Land Use Committee Report

City of Newton
In City Council

Tuesday, February 11, 2020

Present: Councilors Lipof (Chair), Kelley, Greenberg, Markiewicz, Downs, Bowman and Laredo

Absent: Councilor Auchincloss

Also Present: Councilors Leary, Albright, Krintzman, Malakie

City Staff Present: Director of Planning & Development Barney Heath, Chief Planner Neil Cronin, Associate City Solicitor Jonah Temple,

All Special Permit Plans, Plan Memoranda and Application Materials can be found at http://www.newtonma.gov/gov/aldermen/special_permits/current_special_permits.asp. Presentations for each project can be found at the end of this report.

#26-20 **Request to Rezone Approximately 4.4 acres to MU-3 to Create a Contiguous MU-3 Zone**
MD 399 GROVE OWNER, LLC/RAMIREZ CONCORD, LLC/BH NORMANDY RIVERSIDE, LLC/MASSACHUSETTS BAY TRANSPORTATION AUTHORITY petition for a change of zone to Mixed Use 3/Transit Oriented District for portions of land located at 355 Grove Street (currently zoned BU-2) and 399 Grove Street (currently zoned BU-5), also identified as Section 42, Block 11, Lots 3, 4, and 4A, abutting the existing MU-3 Zone.

Action: **Land Use Held 7-0; Public Hearing Continued**

#27-20 **Petition to allow Mixed Use Transit Oriented Development at Riverside Station**
MD 399 GROVE OWNER, LLC/RAMIREZ CONCORD, LLC/BH NORMANDY RIVERSIDE, LLC/MASSACHUSETTS BAY TRANSPORTATION AUTHORITY petition for SPECIAL PERMIT/SITE PLAN APPROVAL to construct a mixed use, transit-oriented development of residential units, office, retail, personal services, restaurant, hotel, and related commercial uses not to exceed 1,025,000 square feet of gross floor area, with residential uses comprising not less than 60% of the total gross floor area with a residential density of not less than 800 square feet per unit with not less than 560 units nor more than 620 units with special permit relief and/or waivers as follows: as to dimensional standards, a development of more than 20,000 square feet of gross floor area, building height of up to 170 feet, buildings up to 11 stories, Floor Area Ratio of up to 2.5, beneficial open space of not less than 15%, increase of height of certain buildings with the Grove Street Area Corridor (to the extent necessary), and reduction in setback from Grove Street for certain buildings within the Grove Street Corridor Area (to the extent necessary); as to design standards, waiver of the sustainable development design standards and placement of a retaining wall greater than 4 feet in height located in a setback; as to uses, for-profit educational use, retail sales of over 5,000 square feet, restaurant with more than 5,000

square feet of gross floor area, personal service use of over 5,000 square feet, place of amusement, health club on ground floor, animal services, hotel, bank up to and over 5,000 square feet, theatre/hall, laboratory/research facility, parking facility, accessory, multi-level, parking facility, non-accessory, single level; as to parking, reduction of the residential parking requirement to 1.25 stalls per unit, reduction of the overall commercial parking requirement by 1/3, and waiver of parking stalls not to exceed 685 stalls, above and beyond the reductions specified above; as to parking facilities, waivers of the parking stall dimension requirements, the end stall maneuvering space requirements, the driveway entrance and exit requirements, the 5% interior landscaping requirements, the interior planting area requirements, the tree requirements, the bumper overhang requirements, the one-foot candle lighting requirement, the parking stall striping requirements (to the extent necessary), the curbing, wheel stop, guard rail, or bollard requirements, and the number of off-street loading facilities requirements; and as to signage, waiver of the number, size, type, location, and design requirements, all at 355 and 399 GROVE STREET on land known as Section 42, Block 11, Lots 3, 4 and 4A, containing approximately 13.05 acres of land in districts zoned Mixed Use 3 Transit Oriented (MU3), BU2 (a portion to be rezoned to MU3), BU5 (to be rezoned to MU3). Ref: Sec. 4.2.2.B.1, 4.2.2.B.3, 4.2.3, 4.2.4, 4.2.4.A.4, 4.2.4.B.3, 4.2.4.G.2, 4.4.1, 5.1.4, 5.1.4.A, 5.1.4.C, 5.1.8.B.1, 5.1.8.B.2, 5.1.8.B.4, 5.1.8.B.6, 5.1.8.D.1, 5.1.8.D.2, 5.1.9.B.1, 5.1.9.B.2, 5.1.9.B.3, 5.1.9.B.4, 5.1.10.A.1, 5.1.10.B.3, 5.1.10.B.5, 5.1.12, 5.1.12.B.4, 5.1.13, 5.2, 5.2.13, 5.4.2.B, 5.12, 6.4.29.C.5, 7.3.3, 7.3.5, 7.4 of the City of Newton Revised Zoning Ordinance, 2017. Additionally, as to infiltration and inflow mitigation, an abatement of the infiltration/inflow mitigation fee pursuant to Section 29-170 of the City of Newton Revised Zoning Ordinance, 2017.

Action: **Land Use Held 7-0; Public Hearing Continued**

Note: Steve Buchbinder, offices of Schlesinger and Buchbinder, Walnut Street, represented the petitioner. VHB Traffic Engineer Randy Hart presented an overview of the traffic study as shown on the attached presentation. Mr. Hart noted that the analysis includes evaluation of site access and potential interchange improvements. He confirmed that the petitioner has worked with the City's peer reviewer Green International and the Mass Department of Transportation (Mass DOT) and has received approval from Mass DOT and the Federal Highway. Mr. Hart noted that some outstanding items remain and noted that the data reflects reductions to the project (reduction of 58 residential units, reduction of 21,368 sq. ft. of retail space, 318,359 sq. ft. of office space and 44 hotel keys).

Mr. Hart explained that some of the proposed changes improve on existing conditions. Currently, the site of the proposed development is served by a single, unsignalized driveway, which can cause traffic queuing, particularly during the PM peak hour. The northbound I-95 off ramp, next to the site is a short ramp with a left turn and a through lane. The free right turn is such that a driver can exit the highway and continue right at a high speed. Two driveways are located close to the ramp, with unsafe sight lines and the speeds from drivers exiting the highway contribute to unsafe conditions. The southbound I-95 ramp is located at an unsignalized intersection. The petitioner proposes to create two points of access; one on Grove Street and a second on the northwest corner of the site. Both locations would be signalized and would control movement into the site. The northbound I-95 ramp would be replaced with a ramp that parallels the highway, goes under the bridge and turns to get into the site, never touching Grove Street. The highway, Recreation Road and Grove Street will be subject to the signalization. Recreation Road

would have full two-way access. Mr. Hart explained that no left turns will be allowed from Grove Street into the site in an eastbound direction and the proposed plan deemphasizes activity on Grove Street. The access on Grove Street will remain, approximately 80' west of its current location. The southbound I-95 ramp at Grove Street will be improved with the installation of a roundabout. The roundabout will make the intersection compact, will slow the volume down and will improve the pedestrian and bicycle benefits. The roundabout makes directional changes easier for drivers. Proposed improvements include coordinated, adaptive signals. These signals can monitor real time traffic conditions and make adjustments as necessary. Mr. Hart reviewed existing and proposed configurations for I-95 southbound, I-95 northbound and the Grove Street Extension as shown attached. The reconfiguration eliminated the ramp from Recreation Road and some conflict points. Access to the site includes a third, emergency access point, to be limited to emergency vehicles and MBTA vehicles as required and under police control.

Proposed pedestrian and bicycle enhancements include a multi-use path/cycle track along the site frontage, to Riverside Park, across the bridge and to the roundabout. A sidewalk runs parallel to the path and pedestrian corridors are located into the site in addition to sidewalks throughout the site. The cycle track, bike network and design work contribute to a robust trail network. Mr. Hart showed cross sections of the proposed Grove Street improvements.

In the transit square, areas have been designated for different uses (MBTA, passenger loading, local shuttles). Mr. Hart explained that the traffic study reflects the conservative approach that was taken with regard to projected impacts. Conservative data was used for retail and office traffic. No mode share aws assumed for retail, bike or pedestrian activities.

Mark Development Principal Damien Chaviano presented details of the shared parking plan for the proposed development. Details of his presentation are found attached. Mr. Chaviano explained the differences between the Newton parking requirements, requirements under a special permit and the numbers as presented under the current proposal. 2,041 are proposed to be located at the site where the parking demand is estimated at 2,468 stalls. Mr. Chaviano explained however, that each use has its own peak demand; office (am), residential (afternoon), retail (AM/PM). Additionally, internal capture accounts for people that visit the site for multiple uses. Mr. Chaviano noted that the site of the proposed development is transit-oriented, and bus and rail options are available. When factoring all of the uses and peak times in, the peak demand is 1963 parking stalls at 10:00 am and total 1963 spaces (78 surplus stalls). Wayfinding and signage will direct visitors to the site where to park. Digital monitoring and a third-party management system will help to track behaviors within the garage and issue parking violations/towing if necessary. During peak AM/PM rush hours, queuing will be addressed by adding personnel in the garage who will direct traffic to different points of access. Parking in the garage will be through a tiered system. There will be a 24/7 parking rate, reverse commuting pass rates as well as daily and guest parking. 55% of residents are expected to leave their cars in the parking garage during the day but at 5:00 pm the office use is reduced and there is a surplus of approximately 248 parking stall surplus. The petitioner will consider a valet system if the projections prove incorrect. Mr. Chaviano confirmed that there is ample supply meet demand on Red Sox game days.

The proposed Transportation Demand Management Plan (TDM) includes a parking management plan (shared parking, reduce parking surplus, unbundle parking, parking pricing), Traffic management (adaptive signal control, idling limit, signage), Bike and pedestrian facilities (bike network and site access,

bike parking 680 stalls plus additional stalls for office and MBTA bike users, showers and lockers, bike repair station), car share services (car share parking, electric car charging (10%, + additional 10% EV ready), electric car/preferential parking), Reimbursements/incentives (MBTA subway, bus, commuter rail passes, bikeshare passes, rideshare passes), and may include a van/carpool program and the hiring of an on-site TDM coordinator. Mr. Chaviano noted that if the development exceeds 110% of the projections, additional mitigation measures will trigger. Examples of the additional mitigation measures could include; increase in the subsidy for T-passes (capped at $750k), addition of a shuttle system to connect to other transit hubs, incentivizing office operations to vary employee work schedules, expansion of the bike share program, coordination with MBTA to expand bus operations or an increase cost of parking for non-MBTA users.

Senior Planner Neil Cronin introduced Green International Affiliates Transportation Planners Wing Wong and Corinne Tobias. Mr. Wing Wong detailed the review process for the proposed development as shown in the attached presentation. He stated that the developer has been responsive in addressing concerns and explained that the peer review addressed maximized utilization of on and off-site transit facilities (vehicle parking supply, mode share splits, pedestrian and bicycle amenities) as well as consistency with the principles identified in the Riverside Vision Plan. Ms. Tobias reviewed details of the subjects of the study. 33 off-site intersections were evaluated as part of the analysis (17 unsignalized/16 signalized intersections). The data reflects a decrease in the trip distribution. Ms. Tobias explained that the total unadjusted trips reflect a condition if the development was built independent of transit and without complementary uses. Once trip credits from hotel, transit and retail uses are applied, the total project net new trips are reduced by approximately 1/3. Ms. Tobias stated that the singular parking location within the site minimizes the need for visitors circulating within the site. With regard to the TDM Plan, Ms. Tobias noted that the parking management, bicycle and pedestrian amenities and reimbursement for MBTA passes should encourage alternate uses of transportation and should discourage vehicle trips.

Regarding the site plan, it was suggested that the improvements to/from I-95 are sufficient, the signalization upgrades are a positive improvement and the petitioner's commitment to incorporating transit signal priority will be beneficial. It was suggested that some details for bicycle and pedestrian accommodations in and around the side are still being refined. "Geofencing" along Grove Street will prevent uber and lyft apps from working in certain areas and will restrict pickup and drop off to certain locations on the site. A third party as well as internal signal could be helpful in directing traffic away from Grove Street. The transit has been evaluated and the petitioner has addressed any concerns regarding queuing, etc. The proposed multi-use path has been extended to travel along Grove Street to the proposed roundabout and along the project site. The petitioner is still evaluating short term improvements for 6 intersections identified as high crash locations in the Road Safety Audit. Ms. Tobias confirmed that the traffic impacts were evaluated according to industry standards and the petitioner was responsive to concerns raised by the peer reviewer. Green International Affiliates will continue their coordination with the City, MBTA and the petitioner in the review of design of on and off-site improvements.

Public Comment

John McElduff spoke on behalf of the Lower Falls Improvement Association (LFIA). Mr. McElduff commented on concerns relative to transportation. A copy of his presentation is attached to this report.

Mr. McElduff emphasized the importance of the development of a five-year plan from the MBTA that addresses major transportation spots on the T. He noted that rideshare companies were not included in the traffic study and suggested that they should be. Mr. McElduff questioned where cars will go when they cannot park on site and noted that when a car enters the site, they must pass several buildings to get to a drop-off point. He expressed concern relative to the decrease in the curb line for dropping off passengers as compared with the existing conditions as well as the location of the bike corral in the center of the transit loop. Mr. McElduff suggested that the petitioner should work with the MBTA to consider opening up the transit loop. In response to concerns relative to queuing, Mr. McElduff recommended that the projected queues should be put into a clear format and noted that if queues are significant; drivers may opt not to use public transportation. Mr. McElduff raised a concern regarding parking limitations during construction. He suggested that the MBTA should be required to contribute funding to ensure the project is successful and stated that elimination of the third bike lane on Grove Street is unnecessary. He noted that there may be an opportunity to locate a pedestrian path on an abutting property (as was conditioned by a separate special permit). Mr. McElduff questioned where dumpsters will be located, what the plan is for roadway maintenance and expressed support for establishing clear TDM metrics prior to issuance of the special permit.

Bike Newton, Brendan Keegan, 139 Gibbs Street, emphasized the importance of the train networks for creating bikeable and walkable destinations proximate to the site. He noted that the Climate Action Plan calls for reduced vehicle trips and promotion of bike and walking trips. Mr. Keegan expressed concern relative to the decrease from $6 million dollars to $2 for the two bridges project as a result of downsizing the project. He noted the trail is essential for connectivity to the Charles River, parks and conservation lands. A copy of Mr. Keegan's presentation is attached to the end of this report.

