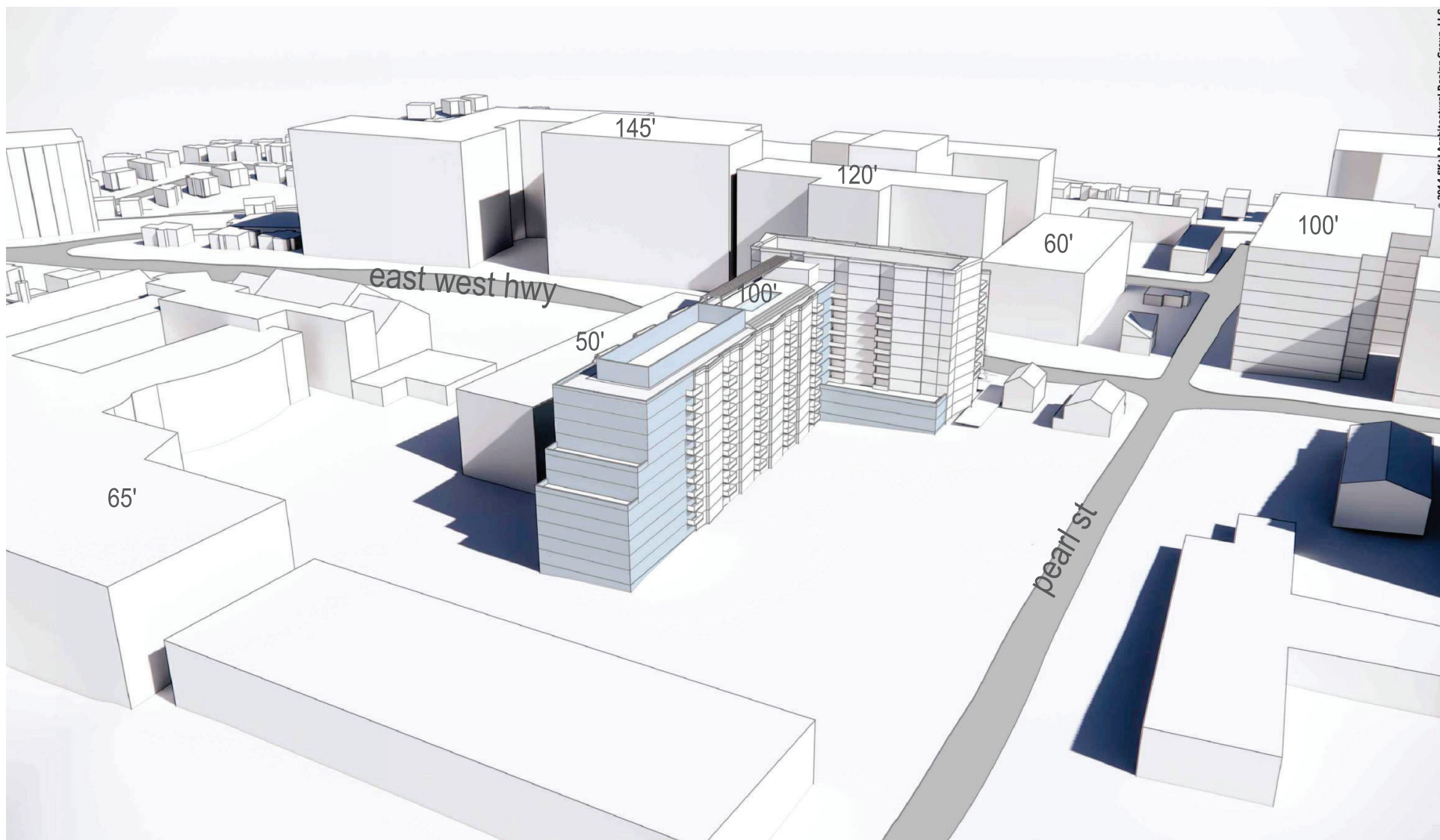
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4405 East-West Highway | Bethesda, MD

May 11, 2022

A13



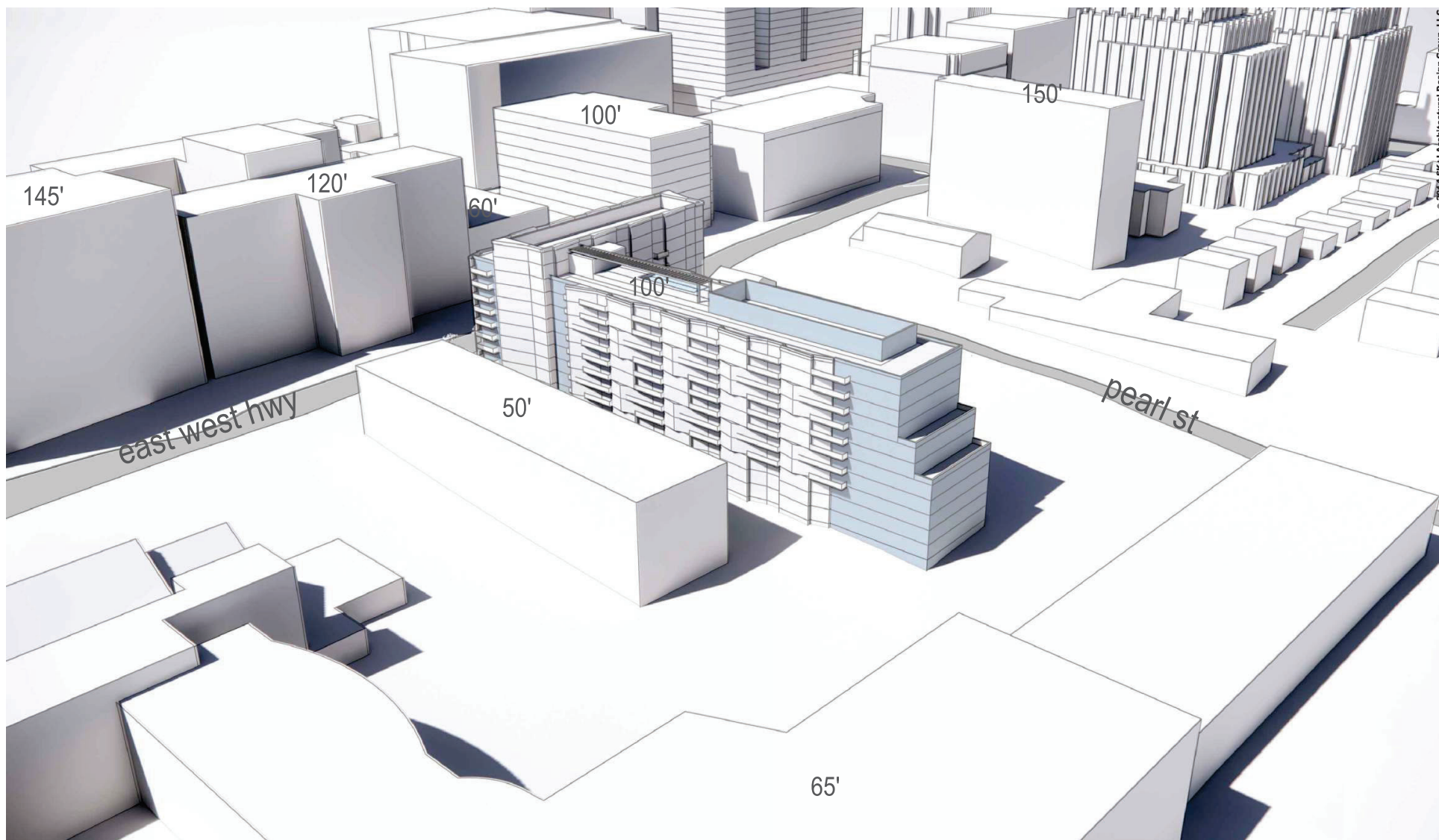
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A14

