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Barney S. Heath
Director

PUBLIC HEARING III MEMORANDUM

DATE: September 20, 2023

MEETING DATES: September 27, 2023

TO: Zoning Board of Appeals

FROM: Barney Heath, Director of Planning and Development
Jennifer Caira, Deputy Director of Planning and Development
Katie Whewell, Chief Planner for Current Planning
Alyssa Sandoval, Deputy Chief Planner for Current Planning
Cat Kemmett, Senior Planner

COPIED: Mayor Ruthanne Fuller
City Council

In response to questions raised at the Zoning Board of Appeals public hearing on May 24, 2023 and July 24, 2023 the Planning Department is providing the following information for the upcoming continued public hearing/working session. This information is supplemental to staff analysis previously provided at the public hearing.

PETITION #04-23 **528 Boylston Street**

Toll Bros. Inc., requesting a Comprehensive Permit, pursuant to M.G.L. Chapter 40B, to construct a six-story all-residential development with ~~244~~ 198 residential units on 5.82 acres of land located at 528 Boylston Street; 0, 502-504, 516 Boylston Street; 0 Hagan Road; and 24-26, 32-34 Hurley Place in the SR1, SR2 Zoning Districts. The proposal includes ~~61~~ 50 affordable units and ~~385~~ 282 parking stalls.

The Zoning Board of Appeals (Board) opened the public hearing on this petition on May 24, 2023, which was held open for the petitioner to respond to questions and concerns raised in the Planning Department's Memorandum and at the public hearing by the Board as well as by members of the public.

EXECUTIVE SUMMARY

The applicant, Toll Brothers, Inc., is seeking a Comprehensive Permit pursuant to Massachusetts General Laws Chapter 40B, Sections 20 through 23, to develop 528 Boylston Street, currently used as the Sam White and Son's landscape yard, into an all-residential multifamily development. The subject property comprises approximately 253,454 square feet (5.82 acres) on seven lots in the Single Residence 1 (SR-1) and Single Residence 2 (SR-2) zoning districts on the eastbound side of Boylston Street (Route 9) in the Chestnut Hill area of Newton.

Two public hearings have been held for this item, one on May 24 and one on July 24 of 2023, and the applicant has revised the original plan submitted based on feedback provided at those meetings. The building design now consists of a six-story building in an "H" shape facing out on Boylston Street. 198 units are proposed, (38 one-bedroom units, 100 two-bedroom units, and 60 three-bedroom units) with fifty (50) of the units (25%) designated as deed-restricted to remain permanently affordable. There are roughly 282 parking stalls proposed, with several in a surface lot and the majority in a subterranean garage.

Since the previous meeting held on this item, the applicant has submitted several new or revised materials which include the following:

- Updated architectural and civil plans
- Additional renderings of building and landscaping
- Revised landscape plans
- Traffic Impact Assessment Memorandum (TIAS) prepared by MDM Transportation Consultants Inc.
- Photometric plans
- Revised drainage report
- Transportation demand management plan
- Fire truck turnaround plan

Reflected in this memo are comments from NBBJ and Beta, the City's design and transportation on-call consultants who have been engaged by the City to review and analyze relevant aspects of the proposed development. The project materials submitted for review can be found on the City's website here. The Planning Department expects to receive a report on stormwater and site design from Horsley Witten to be discussed at a subsequent meeting.

I. ANALYSIS

A. Design Peer Review

The City's design peer reviewer for this application, NBBJ, submitted a memorandum on September 15, 2023 **(Attachment A).** The following is a summary of the key points highlighted in NBBJ's analysis.

Building footprint and scale

Height and bulk: NBBJ noted that at 420 feet long and 270 feet deep, the building is larger than most residential projects in the city. They recommend stepping back the top level of the building or changing the profile of the roofline to transition down more fluidly to abutting residences.

Roof gables: Though the design of the gabled roofs would serve to screen mechanics on the rooftop and minimize their noise impact, the peer reviewer had concerns about the additional height from the peaked roofs in the design. The ridges cast a longer shadow than the flat roof design would, which could have a negative impact on Boylston Street.

Boylston Street: The applicant is encouraged to utilize the front setback to improve the pedestrian experience. NBBJ recommends a wide planted buffer to create a physical separation between the sidewalk and traffic on Boylston Street.

Open space

Multiuse path: The peer reviewer recommends additional amenities to the proposed multi-use path that will connect Boylston Street to Hagen Road such as seating, pedestrian scaled lighting, and signage. They requested further details about design including planned materials for paving and details about the retaining wall.

Conservation: NBBJ encourages the applicant to preserve additional trees on the site, noting several specific specimens to consider keeping. They also recommend enhancing Paul Brook through the removal of invasive species. Planning Staff will confer with staff in the Conservation office to explore opportunities around these recommendations.

Utilities

Lighting: To better understand the lighting plan for the site, a more user-friendly photometric plan is requested, as well as detailed specifications for the proposed fixtures on the site.

Access points

Bike room: The revised design included a relocation of the bike room to the west side of the building. NBBJ noted that this shift has the negative consequence of requiring bicyclists to cross the service drive and the garage to access the elevator. They recommend relocating this room to the southwest corner, which has more ready elevator access and minimizes the risk of conflict with cars in the garage.

Loading areas: Details about the planned operations for the loading area are requested to better understand the impact and use of these loading areas. Details including where deliveries will be made, what mitigation will be provided for abutters, and truck turning studies are requested.

Parking: The site has a proposed parking ratio that is higher than the overall parking demand observed regionally and in Newton in projects of similar size. NBBJ recommends the applicant consider reducing the amount of parking proposed for the site.

B. Transportation Peer Review

The City's transportation peer reviewer for this application, Beta, submitted a memorandum on September 14, 2023 **(Attachment B).** The following is a summary of the key points highlighted in Beta's analysis.

Traffic operations

Driveways: In their analysis of site access and circulation, Beta noted some concerns about the two proposed driveways. They are located close together, creating potential conflicts with weaving and merging with traffic on Boylston Street. They suggest a weave and merge capacity analysis to ensure the driveways can be operated safely as proposed. Alternatively, they suggest consolidating back to one main point of access and egress or reconfiguring the driveways to be one-way right turn only (with the west driveway as the entrance and east as the exit.)

Wayfinding: Signage should be provided to guide visitors and deliveries to the correct driveway**.**

Traffic volume: Based on existing and projected queue lengths and traffic volume, the peer reviewer believes this project will not have a significant impact

on queue lengths. They do however recommend traffic signal phasing and timing optimization at the intersection of Parker Street at the eastbound ramp of Boylston Street.

Bikes and pedestrians: Several schools are in the vicinity, and the impact of traffic on children biking and walking to school should be examined. The applicant should also clarify how bicyclists will access and egress the site from Boylston Street, and whether they plan to construct a separated bicycle lane right turn from the Parker Street eastbound on-ramp on Boylston Street as shown in the TIAS memo.

Sidewalks: The applicant should clarify the extent and design of the proposed sidewalk curbing and drainage on Boylston Street, and they are encouraged to find ways to improve the pedestrian experience and create a buffer between the sidewalk and traffic. This was also noted in the design peer review.

Off-site improvements: The applicant should work with the City and the state to optimize traffic signal timing for Parker Street, improve drainage near the Parker Street eastbound on-ramp to Boylston Street, and extend the Parker Street on-ramp island using scored concrete and delineators.

Parking

Amount of parking provided: Beta questioned whether the data used in the applicant's traffic analysis is appropriate given the limited connection of the site to public transit options and pedestrian and bicycle infrastructure. It is possible residents and visitors to the site will utilize cars more than other similar properties in the city that have better connectivity to other modes of transportation.

Transportation Demand Management: The applicant has proposed several measures to minimize the traffic impact of the project including unbundled parking, electric vehicle parking, and secure bicycle parking. Beta believes the proposed measures are reasonable. They suggest further extending the proposed public transit subsidy beyond the current proposal, which is limited to two months of coverage to new tenants in the building for the first three years operation. Extending these financial incentives will encourage mode share adjustment and alternatives to driving. Staff will continue to review the applicant's TDM plan offer recommendations comparable to similar projects within the City.

Visitor parking: The applicant should clarify whether there will be flexibility to allow shared parking between the resident and visitor parking spaces.

II. Next Steps

The City's peer reviewer for sustainability and site design, Horsley Witten, will provide an analysis of the project discussing drainage and stormwater at a future meeting. Once the materials requested above are provided, NBBJ and Beta will provide further analysis of the urban design and transportation considerations for the project. The Planning Department will continue to review the proposal and provide updated and expanded memoranda in advance of future ZBA hearings.

ATTACHMENTS

Attachment A: NBBJ review

Attachment B: Beta review

Attachment A

nbbj

www.nbbj.com

September 15, 2023

Ms. Katie Whewell
Chief Planner for Current Planning
1000 Commonwealth Ave.
Newton, MA 02459

Subject: 528 Boylston Street 40B Design Review (Memo #2)

Dear Ms. Whewell,

NBBJ is pleased to submit the following memo on the design review for Toll Brothers, Inc. at 528 Boylston Street in Newton, MA. NBBJ was engaged to provide peer design review and signed a work order in May of 2023. The following design review comments are based on a review of materials supplied by the City of Newton along with site visits, historical research, zoning analysis, and a review of recent local planning documents. On June 15, 2023, our team provided an informal review of the initial submission (dated April 26, 2023) and supplemental material presented during a virtual meeting with the applicant on June 7, 2023. On July 14, 2023, we submitted a design review memo to your office and then made a presentation to the Board of Appeals on July 24, 2023.

The following analysis is based on the revised submission dated August 21, 2023, and a detailed series of 3d model views that we received on September 5, 2023. Additionally, we participated in a virtual meeting with the applicant on September 7, 2023.

Project understanding

The 5.82-acre project site is between the Newton Highlands and Thompsonville neighborhoods along Boylston Street (Route 9). It is proximate to the Chestnut Hill shopping area to the east, Newton South High School to the southeast, and abutting single-family homes. Current uses on the site include a landscape yard and two residential buildings. The site is heavily wooded and includes significant topography ranging from 118′ at the western edge rising to 190′ to the east. Paul Book travels along the western

edge of the property, presenting a potential resource for the project and the surrounding neighborhood.

The applicant proposes to demolish the existing structures on the property and construct a six-story building with 198 residential units with 273 parking spaces and 65.3% open space. Most of the parking will be in a partially below-grade garage that includes residential uses lining the edges that abut surrounding residential properties. The building includes an "H" shape with three courtyards – two facing Boylston Street (Route 9) to the north and one facing south.

The building is located along Boylston Street (Route 9) with a setback of approximately 30' (based on latest site plan) from the property line. It is bordered by conservation land to the west, steep topography to the east and low-scale single-family properties to the south. The project includes a service drive and parking entry on the west side of the building and a separate vehicular and pedestrian entry in the middle of the building facing Boylston Street that includes a total of 6-8 surface parking spaces.

Urban Design Considerations

Current residential single-family zoning on the site does not provide guidance on massing or density and the surrounding area does not have a small area plan or other planning studies that outline urban design considerations. Despite the lack of regulatory guidance, NBBJ has identified the following design considerations for our site review that build upon public and City input received during the review process:

Respect and protect adjacent residential neighborhood: Keep buildings as far as possible from abutting neighbors and reduce heights near residential neighborhoods. While the project may not conform to height restrictions of the surrounding zoning, setbacks and max site coverages should be respected.

Enhance environmental conditions: The location along Paul Brook is an opportunity to enhance environmental conditions and provide more public access to the brook. The Brook is currently constrained within a concrete channel that could be removed to provide better conditions for wildlife and enhanced flood storage to protect downstream neighborhoods.

Provide connectivity: The site lies between Hagen Road and Route 9 which currently has no public access. Allowing the public through the site may provide convenience for Newton residents to travel to the nearby Newton South High School or to nearby crossings of Route 9 on Parker Street.

Improve pedestrian accommodations on Route 9: The current pedestrian accommodations on Route 9 are neither pleasant nor accessible for persons with disabilities. At a minimum, the site plan should improve those conditions along the site

frontage, but additionally off-site improvement would be desirable to connect to any nearby transit locations.

Recommendations:

Building Footprint Size

The proposed building is 420' long and 270' deep. Although this building footprint is significantly larger than abutting residential single-family buildings, it is consistent with other recently approved 40B developments in Newton, including the Dunstan East project in West Newton and the 40B project at 15 Riverview Avenue along the Charles River.

Building Massing and Scale

The applicant has reduced the size of the building from 244 units to 198 Units in the latest submission. This has allowed the applicant to include a range of building heights between 4 and 6 stories, including terracing at the west side and south side of the building adjacent to single family residential properties. The revised plan also includes an additional courtyard facing Boylston Street that helps break up the scale of the building, giving the impression that there are multiple buildings rather than one large building. While these adjustments have made considerable progress, the building still has an imposing façade along Boylston Street that may set a precedent for future development along Boylston Street.

To further mitigate the scale and bulk of the building, we recommend the following:

1. A maximum façade elevation along Boylston that does not exceed the maximum Village Center 3 (VC-3) height of 4.5 stories. This could be accomplished by stepping back the top level of the building or changing the profile of the roofline, particularly for the wings that extend closer to the street. [see pages 9-14 in attached document]
2. Consider stepping down the Boylston Street massing further as it steps down the hill on the east side, perhaps down to a 3-story elevation. This could help transition the height of the building to better relate to abutting single family houses on Olde Field Road. [see pages 9-10 in attached document]
3. Reconsider the design of the gable roof parapet elements. While we understand that these are intended to screen rooftop condensing units, we have concerns about the added bulk (additional 10' of height) and shadow implications along Boylston Street. [see pages 22-30 in attached document]
4. Consider using natural materials such as stone for the lower level of the building. This could help blend the building into the natural environment while reducing the apparent

size and bulk of the building.

Boylston Streetscape

The first plan revision pushed the building further away from Boylston Street, creating opportunities for additional buffering and transitions in massing. The latest revision has now been expanded to include a 30' front yard setback that complies with the required setback in the SR2 zone. While we are encouraged by the expanded front yard setback, we still have concerns about the design of the streetscape along Boylston Street. The latest plans continue to locate the public sidewalk right along the edge of Boylston Street with no buffer or curbside landscaping to protect pedestrians. We continue to encourage the applicant to fully take advantage of the 30' front setback by giving more consideration to the safety and comfort of pedestrians by incorporating a wide planted buffer that physically separates the sidewalk from fast-moving traffic along Boylston Street. Trees could be planted within this buffer (on state and/or private property) to provide shade and physical protection for pedestrians. If a guard rail must be included as part of the streetscape design, we recommend that the applicant explore design alternatives that blend in with the surroundings (ex: Corten model with weathered steel that rusts to a natural, more subdued finish compared to galvanized steel more commonly used). Stone walls and landscape berms could also be included to offer buffering and to blend in with the natural environment. Moving a narrower sidewalk (5'-7') back from the street with a planted buffer would be preferable to building an overly wide sidewalk (10') along Boylston Street, which creates more impervious surfaces and more runoff. [see pages 6-8 in attached document]

Open Space

The project includes two courtyards along Boylston Street, one south-facing elevated courtyard, a small pocket park at the northwestern corner of the property, and conservation land along the western edge of the site adjacent to Paul Brook. The applicant has been responsive to some of our initial recommendations, including the replacement of a dog park on Boylston Street with a new rain garden and conservation area. To further improve the quality of open space, we recommend the following:

1. We are pleased that the applicant has now included a wide multi-use path along the conservation land near Paul Brook that provides an important connection between Boylston Street and Hagen Road. However, we recommend that the applicant reconsider the use of a guard rail along the edge of the trail. A low stone wall, for example, could provide a safe barrier while blending in with the natural environment. Additional amenities such as seating, pedestrian scaled lighting, and gateway / interpretive signage could also be included to improve the experience for bicyclists and

pedestrians. [see page 17 in attached document]

2. Enhance Paul Brook and the existing conservation land by removing invasive species and providing greater accessibility for all ages and abilities.
3. Explore opportunities to preserve additional large trees on the site, particularly those that have a caliper of 24" or greater. For example, there is an existing 24" ash tree within one of the proposed courts on Boylston Street that is designated for removal. Could this become a signature landscape element? [see page 18 in attached document]
4. Consider the existing pattern of tree species within the existing landscape. The existing site predominately includes Ash, Red Oak, White Oak, and Hickory trees with some Eastern Pine trees along the eastern side of the site, but the proposed planting plan includes a much different mix of trees.
5. Provide additional information on the design of the proposed open spaces, including retaining wall details, paving materials, and lighting specifications.
6. The project proposes significant excavation of rock outcrops on the east side of the site. Can some of the remaining areas of outcrops be preserved and/ or featured in the landscape design?

Promote Low Impact Development

While not specifically the responsibility of the proponent, we recommend a concurrent study of how Paul Brook and the adjacent protected floodway could be improved to reduce downstream flood impacts. Given the increase in precipitation anticipated with climate change, could this site enhance downstream protection with selective removal of invasive species, removal of channels to slow flows and increase storm storage within the 100 year flood zone?

Site Lighting and Overhead Utilities

We would like additional information on the proposed site lighting strategy, including a revised photometric study that is more legible and user-friendly. We would also like the applicant to provide detailed specifications for all proposed fixtures. Additionally, during our call with the client on September 7, we learned that all the existing overhead utility poles may need to be relocated to accommodate the expansion of the existing shoulder on Boylston Street. We recommend that the applicant investigate the potential to bury the utilities along the property frontage, including any potential coordination with the City of Newton.