Mike Halle, 62 Cherry Place Chair of the Transportation Advisory Group, emphasized the importance of retaining the one-way northbound lane on the golf course side of Grove Street noting that accessibility is essential for improving pedestrian and bicycle facilities.

Stacy Humphrey, 80 Crehore Drive, spoke on behalf of Lynn Slobodin, 61 Washburn Avenue, her comments reflected concern about the location about the handicapped parking and access route to the train platform. The LFIA has arranged a meeting to discuss these concerns. The handicapped route to the train and the parking spaces are too far from the train platform and should not be only accessible by elevators, which can be unreliable.

Mark, address unknown, expressed concern about traffic projections. He urged the Council to consider and decide whether the proposed mitigation measures will be successful and suggested that he mitigation measures are not yet sufficient and should be additionally refined.

Al Calderoni, stated that it is unrealistic to expect people to live car free and noted that living car-free is not always practical. He urged the Council to focus on mitigation efforts that will address higher than anticipated traffic.

Jill Charney, 671 Grove Street, noted that Riverside station cannot currently be called a transportation hub. Upgrades must be made to accommodate the increased ridership from the proposed Riverside development and the Newton Highlands station. Ms. Charney noted that the MBTA is facing a $93 million

dollar budget deficit for the improvements currently planned. She questioned what has the petitioner negotiated with the MBTA to ensure the increased demand is met.

Ron Parkinson, 21 Grayson Lane, expressed concern relative to the traffic in Lower Falls and Auburndale. He suggested that there should be penalties for traffic higher than projected, similar to the Northland project. Any traffic mediation penalties should be spent on traffic improvements for the benefit of the neighborhood.

Cyrisse Jaffee, 8 Hallron Road, Requested a simulation of how the roundabout will function/flow. Ms. Jaffee expressed concern relative to the shared parking analysis and whether it accurately reflects the future conditions. Ms. Jaffee questioned if residential spaces are reserved until 8:00 am, will residents have to move their car at 8:00 am?

Tom Gagen, 32 Fern Street, noted that the developer cannot control the MBTA but can be held to high, reasonable standards for traffic management. Mr. Gagen noted that Riverside 1 was not successful and urged approval of the proposed development.

Jen Martin, 86 Ellin Avenue, Chair of the Safe Routes to School Task Force, expressed support for maintaining the proposed bike lane on the golf course side to ensure connection to Williams school without having to cross Grove Street. She noted that better bike infrastructure will promote connecting cyclists from Wellesley through Newton and to Waltham and expressed support for more funding for the two-bridges trail.

Karen Mondell, 11 Pine Grove Avenue, expressed concern relative to the displacement of 200-300 from Riverside during construction.

John Tortelotte, asked Councilors to consider requiring adequate space in the site plan to plan for accommodation of urban rail tracks, infrastructure, a new station and train storage as detailed in the Vision Plan list. This should be a condition of the site plan approval.

Charles Stover, 72 St. Mary's Street, urged the Council to work with the community who will be impacted by the proposed development.

Bob Sklar, 517 Grove Street, noted there is a group home at 511 Grove Street that is serviced by vans, which require some time to pick up passengers. He questioned whether this need has been evaluated.

Nathaniel Lichtin, 53 Pine Crest Road, noted that there is currently no parking demand management plan. He suggested that parking have its own set of goals and penalties to eliminate overflow parking. Mr. Lichtin suggested that some flexibility for future needs in the transportation hub should be left. He questioned how the geofencing will impact people not visiting the Riverside site.

Randall Block, 45 Lafayette Road, noted that this is a complex project. He stated that restrictions should be place on the service deliveries for trucks as well as weight restrictions on Grove Street. Mr. Block suggested that 100% of commercial traffic should come from I-95 and not from Grove Street.

Mr. Henderson noted that the MBTA has performed significant analysis relative to drop-off, pick-up, shuttle movements, etc. He noted that the T will be making significant investments in the green line work and will be receiving payment from the petitioner in one lump sum. Mr. Henderson explained that they are still working on phasing and maintenance of parking whenever possible as well as how to mitigate the reduction in number of parking stalls during construction. In response to concerns raised about the future work on the commuter rail, Mr. Henderson noted that any work on the commuter rail would happen north of the site.

Mr. Randy Hart noted that Ubers and Lyfts are counted in the traffic study as they cannot be differentiated from any other trip to the site. He noted that the petitioner can provide queuing information at all of the intersections studied but reiterated that the projections are based on conservative estimates. Mr. Hart confirmed that measures will be in place on Red Sox game days to maximize efficiencies.

Councilor Questions & Comments

How will regional rail mesh with this station?

The train station is not visible by eye, its tucked away on the site.

How will the one-way/two-way changes on Recreation Road; impact members of the community?

Can we consider permitting private bus companies through the site as well?

Can the petitioner provide simulations of the intersections, simulations of the roundabouts and a simulation that shows bike movements?

Is there a way to enforce the various parking uses in spaces at specific times to ensure the parking demands can be met?

Can the peer reviewer evaluate removal of the bike lane on the golf course side of Grove Street?

How many real time transit displays are included in the proposal?

Is the middle of the transit square the safest place for the bike corral?

Can the MBTA allocate some spaces for shared parking?

The Committee adjourned at 9:45 pm.

Respectfully Submitted,

Richard Lipof, Chair

1

Interchange Modifications Re-Evaluated

- Re-evaluated site access and interchange enhancements along with revised project
- Looked at multiple alternatives along the way
- Worked with MassDOT for last 18 months on evaluation
- Currently the site access and interchange improvement plans have been conceptually approved by MassDOT and FHWA allowing us to move onto formal design

vhb

2

City Hired Peer Review Firm

- City Hired Green International to review all transportation aspects of the project
- Through the City the Proponent has been working with peer consultant for many months
- Proponent has responded to multiple rounds of comments during this process
- We believe that we are in general agreement regarding most of the transportation components and recommendations

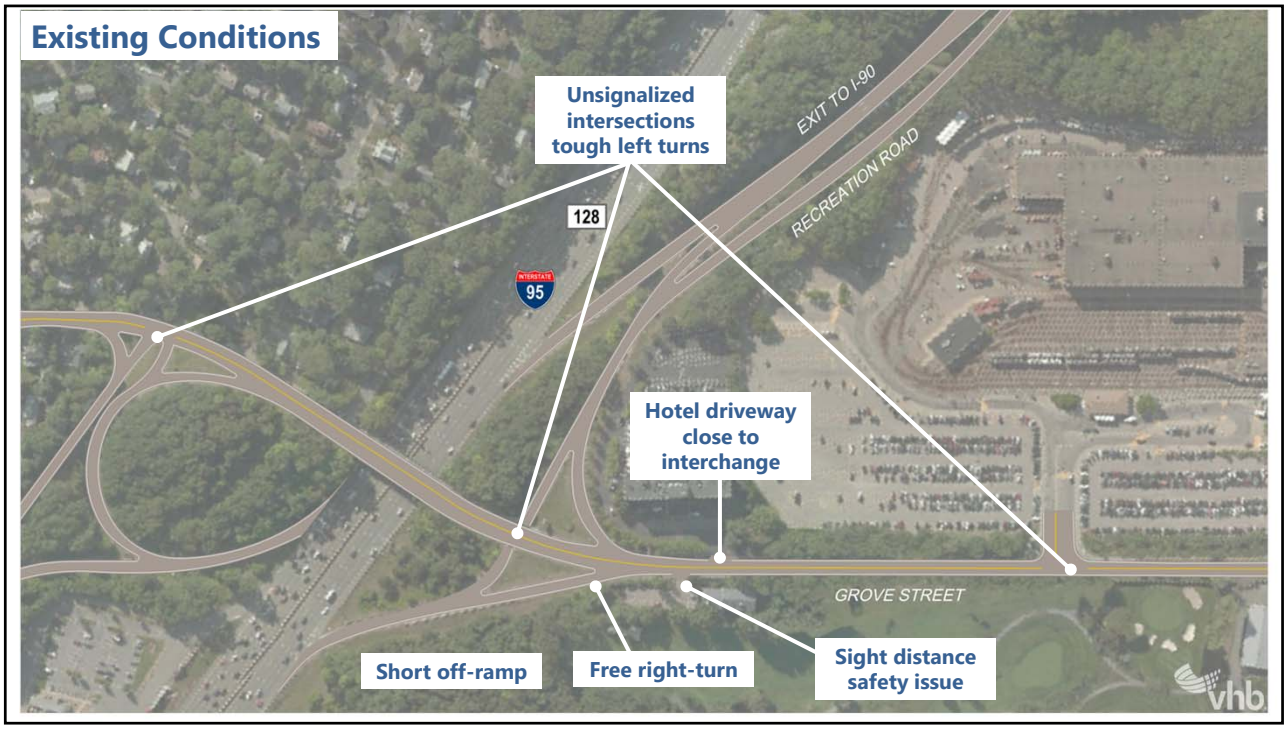
3

Project Modification From Original Filing (Spring 2019)

- Current Building Program 1,025,000 sf
- Original March 2019 1,457,000 sf
- **Change of approximately 432,000 sf**
  - 617 Residential Units (**reduction** of 58)
  - 43,241 sf of Retail (**reduction** of 21,368 sf)
  - 243,888 sf of Office (**reduction** of 318,359 sf)
  - 150 key Hotel (**reduction** of 44 keys)

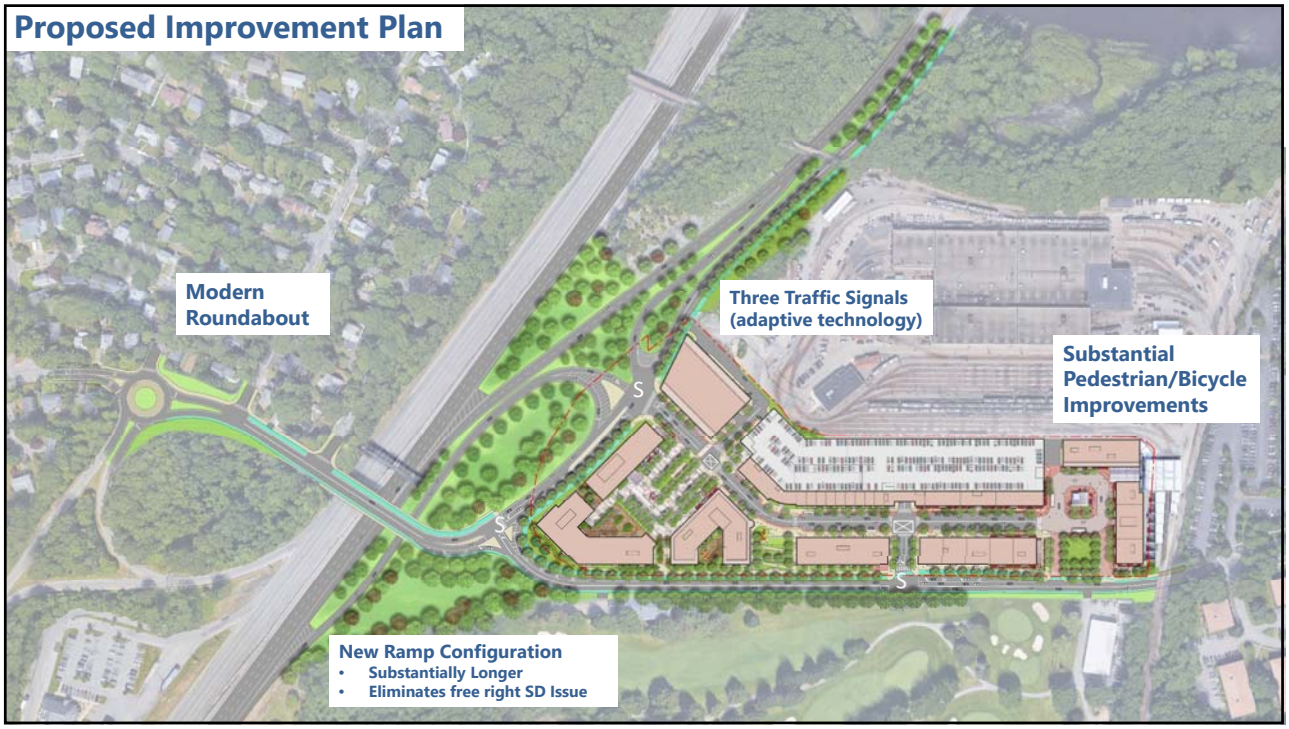
4

HR [2]2


Existing Conditions
Unsignalized intersections tough left turns
EXIT TO I-90
RECREATION ROAD
128
95
Hotel driveway close to interchange
GROVE STREET
Short off-ramp
Free right-turn
Sight distance safety issue
vhb

5

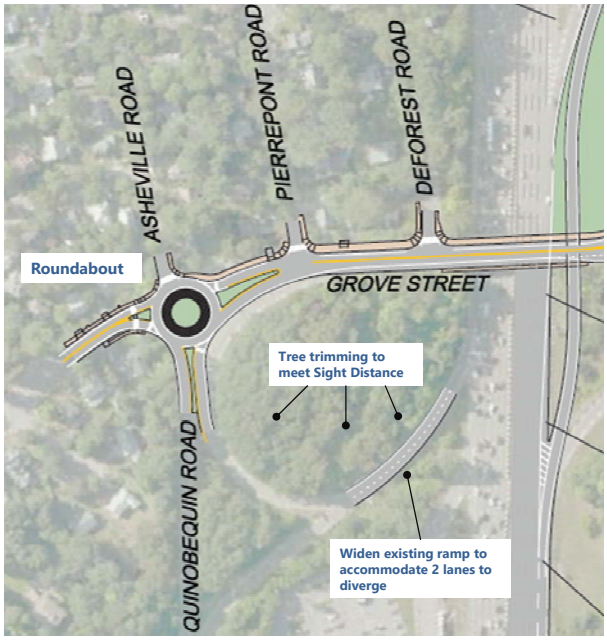
HR [2]3


Proposed Improvement Plan
Modern Roundabout
Three Traffic Signals (adaptive technology)
Substantial Pedestrian/Bicycle Improvements
New Ramp Configuration
• Substantially Longer
• Eliminates free right SD Issue