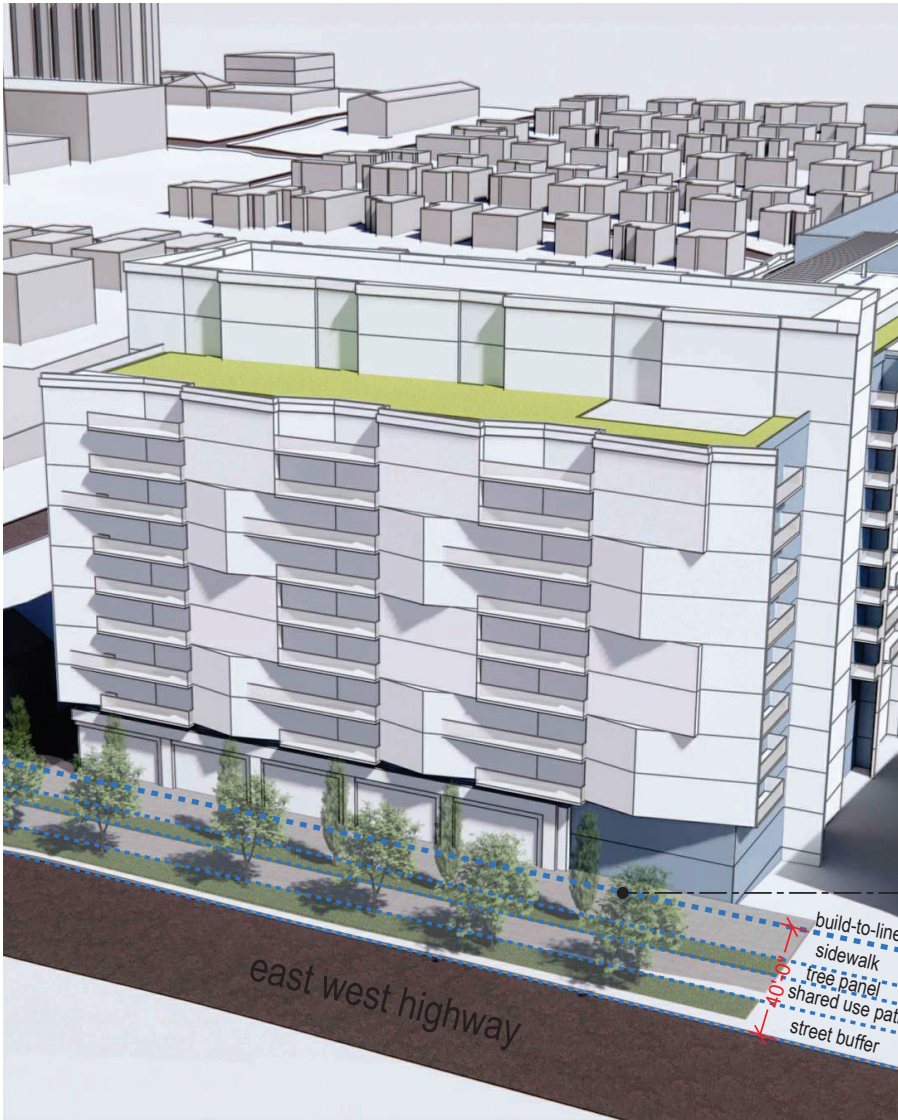


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May 11, 2022

A15



2.4.2 Base: Building Placement

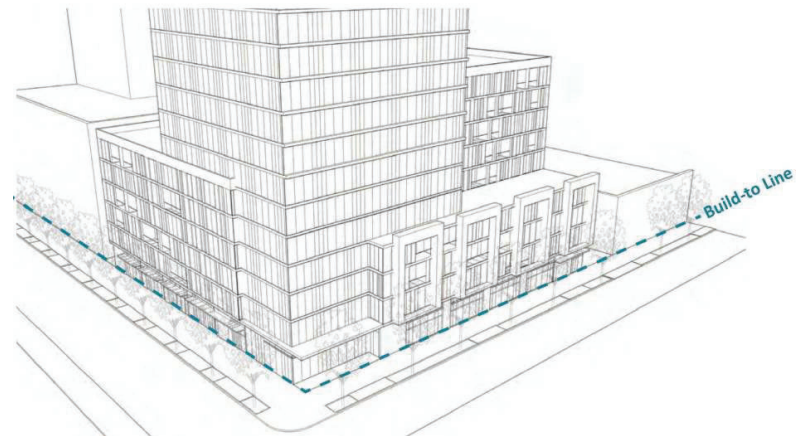
Intent: To create a continuous street wall to frame the sidewalk and create a more comfortable outdoor room for pedestrians to encourage walking throughout the downtown.

Guidelines:

- Place the facade of the building base along the recommended build-to-line to create a continuous street edge.
- Buildings taller than 200 feet that do not step back the upper floors should have a build-to-line of at least 20-30 feet.
- Where existing building lines for adjacent properties are set back more than the recommended build-to-line, buildings may be placed to align with this existing building line as long as it is within 5 feet of the recommended build-to line.
- Exceptions to the building placement guidelines include through-block connections and open spaces recommended in the sector plan, entrances and articulation for architectural interest.



The building base of Eleven 55 Ripley in Silver Spring creates a continuous edge along the sidewalk at a low-rise scale.
Source: Shalom Baranes Associates Architects

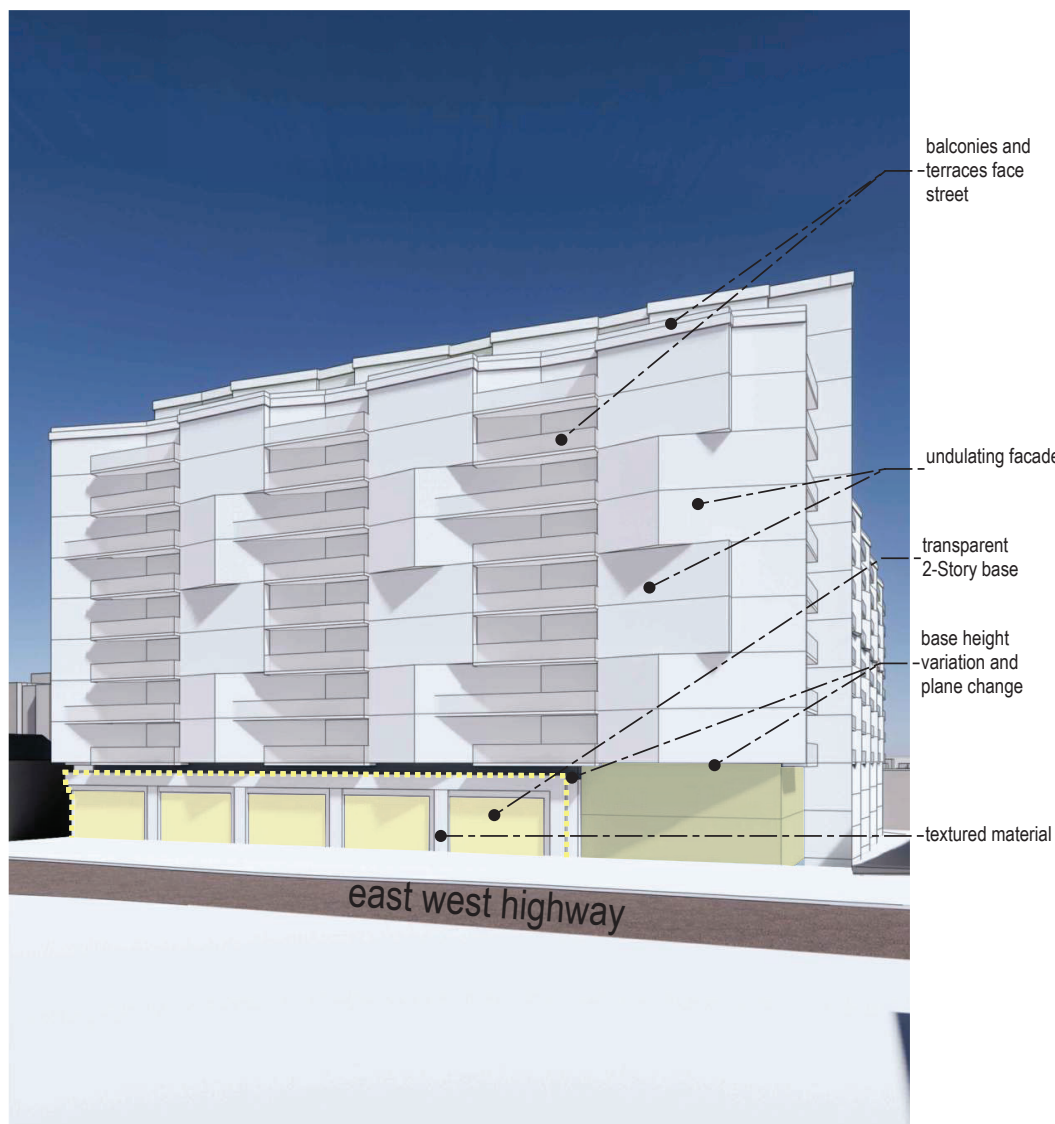


4405 East-West Highway

Bethesda, MD

May 11, 2022

A16

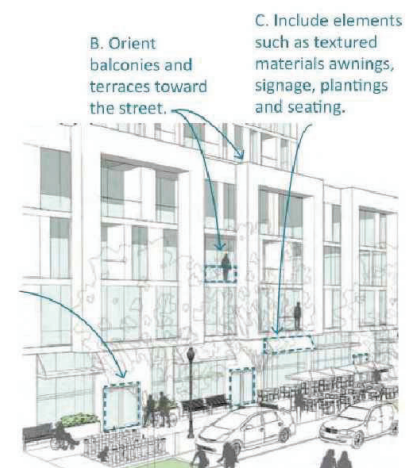


2.4.3 Base: Street Activation

Intent: To encourage pedestrian activity by providing ground-floor and base design elements that engage with the sidewalk environment.