Bike Room

We are pleased to see the relocation of the bike room to the west side of the building, as this will provide more convenience for most riders who will be arriving from the west or conversely from the south on Hagen Road. However, the proposed entrance to the bike room requires bicyclists to cross the proposed service drive and to travel through the garage to reach the elevator. We strongly recommend that the entrance and bike room be shifted further south near the other public entrance at the southwest corner of the building. This access point will offer more convenient access that will avoid any potential vehicular conflicts and provide direct access to an elevator. [see pages 15-16 in attached document]

Location and Design of Loading Area

The revised design submission proposes two building curb cuts. The western curb cut is for resident garage access, trash and, presumably some types of delivery. The loading dock and trash removal for the project is located at the back of the building adjacent to the parking garage entrance, minimizing the impact on Boylston Street. We request that the applicant provide a truck turning study along with additional information that highlights how noise and lighting associated with the loading area will be mitigated to protect abutting single-family homes. Will all deliveries be made at the rear of the building? What size moving trucks are anticipated and will there be limitations on truck operations?

The second curb cut is proposed east and is intended for drop-off with an additional access to the garage and guest parking. Is this location also intended for use by Amazon/UPS type deliveries? We request the applicant provide a truck turning study to determine that delivery vehicles can operate within the current layout without backing into Boylston Street.

Parking

The site plan includes a parking ratio of 1.38 (274 spaces for 198 units). With local bus accessible on Parker Street (.2 miles) and the nearby Newton Centre green line station (1 mile), we recommend that the applicant consider further reductions to the parking supply to encourage the use of alternative transportation. (Note: based on a study conducted by MAPC in 2019, the overall parking demand is closer to 1.2 per unit.)

Additional Information

Below is a summary of additional information needed for design review:

- Additional Street level rendering along Boylston Street that illustrates both the proposed streetscape and how the building relates to the ground plane.
- Ground level rendering of conservation land on west side showing public access path and improvements to wetland area, and specific amenities including seating and signage.
- Architectural rendering of rear elevations
- Explore massing studies that mitigate shadow impacts on the surrounding properties, including those along Boylston Street
- Revised photometric plan
- Lighting fixture specifications
- Landscape details (including section along Boylston Street and design of retaining wall along wetland)
- Truck turning study for loading vehicles (trash, deliveries, and moving trucks).

We truly appreciate the opportunity to offer design review service to the City of Newton.

Sincerely

Alan Mountjoy, Principal, NBBJ

Attachment A

528 BOYLSTON STREET
URBAN DESIGN PEER REVIEW

Newton Zoning Board of Appeals
September 27, 2023

nbbj

Urban Design Considerations

- **Respect and protect adjacent residential neighborhood**: Keep buildings as far as possible from abutting neighbors and reduce heights near residential neighborhoods. While the project may not conform to height restrictions, setbacks and max site coverages should be respected.

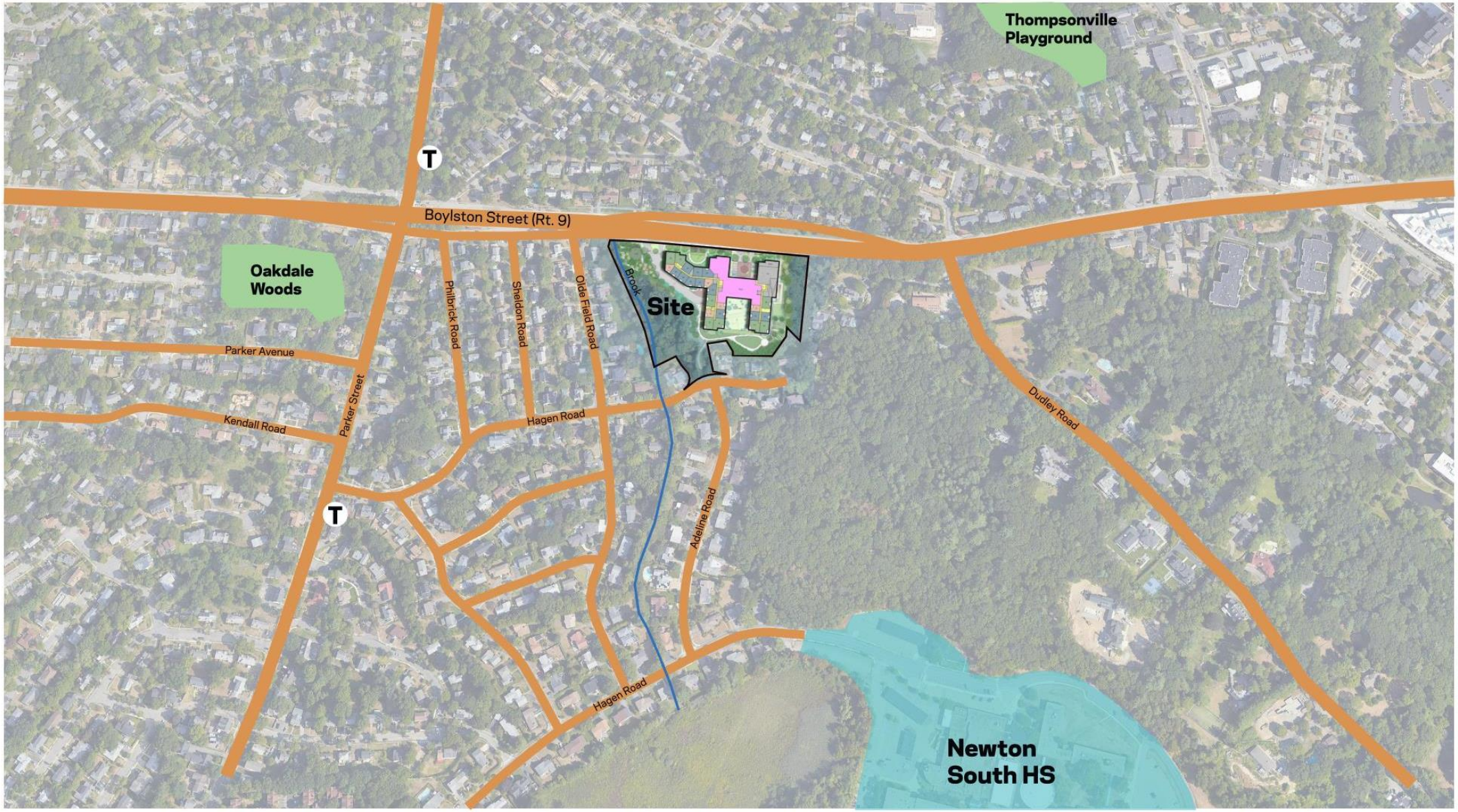
- **Enhance environmental conditions:** The location along Paul Brook is an opportunity to enhance environmental conditions and provide more public access to the brook. The Brook is currently constrained within a concrete channel that could be removed to provide better conditions for wildlife.

- **Provide connectivity**: The site lies between Hagen Road and Route 9 which currently has no public access. Allowing the public through the site may provide convenience for Newton residents to travel to the nearby Newton South High School or to nearby crossings of Route 9 on Parker Street.

- **Improve pedestrian accommodations on Route 9**: The current pedestrian accommodations on Route 9 are neither pleasant nor accessible for persons with disabilities. At a minimum, the site plan should improve those conditions along the site frontage, but additionally off-site improvement would be desirable to connect to any nearby transit locations.

Context

Attachment A



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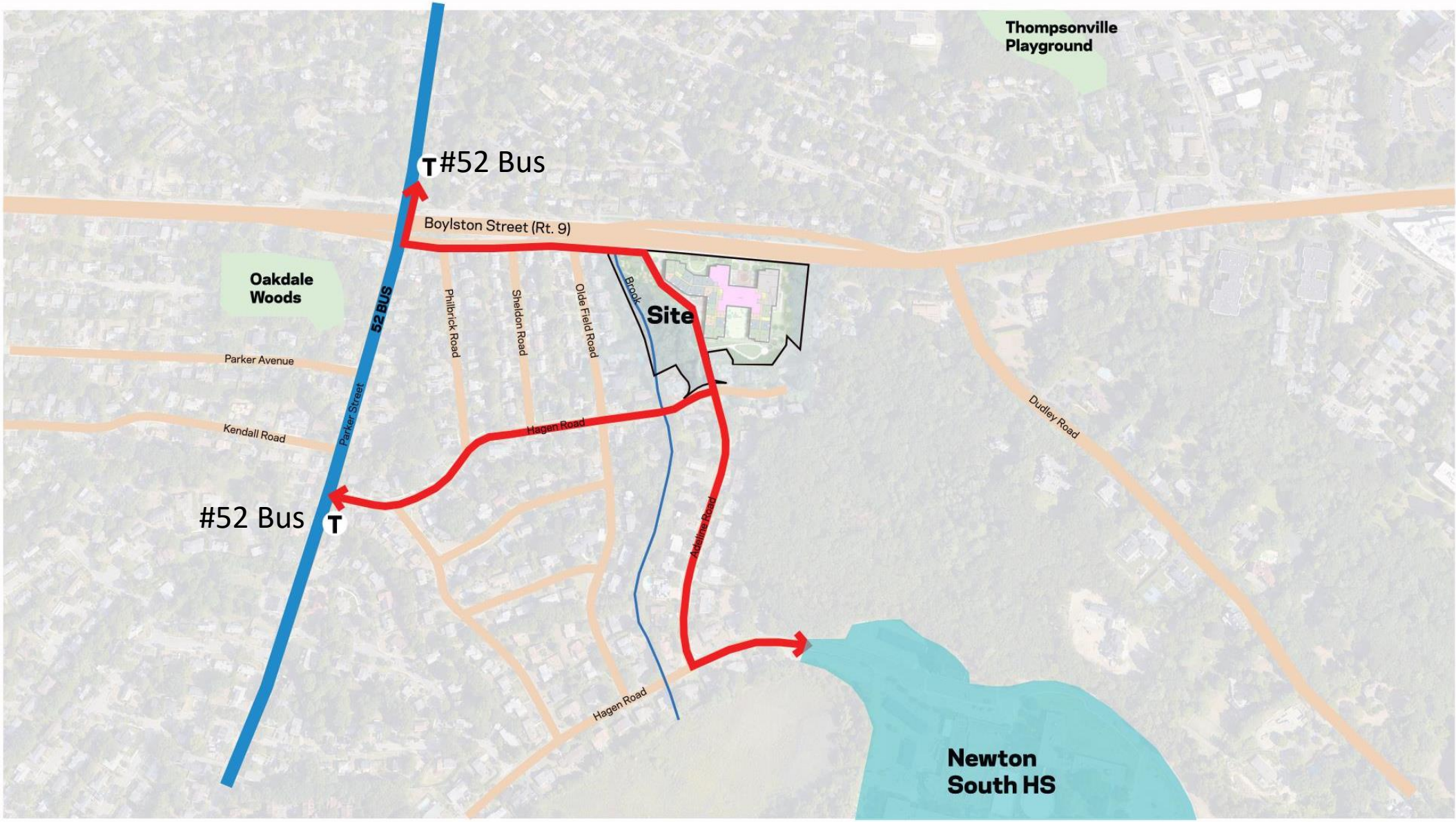
Context

Attachment A



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Site Photos

Boylston looking east

Boylston looking west

Boylston looking east at Sheldon Road

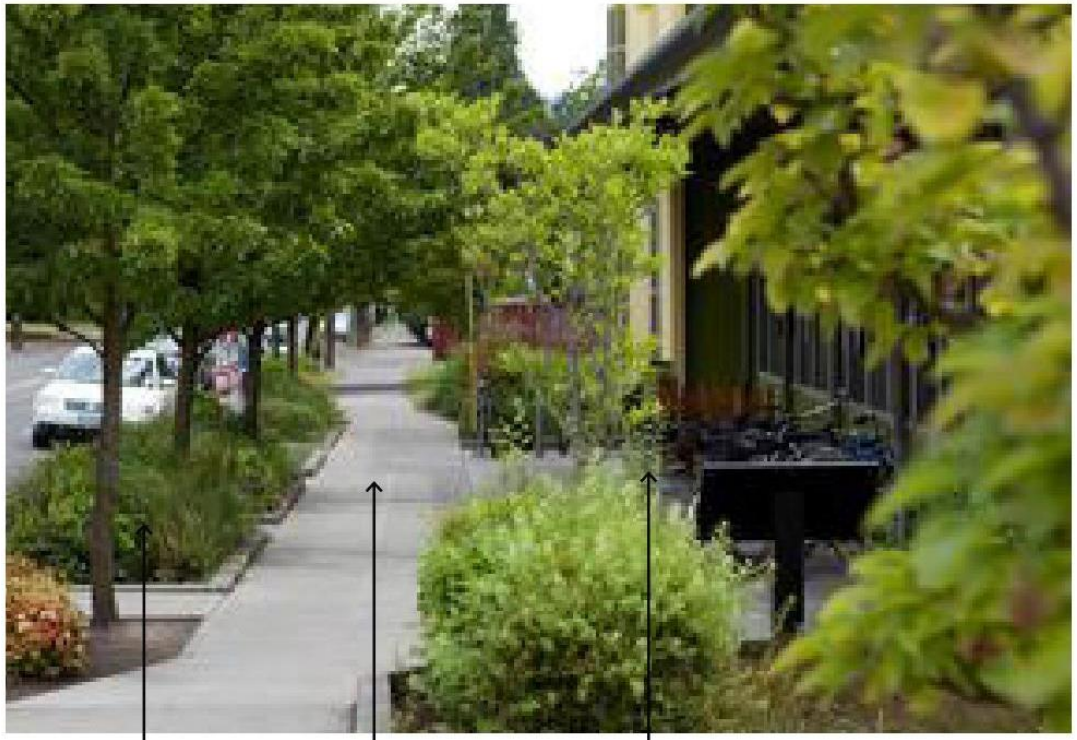
Ledge outcrop along Boylston Street

Boylston Street Frontage

The current conditions for the Boylston Street frontage nclude a narrow sidewalk with no street trees or pedestrian buffer, overhead utilities, and no ground level activity. The applicant has proposed a wider sidewalk and new landscaping between the sidewalk and the proposed building. While this is an improvement over the existing conditions, we encourage the applicant to consider adding a wide tree-lined landcape buffer along the edge of the street to provide additional screening and protection for pedestrians. We also encourage the applicant to consider burying all overhead utilities.

Existing Conditions

Example: Portland, OR



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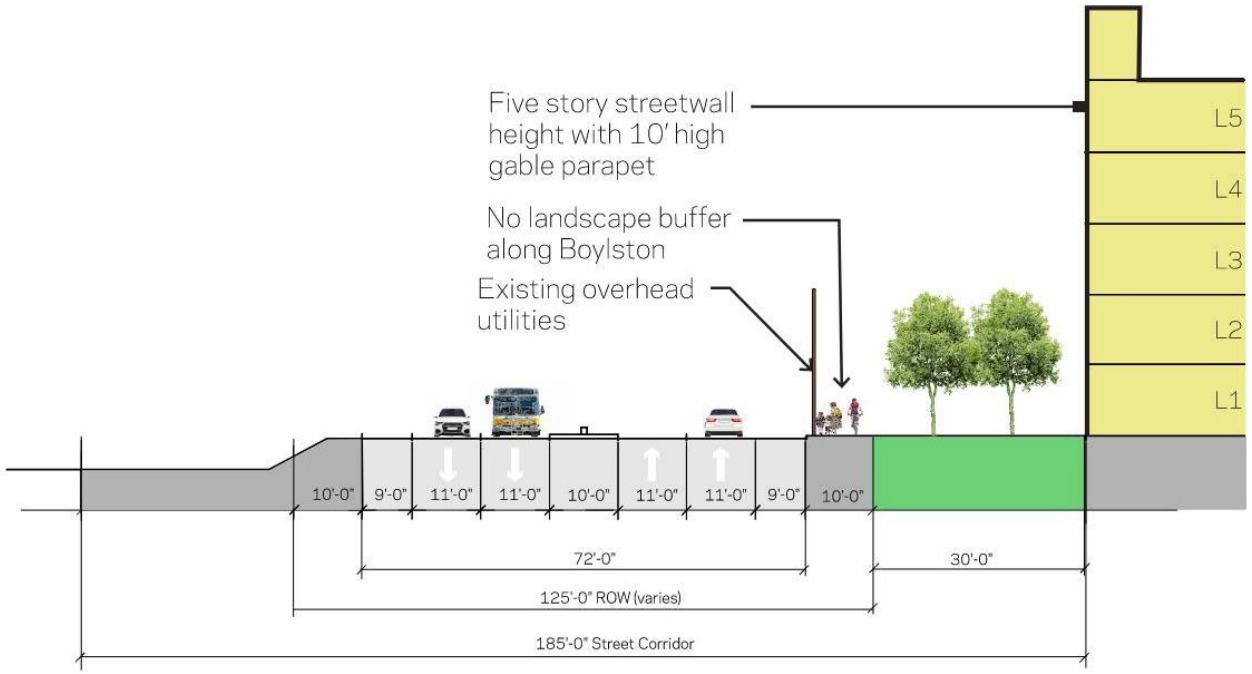
Boylston Street Frontage