6

Existing I-95 SB Off-Ramp at Grove Street

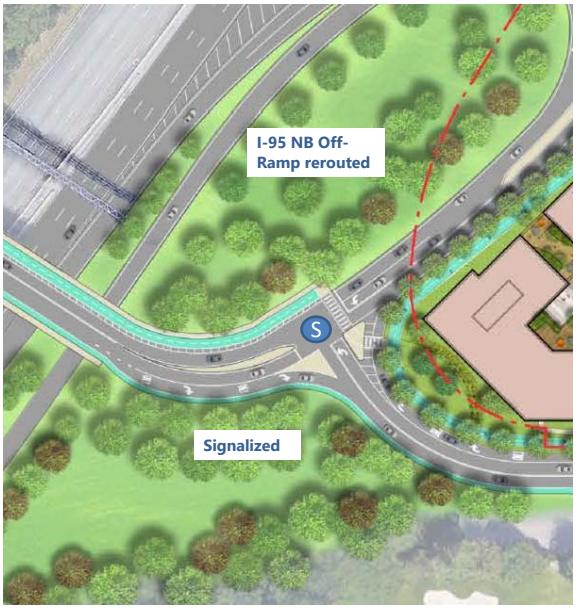
Proposed Modern Roundabout I-95 SB Off-Ramp at Grove Street



7

Existing I-95 NB Ramps at Grove Street

Proposed Grove Street at Grove Street Extension



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Existing Site & I-95 On-Ramp

Proposed Grove Street at Grove Street Extension

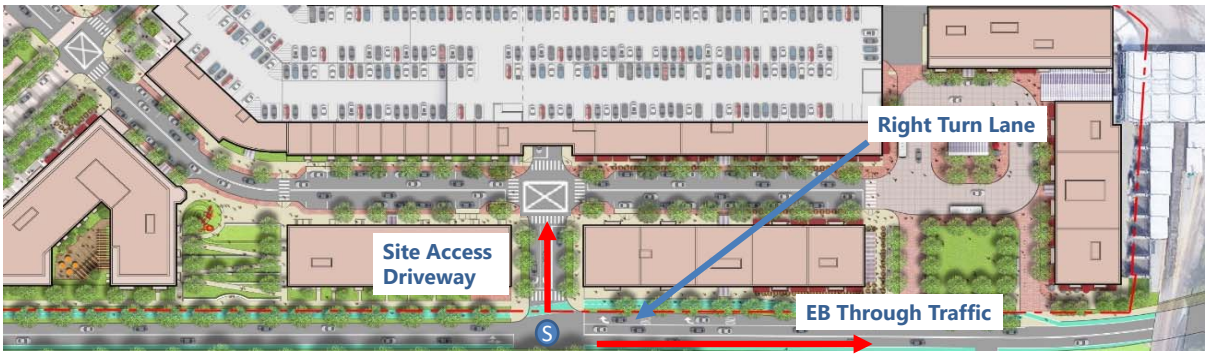
9

Existing Grove Street at MBTA Driveway

Proposed MBTA Site Access & Main Street

10

Grove Street WB Right-Turn Lane Into Site



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12

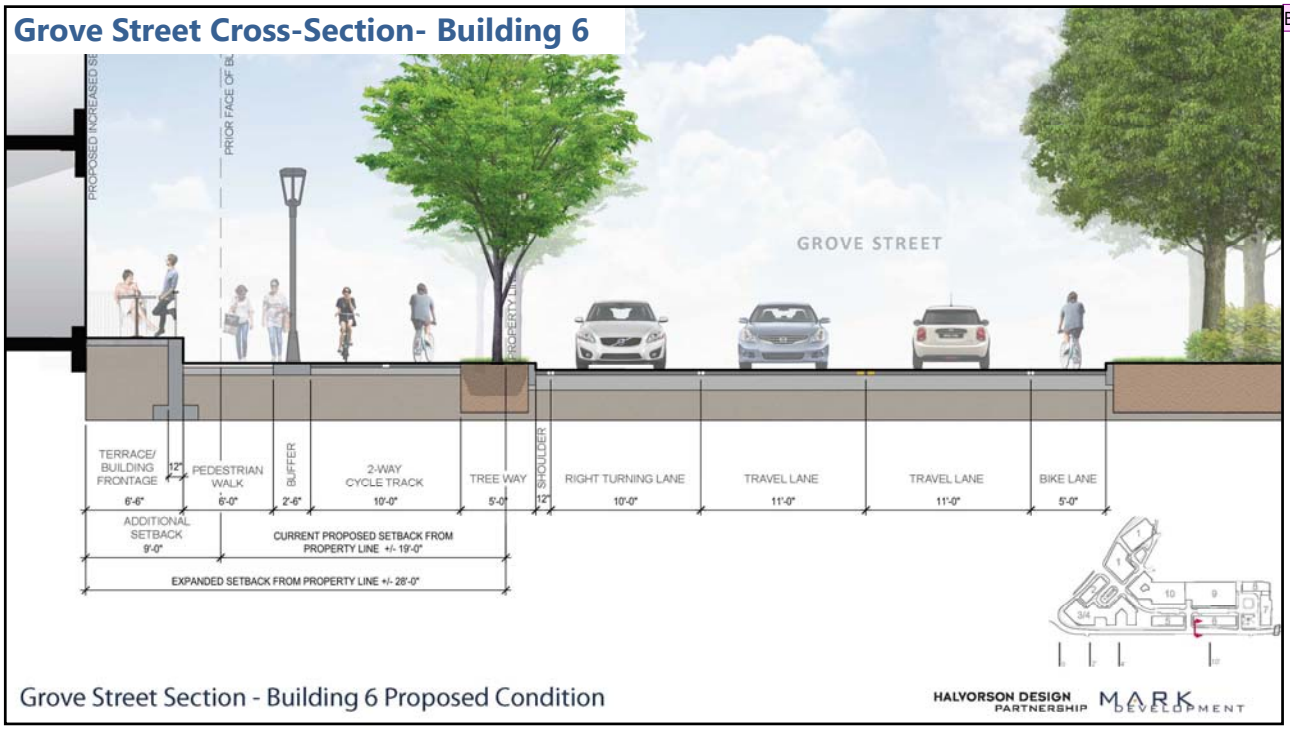
Pedestrian & Bicycle Enhancements

BT7

13

Grove Street Cross-Section- Building 6

BT7



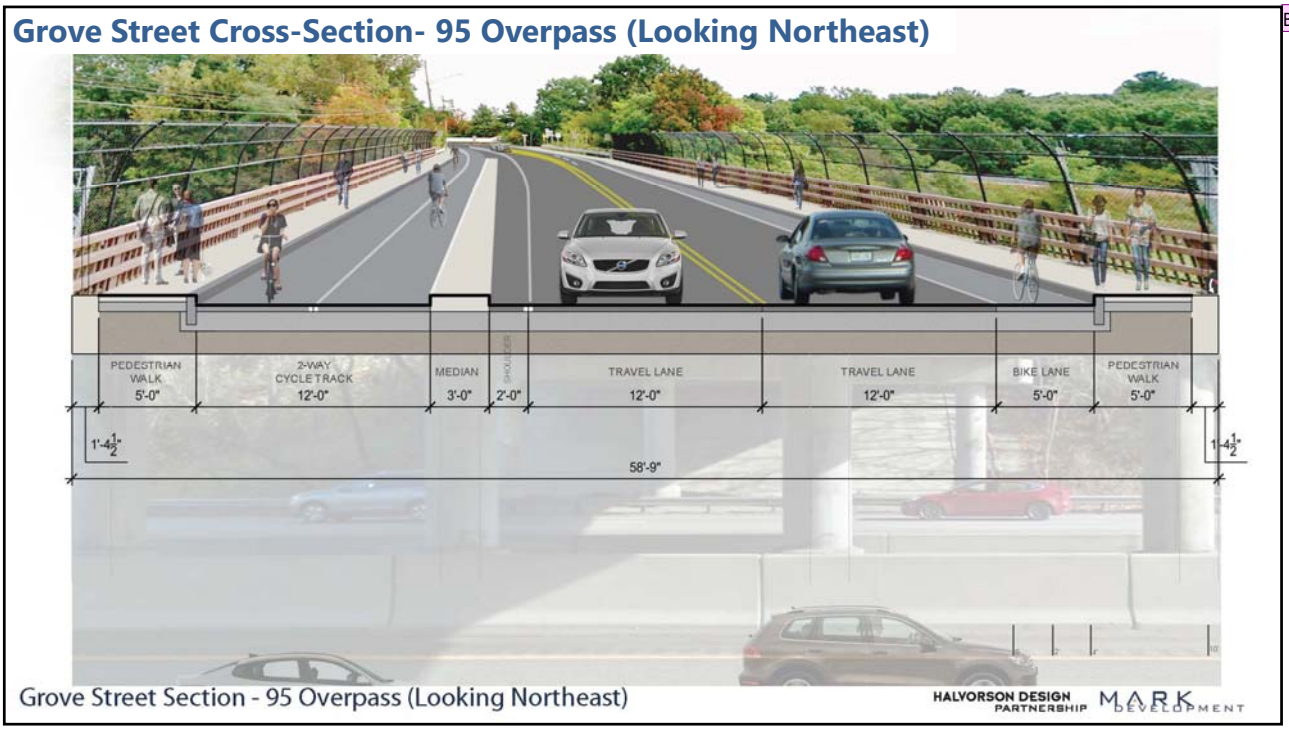
Grove Street Section - Building 6 Proposed Condition

HALVORSON DESIGN PARTNERSHIP MARK DEVELOPMENT

14

BT7

Grove Street Cross-Section- 95 Overpass (Looking Northeast)

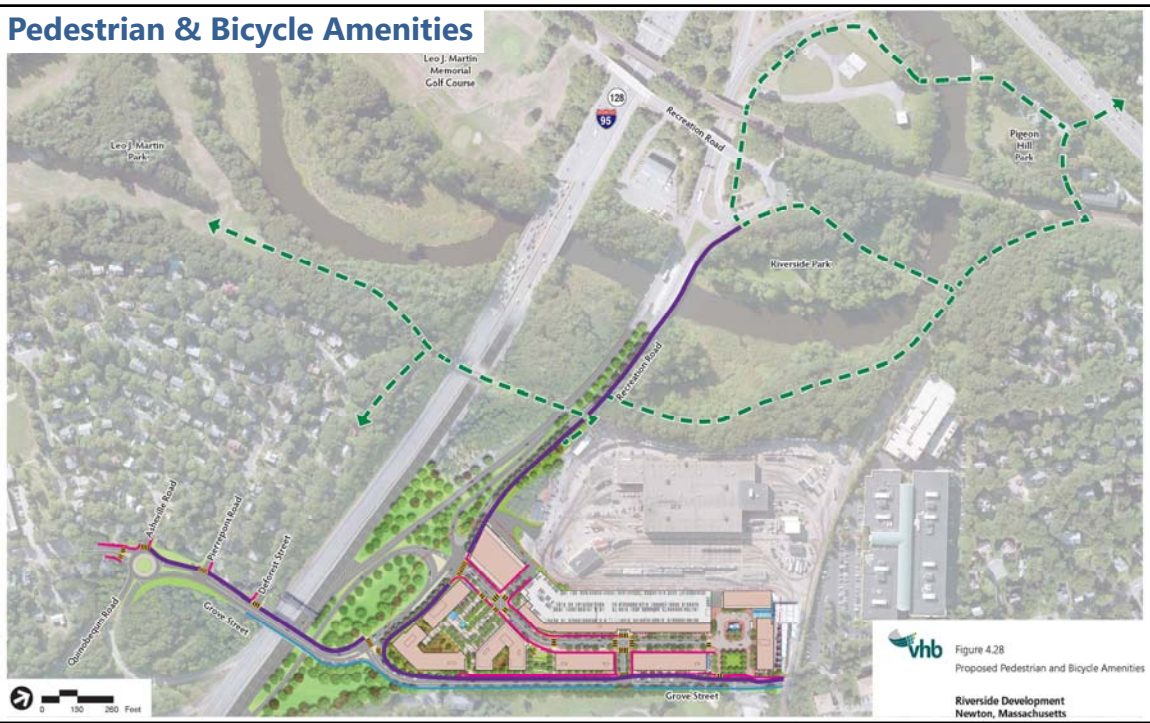


Grove Street Section - 95 Overpass (Looking Northeast)

HALVORSON DESIGN PARTNERSHIP MARK DEVELOPMENT

15

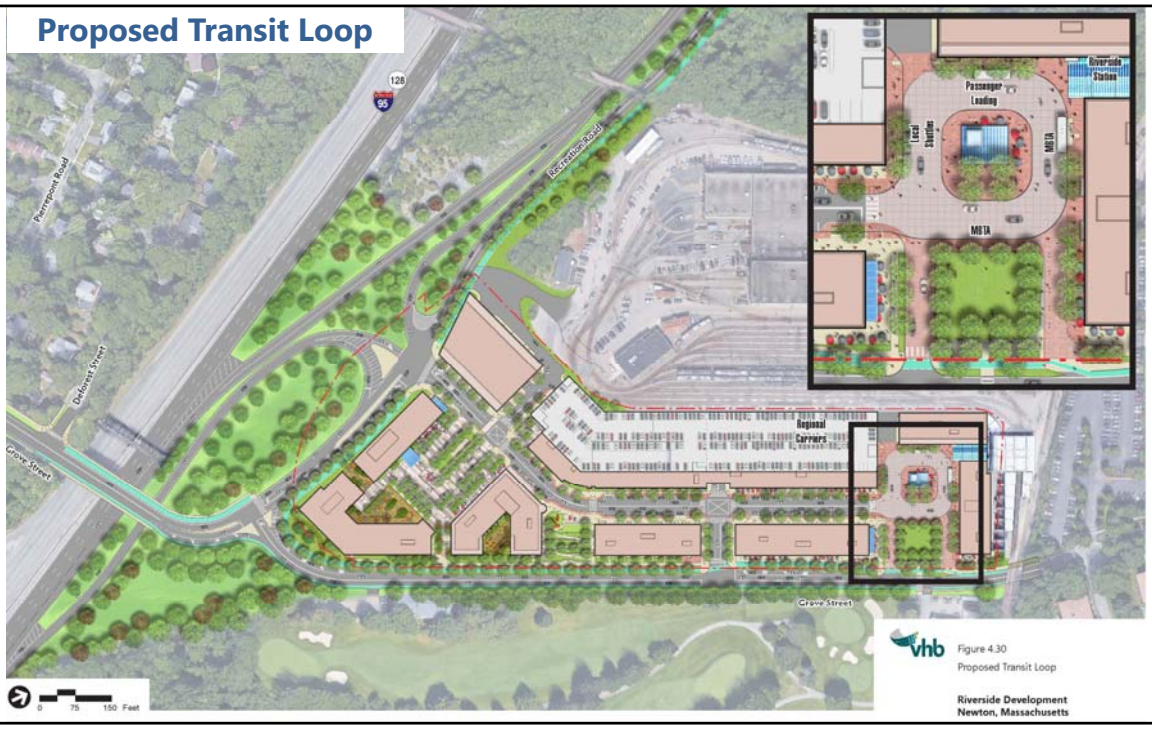
Pedestrian & Bicycle Amenities



vhb Figure 4.28
Proposed Pedestrian and Bicycle Amenities
Riverside Development
Newton, Massachusetts

16

Proposed Transit Loop



17

TIA and Projections are very conservative

For the purpose of providing city with highly conservative estimate of project traffic the following assumptions have been made:

- LUC 820 Shopping CTR was applied to retail
- Mode Share for Office was 5%
- Mode Share for Residential was 25%
- No Mode Share for Retail activity
- No Mode share for bikes and ped access to site.