Guidelines:

- Provide frequent entries, transparency and operable walls where possible to encourage visual and physical connections between the ground floor and the public sidewalk. Avoid long blank walls along the sidewalk.
- Orient private balconies and terraces toward the street to encourage an interface between the private and public realms and to create eyes on the street.
- Include elements such as textured materials, awnings, plantings, signage and seating to create a visually engaging and inviting building edge to frame the sidewalk and create stopping points to relax, gather and socialize.
- Place particular focus on active ground floor design along the portions of streets identified as the recommended retail nodes in the *Retail Planning Strategy for the Downtown Bethesda Plan*.

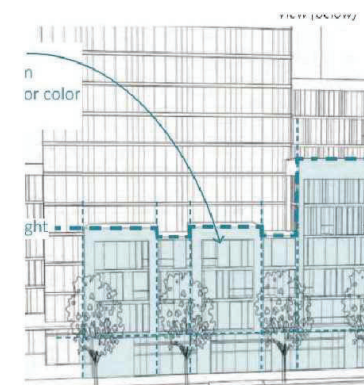


2.4.4 Base: Variation and Articulation

Intent: To ensure that facades are not exceedingly long, uninterrupted and rigidly uniform. These variations break up the mass of large buildings, add visual interest and promote human-scaled lower stories to relate pedestrians.

Guidelines:

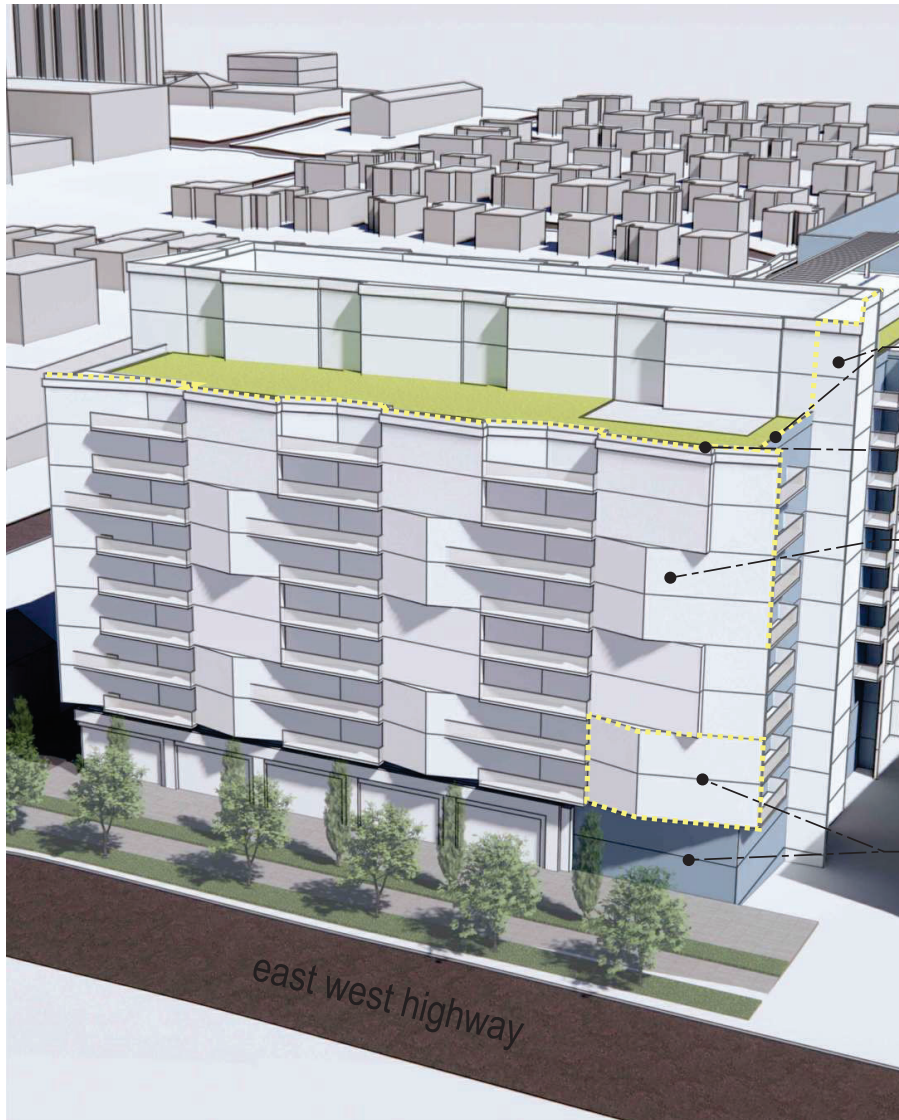
- Vary base height up to the maximum height designated by the street type. This variation should respond to the street character and typical widths, heights and modulation of existing buildings to create a contextually sensitive building wall along the street.
- Provide plane changes in the facade that create significant vertical and horizontal breaks, and shadow lines on the facade.
- Consider variation in building materials or color to add texture to lower floors most visible to those at pedestrian level.
- Avoid cantilevering the majority of the building mass over the Frontage Zone, public sidewalk or public open space to prevent interfering with street trees and blocking access to sunlight and sky views for pedestrians.



4405 East-West Highway | Bethesda, MD

May 11, 2022

A17



2.4.8 Tower: "Menu" of Methods to Reduce Bulk

B. Use Unique Geometry

Varied geometry adds visual interest and helps to reduce the perceived bulk of a building's upper floors. Angled and curved facades allow a building to be viewed dynamically from different vantage points. They can enhance privacy between towers in close proximity by directing views away from nearby windows.

C. Vary Tower Heights

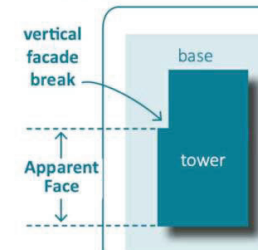
Whether creating a large development with several towers, or an infill development between multiple existing towers, variation in building height can reduce the imposing massing of several large structures built adjacent to each other.

D. Modulate and Articulate Facades

Techniques to break up large facades and reduce perceived building bulk include shifts in massing to allow for upper floor terraces, green roofs and balconies; changes in facade planes; and varied fins, frames and mullions to add depth to glass facades.

F. Limit Apparent Face

The apparent face is the length of a facade plane that is unbroken by vertical changes in depth. Limiting this length reduces the perceived bulk of a long building facade.





penthouse
harmonizes with
rest of building

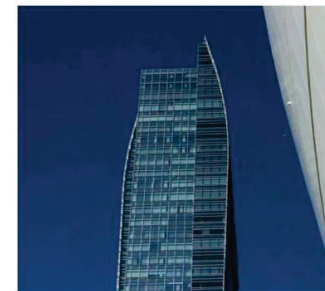
amenity space set
back from roof
line

2.4.9 Top: Tower Top

Intent: The building top or cap contributes to the skyline, adding visual interest and shaping the image of Bethesda from afar. Tower tops should be carefully considered on prominent sites, including those with the tallest building heights, locations adjacent to major public open spaces and those that terminate views.