Current Proposed Streetscape

Boylston Street Frontage

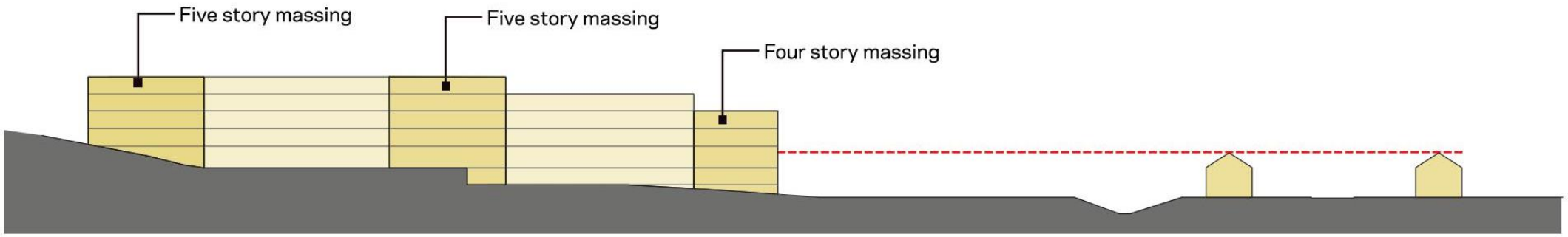
Current Proposed Streetscape



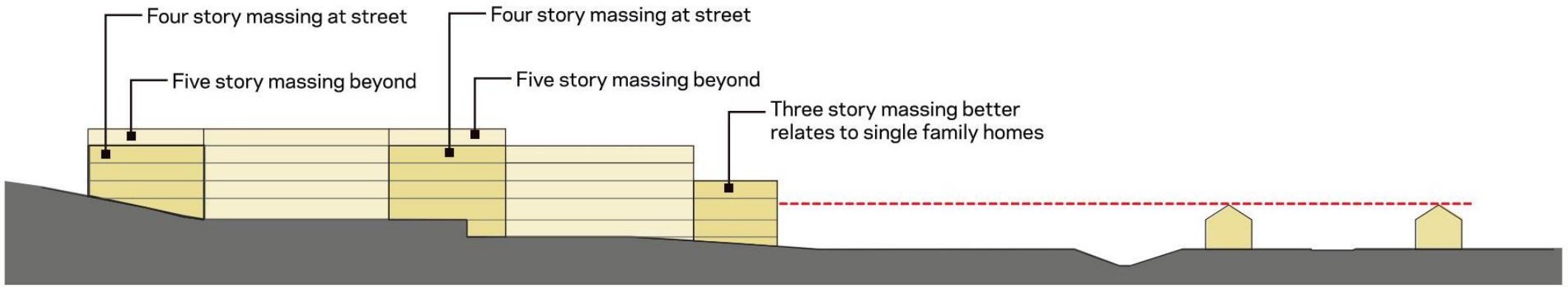
Alternate Streetscape

Boylston Street Massing

Attachment A

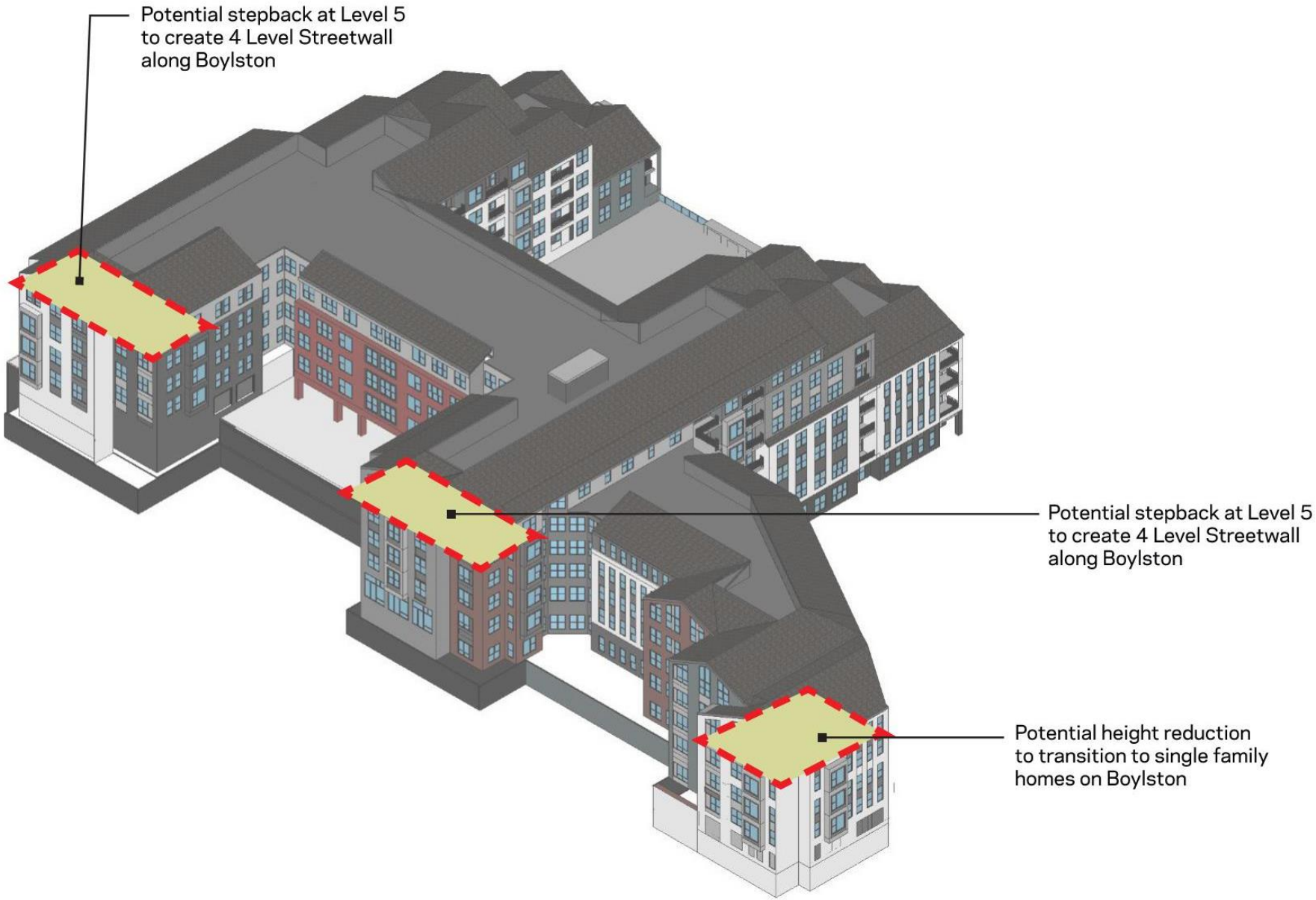


Current Proposed Massing



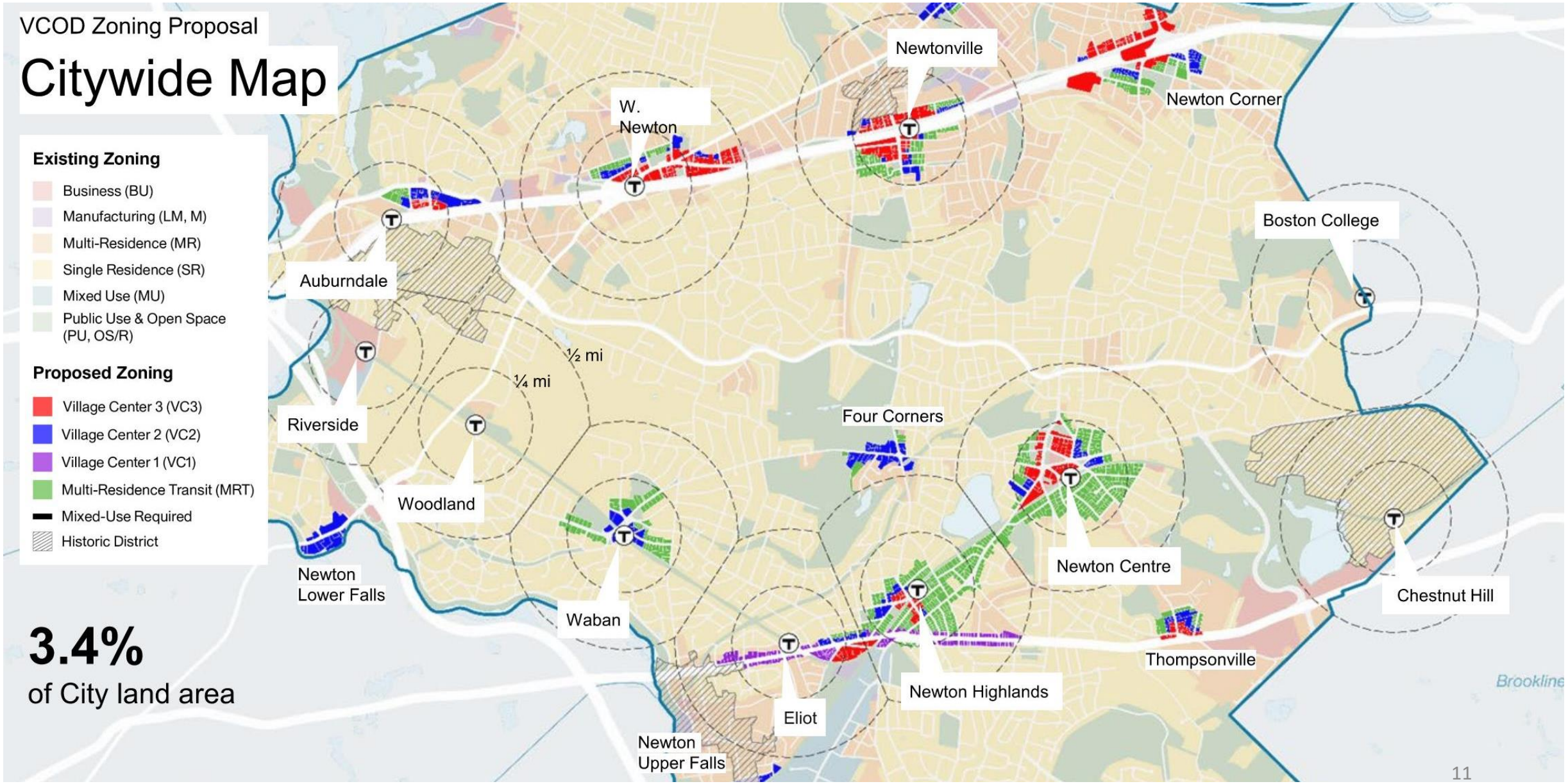
Alternate Massing

Boylston Street Massing



Zoning

Attachment A



Zoning

Attachment A

MRT*

2.5 Stories

40 Feet tall, max.

1,500 SF, max. Footprint

Residential development allowed

VC1

2.5 Stories

45 Feet tall, max.

4,000 SF, max. footprint

Residential & Limited Retail development allowed

VC2

3.5 Stories

62 Feet tall, max.

10,000 SF, max. footprint

Mixed Use/Commercial, & Residential development allowed

VC3

4.5 Stories

75 Feet tall, max.

15,000 SF, max. footprint

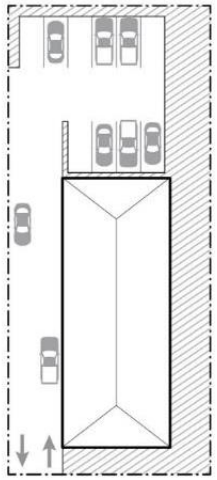
Mixed Use/Commercial, & Residential development allowed

Zoning

This code regulates urban form through the following principal mechanisms:

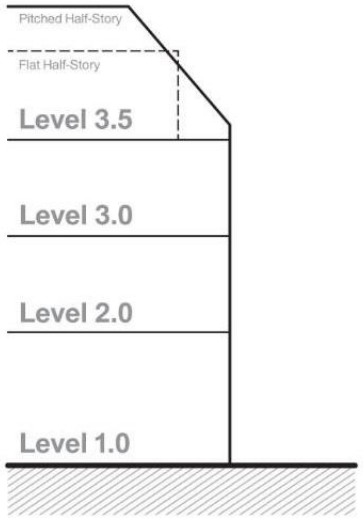
1 Building Footprint

Sets the maximum area per story



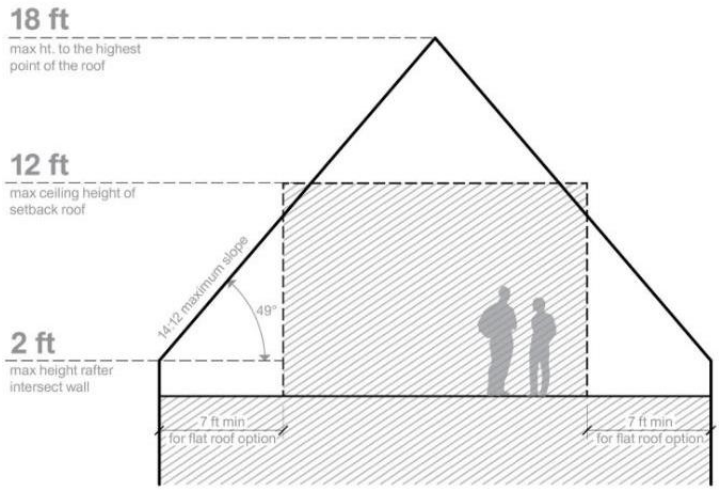
2 Building Height

Sets the maximum height in stories/feet



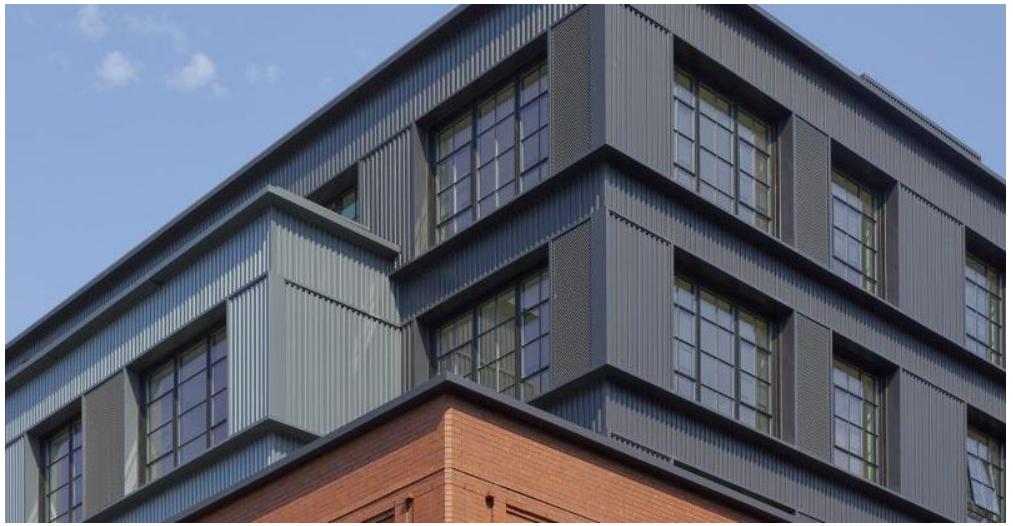
3 Roof Form

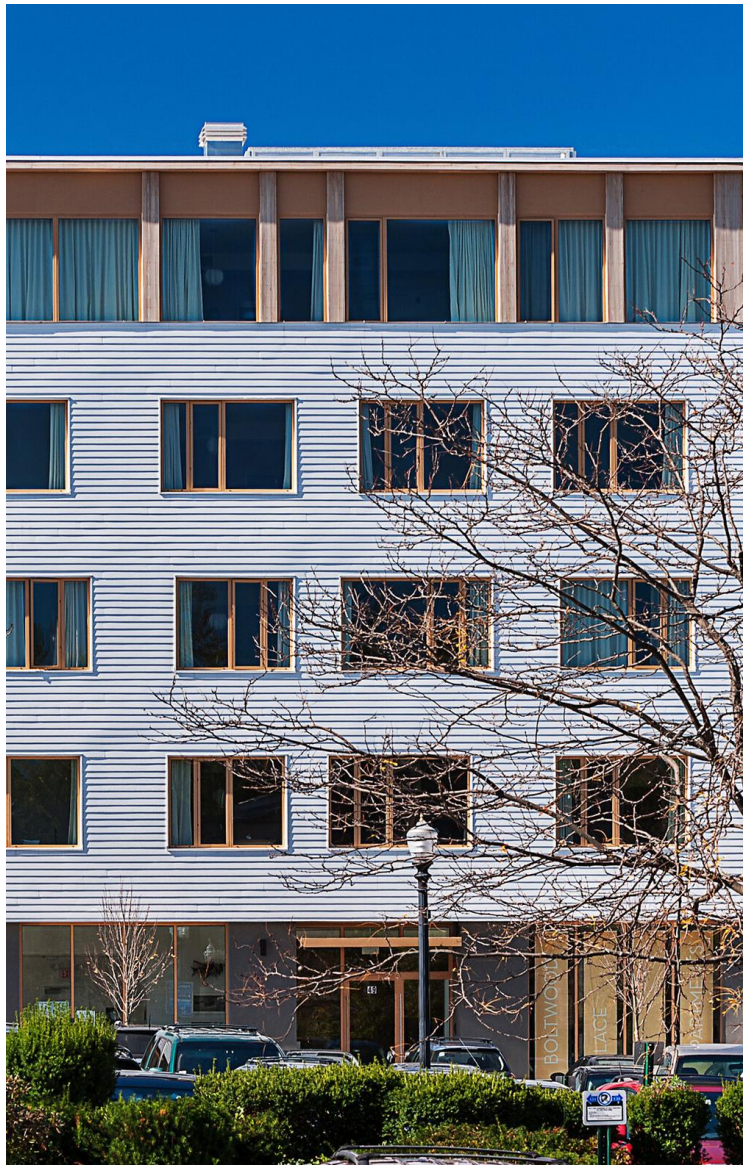
Provides options for a flat or pitched roof half-story