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Operations Are Also Highly Conservative

Intersection operations are also highly conservative due to:

- Assumptions that have been made for mode share, just discussed.
- Adaptive Signal Technology will be implemented at all three proposed traffic signal. We are unable to analyze the intersections with adaptive controls so results should be considered highly conservative.
- Adaptive systems monitor activity in real time and adjust to on-demand traffic needs. Highly efficient systems.

19

Riverside Station

Land Use Presentation

February 25, 2020

MARK DEVELOPMENT

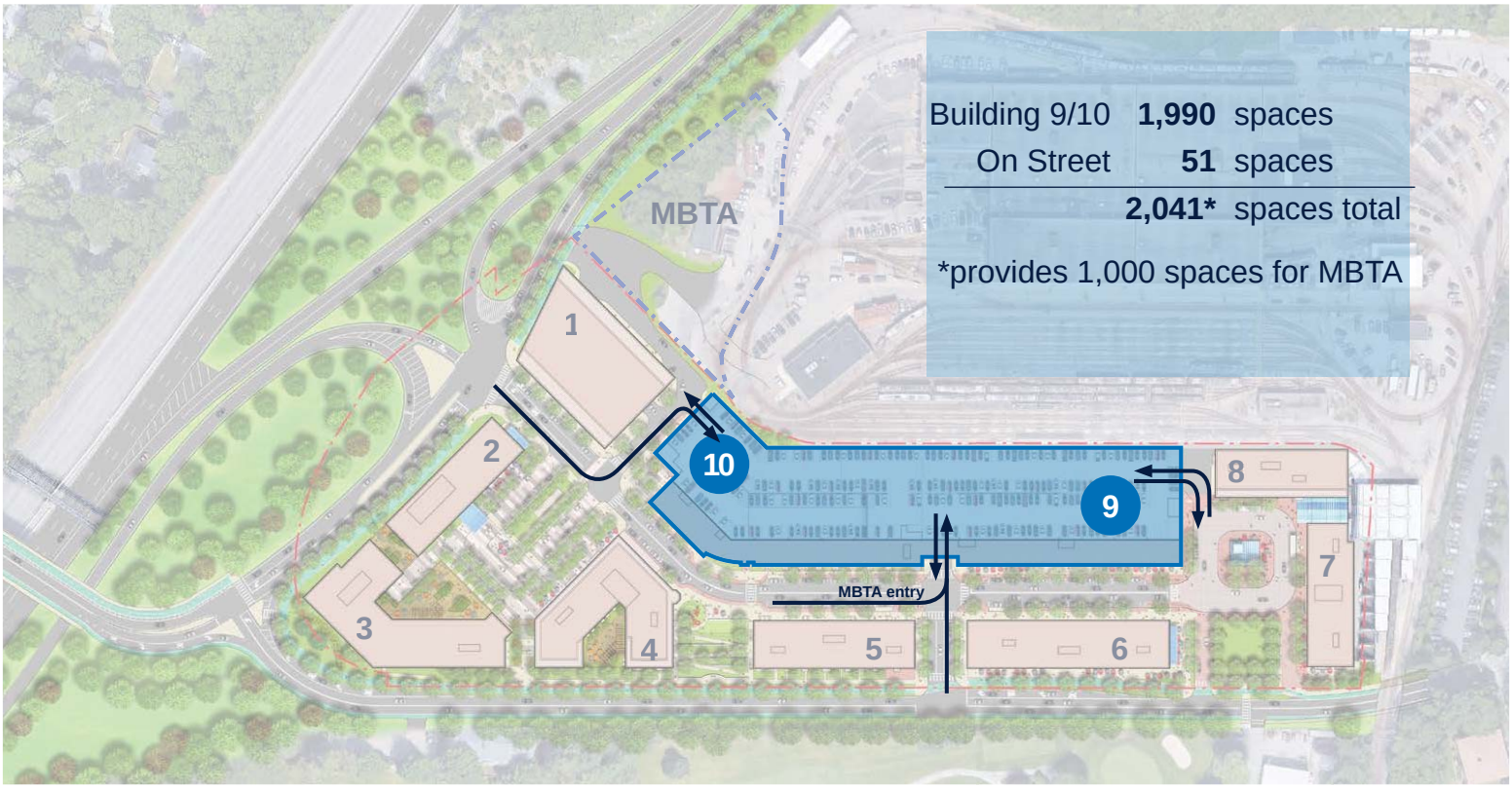
Riverside Parking Summary

	Required Under Newton Zoning Ordinance	Newton Ordinance Under Special Permit (*)	MD Proposal
Parking Spaces	2,599 Spaces	1,682 Spaces	1,041 Spaces
MBTA Parking Spaces**	1,000 Spaces	1,000 Spaces	1,000 Spaces
Total Spaces	**3,599 Spaces**	**2,682 Spaces**	**2,041 Spaces**

**The Newton Zoning Ordinance under Special Permit allows for a reduction of parking stalls to 1.25 per residential unit and a 1/3 reduction if there are three or more uses on site.*

Today, the MBTA uses on average 636 spaces on a daily basis

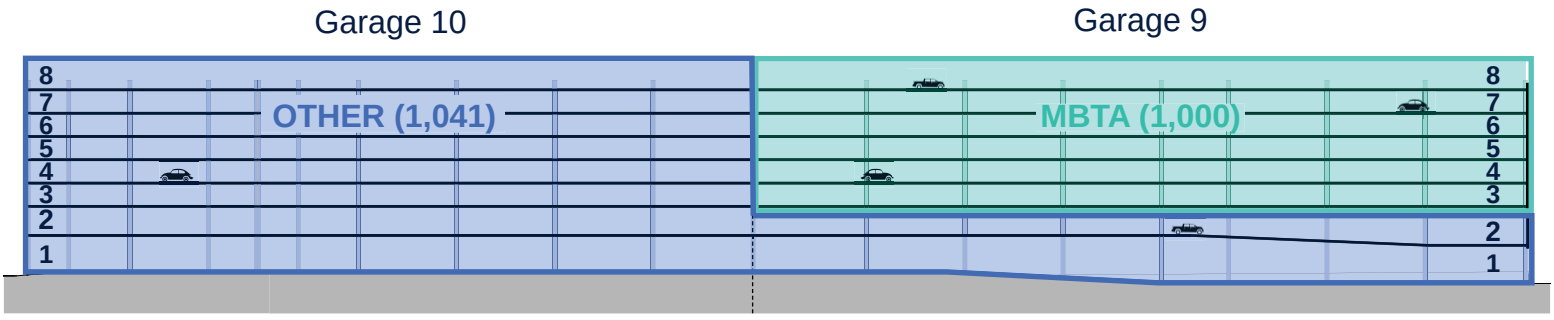
MARK DEVELOPMENT



Consolidated Garage

MARK DEVELOPMENT

Longitudinal Section Through Garage 9 and 10



** Includes 51 on-street parking spaces.*

MARK DEVELOPMENT

Do the 2,041 planned parking spaces meet the needs of this development?

MARK DEVELOPMENT

	development total		initial estimated demand rate	resulting peak demand
Retail	43,241 ft²	x	1.95 spaces/1000 ft²	84.32
Hotel	150 keys	x	0.74 spaces/key	111.00
Residential	617 units	x	1.12 spaces/unit	691.04
Office	243,388* ft²	x	2.39 spaces/1000 ft²	581.70
MBTA				1000**

Total: 2468.06

* Square footage cited here does not include MBTA office space.
** This is not a peak demand number, but rather an agreed-upon number of dedicated spaces.

Why aren’t we providing 2,468 parking spaces?

MARK DEVELOPMENT

Why aren’t we providing 2,468 spaces?

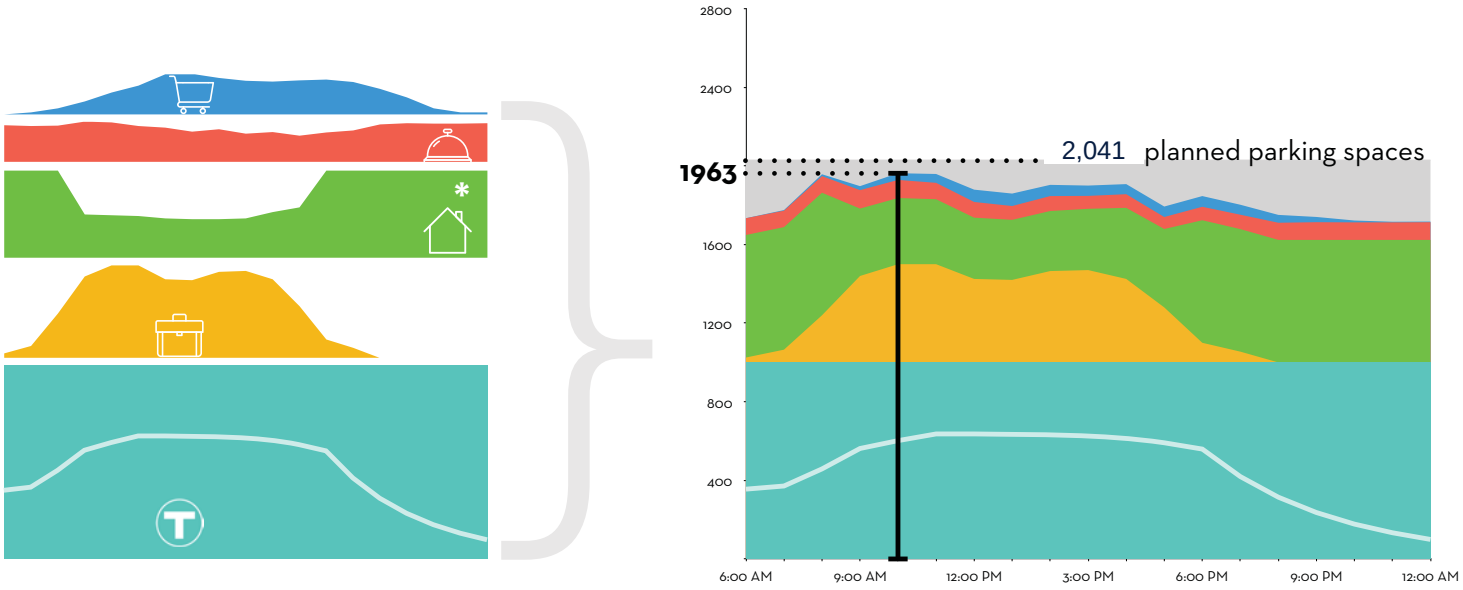
1) Peak demands do not happen at the same time
   (i.e. Office 10 AM and residential 6 PM)

2) Internal Capture
   (i.e. multiple purposes to a single trip)

3) Public Transit and Other Means of Trip Reduction

MARK DEVELOPMENT

Taking into account these reductions, our updated graphs look like this. Peak demand across all parking types still occurs at **10am**.



* 624 residential spaces are 100% reserved 6pm-8am, which is the adjusted peak (overnight) demand for 617 residential units.

Shared Parking at Peak Operational Period

			effective 10am demand rate	10am demand
Retail	43,241 ft²	x	0.792	34.23
Hotel	150 keys	x	0.613	92.02
Residential	617 units	x	0.546	336.84
Office	243,388* ft²	x	2.055	500.16
MBTA				1000**

78 Surplus Parking Spaces

Total: 1963.26

* Square footage cited here does not include MBTA office space.
** This is not a peak demand number, but rather an agreed-upon number of dedicated spaces.

How does this work in practice?

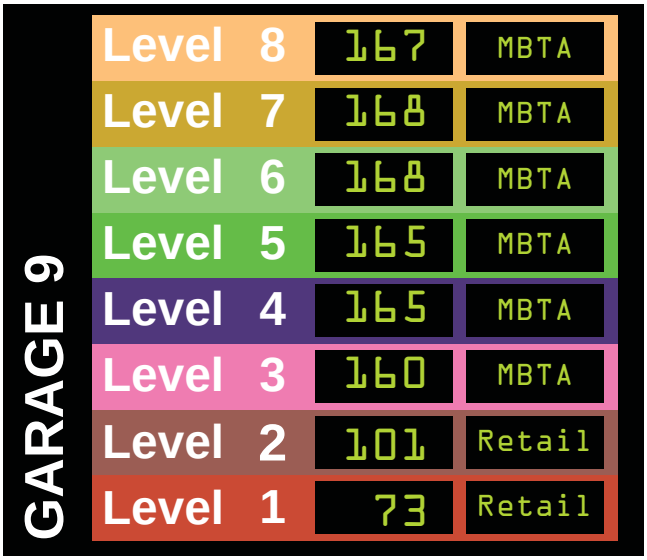
MARK DEVELOPMENT

Share Parking FAQ

- How are we “gating” areas so that people park in the right spot?
- What happens if someone parks in the wrong spot?
- How are we handling peak hour traffic distribution throughout the garage? Especially, in the morning and evening MBTA rush hour?
- How is residential parking being treated, specifically 24/7 vs. short term parkers?
- Can a resident leave his or her car all day?
- How will a resident or commercial user be assured a parking space upon arrival?
- Can someone buy a monthly MBTA parking pass if they are not a commuter?
- How is Red Sox parking being handled?