Guidelines:

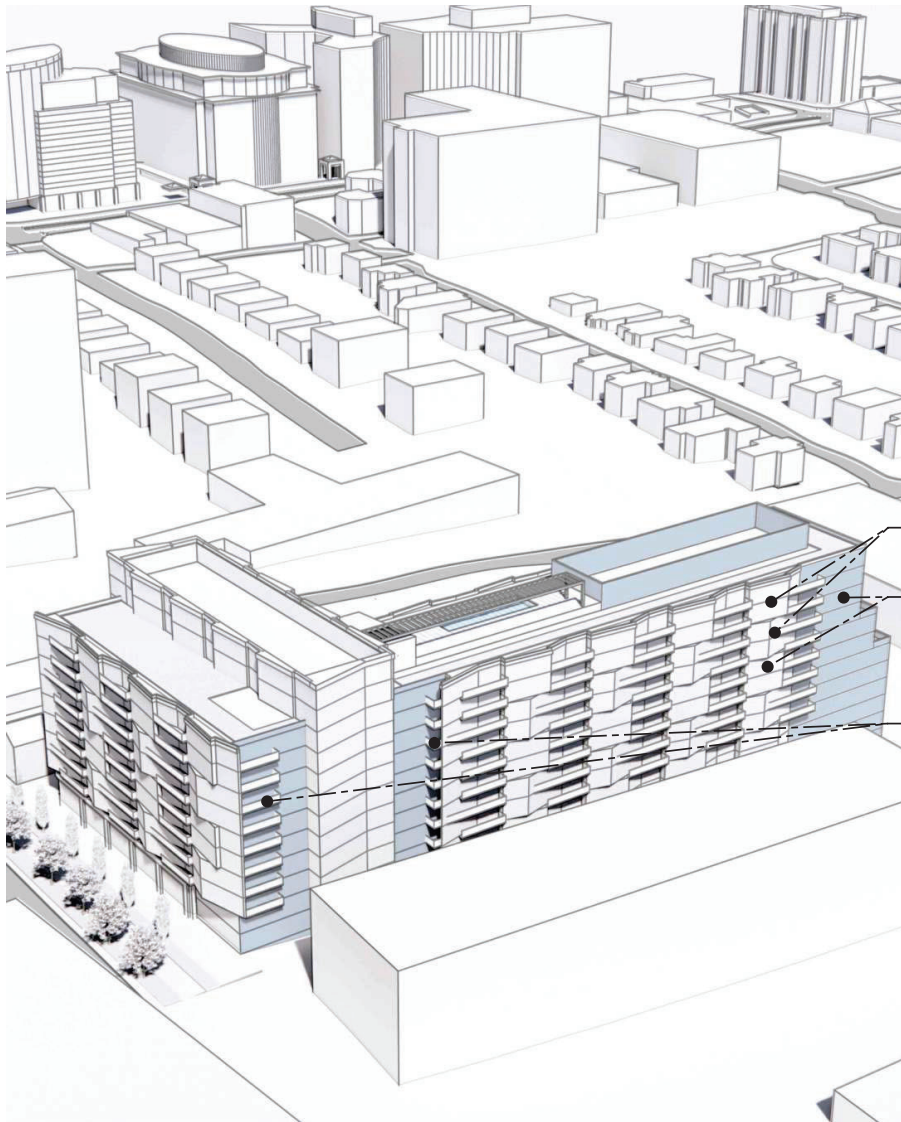
- A. Encourage unique design of tower tops that can enhance the image of Bethesda as an innovative downtown, welcoming new businesses, residents and visitors.
- B. Taper tower tops where possible to reduce the perceived bulk of tall buildings.
- C. Integrate energy efficiency into the design of tower tops, including solar panels and passive heating and cooling elements.
- D. Consider the views of the rooftop composition from adjacent buildings when designing building tops.
- E. Not all tall buildings should have a sculptural top. However, mechanical penthouses and rooftop amenity spaces should in all cases be designed to harmonize with the overall building composition.
- F. Enclosures for rooftop amenity spaces should either contribute to the creation of expressive tops, or otherwise be set back from the roof line and limited to a portion of the roof area so as to not be perceived from surrounding streets and public spaces.



This curved and tapered top adds a unique element to the skyline.



*The form of the tower top for this Pittsburgh office building is part of the energy efficient solar chimney design.
Source: Gensler*



2.4.11 Bird-Safe Design

The windows, doors, and arches of buildings can be deadly obstacles for birds causing hundreds of millions of bird collisions annually. Glass is transparent to birds. Reflections of the sky, vegetation, clouds, water, and branches lure birds into the glass causing mortality and injury.

Intent: To design glass buildings to protect local and migratory birds from deadly strikes. Integrate elements into the building and site design to warn birds before they collide.

Guidelines:

A. Glass Coverage and Glazing

- **Patterns on Glass:** Ceramic dots, or frits, can be screened, printed, applied between layers of insulated glass to reduce transmission of light and prevent bird collisions. These can be applied in different colors and patterns to work effectively.
- **Angled Glass:** Not as effective as other strategies, angled glass at 20-40 degrees has resulted in reduced mortality.
- **Window Surfaces:** New one-way transparent opaque films and window surfaces allow sunlight to pass through windows while reducing reflectivity.

B. Architectural Features

- **Awnings, Louvers and Overhangs:** When designed to eliminate reflections and shadow glass these architectural features have shown to reduce bird collisions.
- **Balconies and Balustrades:** Along with providing outdoor spaces for humans, balconies and balustrades can block window reflection.
- **Opaque and Translucent Glass:** Frosted, colored, opaque, or stained glass have proven to be significantly successful bird deterrents.

C. Facade Treatments

- **Screens:** Screens can be integrated into facade elements without blocking view or light and are highly effective in protecting birds.

- **Grilles:** Horizontal or vertical grilles can be incorporated into the aesthetic and design of windows.
- **Shutters and Shades:** External shutters and shades of various styles and colors enhance a buildings aesthetic while reducing or eliminating reflections.

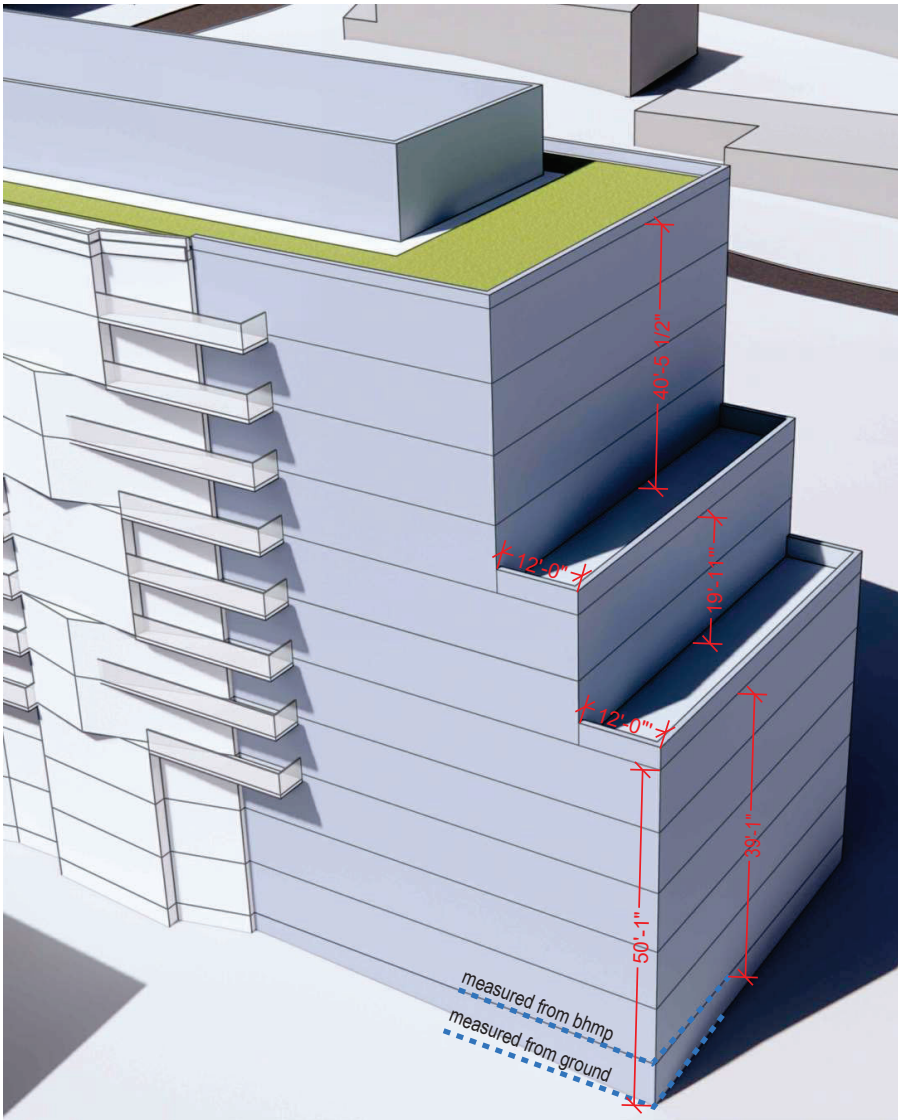
D. Lighting Treatments

Lights disrupt birds' orientation inhibiting them from seeing their navigational markers like the stars and moon. Night lights and up lights (lights pointing upward) can entrap birds reluctant to fly from a lit area into a dark one.