Building Massing Precedents

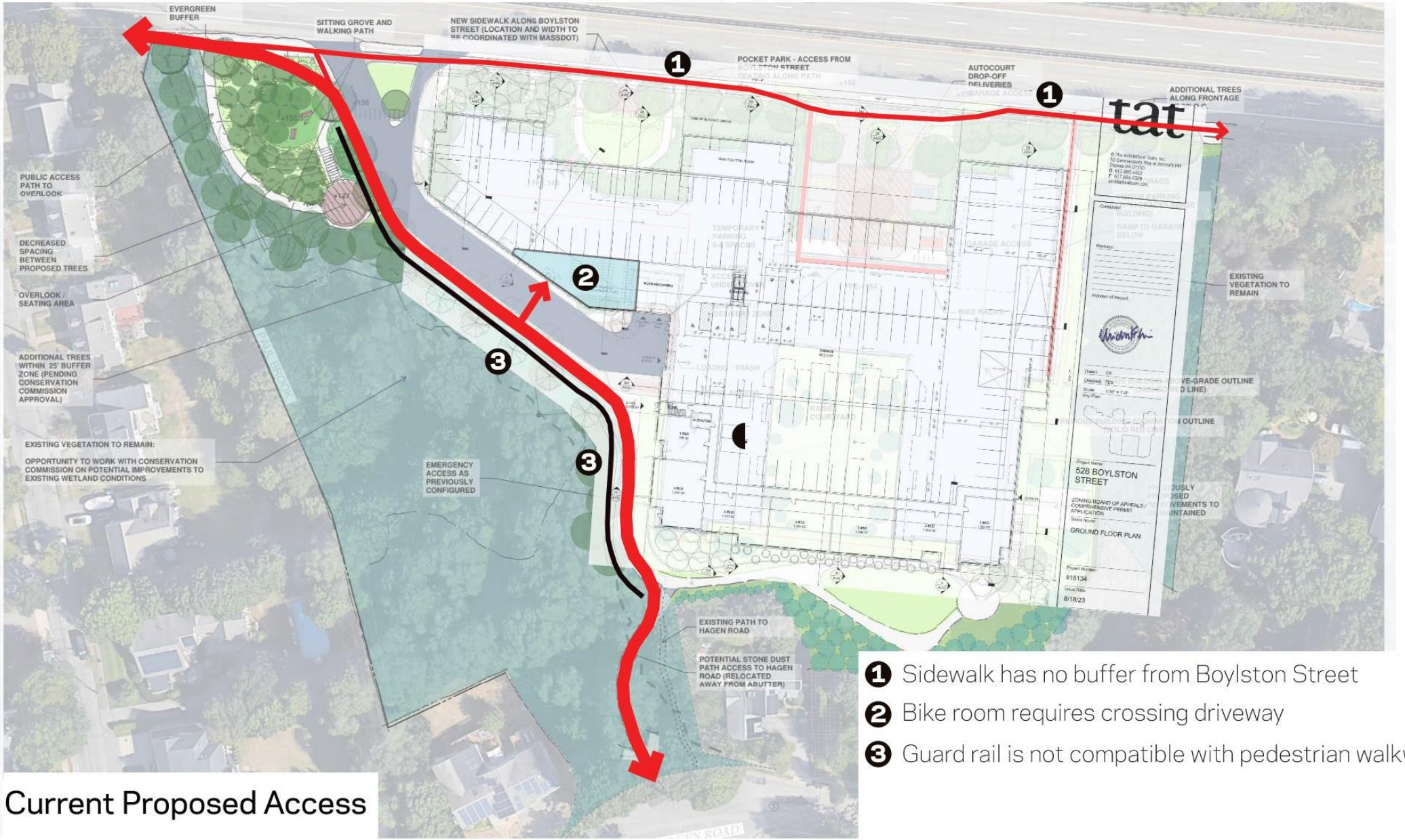
Attachment A





Bicycle Access

Attachment A

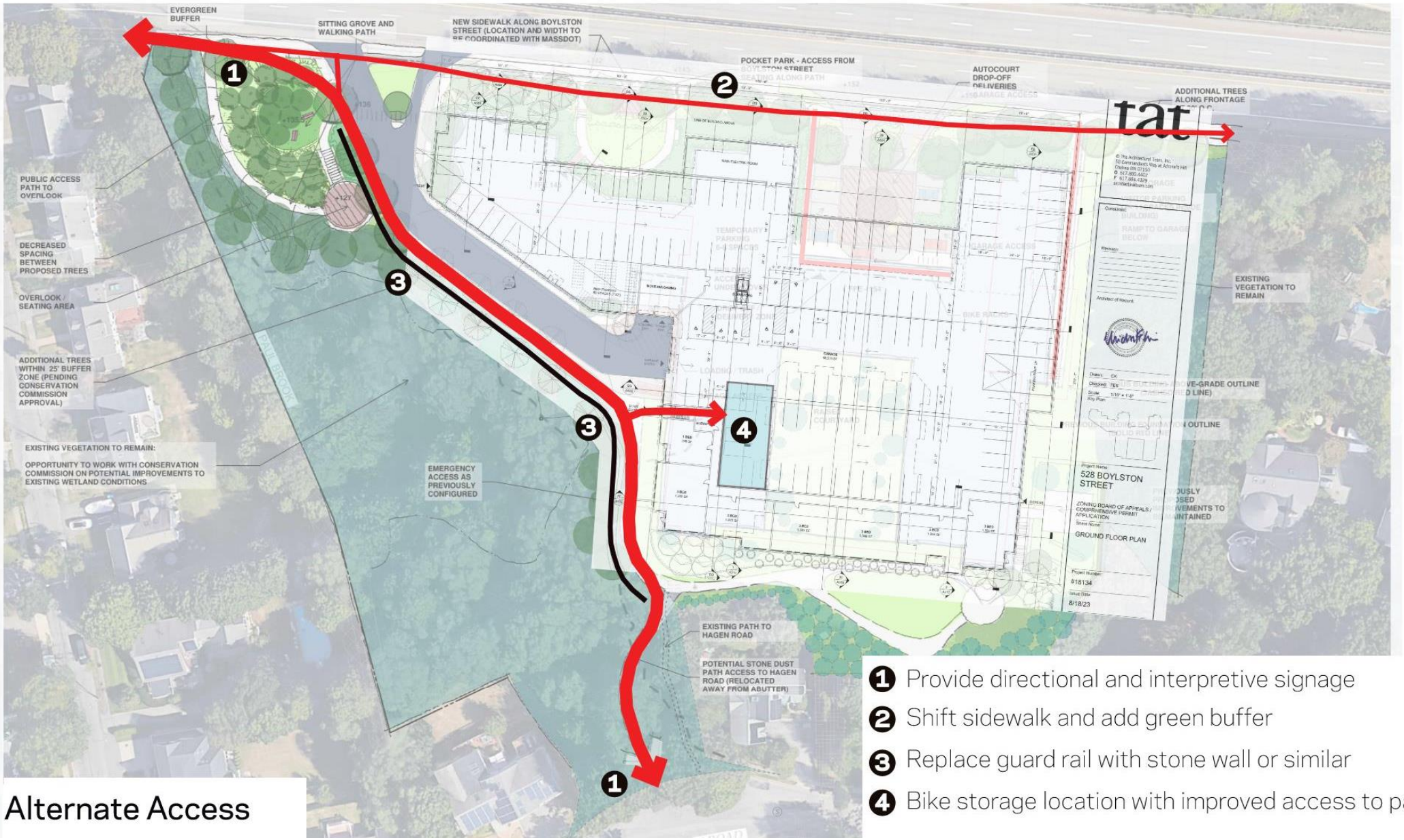


Current Proposed Access

1. Sidewalk has no buffer from Boylston Street
2. Bike room requires crossing driveway
3. Guard rail is not compatible with pedestrian walkway

Bicycle Access

Attachment A

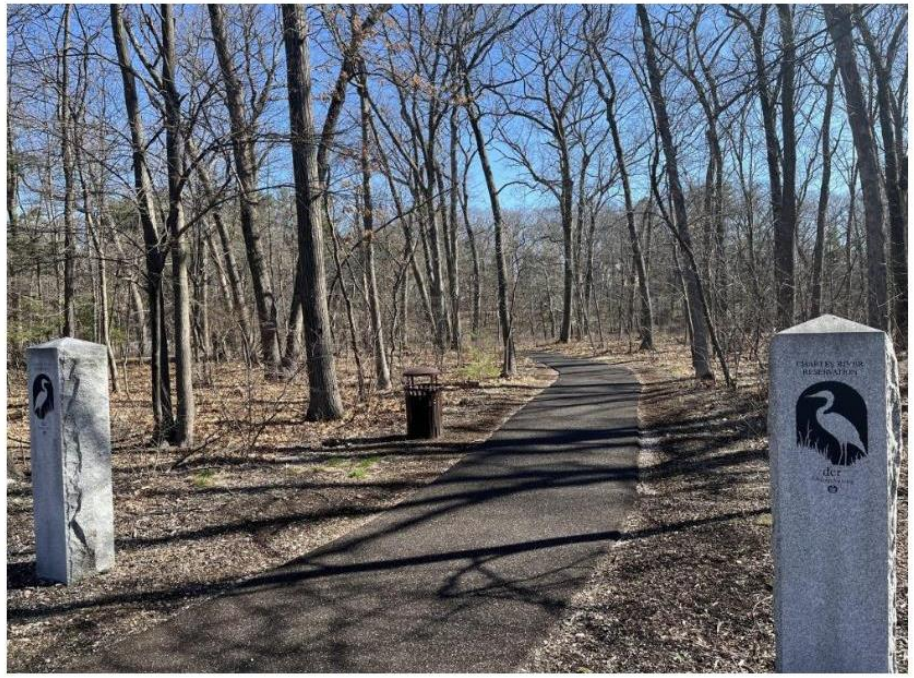


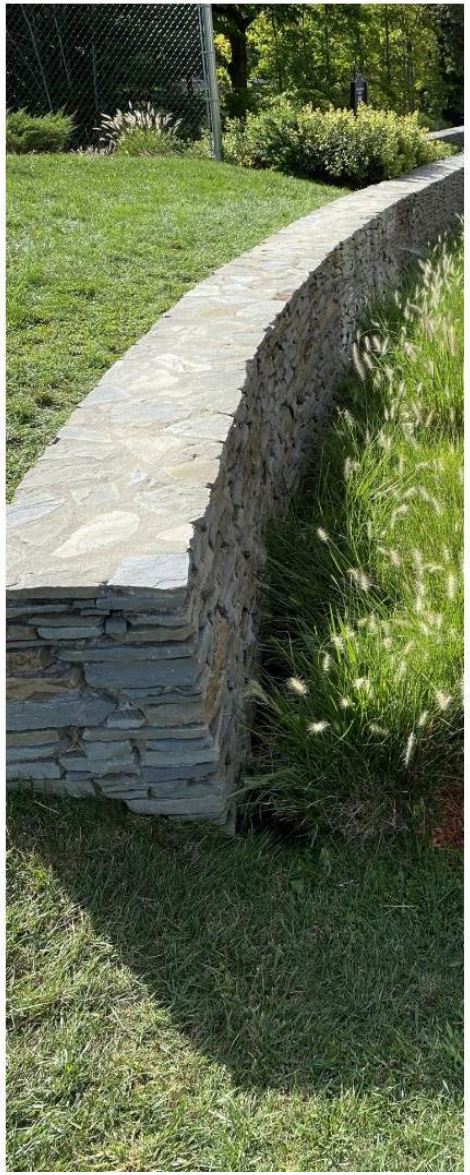
Alternate Access

1. Provide directional and interpretive signage
2. Shift sidewalk and add green buffer
3. Replace guard rail with stone wall or similar
4. Bike storage location with improved access to path