MARK DEVELOPMENT

How are we “gating” areas so that people park in the right spot?



Digital Parking Signage

License Plate Recognition

MARK DEVELOPMENT

What Happens if Someone Parks in the Wrong Spot?

PARKING VIOLATION

Date _____ Time _____

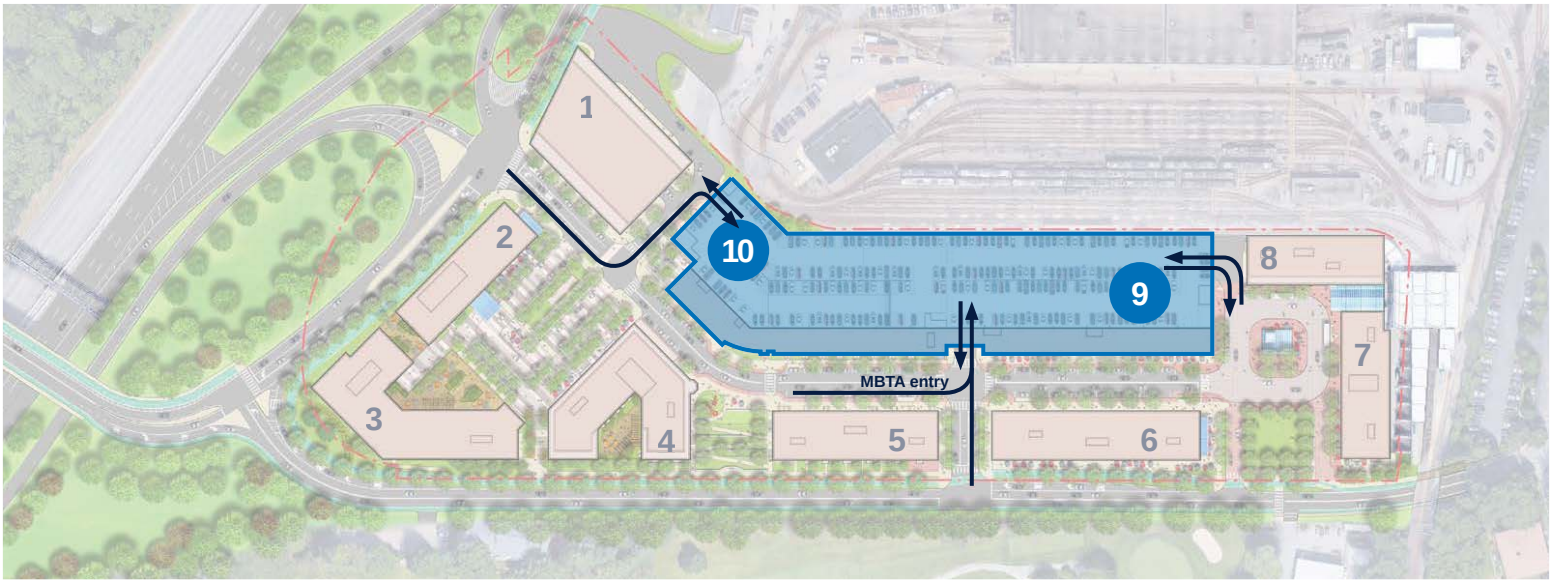
License Plate _____ Make of Auto _____

Offense(s): _____

MARK DEVELOPMENT

How are we handling Peak Traffic Distribution?

Especially, in the morning and evening MBTA rush hour?



MARK DEVELOPMENT

How is Residential Parking being Treated – short term vs. long term?

We have a tiered parking structure.

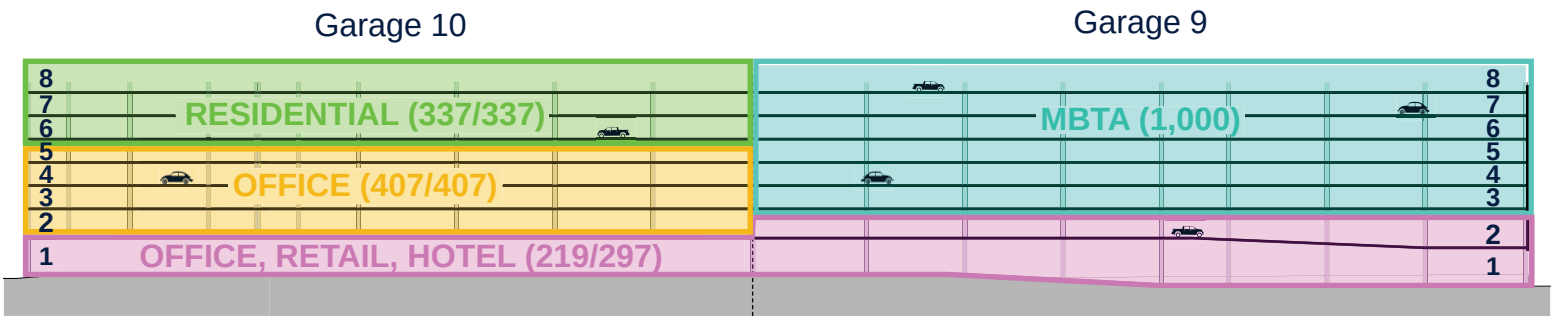
- We will offer 24/7 parking spaces
- We will have “commuter” hour passes
- We will have Daily and Guest parking

MARK DEVELOPMENT

Can a resident leave his or her car all day?

10 AM - Project Peak

(Demand 1,963 / Supply 2,041 = 78 Surplus)



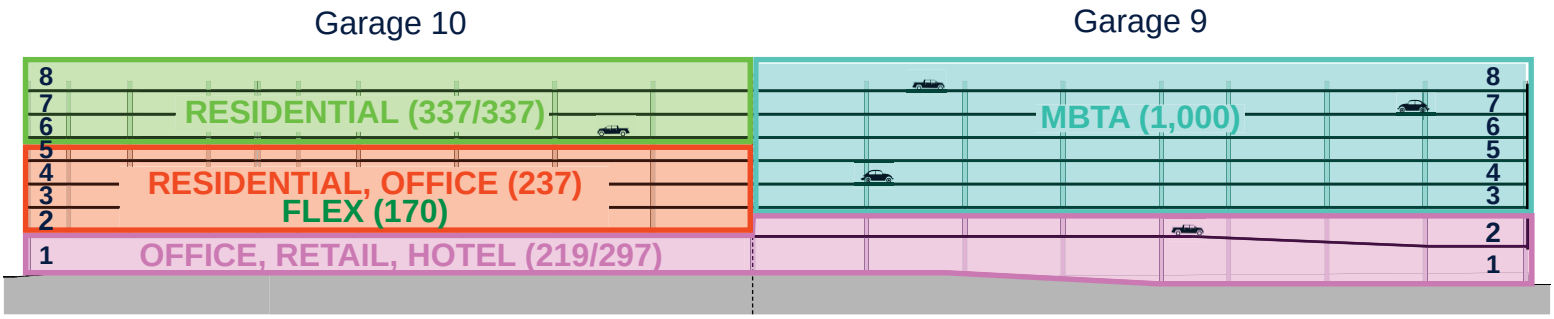
Longitudinal Section Through Garage 9 and 10

MARK DEVELOPMENT

What will the situation be when a resident comes home?

5 PM

(Demand 1,793 / Supply 2,041 = 248 Surplus)



Longitudinal Section Through Garage 9 and 10

MARK DEVELOPMENT

What happens if we are wrong?

VPNE has extensive experience with **floor valet systems**.

MARK DEVELOPMENT

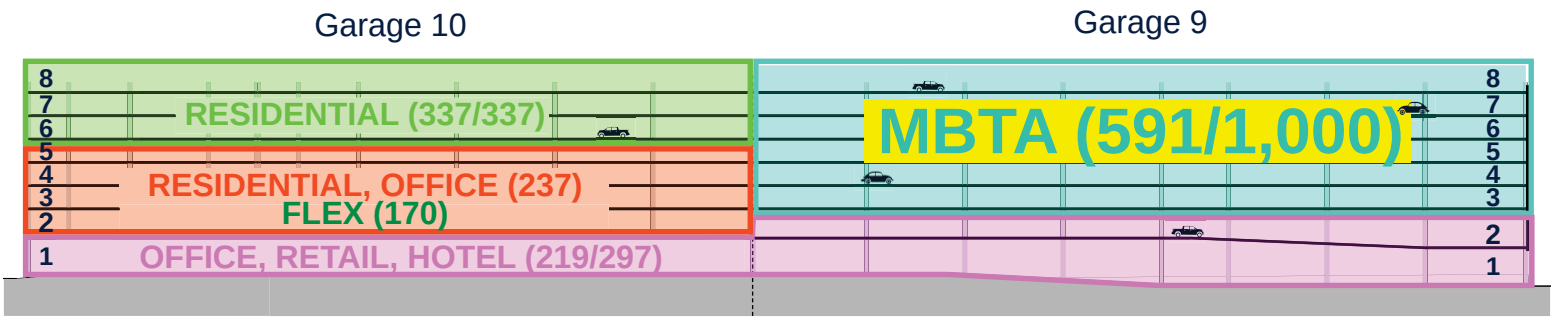
Can someone buy a monthly MBTA pass if not an MBTA commuter?

MARK DEVELOPMENT

How is Red Sox Parking Being Handled?

5 PM

(Demand 1,793 / Supply 2,041 = 248 Surplus)



Availability:	Garage 10	248 spaces
	Garage 9	409 spaces
	Valet	170 spaces
	TOTAL	**827 spaces**

MARK DEVELOPMENT

What is TDM and why is it Important?

A TDM is a tool to guide, distribute and reduce travel demand amongst constituents. A TDM plan should define goals and then strategies for achieving those goals appropriate to the project's proposed use.

Benefits of TDM:

1) Transportation Benefits
2) Environmental Benefits
3) Health & Safety Benefits
4) Financial Benefits

MARK DEVELOPMENT

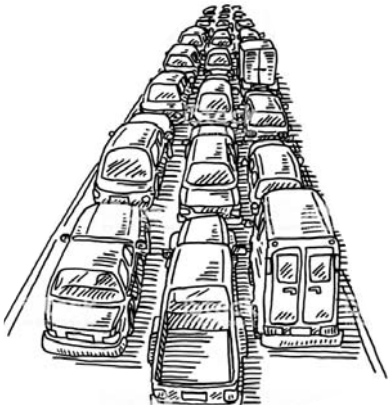
Potential TDM Measures for Modal Shifts

- **Parking Management:**
  1) Shared Parking
  2) Reduce Parking Surplus
  3) Unbundle Parking
  4) Parking Pricing

MARK DEVELOPMENT

Potential TDM Measures for Modal Shifts

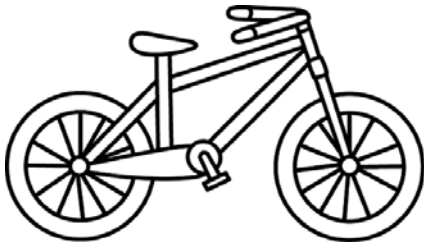
- **Traffic Management:**
  1) Adaptive Signal Control
  2) Idling Limit
  3) Signage (Exterior and Interior)



MARK DEVELOPMENT

Potential TDM Measures for Modal Shifts

- **Bike and Pedestrian:**
  1) Bike network and site access
  2) Bike Parking
  3) Showers and Lockers
  4) Bike Repair Station



MARK DEVELOPMENT

Bicycle Parking

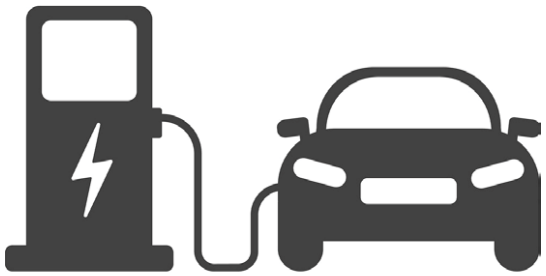
	Bicycle Parking	Parking/Unit Ratio
Residential	680	1.10
Office	TBD	TBD
MBTA	TBD	TBD
TOTAL	**680**	**TBD**

Assumes a 2-tier pull-down unit throughout the residential bike storage rooms.

MARK DEVELOPMENT

Potential TDM Measures for Modal Shifts

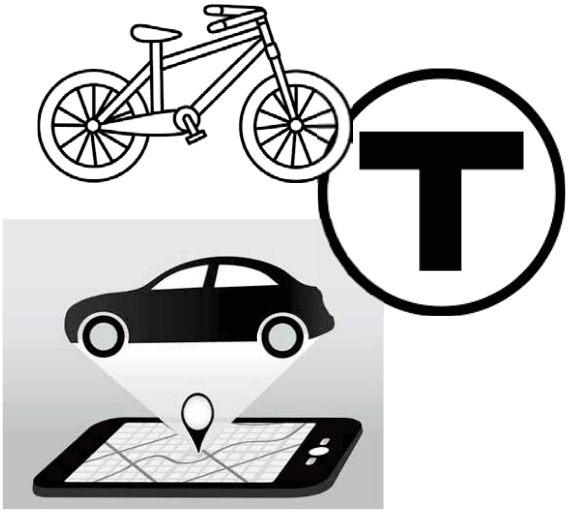
- **Car Share and Electric Car Usage:**
  1) Car Share Parking
  2) Electric Car Charging
  3) Electric Car Parking



MARK DEVELOPMENT

Potential TDM Measures for Modal Shifts

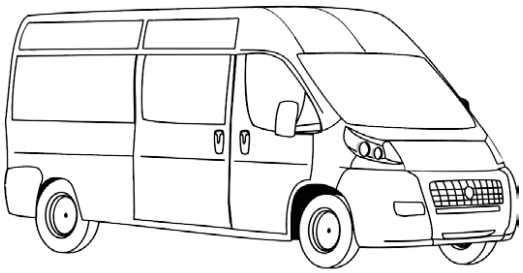
- **Incentives for Sustainable Transportation:**
  1) MBTA Subway Passes
  2) MBTA Bus Passes
  3) MBTA Commuter Rail Passes
  4) Bikeshare passes / Memberships
  5) Rideshare passes / Memberships



MARK DEVELOPMENT

Potential TDM Measures for Modal Shifts

- **Vanpool / Carpool Program**



MARK DEVELOPMENT

TDM Plan Monitoring and Reporting

- Hire an on-site TDM Coordinator and TMA

- Pre-Occupancy Site Visit

- Ongoing Monitoring and Reporting Plan
    1) Survey
    2) Data Tracking

MARK DEVELOPMENT

Post Construction Traffic Mitigation (if required)

If traffic specific to the development project is 110% or more of adjusted projections made in the TIA additional mitigation measures such as the following could be implemented.