- **Eliminating unnecessary lighting** is one of the easiest ways to reduce bird collisions, with the added advantage of saving energy and expense.
- Choose down-lighting over up-lighting to keep from directing light into the night sky.
- Minimize perimeter and vanity lighting and consider filters or special bulbs to reduce red wavelengths where lighting is necessary.
- As much as possible, lights should be controlled by motion sensors.
- **Lights Out:** Turn lights out visible from the outside during spring and fall migration periods.

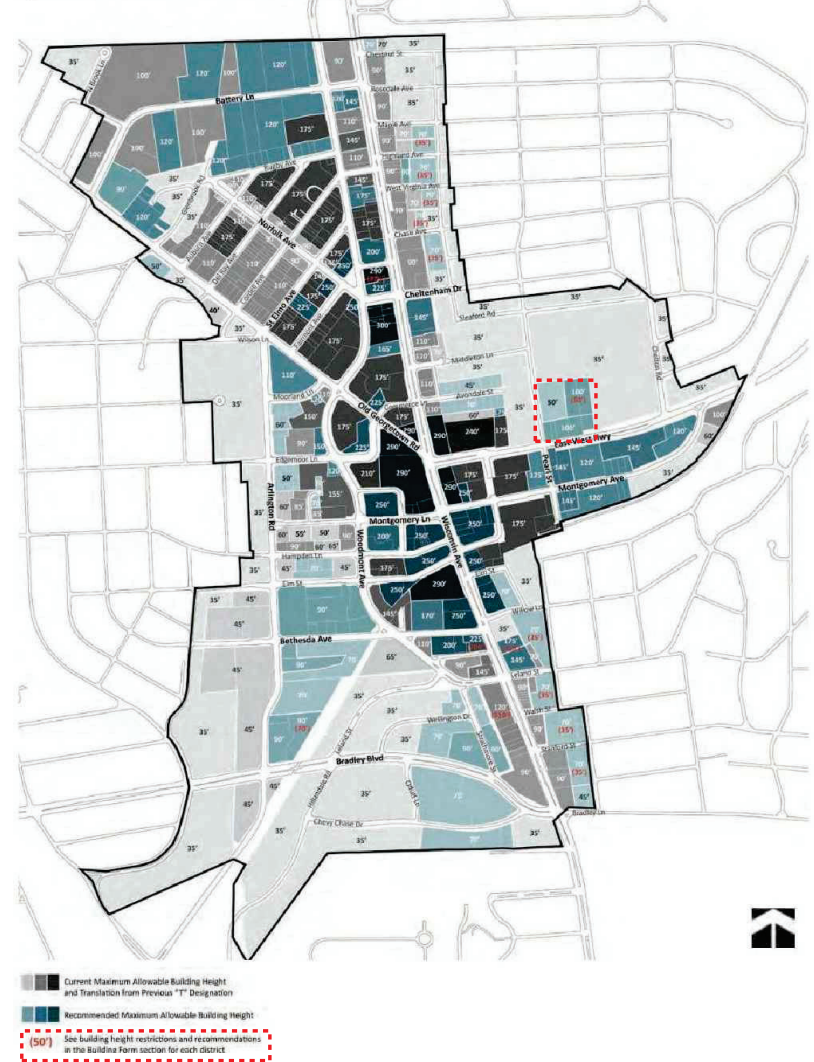
E. Site and Landscape Design

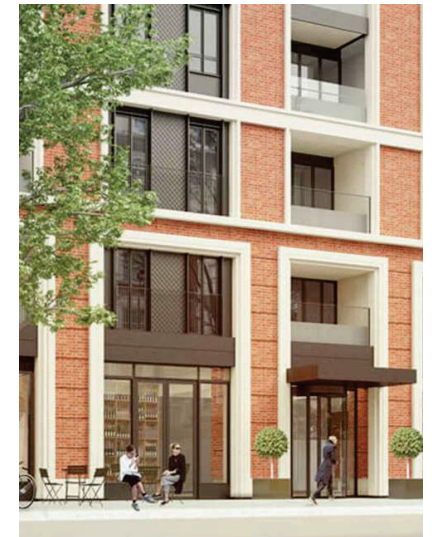
- Obtain USGBC LEED Green Building Rating Points from the category of "Bird Collision Deterrence".
- Glass windows should not reflect nearby or site vegetation, particularly large, mature trees and water. Where this is not feasible, use window treatments outlined above.
- Use soil berms, furniture, landscaping, or architectural features to prevent reflection in glazed building facades.
- Avoid up-lighting rooftop antennas and tall equipment as well as decorative architectural spires.

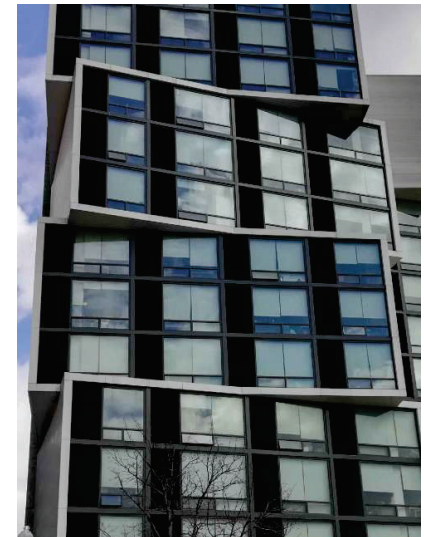
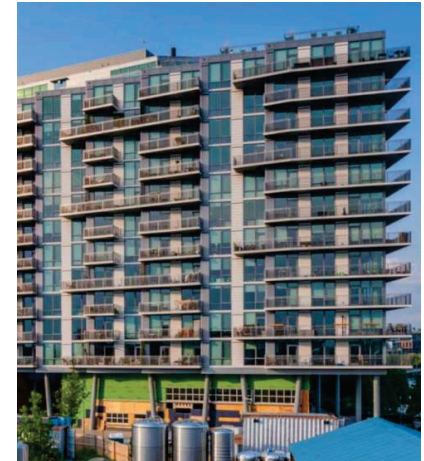
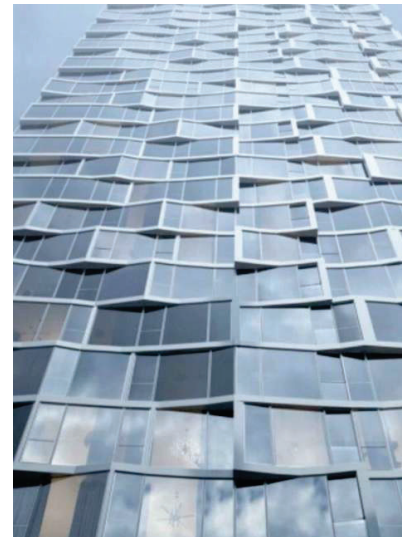
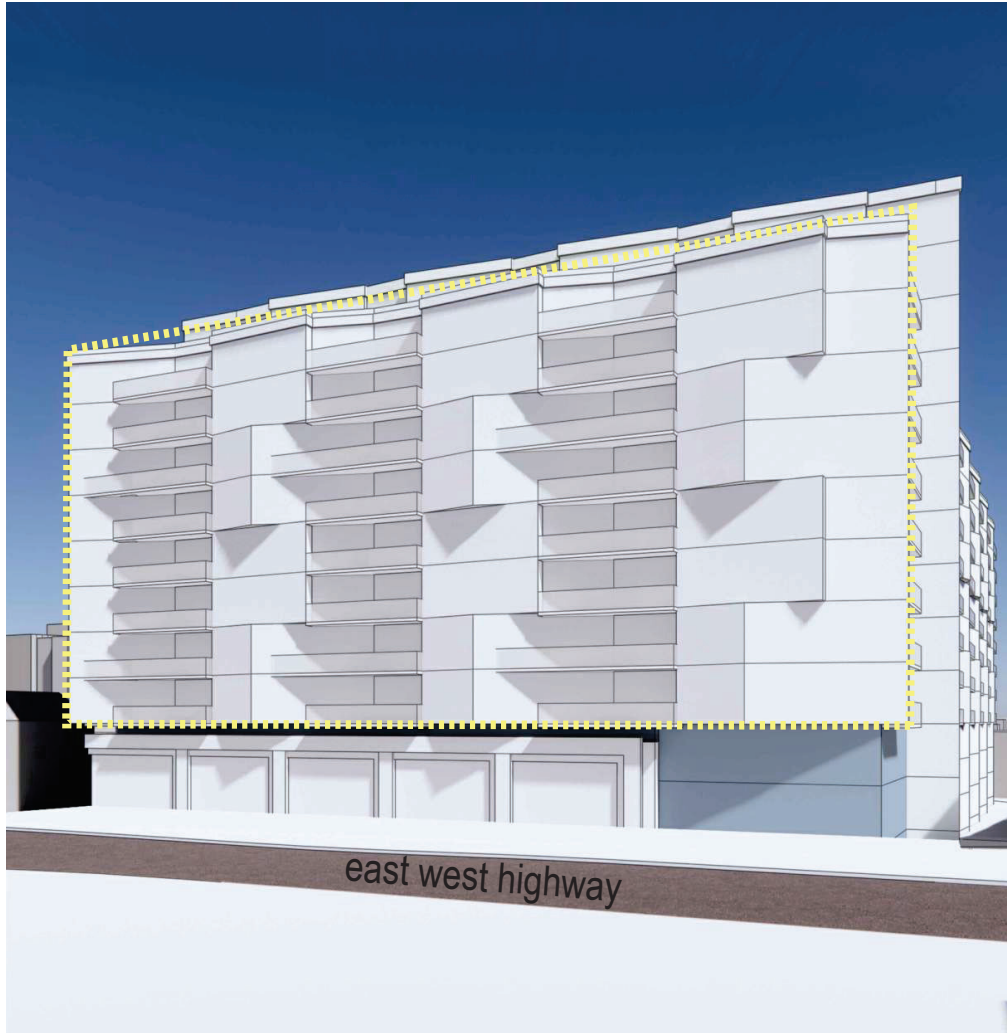