Conservation Area with Multi-use Trail

Attachment A

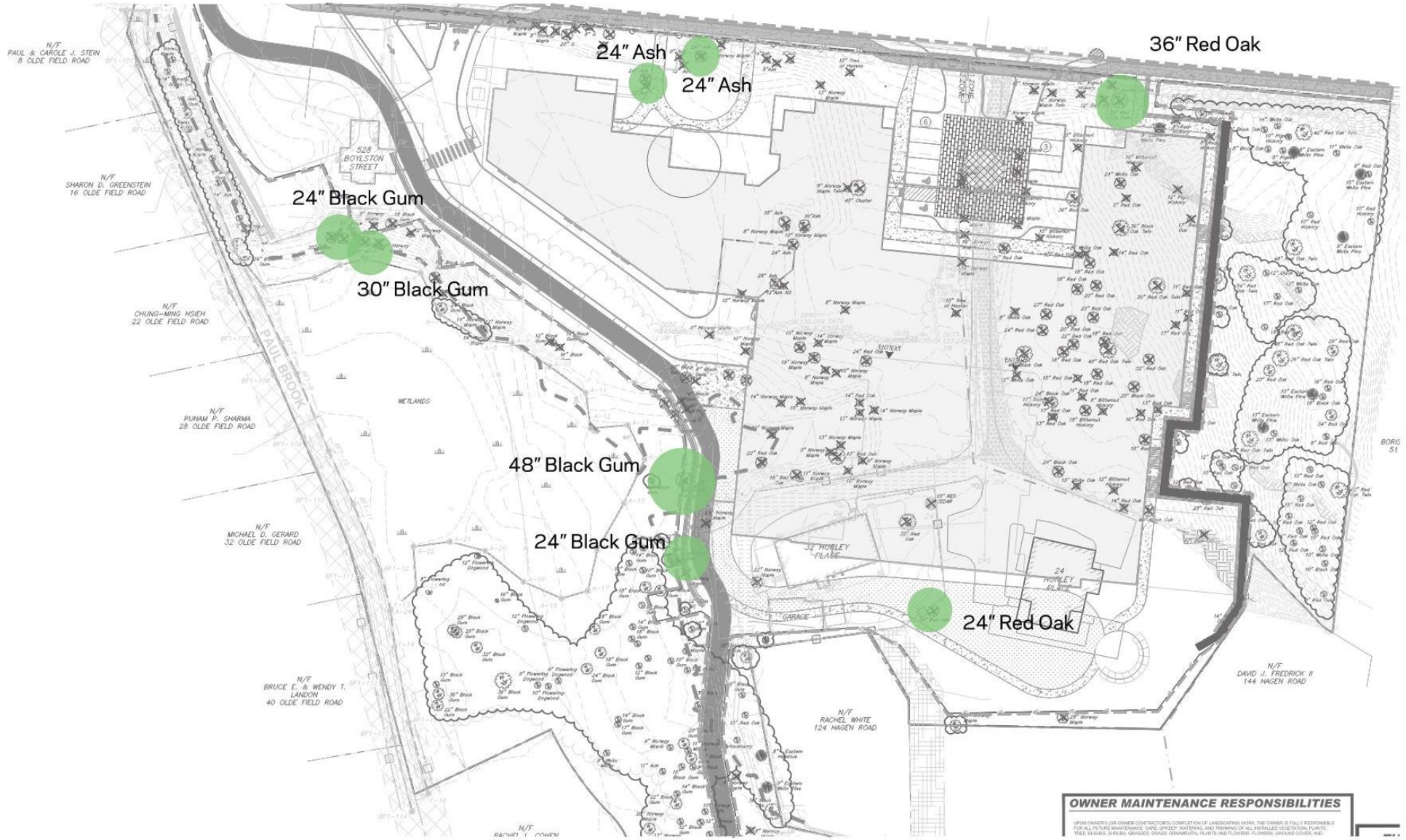




Tree Removal Plan

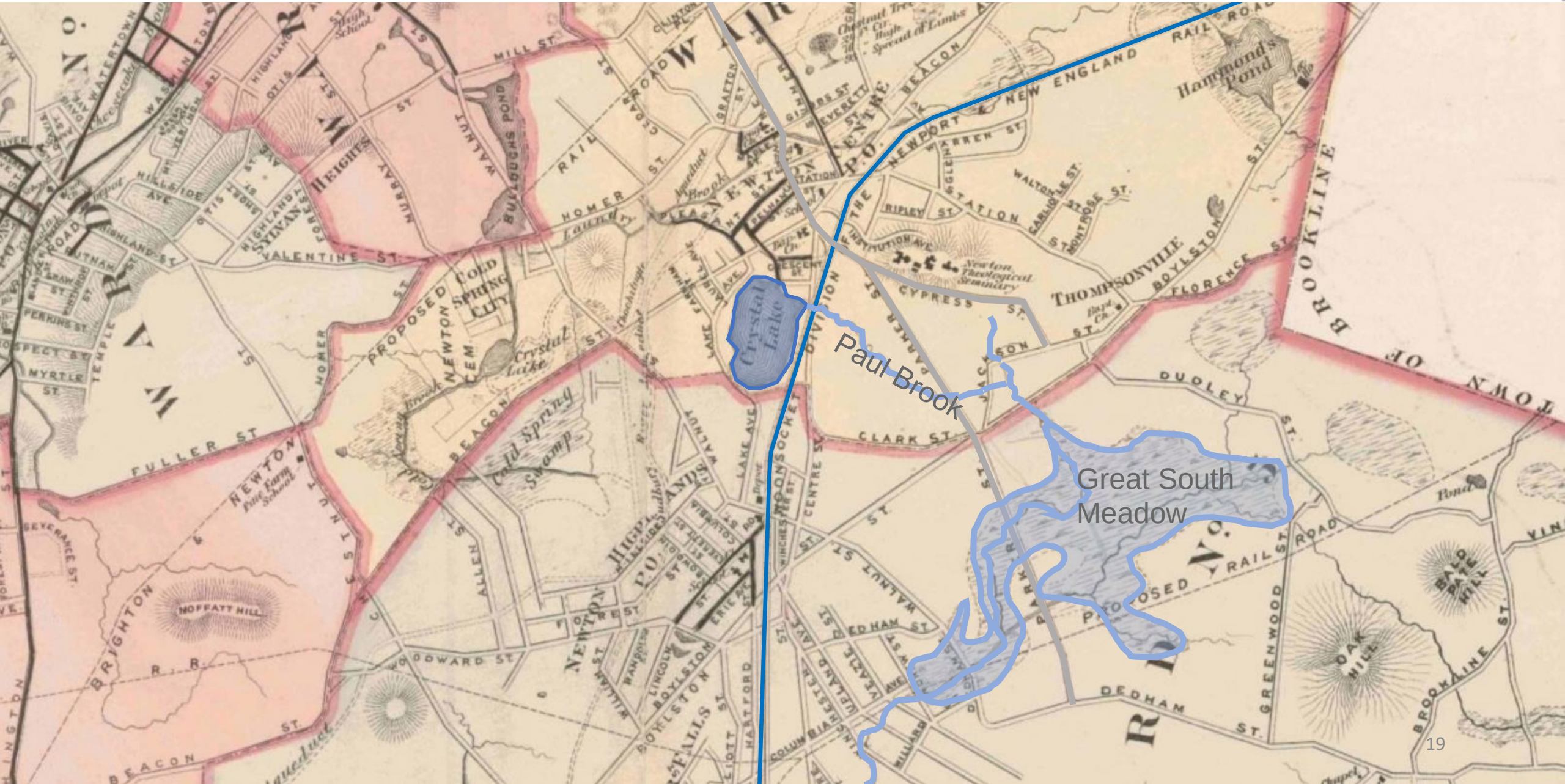
Attachment A

Potential Trees to Preserve



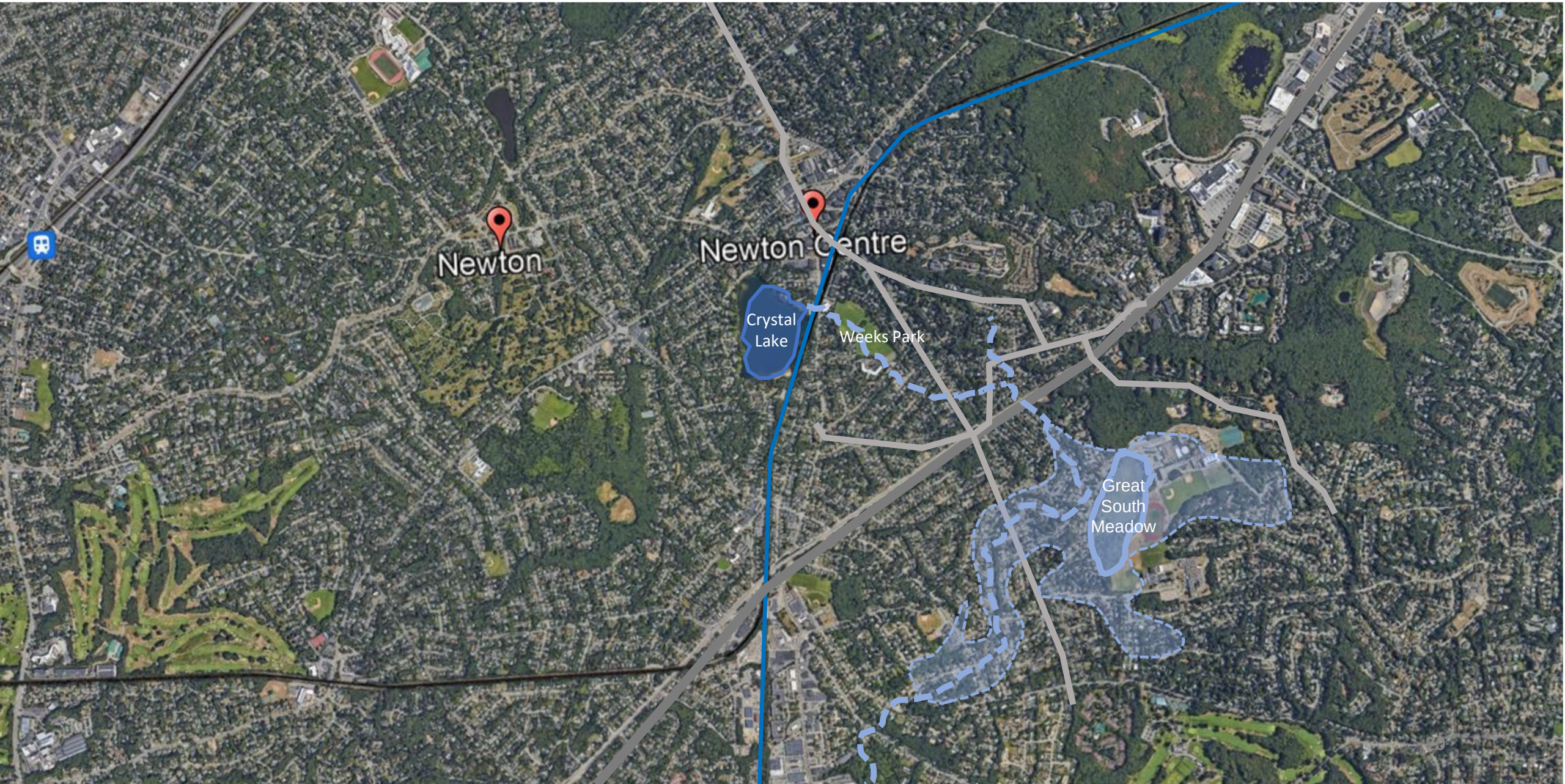
Paul Brook

Attachment A



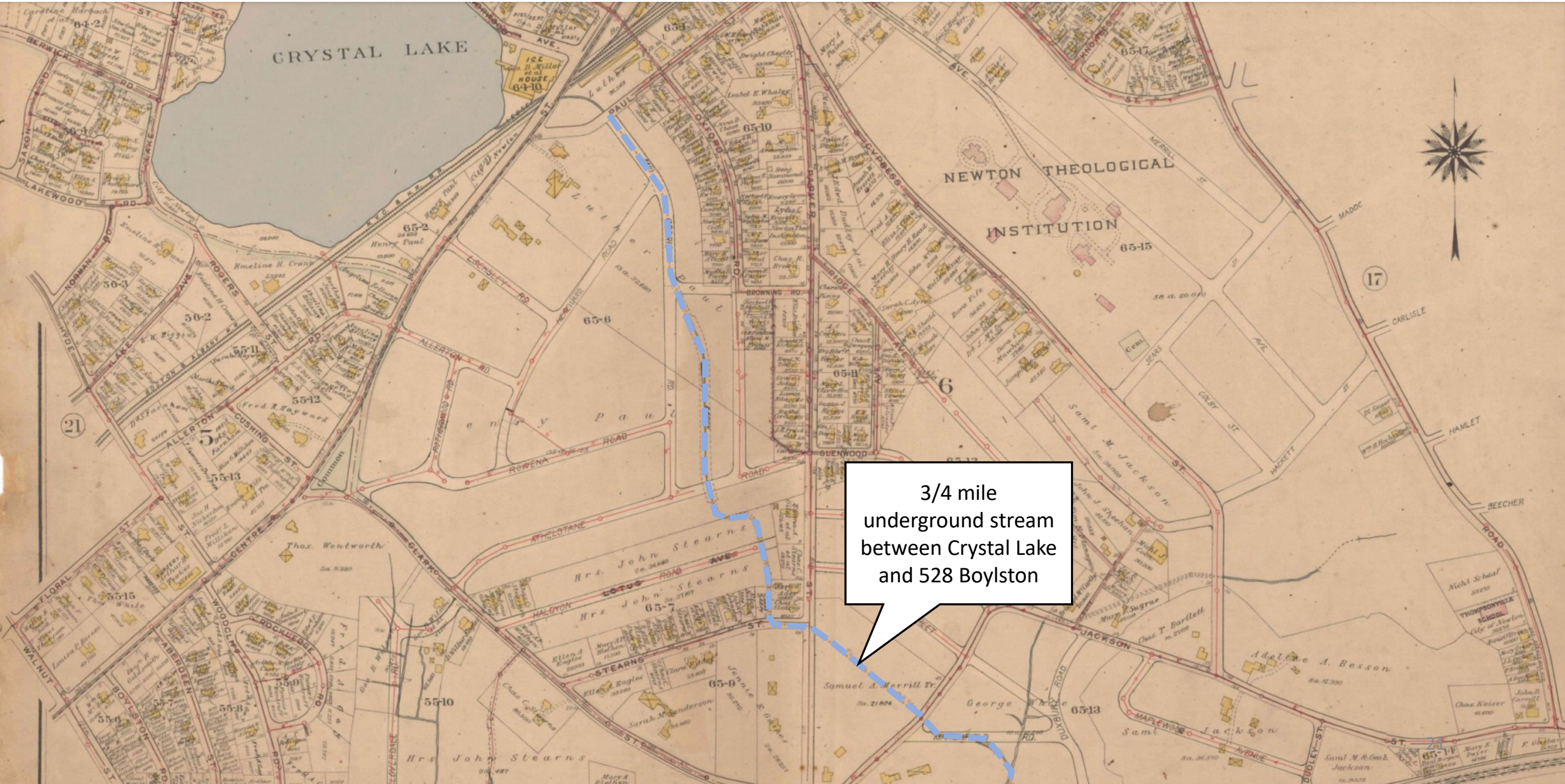
Paul Brook

Attachment A



Paul Brook

Attachment A

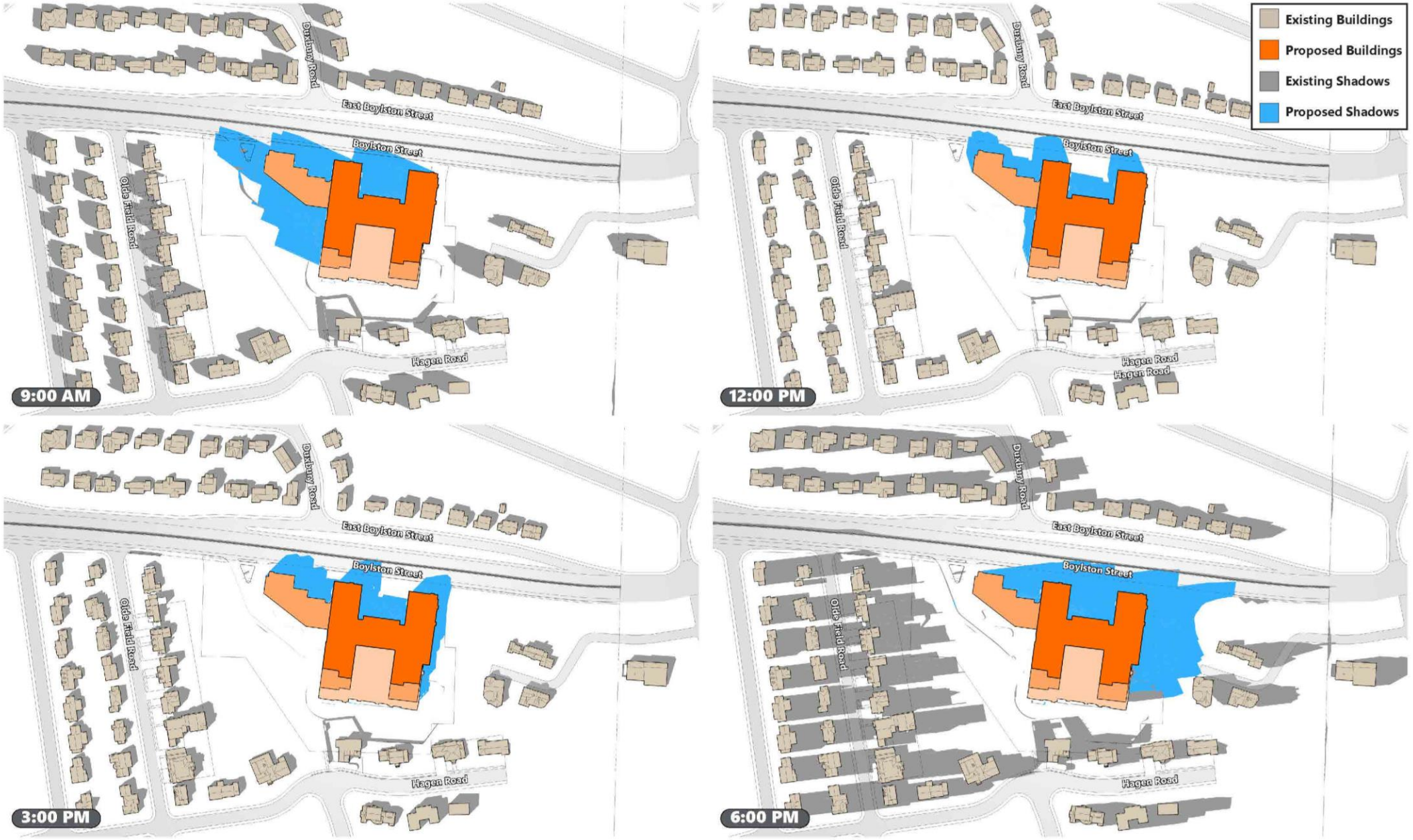


Shadow Studies – June 21

Attachment A

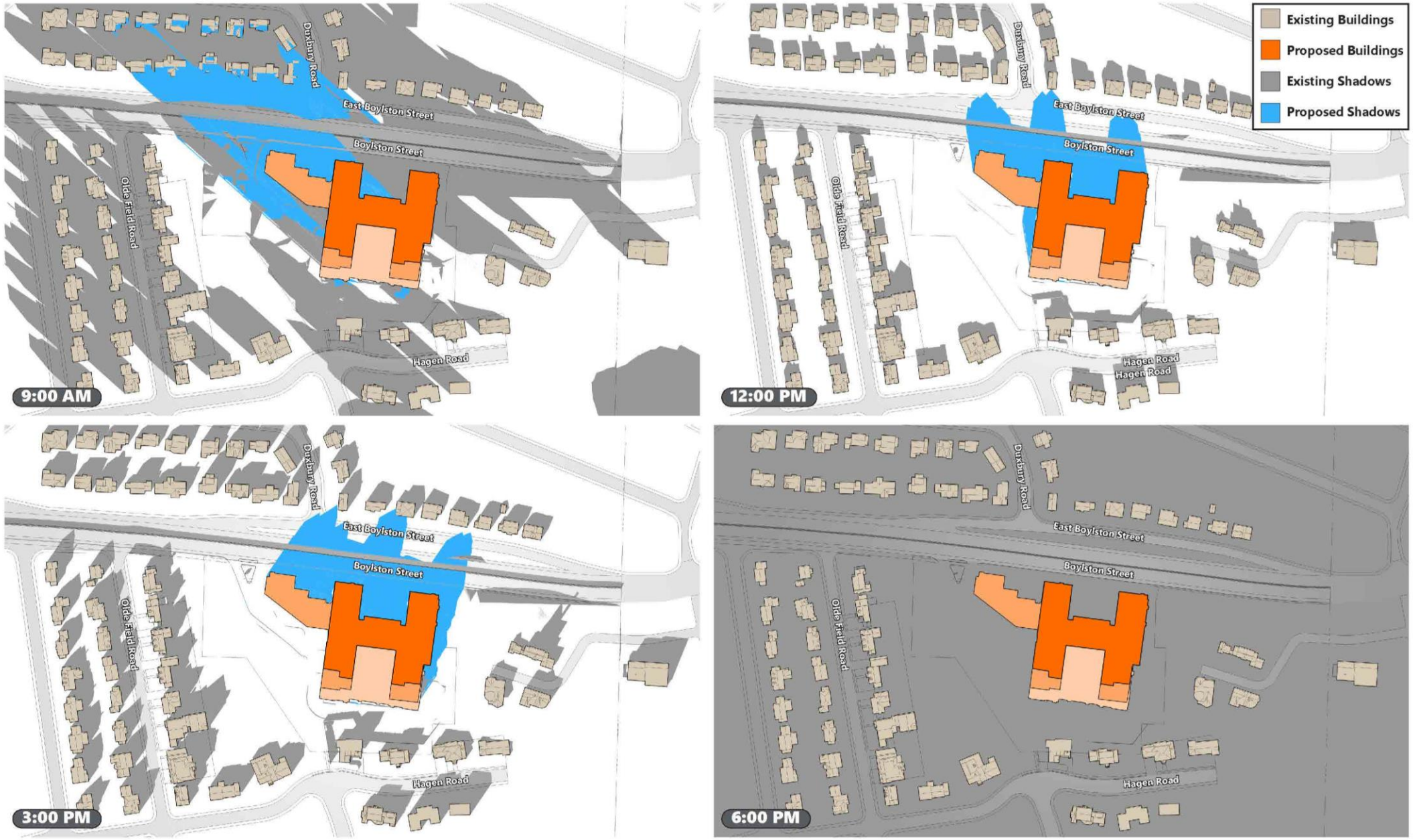
Shadow Studies – March 21

Attachment A



Shadow Studies – December 21

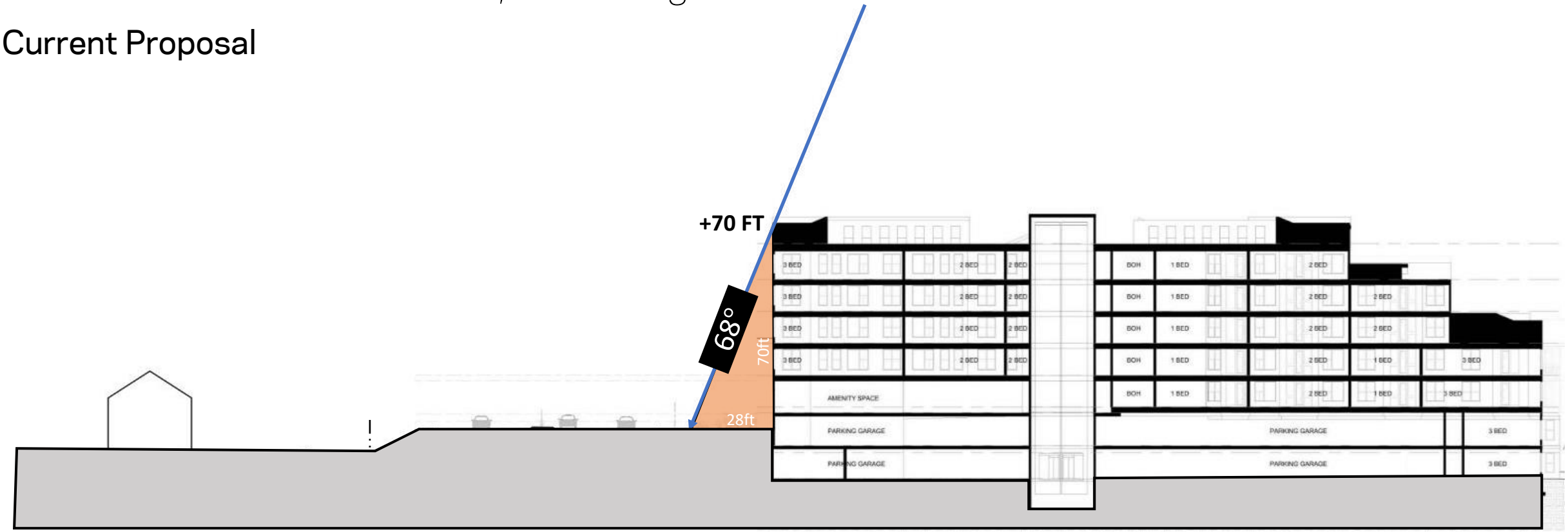
Attachment A