- Increased participation with T-Pass Purchases (capped at $750K)
- Adding a shuttle system to connect to outer transportation hubs
- Incentivizing office operations to vary employee work schedules
- Expanding bike sharing
- Working with MBTA to asses the potential for expanding bus operations
- Increase the cost of daily parking for non-MBTA users.

MARK DEVELOPMENT

MARK DEVELOPMENT

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

Transportation Peer Review
Riverside Station, Grove Street, Newton, MA

February 25, 2020

1

GREEN INTERNATIONAL AFFILIATES, INC.

PRESENTATION OVERVIEW

Riverside Station
Newton, Massachusetts

Normandy

MARK DEVELOPMENT

- **Review Approach**
- **Project Study Area**
- **Site Trip Generation**
- **Site Parking Supply**
- **Impacts / Mitigation**

2

GREEN INTERNATIONAL AFFILIATES, INC.

REVIEW TIMELINE

- March 2019 - Special Permit Application
  - Transportation Impact and Access Study (TIAS)
  - Site Plans
  - Shared Parking Analysis
- September 2019 - Revised Building Program Zoning Review
  - Program Modification and Traffic Generation Memo
  - Revised Site Plans
  - Revised Shared Parking Analysis
- December 2019 – New Special Permit Application
  - Revised TIAS
  - Revised Site Plans
  - Revised Shared Parking Analysis
  - Revised Transportation Demand Management (TDM) Plan
- Meetings with Project Team and City
  1. 7/11/2019 Meeting w/ Developer & City Peer Review Team
  2. 8/29/2019 Road Safety Audit (RSA)
  3. 10/10/2019 Meeting w/ Developer & City
  4. 1/23/2020 Meeting w/ Developer, City & MBTA
  5. 2/6/2020 Meeting w/ Developer & City
  6. 2/20/2020 Meeting w/ Developer & City

3

GREEN INTERNATIONAL AFFILIATES, INC.

TRANSIT ORIENTED DEVELOPMENT REVIEW APPROACH

1. Maximize utilization of on-site transit facilities
   a) Limit vehicle parking supply on-site
   b) Realistic mode share splits
   c) Pedestrian and bicycle amenities
2. Consistency with principles identified in the Riverside Vision Plan

4

GREEN INTERNATIONAL AFFILIATES, INC.

PROJECT STUDY AREA

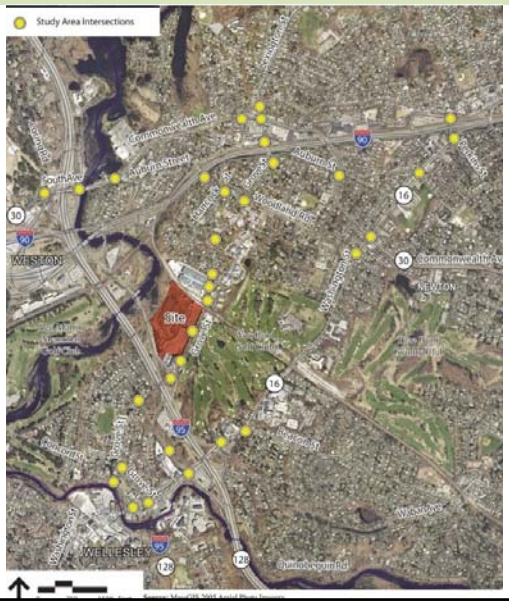
- 33 Off-Site Intersections
  - 17 Unsignalized Intersections
  - 16 Signalized Intersection

Trip Distribution

Local Region	*March 2019 TIAS*	*Dec. 2019 TIAS*
NE Quadrant	7% - 5%	14% - 11%
NW Quadrant	3% - 5%	3% - 4%
SE Quadrant	5% - 2%	12% - 9%
SW Quadrant	7% - 8%	7% - 7%

Legend
Residential % - Office / Retail %

Figure prepared by VHB



5

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SITE TRIP GENERATION – TRIP CREDITS

- Total Unadjusted Vehicle Trips
  - Weekday Daily
    - Enter = 4,637
    - Exit = 4,637
    - Total = 9,274
- Apply Trip Credits:
  - Existing Site Generated Trips
    - Hotel Indigo
  - Mode Share
    - Transit Trips
  - Internal Capture Trips
  - Pass-By Trips
    - Retail Land Use
- Total Project Generated Net New Trips
  - Weekday Daily
    - Enter = 3,252
    - Exit = 3,185
    - Total = 6,437

6

GREEN INTERNATIONAL AFFILIATES, INC.

TRANSIT DEMAND / IMPACTS

- **Use of 2 mode shared splits:**
  - **Conservative Estimate of Vehicle Trips**

Use	*Vehicle*	*Transit*
Residential	75%	25%
Office	95%	5%
Retail	100%	0%

  - **Transit Trips for Transit Oriented Development based on US Census**

Land Use	*Vehicle*	*Transit*
Residential	65%	35%
Office	85%	15%

7

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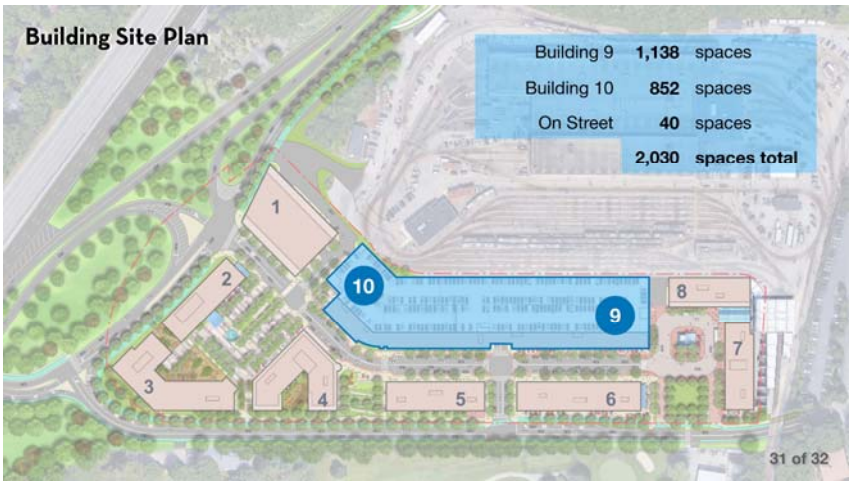
ON-SITE PARKING SUPPLY



8

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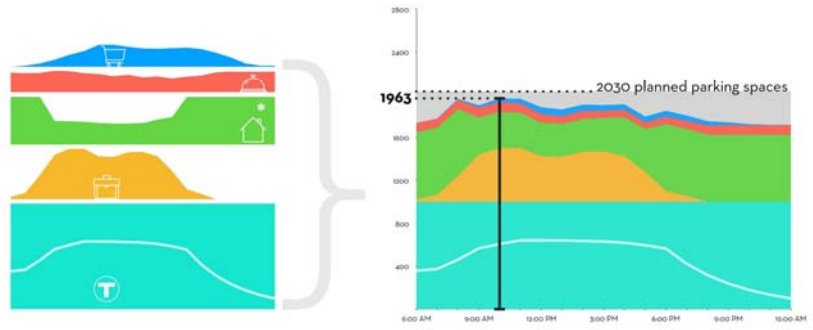
PEAK PARKING DEMAND

Taking into account these reductions, our updated graphs look like this. Peak demand across all parking types still occurs at **10am**.



* 624 residential spaces are 100% reserved 6pm-8am, which is the adjusted peak (overnight) demand for 617 residential units.

21 of 32

67 Surplus spaces in non-MBTA spaces at peak demand period of 10 AM

9

GREEN INTERNATIONAL AFFILIATES, INC.

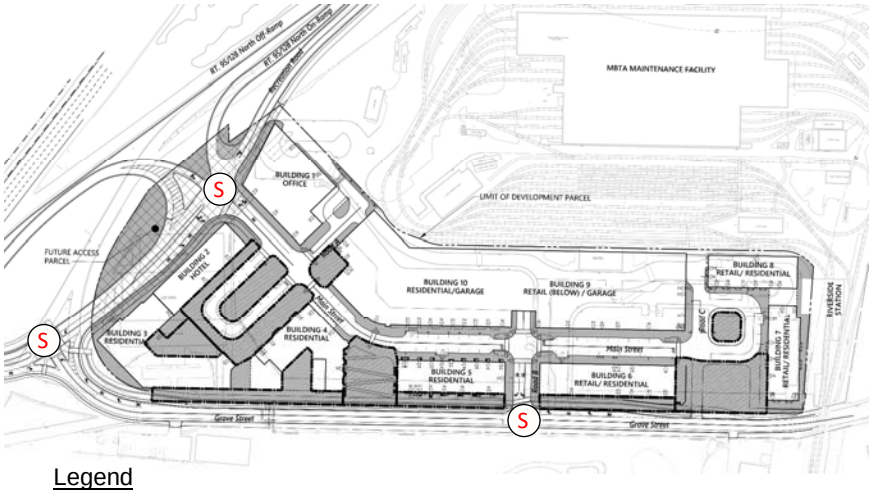
TRANSPORTATION DEMAND MANAGEMENT PLAN

- **Parking Management**
  - **Shared Parking**
  - **Reduced Parking Surplus**
  - **Parking Pricing**
- **Bicycle and Pedestrian Amenities**
  - **Improvements to Bicycle Network & Site Access**
  - **Streetscape Improvements**
  - **On-Site Bicycle Parking**
- **Reimbursement for MBTA passes**
- **Real Time Transportation Information Displays**
- **Traffic Monitoring & Reporting Program**
  - **Data collection program to monitor site generated vehicle trips for residential, office and retail land uses by travel mode**
    - **1st Monitoring Plan submitted 12 months after full occupancy**
    - **Subsequent Plans submitted annually for 2 years following full occupancy**

10

GREEN INTERNATIONAL AFFILIATES, INC.

SITE PLAN LAYOUT



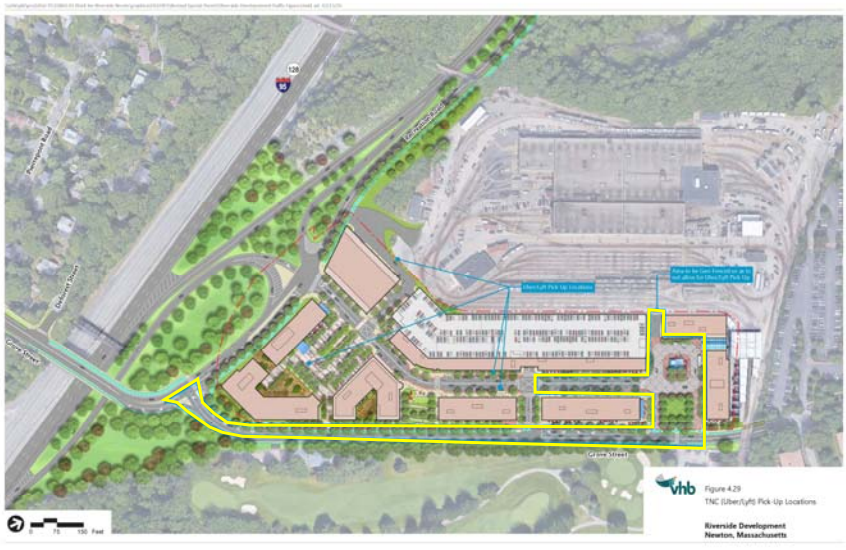
Legend

(S) Proposed Signalized Intersection

11

GREEN INTERNATIONAL AFFILIATES, INC.

UBER/LYFT PICK UP LOCATIONS



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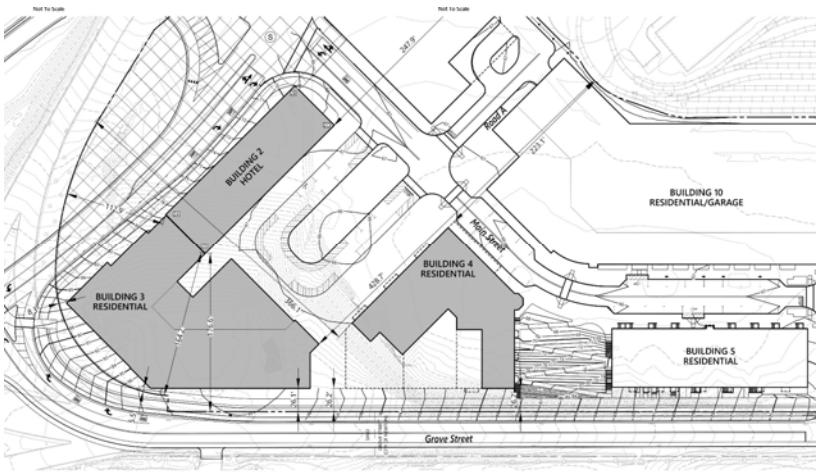
GREEN INTERNATIONAL AFFILIATES, INC.