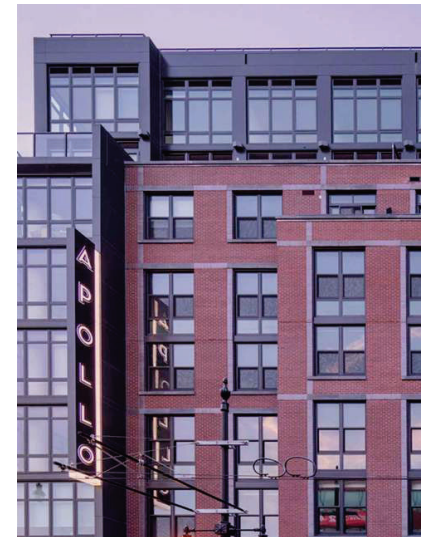
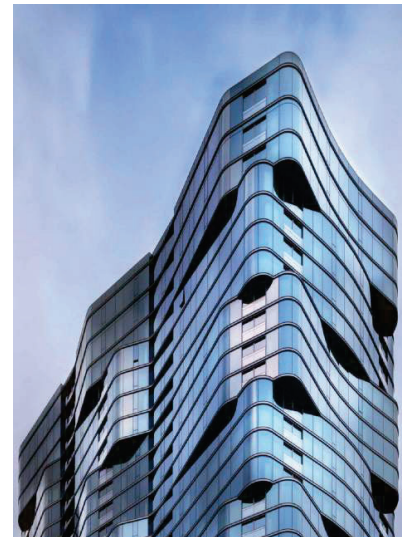
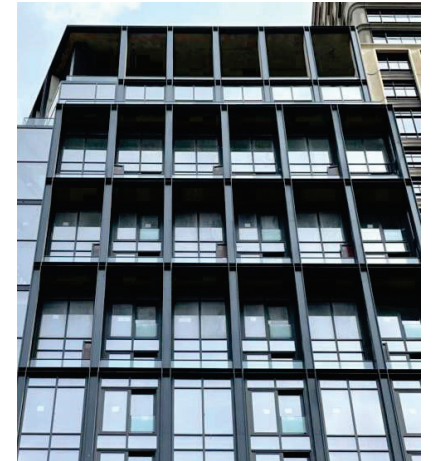
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rear stepdown