Shadow Studies – June 21, Solar Angle 68°

Attachment A

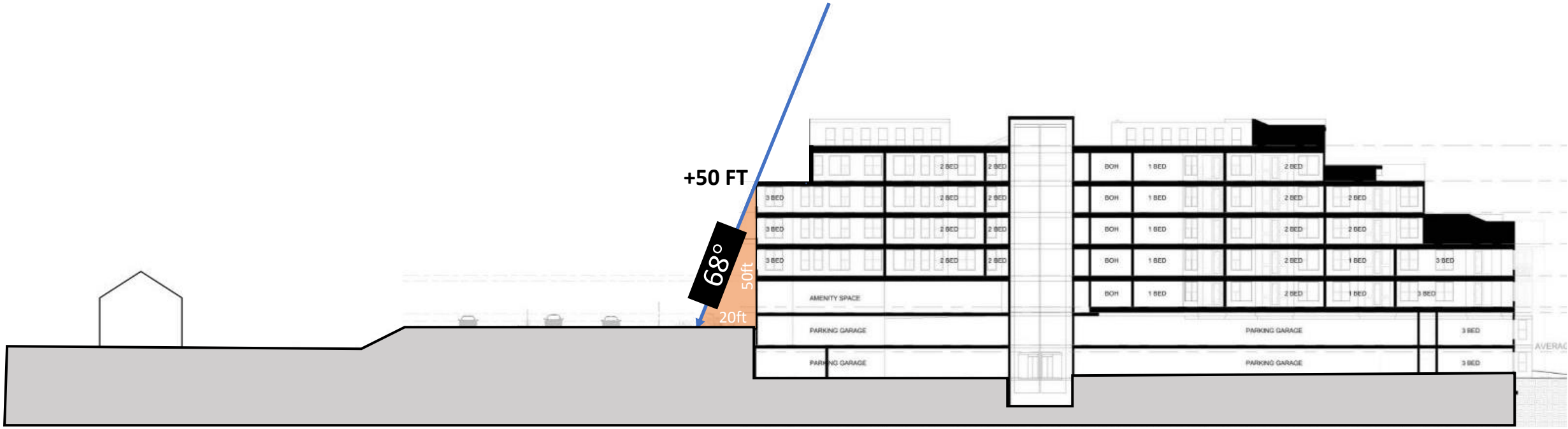
Current Proposal



Shadow Studies – June 21, Solar Angle 68°

Attachment A

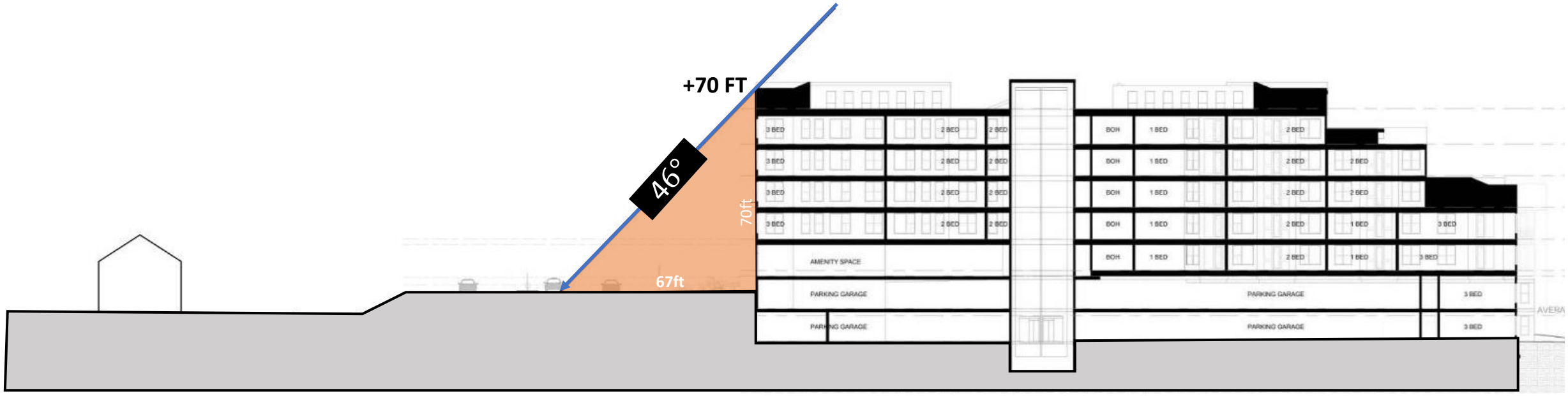
Alternate Proposal with 10’ setback and reduced parapet

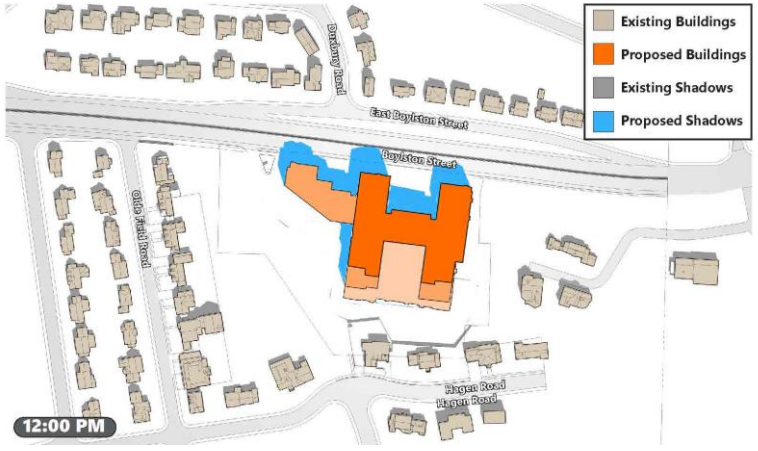


Shadow Studies – March/September 21, Solar Angle 46°

Attachment A

Current Proposal

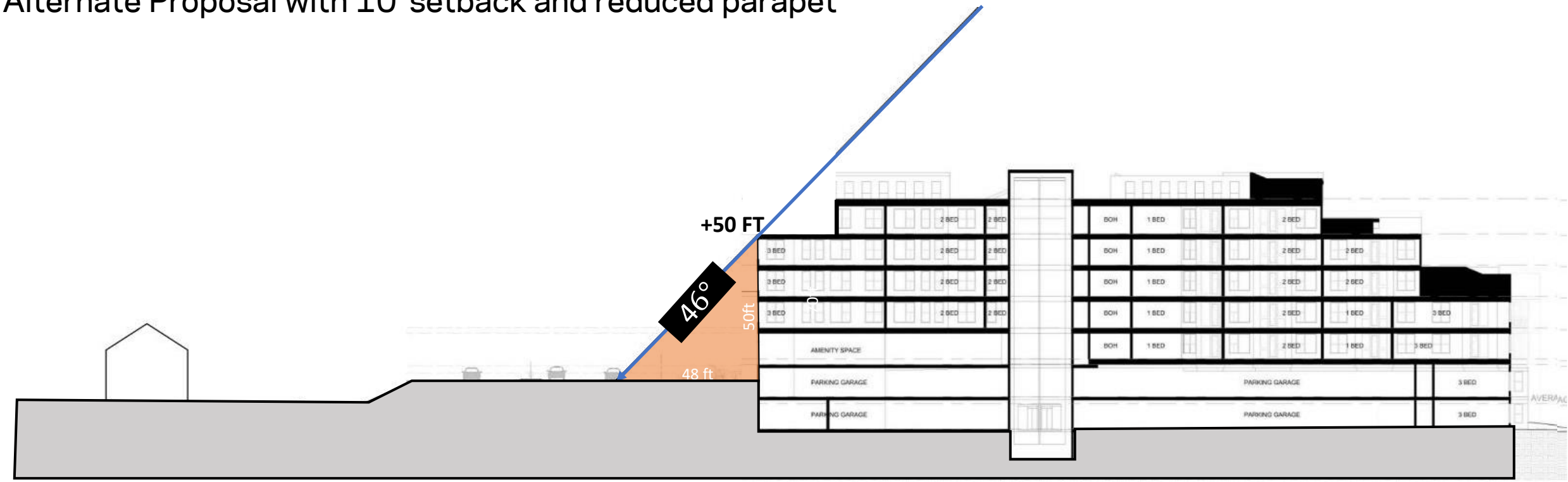




Shadow Studies – March/September 21, Solar Angle 46°

Attachment A

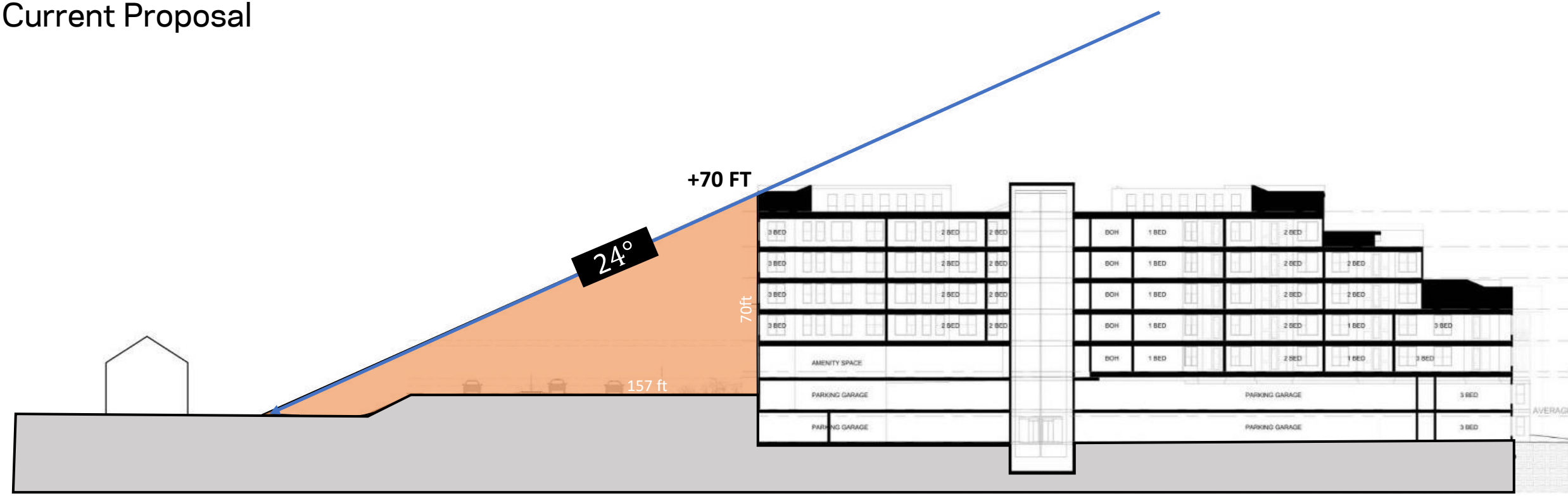
Alternate Proposal with 10’ setback and reduced parapet