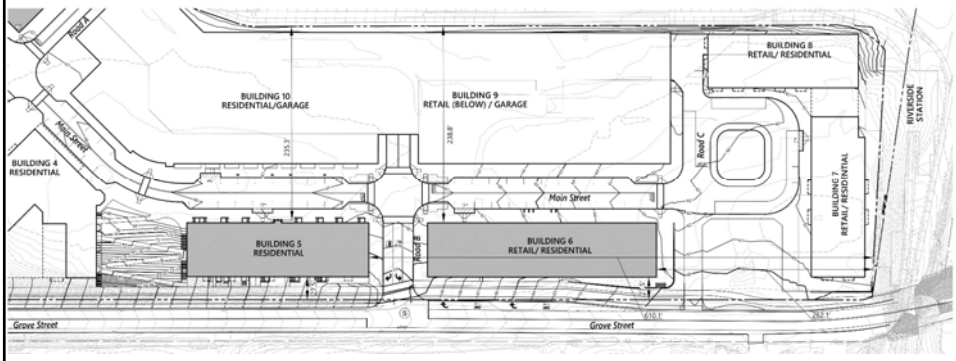
SITE PLAN LAYOUT



13

GREEN INTERNATIONAL AFFILIATES, INC.

SITE PLAN LAYOUT



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ON-SITE TRANSIT LOOP

15

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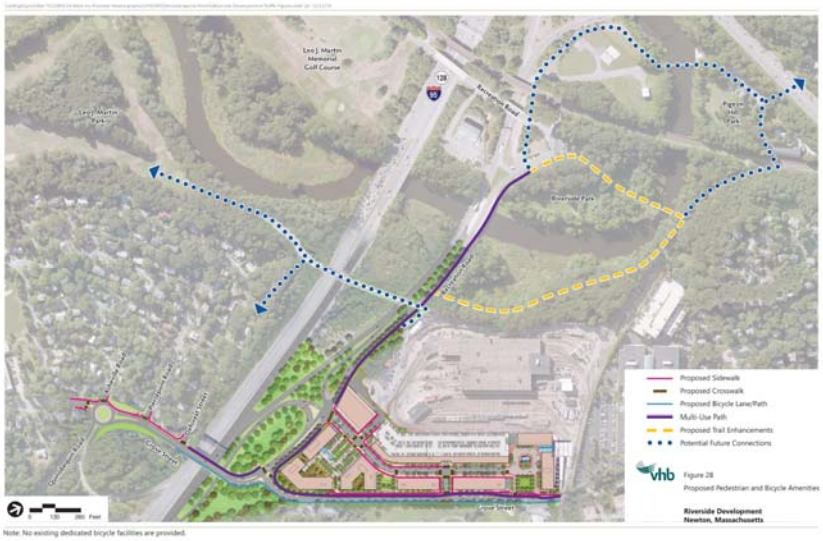
INFRASTRUCTURE IMPROVEMENTS



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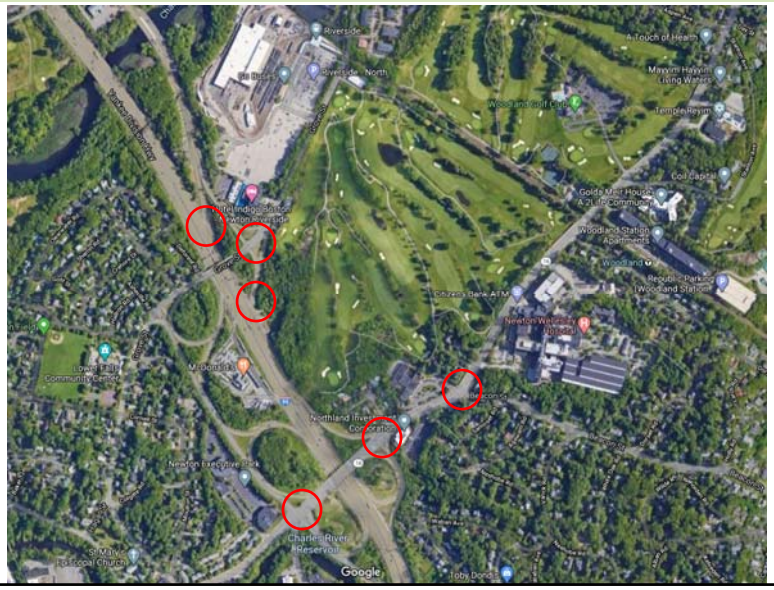
ROAD SAFETY AUDIT



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GREEN INTERNATIONAL AFFILIATES, INC.

CONCLUSIONS / NEXT STEPS

CONCLUSIONS

- Traffic impacts were evaluated according to industry standards
- Developer is responsive to addressing concerns and mitigating impacts as they arise

NEXT STEPS

- Continue coordination w/ Developer, City & MBTA as the project continues through the permitting process
- Review MBTA Circulation On-Site
- Review Design of Off-Site Infrastructure Improvements

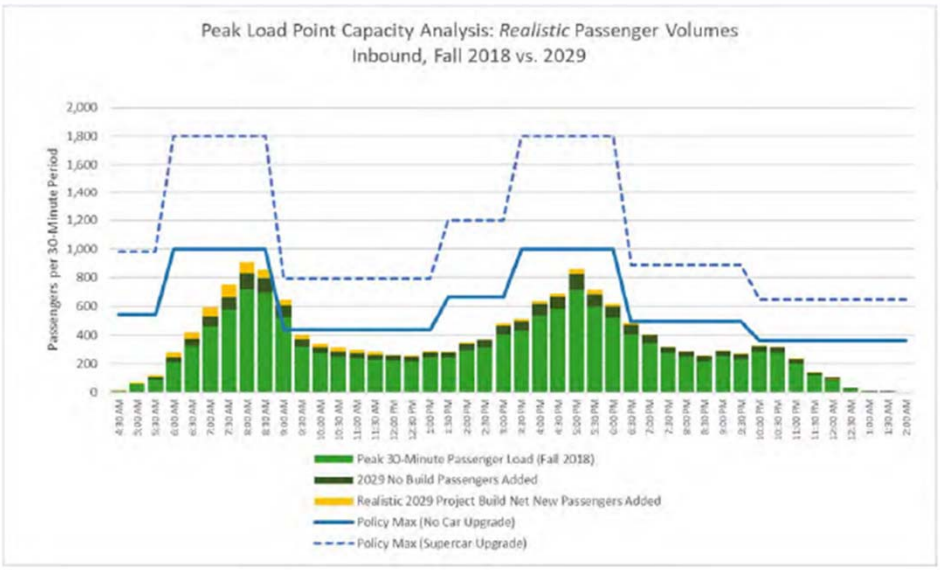
18

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

19

GREEN INTERNATIONAL AFFILIATES, INC.

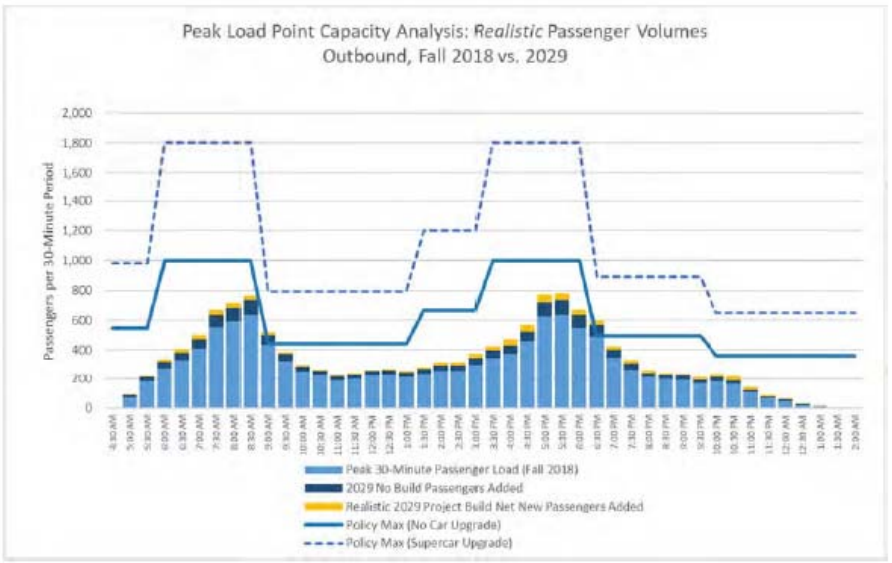
ESTIMATED FUTURE TRANSIT CAPACITY



20

GREEN INTERNATIONAL AFFILIATES, INC.

ESTIMATED FUTURE TRANSIT CAPACITY



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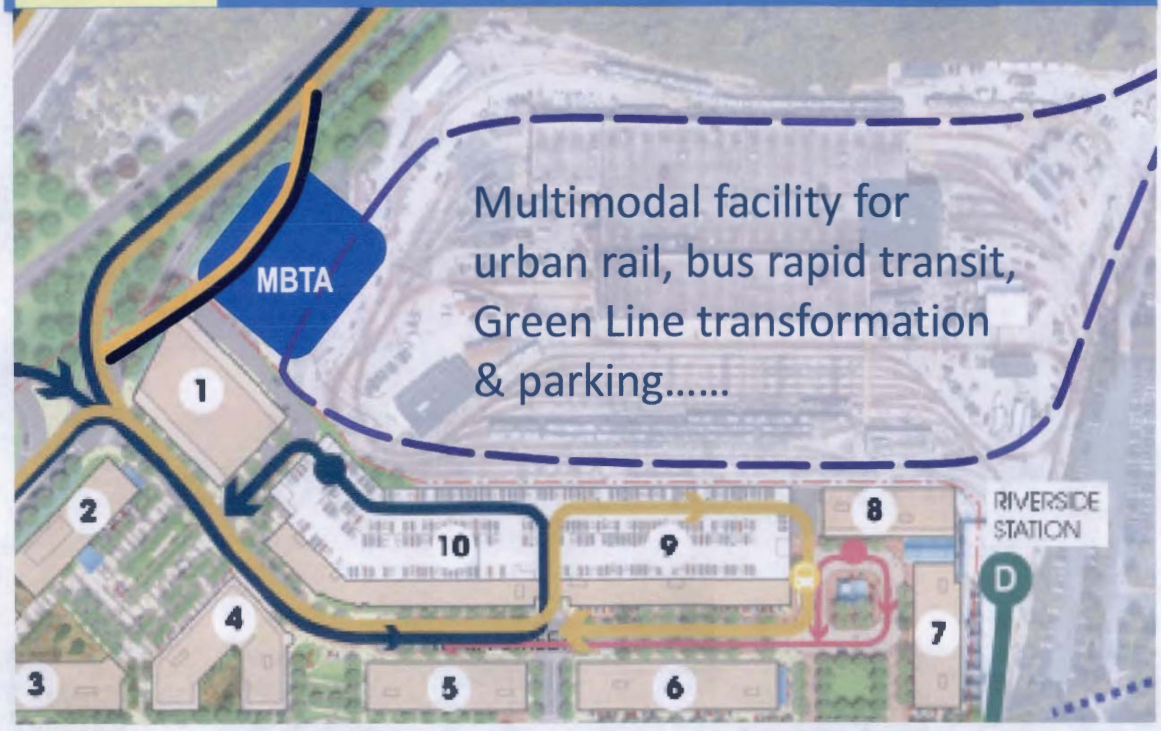
LFIA Riverside Committee

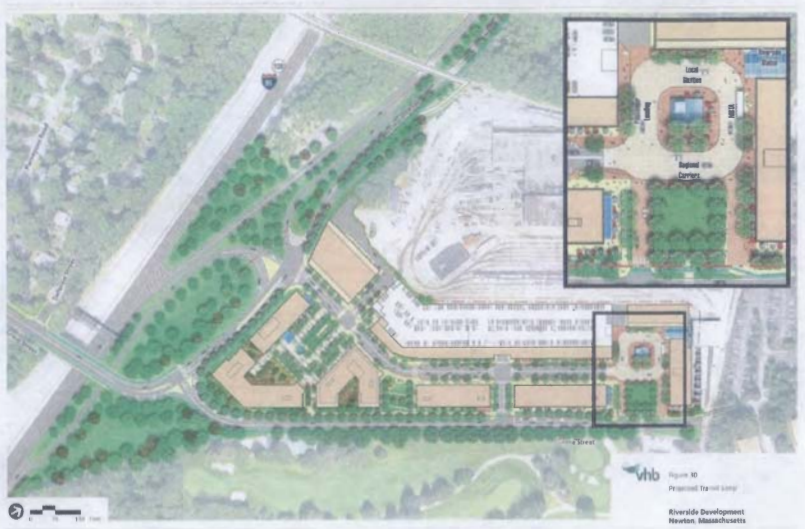
Transportation Issues

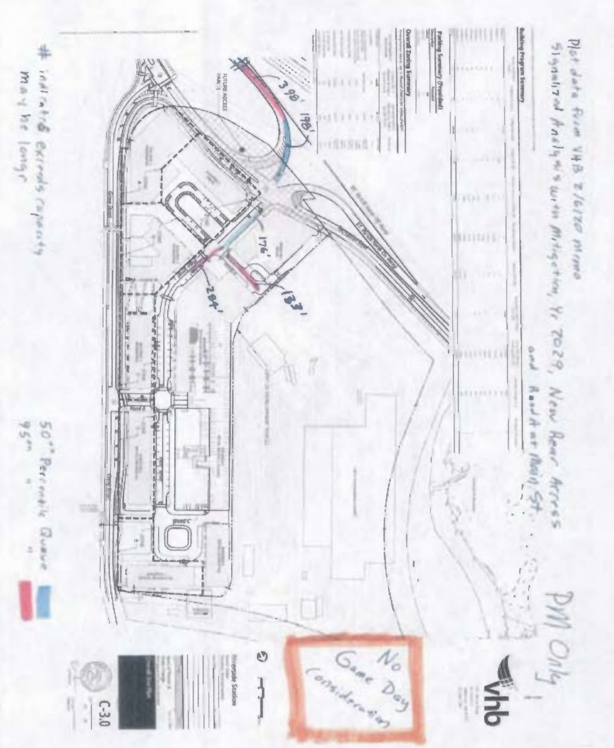
LFIA

LFIA Riverside Committee




Riverside Development
Newton, Massachusetts


Riverside Development
Newton, Massachusetts


Plot data from VHB 2/6/20 Memo
Signalized Analysis with Mitigation, Yr 2029, New Rear Access and Road A at Main St
PM Only !
No Game Day Consideration
398'
198'
176'
284'
133'
# indicates exceeds capacity may be longer
50th Percentile Queue
95th " "
Building Program Summary
C-3.0
vhb


Plot data from VHB 2/6/20 Memo
Roundabout Capacity Analysis
Game Day Data not available ((22% of commuter days))
321' (not to scale) AM
239' PM
239' PM

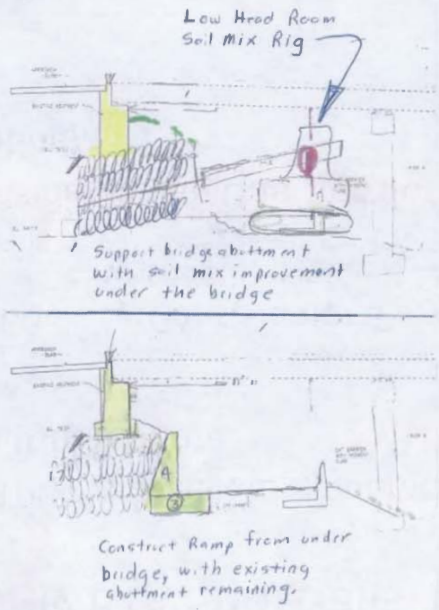
MBTA Shortfalls (Need Documentation!)