Figure 2.19: Recommended Maximum Building Heights





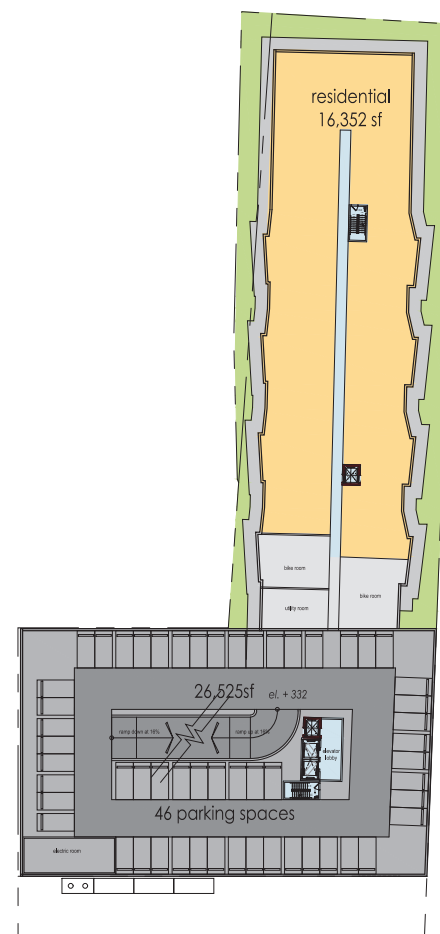


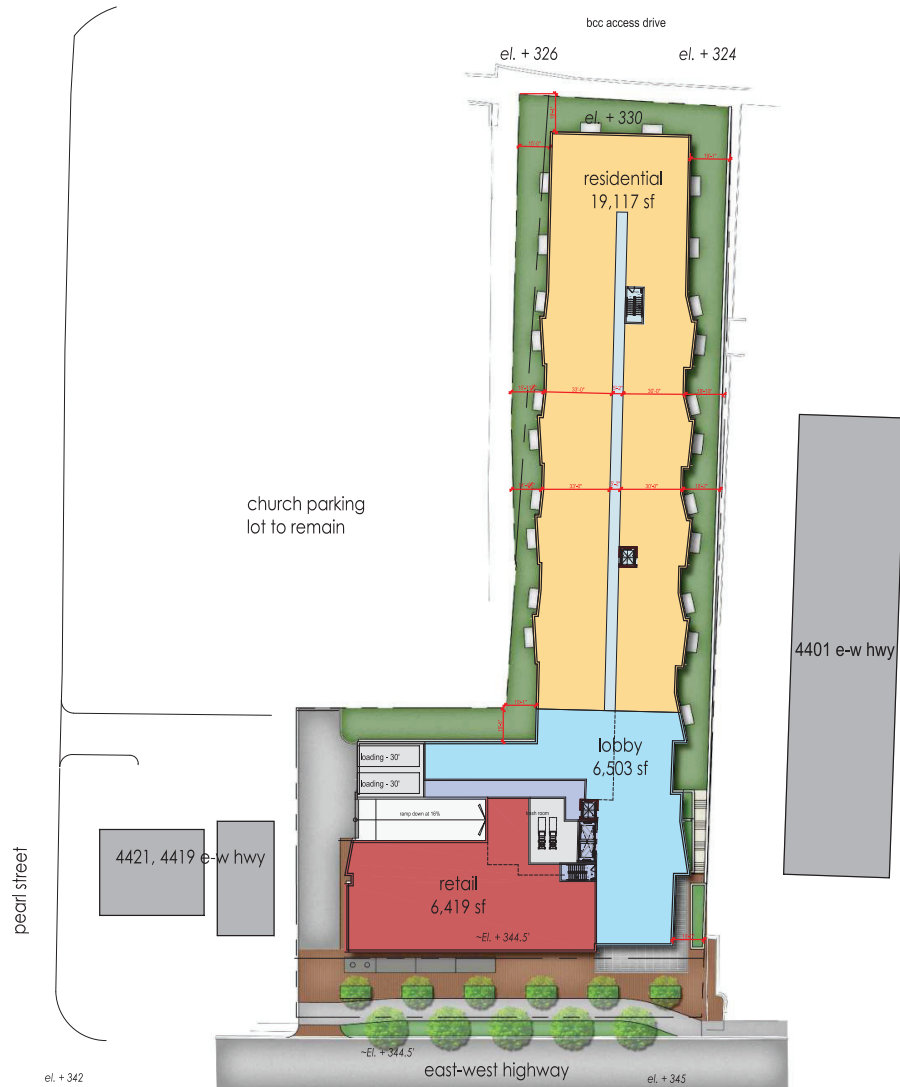


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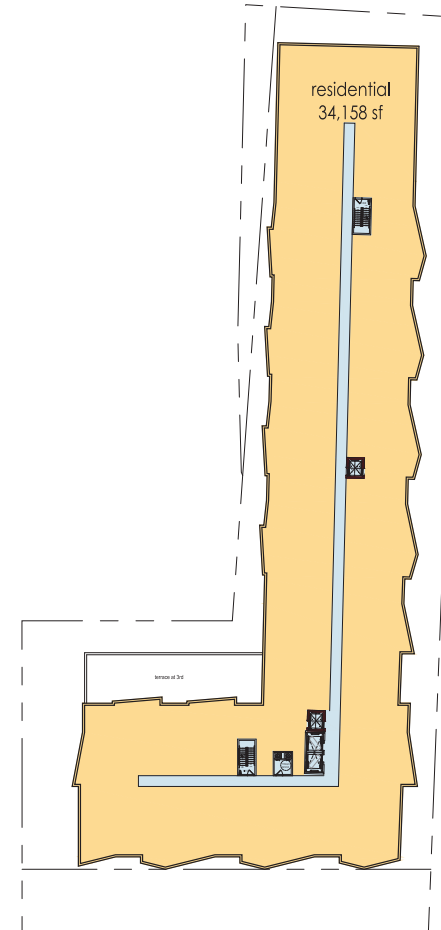
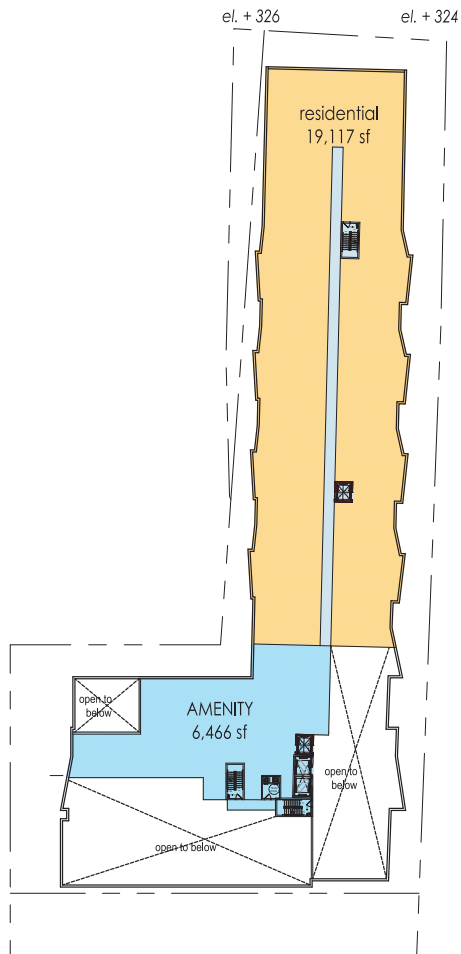
May 11, 2022

A24





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1st floor plan



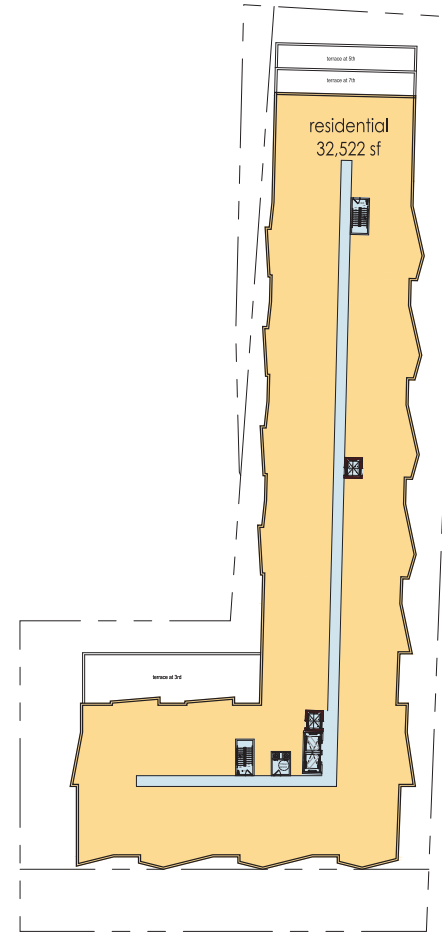
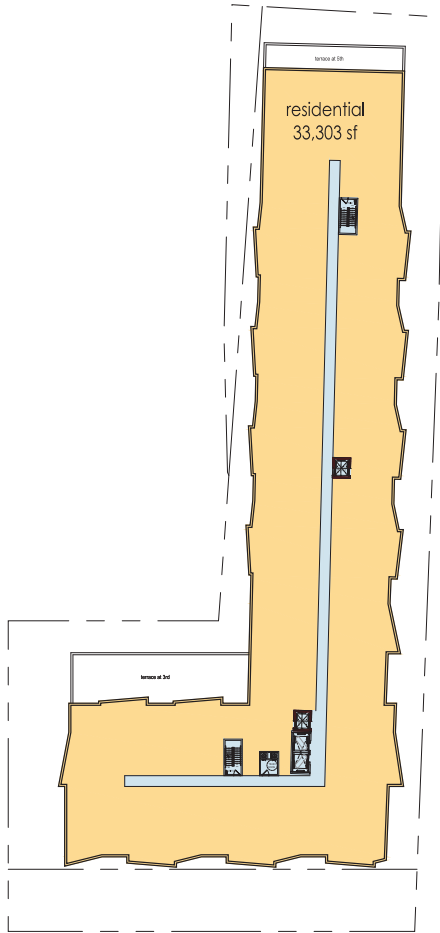
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2nd & 3rd to 4th floor plans