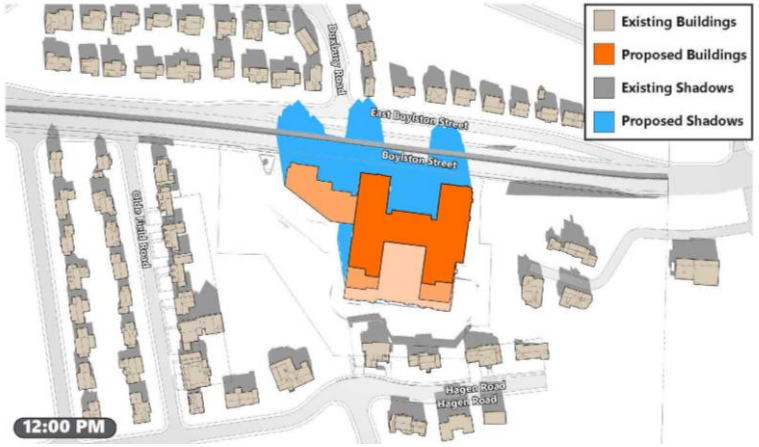


Shadow Studies – December 21, Solar Angle 24°

Attachment A

Current Proposal

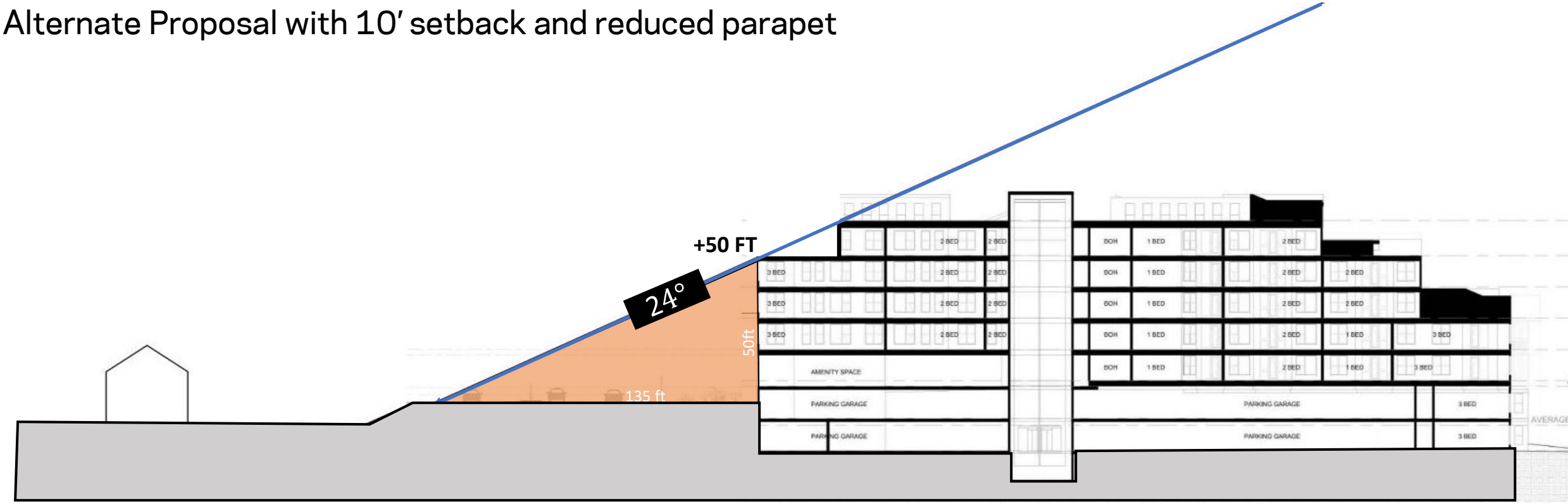




Shadow Studies – December 21, Solar Angle 24°

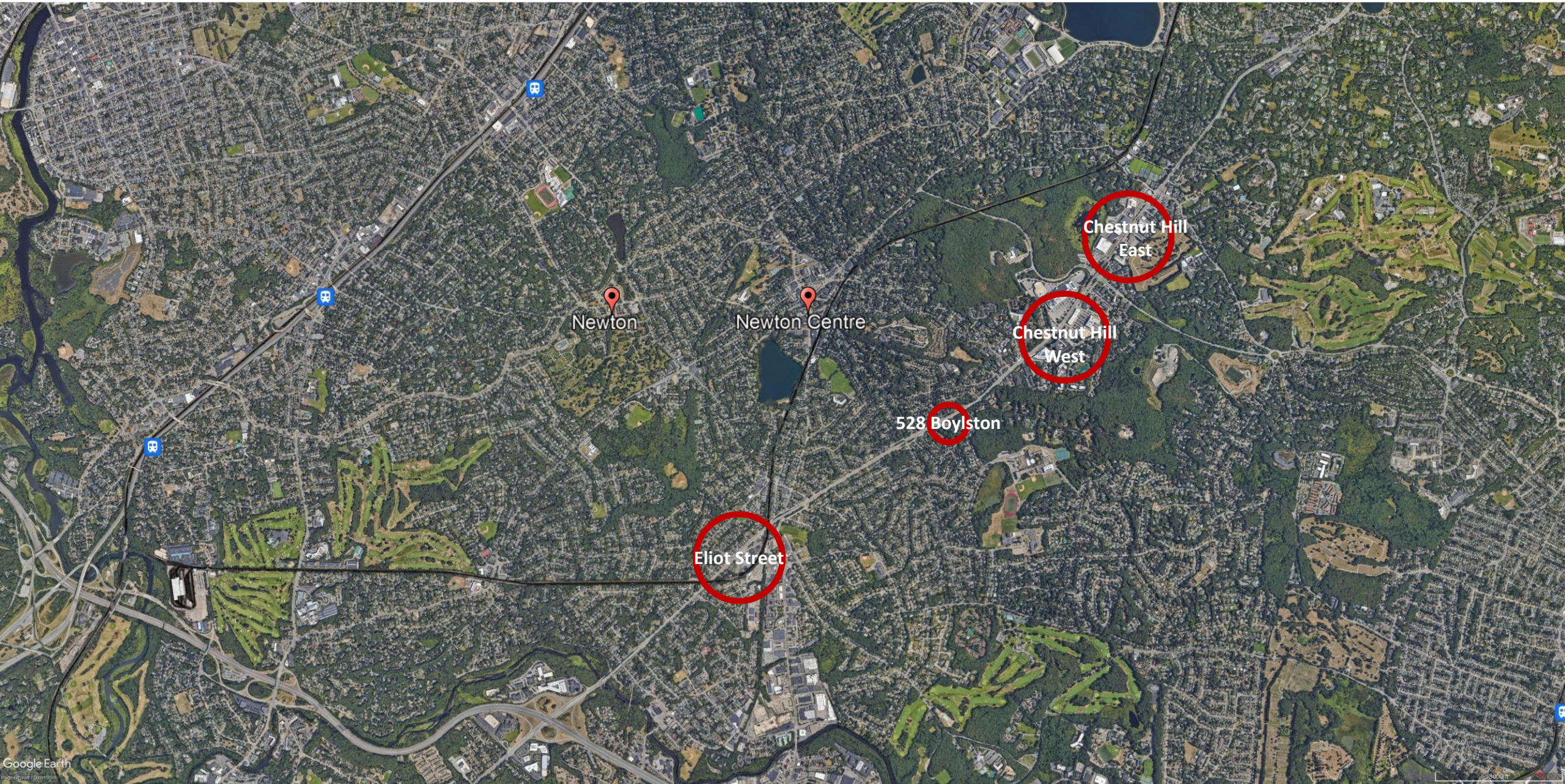
Attachment A

Alternate Proposal with 10’ setback and reduced parapet



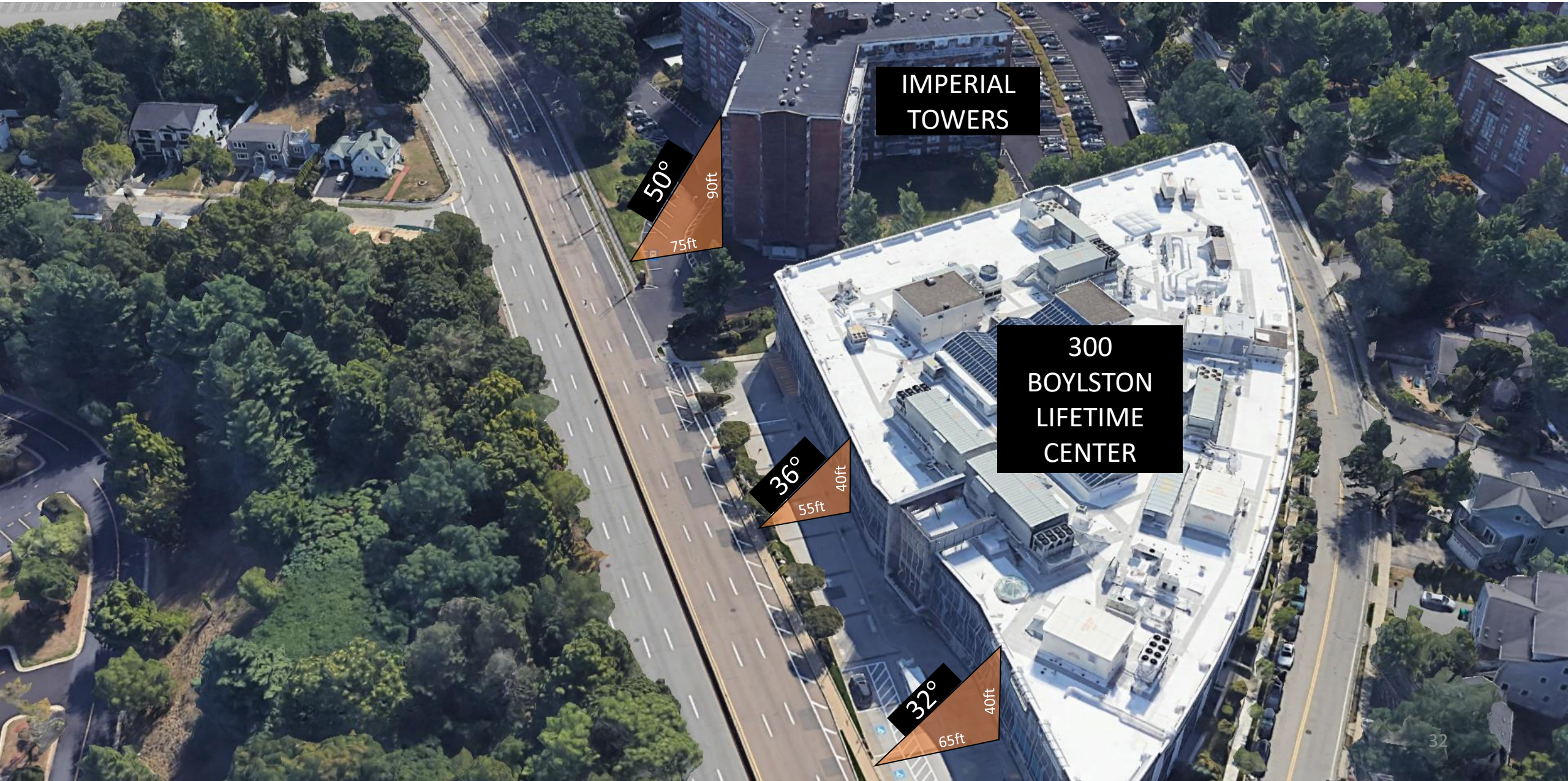
Large Building Context

Attachment A



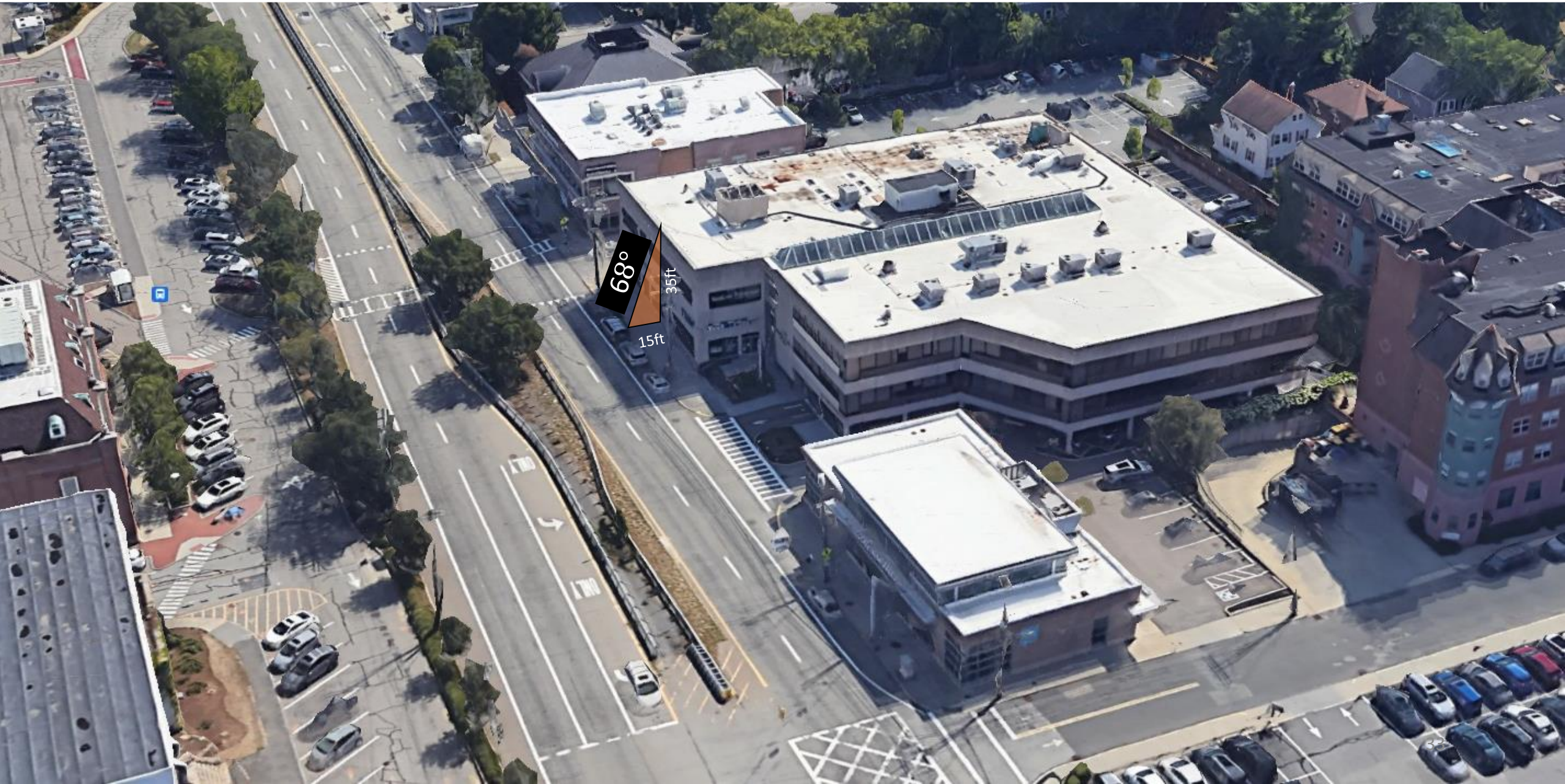
Chestnut Hill West

Attachment A



Chestnut Hill East

Attachment A

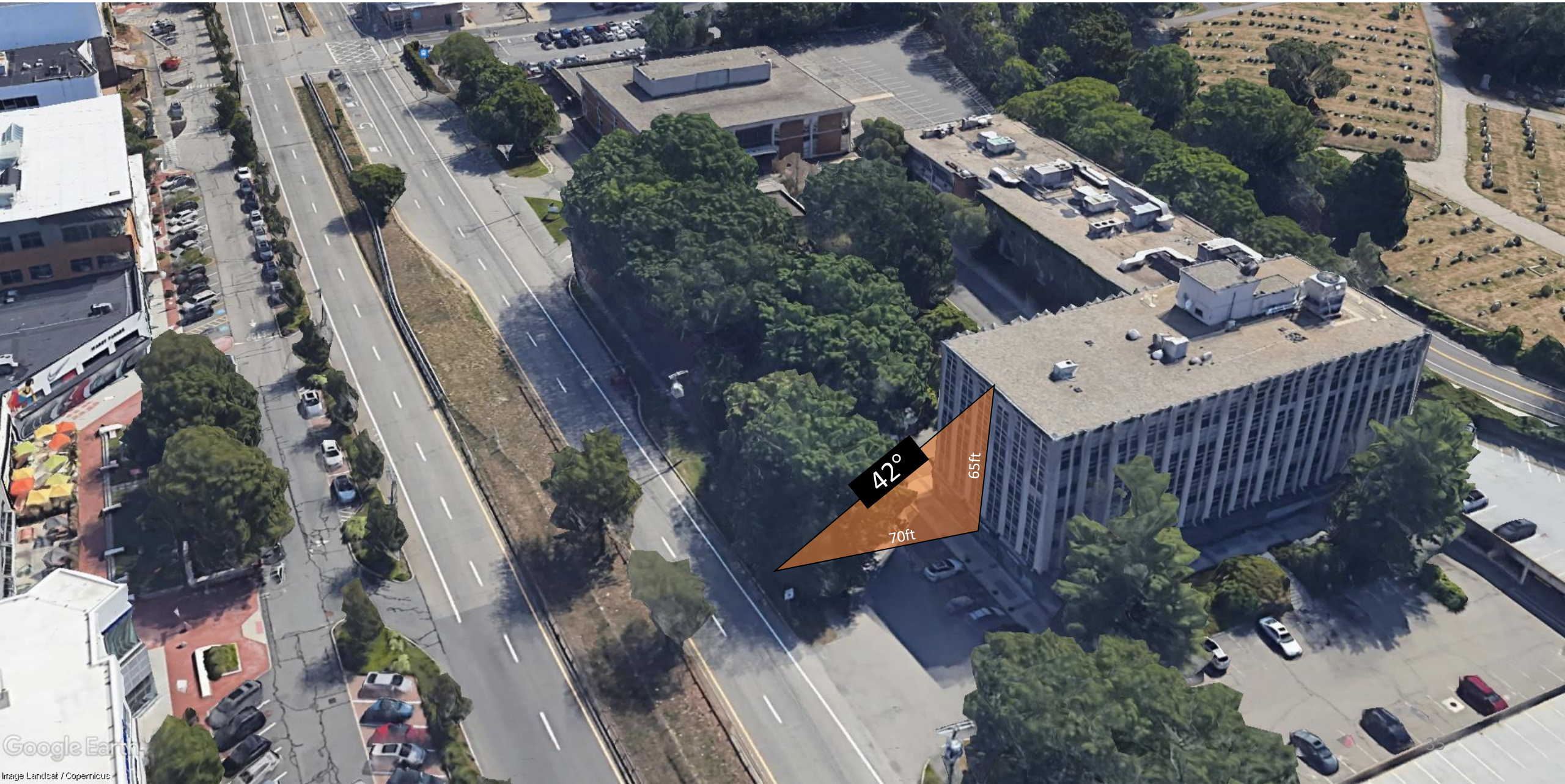


Avalon, Chestnut Hill

Attachment A

1330 Boylston St., Brookline

Attachment A



Attachment B

IMPROVING COMMUNITIES TOGETHER

September 14, 2023

Katie Whewell
Chief Planner for Current Planning
Department of Planning & Development
1000 Commonwealth Avenue
Newton Centre, Massachusetts 02459

Re: Proposed Multifamily Residential Development Transportation Peer Review

Dear Ms. Whewell:

BETA Group, Inc. (BETA), in accordance with our scope of services, has conducted a transportation engineering peer review for the proposed Multifamily Residential Development located along the eastbound side of Boylston Street (Route 9) in the Chestnut Hill area of Newton, Massachusetts. The Site is ±5.82 acres located at 528 Boylston Street and is bounded by Boylston Street to the north and residential properties to the west, south, and east. The site is currently used as a landscaping and mulch wholesale supply center, with significant heavy vehicle operations associated with moving landscaping materials such as soil/mulch. The proposed project includes six stories with 198 dwelling units with one-bedroom to three-bedroom units with 282 parking spaces.

This letter has been prepared by BETA to outline our findings, comments, and recommendations in the review of the materials provided.

BASIS OF REVIEW

The following documents were received by BETA and formed the basis of the review:

- ***Supplemental Submission ZBA Hearing,*** *dated May 24, 2023, prepared by Toll Brothers Newton.*
- ***Architectural Plan Set,*** *August 18, 2023, prepared by The Architectural Team, Inc.*
- ***Existing Conditions Plan*** *dated October 2021.*
- ***Narrative Description of the Project.***
- ***Summary of Relief and Waivers Requested****.*
- ***Tabular Zoning Analysis.***
- ***Landscape Plan set,*** *dated August 18, 2023.*
- ***Traffic Impact Assessment Memorandum, for Proposed Multifamily Residential Development 528 Boylston Street – Newton, MA*** *dated July 28, 2023, prepared by MDM Transportation Consultants Inc.*
- ***Summary Of Relief and Waivers Requested,*** *dated April 26, 2023.*
- ***Fire Truck Turnaround*** *dated August 21, 2023.*
- ***Updated Civil Plans Zoning Board of Appeals Comprehensive Permit Application,*** *dated August 21, 2023, prepared by Bohler Engineering.*

BETA GROUP, INC.
315 Norwood Park South, Norwood, MA 02062
P: 781.255.1982 |W: www.BETA-Inc.com

PROJECT DESCRIPTION AND STUDY AREA

The proposed project is a six-story all-residential development comprised of 198 apartments ranging from one-bedroom to three-bedrooms units with a total lot area of 5.82 acres. Parking is provided in a primarily subterranean garage that provides 274 of the total 283 parking spaces. The remaining parking spaces are outdoors at grade. Access/egress to the Site is proposed via a primary right-in/right-out curb cut from Boylston Street (Route 9) to accommodate the residents and service/delivery vehicles, and a secondary right-in/right-out curb cut to be used by visitors, prospective tenants and short-term parking associated with transportation network companies (TNCs) that offer rideshare service, food delivery service and package delivery. The existing building is located along the eastbound side of Boylston Street (Route 9) in the Chestnut Hill area of Newton. The site is currently used as the Sam White and Son's landscape yard.

The study area includes the following 10 intersections:

- Parker Street at Clark Street and the Route 9 westbound off-ramp (Signalized)
- Parker Street at the Route 9 eastbound ramps (Signalized)
- Route 9 eastbound on-ramp at Sheldon Road (unsignalized)
- Route 9 at Olde Field Road (unsignalized)
- Route 9 at Dudley Road (unsignalized)
- Route 9 at Langley Road (Signalized)
- Langley Road at Jackson Street (unsignalized)
- Route 9 at Chestnut Hill Square/Shops at Chestnut Hill Driveways (Signalized)
- Hammond Pond Parkway at the Route 9 eastbound ramps (Signalized)
- Hammond Pond Parkway at the Route 9 westbound ramps (Signalized)

EXISTING CONDITIONS

STUDY AREA

1. **The Transportation Impact Study and Access Plan identified 10 study intersections. Not all locations are shown in Figure 1. The study area should include locations in the vicinity of Newton South High School and the middle schools to evaluate potential impacts/conflicts of traffic with children walking and biking from the project. This should include the morning arrival period and afternoon dismissal period. See Comment 23.**

2. **Only three roadways (Route 9, Park Street, Hammond Pond Parkway) are described in detail. Roadway descriptions should be provided for other study roadways.**

3. **Descriptions of the intersections are not provided. These should be provided.**

ROADWAY NETWORK

EXISTING TRAFFIC VOLUMES AND SPEED

Traffic volume data were collected at the study area intersections during the weekday AM Peak (7:00 AM - 9:00 AM) and weekday PM Peak (4:00 PM – 6:00 PM) periods to coincide with peak traffic activity of the proposed uses and the adjacent streets. Traffic data used in this evaluation were collected in May 2023, which represents slightly above average traffic conditions and when public schools were in session. In order to provide a conservative existing conditions analysis, the volumes were not seasonally adjusted.

Per MassDOT guidance the traffic volumes are no longer subject to COVID-19 pandemic adjustment factors.

Route 9 eastbound in the study area has a posted speed of 50 mph and 85th percentile speed of 56 mph.

PUBLIC TRANSPORTATION

Route 60 (Chestnut Hill – Kenmore Station) and Route 52 (Watertown Yard – Dedham Mall) are the bus services available to the project area.

PEDESTRIAN FACILITIES

It is noted that the existing asphalt sidewalk on south side of Route 9 along the project frontage is approximately four feet and in very poor condition. There is a two-foot-wide grass strip, granite curb, and two-beam metal guardrail at the back of the sidewalk.

CRASH HISTORY

Crash data were obtained from the MassDOT database for the most recent five-year period available from 2018 to 2022. Two study area intersections, Hammond Pond Parkway at the Route 9 eastbound ramps and Hammond Pond Parkway at the Route 9 westbound ramps were identified by MassDOT Highway Safety Improvement Program (HSIP) as a crash cluster between 2018 and 2020 and have average crash rates above the MassDOT District 6 average rate. These two intersections appear to have been recently updated to include new traffic signal equipment and pavement markings, all of which are in good condition.

4. **A crash analysis for the intersection of Route 9 at Chestnut Hill Driveways was not included in the crash summary. Please provide intersection crash analysis for this location.**

5. **Due to high traffic volumes, intersecting driveways and roadways, and crashes along Boylston Street (Route 9), a roadway crash rate analysis should be provided for Route 9 within the study area vicinity.**

FUTURE CONDITIONS

The Traffic impact assessment memorandum evaluated impacts over a seven-year period to 2030 from the initial traffic data collection in 2023, for both the No-Build and Build conditions.

BACKGROUND GROWTH

An annual growth rate of 0.6% was applied to the raw volumes at study the intersections.

6. **BETA finds this growth rate of 0.6% to be reasonable.**

7. **A review of other developments in the area should be done as there are more developments in the area than what is currently in the traffic report. Two developments that may need to be included are the approved marijuana dispensary at 232 Boylston Street and proposed Sunrise of Newton Senior Living Facility at 11 Florence Street at Route 9.**

BUILD CONDITIONS

8. Trip generation for the project was estimated using the Institute of Transportation Engineers, *Trip Generation, 11th Edition* Land Use Code 221 (Mid-Rise Residential). No adjustments were made for non-auto transportation modes which provides a conservative estimate of vehicle trips. The Traffic memorandum indicates that the existing site use would generate 73 vehicle trips during the weekday AM peak hour and 77 vehicle trips during the weekday PM peak hour. For comparison, the existing site use generated approximately 19 vehicle trips in the weekday AM peak hour and no vehicle trips in the PM peak hour. **The trip generation estimates are reasonable**.

9. Trip distribution of traffic to both driveway access was based on U.S. Census Bureau Journey-to-Work data for the City of Newton 2021, existing travel patterns and volumes of the adjacent roadway system. This appears reasonable.

TRAFFIC OPERATIONS

SITE ACCESS AND CIRCULATION

10. Sight distance analyses were performed at both proposed site driveways (Primary Driveway and Secondary Driveway). Both Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD) were evaluated. Analyses were based on the 85th percentile travel speed of 56 MPH and the 50 MPH regulatory speed limit. The results show that required SSD and ISD lengths are exceeded in at both proposed site driveways. **BETA agrees with these results.**

11. The two proposed project driveways are located approximately 300 feet apart on the south side of Boylston Street (Route 9). An Acceleration/Deceleration lane is proposed along Route 9 eastbound in the vicinity of the project. Route 9 is a four-lane high-speed divided highway with access from ramps, intersections, and driveways. Just to the west of the proposed project are the following access points to Route 9 eastbound:

- Olde Field Road – Unsignalized T-intersection approximately 265 feet west of the main project driveway.
- Boylston Street Eastbound on-ramp from Parker Street – Yield controlled on-ramp approximately 400 feet west of the main project driveway.
- Sheldon Road - Unsignalized T-intersection that intersects with the Parker Street eastbound on-ramp just west of Route 9.

There are traffic operations and safety concerns with the two proposed project driveways operating in close proximity to one another and with the access points on Route 9 immediately west of the project site. The new project driveways will create weave sections between 1) traffic approaching the main driveway from Route 9 mainline eastbound conflicting with traffic entering Route 9 mainline eastbound from Olde Field Road and the Parker Street on-ramp, and 2) traffic approaching the east driveway from Route 9 mainline eastbound conflicting with traffic exiting the main driveway onto Route 9 eastbound**. A weave capacity analysis should be provided to indicate operations along these segments. A merge analysis should be provided for the east driveway exit onto Route 9 eastbound.**

12. **The proposed two site driveways on Route 9 will create a traffic weaving situation along Route 9 eastbound. If the driveways cannot be shown to operate under acceptable safe conditions, consideration should be given to reducing the potential impacts by 1) consolidating the driveways into one access/egress, or 2) making the main west driveway a one-way right-turn entrance only and making the east driveway a one-way right-turn exit only.**

13. **What measures/signage will be provided to direct delivery trucks and visitors to the appropriate site driveways? This should be provided to prevent motorists needing to turn around in the west driveway or circling back around from the east driveway (from Route 9 eastbound-westbound-eastbound).**

14. **The shadow study shows that the project will cast a shadow across Route 9 eastbound for most of the fall and winter seasons. Will the shadows impact motorist visibility, and if so are there measures that would mitigate their impact such as additional street lighting?**

15. **The Proponent is proposing to extend the traffic island at the Parker Street on-ramp further east to prevent eastbound Route 9 traffic from turning right onto Sheldon Road and improving the merge for Parker Street eastbound on-ramp. BETA agrees with this measure.**

16. **The Applicant is proposing a scored concrete island gore and a Stop sign on the eastbound Parker Street on-ramp approach to Route 9. Please provide capacity analysis with Stop control on the eastbound ramp. The concern is that the Stop control with increase the upstream queue length on the ramp back to the Park Street signal.**

17. **The proposed project will require review by MassDOT and an Access Permit.**

18. **The fire truck turning radius figures are acceptable. Please provide similar figures showing large moving truck maneuvers.**

19. **The Applicant should coordinate with the Newton Fire Department to see if they will require an emergency access from Hagen Road. If so, a gated entrance may be needed instead of bollards at Hagen Road.**

20. **Has the Newton Fire Department reviewed the proposed emergency access roadway on the west and south sides of the building?**

21. **There is a concern that small deliveries (food services such as Grubhub) would park on Hagen Road and walk to the project site instead of driving to the project access on Route 9. What measures can the Applicant implement to prevent this from happening?**

INTERSECTION CAPACITY ANALYSIS

Capacity analyses were performed for the study intersections using the Synchro 10 software, based on the 6th Edition of the Highway Capacity Manual methodologies for the 2023 Existing, 2030 No-Build, and

2030 Build traffic volumes, during the weekday AM and weekday PM peak hours. Three study intersections have four individual movements that operate at Level of Service (LOS) D during the No-Build conditions and will remain at LOS D with the addition of project traffic. These include Parker Street at Clark Street/Route 9 WB Off-Ramp westbound approach, Parker Street at Route 9 EB Ramps eastbound and northbound approach and Dudley Road at Route 9. These movements will not be impacted significantly as a result of the added project trips. All other study area intersections are expected to operate with LOS C or better.

22. **The site driveways are projected to operate with Level of Service D or better during both the AM and PM peak hours. Weave and merge capacity analysis should be provided. See Comment 11 above.**

23. **The average vehicle queues and 95th percentile vehicle queues at the signalized study intersections will generally be contained within available storage lanes during peak hours. The project will not significantly change queue lengths when compared to No-Build conditions. Long queue lengths are shown for the Existing, No-Build and Build conditions at Parker Street at Route 9 Westbound ramps extending over the bridge and impacting the intersection of Parker Street at the eastbound ramps intersection. The Traffic memorandum recommends traffic signal phasing/timing optimization at this intersection. Indicate if the Applicant is committing to fund this measure.**

24. **The project is located within walking/biking distance of the Newton South High School and Middle Schools. Potential impacts/conflicts of traffic with children walking and biking to school in the vicinity of the schools should be evaluated. See Comment 1.**

TRANSPORTATION DEMAND MANAGEMENT

The Proponent proposes to implement several Transportation Demand Management (TDM) measures on site in an effort to minimize the project's impact on the surrounding roadways. The measures include:

- On-site TMD coordinator
- Unbundled parking
- Preferential parking and incentives for low emission vehicles
- Electric vehicle (EV) parking
- Weather-proof bicycle parking
- Public transportation information
- On-site amenities such as a fitness center and club room
- Transit pass subsidy
- Pedestrian infrastructure within project site and connections to public sidewalks

25. **The proposed TDM program elements are reasonable. The Proponent should coordinate with the City on specifics of the Transit Pass Subsidy measure. Consideration should be given to providing continued financial incentives for alternative modes such as discounted MBTA passes for residents.**

PEDESTRIAN AND BICYCLE ACCOMMODATIONS

26. **There is currently an unimproved path through the wooded area between Hagen Road and Hurley Place. The current site plans show a 10-foot-wide multi-use path connecting the project site to**

Hagen Road. Without this connection, project residents would be limited to using sidewalks on Route 9 to access neighborhood streets such as Old Field Road. While the Applicant is proposing to improve sidewalks on the south side of Route 9 in the project vicinity, the pedestrian walking experience on Route 9 would continue to be uncomfortable due to the high volume, speed, and noise of traffic. Therefore, the multi-use path is needed to provide a more comfortable and convenient facility and connection for walkers and bikers.

27. **Explain how bicyclists are expected to access/egress the site via Route 9.**

28. **Indicate how children would walk or bike to middle school and Newton South High School.**

29. **Figure 13 in the Traffic memo shows a separated bicycle lane right turn from the Parker Street eastbound Route 9 on-ramp. Is this proposed by others or as part of the project?**

30. **The existing sidewalk on the south side of Route 9 fronting the project has a deteriorated asphalt sidewalk and a two-foot-wide grass strip in places between the sidewalk and roadway. Will a buffer strip be provided as part of the proposed new sidewalk? A buffer area between Route 9 and the sidewalk would provide more separation between pedestrians and traffic and reduce pedestrian stress.**

31. **Figure 13 of the Traffic memorandum shows the Applicant will repair/reconstruct sidewalk curbing and drainage where needed west of the project site and replace existing 5-foot-wide asphalt sidewalk east of the project site to Dudley Road. Provide clarification on the extent of the sidewalk and drainage improvements west of the project site and confirm sidewalk replacement limits east of the project site.**

32. **The site plans show a proposed crosswalk across the main project driveway connecting a walking path between the proposed Sitting Grove west of the driveway and the residential buildings east of the main driveway. There is a concern that motorists entering the site from Route 9 eastbound will be traveling at relatively high speeds and may not expect pedestrians in this location and may not have time to react. Consideration should be given to providing safety enhancements at the crosswalk and/or relocating the crosswalk further south away from Route 9.**

PARKING ACCOMMODATIONS

33. **The project proposes 282 parking spaces for the 198 dwelling units (1.42 spaces per unit). The Traffic memo (Table 16) shows Institute of Transportation Engineers (ITE) *Parking Generation* peak parking rates (adjusted for mode share) ranging between 1.09 and 1.22 per unit. Will the peak parking ratios be below 1.4 spaces per unit without mode share adjustment? We question whether the Census data mode share for non-auto use is appropriate for the project location which has limited connections to pedestrian, bicycle, and transit facilities.**

34. Table 17 in the Traffic memo shows parking survey results for six multi-family complexes in the general Metro Boston area. The results show parking demand ranges between 1.29 and 1.44 spaces per unit, with an average rate of 1.34. Please provide dates when the parking surveys were conducted. Is the parking supply for each site available? Are number of visitor spaces provided for each site?

35. The site plans show nine surface parking spaces and 11 spaces in the garage for short-term visitor use (20 total). It is understood that additional overnight/long-term visitor spaces will be provided in the garage to guests as needed. Provide and explanation of how the proposed visitor parking space supply will meet demand. Will the site have the flexibility to allow shared parking between resident and visitor parking spaces.

36. What measures will the Applicant provide to prevent visitors from parking on Hagen Road?

37. The Traffic memo provides information from the MAPC *WestMetro Parking Utilization Study (Perfect Fit Parking Initiative, Phase 4 (July 2023).* The study shows that 10 sites in Newton provided an average parking supply of 1.52 spaces per unit with a parking demand of 0.83 occupied spaces per unit and 50% occupied spaces per total spaces. This information supports that the proposed 1.42 parking spaces per unit ratio is adequate. Is the MAPC data inclusive of visitor spaces?

38. The architectural plans indicate that the garage parking spaces will be 18 feet long by 9 feet wide. Per the Newton Zoning Ordinance, section 5.1.8.B.2, spaces shall be 19 feet long.

RECOMMENDATIONS

The Proponent proposes to implement several recommendations on the surrounding roadways. The measures include:

ACCESS/EGRESS IMPROVEMENTS

- Driveway Design – designed with minimum curb radii to accommodate delivery and emergency access vehicles. Includes widening of eastbound Route 9 shoulder to provide acceleration/deceleration lane.
- Signs and Pavement Markings Stop signs provided on driveway approaches to Route 9 eastbound.
- Wayfinding Signs – Signage suggested to direct residents and visitors to appropriate driveway.

39. A wayfinding signage plan should be provided. See Comment 13.

PEDESTRIAN AND BICYCLE ACCOMMODATIONS

- Pedestrian Accommodation – sidewalks connecting to Route 9.
- Multi-use path to Hagen Street.
- Route 9 Sidewalk Enhancement – enhancement of sidewalks along Route 9.
- Bicycle Amenities – provide weather-protected bicycle parking.

See Comments 24 through 30 above.

OFF-SITE IMPROVEMENTS

The proponent in collaboration with the City and MassDOT will:

- Optimize the traffic signal timing for Parker Street at Route 9 Ramps. **See Comment 22.**
- Extend Parker Street Route 9 Eastbound On-Ramp Island using scored concrete and delineators. **See Comment 15.**
- Drainage Improvements near the Parker Street ramp intersection with Sheldon Road and between the Site and Olde Field Road.
- Transportation Demand Management. **See Comment 24.**

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.

Jeffrey Maxtutis
Senior Associate

Project No: 10337.02