May 11, 2022

A27



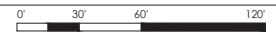


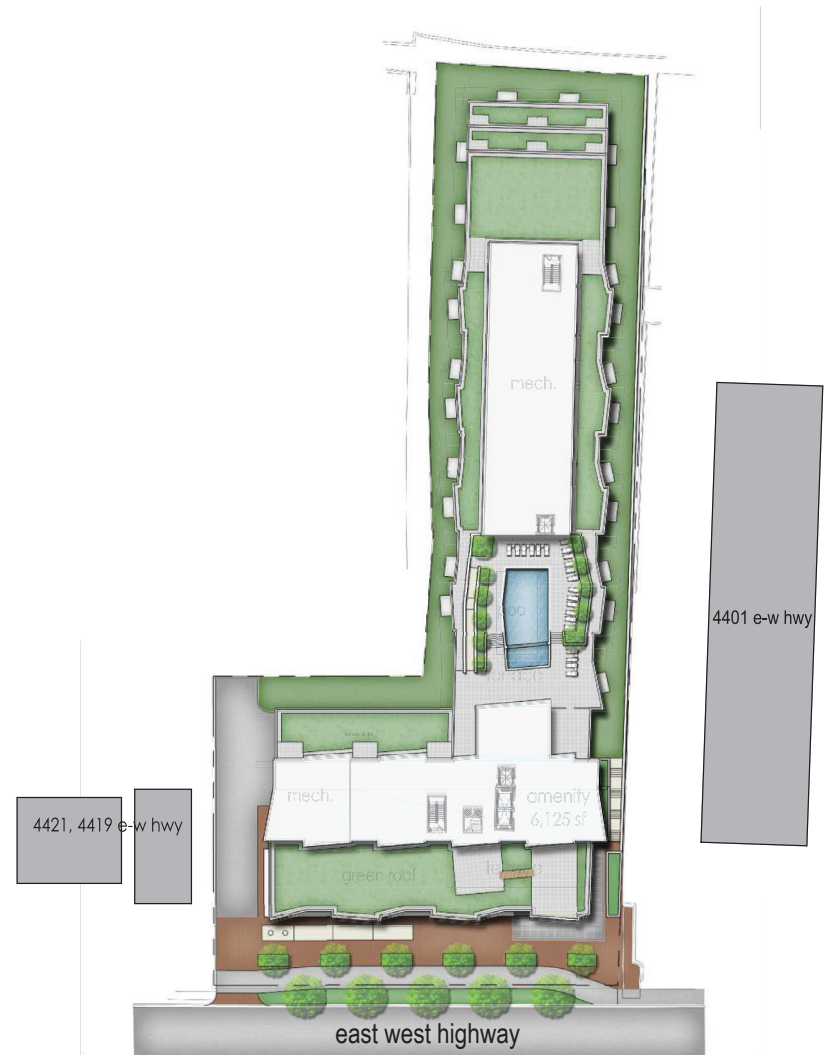
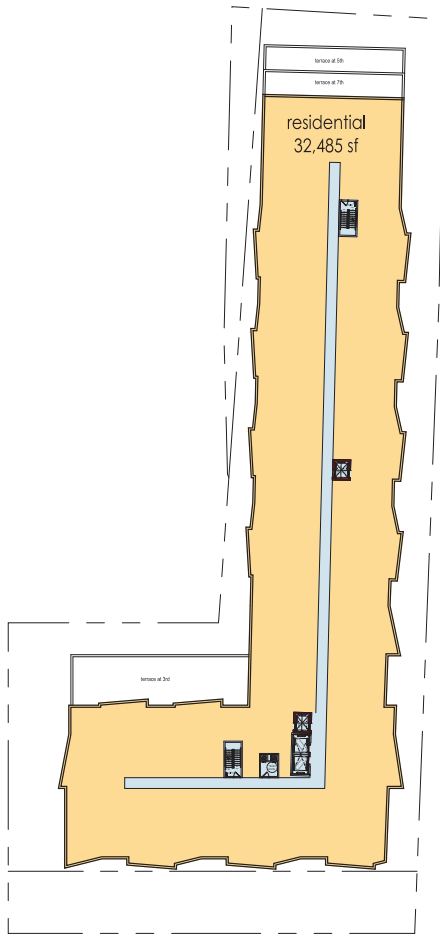
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5th to 6th & 7th to 8th floor plans

May 11, 2022

A28





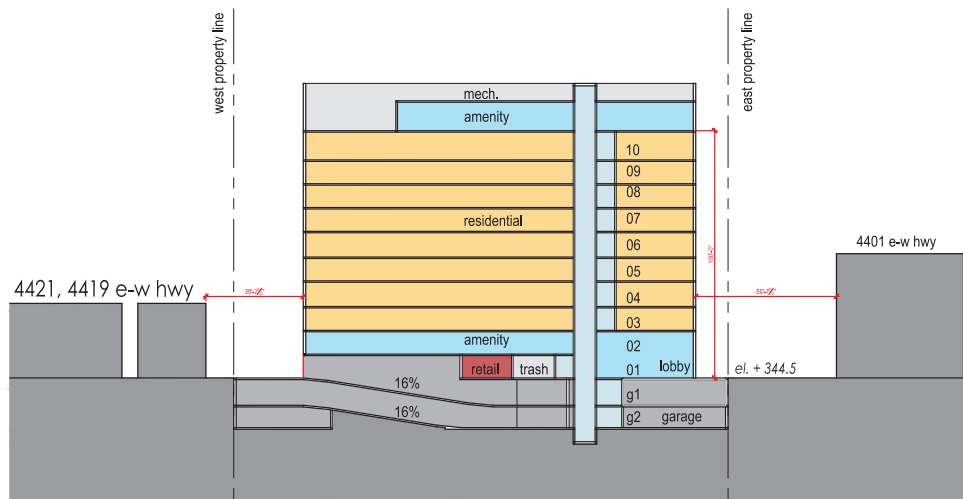
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9th to 10th & penthouse floor plans

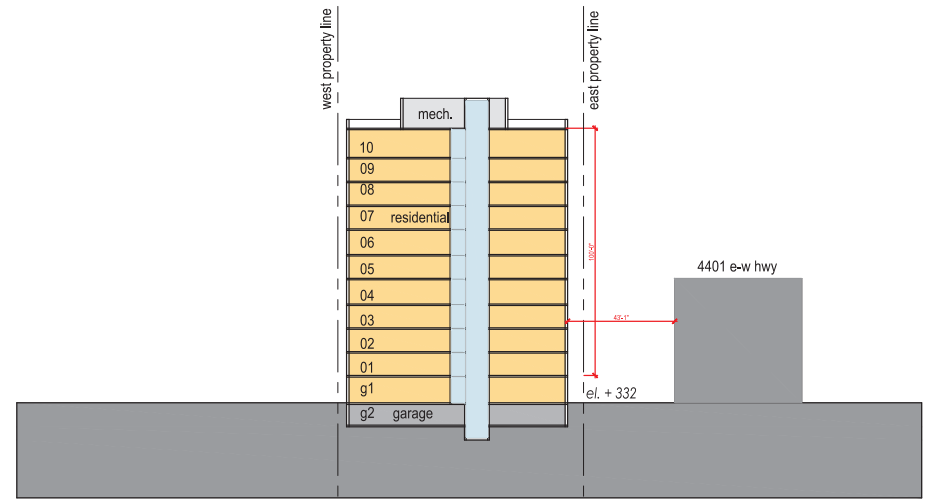
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A29

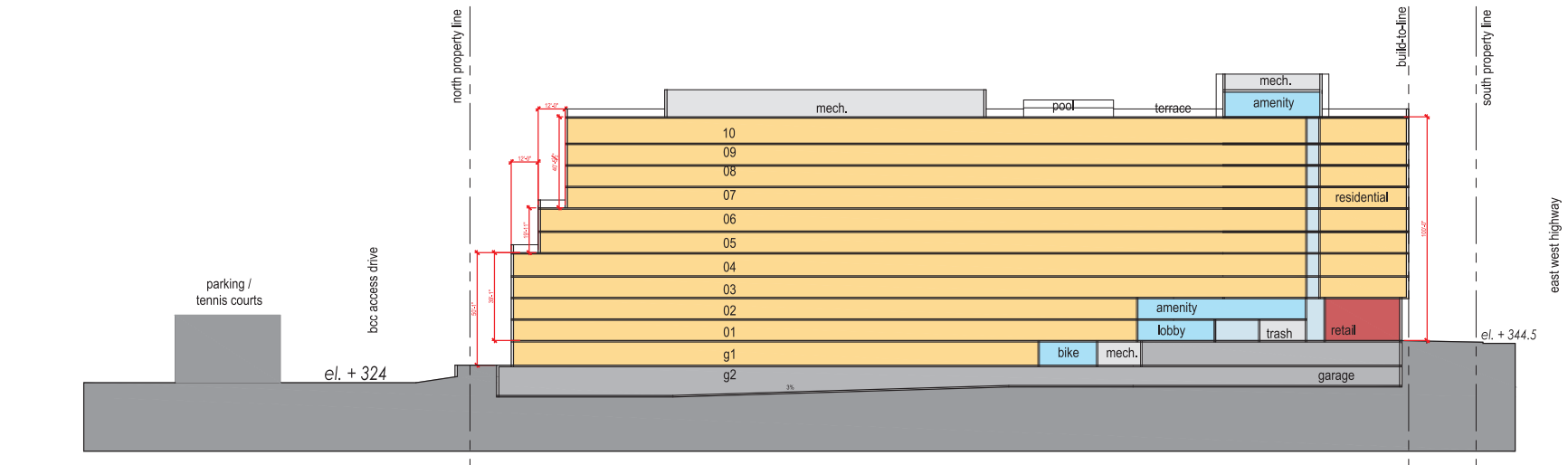
0' 30' 60' 120'



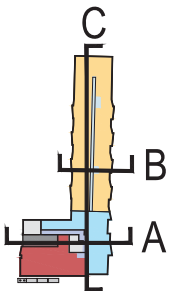
A. e-w section through lobby



B. e-w section residential bar



C. n-s section



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transverse and longitudinal sections

May 11, 2022

A30