MBTA will collect for generations land lease rent. They need to contribute more.

Temporary/Construction Parking (needs and plans in writing).

Consider Green Line Transformation, Bus Rapid Transit (in writing).

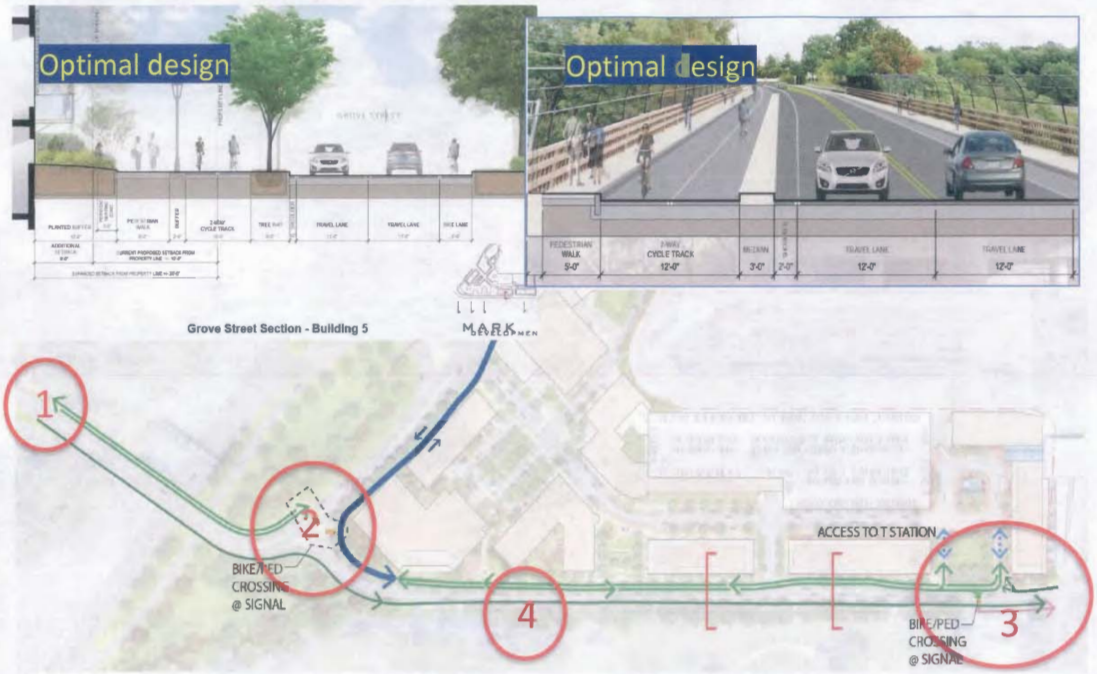
MASSDOT Issue Under Grove St. Bridge



- The new highway ramp needs to go under the bride.
- LFIA hopes all work occurs from underneath by tis method.
- The Developer like this concept.
- Not using this method is irresponsible.
- MASSDOT needs to commit too this.

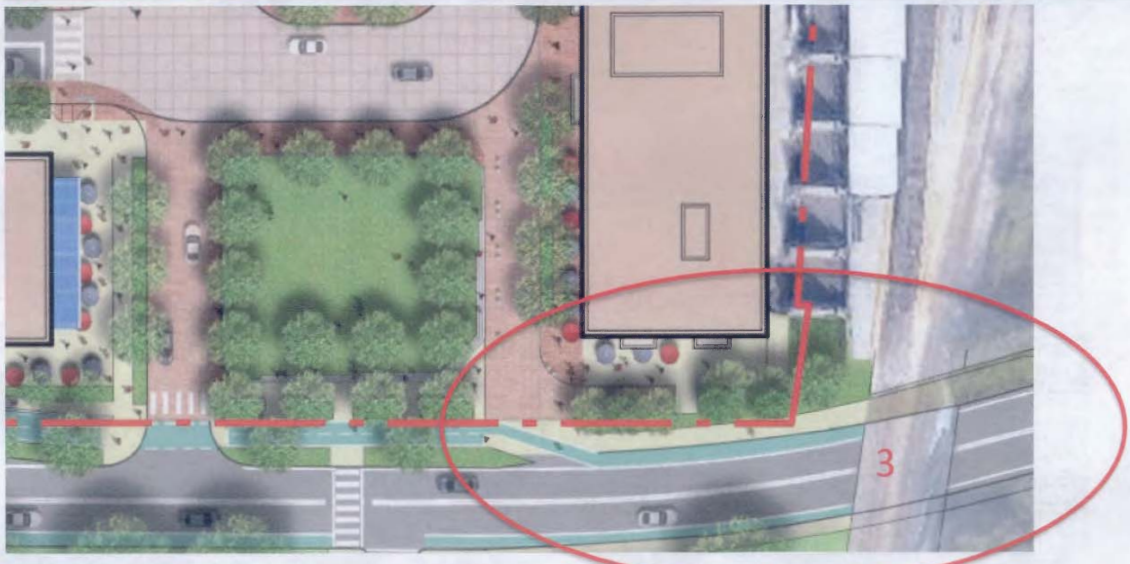
LFIA Riverside Committee

Grove St – Bike Pedestrian Infrastructure



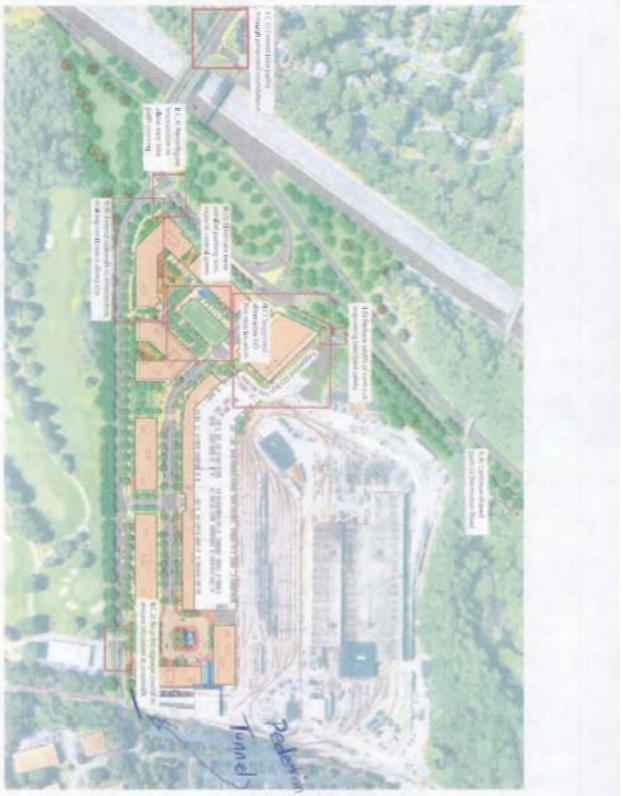
LFIA

LFIA Riverside Committee



Bike Ped Crossing at MBTA underpass dangerous

Transition to **no bike infrastructure** beyond underpass a concern – needs careful thought



LFIA

A Few Final Issues

- Only 3 of 10 buildings have loading docks. Where will dumpsters be set?
- No plan for roadway maintenance across the site and the public roads. This should be clearly defined prior to special permit approval.
- The Transportation Demand Management (TMD) Plan has great "ideas" but limited metrics to actually deliver. Zoning language requires commitment in the special permit, not after the project is built. We addressed this in our written analysis.
- The Woodland-Grove Intersection needs a traffic signal, per the peer reviewer, the Developer wants to "add signs". This needs agreement and study (keep Williams, Lasell and Auburndale communities safe). A dollar metric to cover the cost needs to be added to the TMD.

Analysis of Transportation Plans Related to the Riverside Station Transit Oriented Development

Prepared for the Newton City Council

Submitted

February 25, 2020

Lower Falls Improvement Association
Riverside Committee

Table of Contents

Reference Documents

- Developer's* Traffic Generation and Operation Analysis Memo dated 2/6/20
- Developer's Transportation Demand Management Plan Monitoring Memo dated 1/14/20
- Developer's Traffic Impact and Access Study dated December 2019
- Developer's Traffic Impact and Access Study Appendices dated December 2019
- Developer's Special Permit Application Binder dated 12/9/19
- Developer's Interchange Modification Report dated June 2019
- Developer's Interchange Modification Report Appendix dated June 2019
- Existing Condition Plans dated 3/17/18
- City Of Newton Planning and Development Department Memo dated 2/21/20

*In this document, BH Normandy and Mark Development will be referred to as "Developer", the LFIA Riverside Committee will be referred to as "We", the Massachusetts Department of Transportation will be referred to as "MASSDOT", and the Massachusetts Bay Transportation Authority will be referred to as "MBTA".

Introduction

The Lower Falls Improvement Association (LFIA) Riverside Committee wants a successful development of a Transit Oriented Development (TOD) at Riverside Station.

As adjacent residents, we are very aware of the historic and current transportations operations that occur at Riverside Station because most of us use the facility on a frequent basis. Most Newton Lower Falls and Auburndale residents chose to live in these villages partially because of great access to the MBTA Riverside Station.

We champion Riverside as a multi-modal facility, and look forward to its future improvements, both those that are in the works, like the Green Line Transformation, and those planned in the decade(s) to come. Connectivity is paramount, as Americans transition to modern public transportation systems, including increased walking, increased biking, Urban Commuter Rails running on subway schedules, Bus Rapid Transit (electric) and autonomous vehicles. These systems will make the globe a better place to live, and being part of that effort is worthwhile.

Because of our connection to Riverside, its development raises a serious level of concern. We conducted a survey in 2019 and learned that:

100% of Newton Lower Falls respondents have concerns about development at Riverside.

100% of Newton Lower Falls respondents have "great concern" about traffic on Grove Street.

100% of Newton Lower Falls respondents have some level of concern about the impact on MBTA train service (67% have "great concern", 25% have "moderate concern" and 8% have "little concern")

This concern about traffic and transportation is not limited to those who abut the station. 83% of city-wide respondents also have "great concern" about traffic on Grove and only 6% have "no concern." In addition, 89% of city-wide respondents have some level of concern about MBTA impact. (55% have "great concern", 25% have "moderate concern", and 10% have "little concern").

The analysis that follows raises many traffic and transportation issues. We are bringing these to your attention because if these concerns are not addressed, the development and the Riverside transportation facility will be less vibrant, and possibly have major failing components.

Because Newton has never embarked on a TOD of this size, scale and importance, and in order to obtain the highest quality traffic study documents, we request that they be signed and stamped by a Massachusetts Professional Engineer.

Section 1: Traffic Impact and Access Study (TIAS), the "traffic study"

We reviewed the referenced traffic study documents and have the following concerns:

General Traffic Count:

The stretch of Grove Street adjacent to the site currently generates approximately 14,000 vehicle trips per day (vtd), comprised of roughly 5,000 vtd from the existing hotel and MBTA site, and 9,000 that pass by those facilities. The developer reports that the project will generate more than 6,000 additional vtd, after considering various credits for transit, pass by trips, etc. We disagree with this finding, and found approximately 8,500 vtd may be generated, based on recommendations by professional engineers that utilize the ITE trip generation methodologies. Because of this and other issues, we believe the actual number of projected project generated trips are low for the following reasons:

Future Traffic Volume Growth Factor

The current traffic study utilizes a future traffic growth factor of 0.5% per year. Back in 2013 when Riverside was before the City Council, the developer's civil engineer utilized a future traffic growth factor of 0.4% per year. Data extracted from the MASSDOT traffic count data base show that adjacent flows on the Mass Pike and Rt. I95 actually grew at 2.9% per year between 2013 and 2018. This means that the developer's civil engineer underestimated the growth rate by a factor of 7 – in other words – traffic grew at a rate more than 7 times what they predicted. The future traffic growth factor used must be much greater than 0.5% per year for this reason. Once a realistic and appropriate growth rate is selected, updated reports should be generated detailing delays and queues at peak demand hours for all intersections within a mile radius of the development.

TNCs

The impact of Transportation Network Companies (TNCs), also known as rideshare companies (Uber, Lyft, etc.), on traffic has not been appropriately considered. As a matter of fact, the December 2019 TIAS indicates that zero TNC trips were added to vehicle trip counts.

Recent academic studies indicate that areas with higher populations and strong per capita income tend to utilize TNC's on a much higher basis. Newton meets both these metrics. In 2018 Newton had over 1 million TNC rides. The Massachusetts Department of Public Utilities, TNC Division, reports Newton TNC trips rose 23% from 2017 to 2018.

The following excerpts were taken from a Wall Street Journal article published 2/15/20:

Multiple studies show that Uber and Lyft have pulled people away from buses, subways and walking, and that the apps add to the overall amount of driving in the U.S. While Uber and Lyft first focused on the positives that could decrease congestion, the factors that add to it are far larger, said Bruce Schaller, a transportation consultant and former New York City official who has studied the topic.

"The math is pretty simple and straightforward," Mr. Schaller said. In a paper presented last month to the Transportation Research Board, he estimated that for every mile of personal-car driving the companies remove from the road in large U.S. cities, they add 2.5 miles of driving to a ride-hailing vehicle.

The biggest factor by far is the large amount of time Uber and Lyft drivers spend without any passengers, hunting for fares. A December report by the California Air Resources Board found ride-hailing cars are driving with no passengers 39% of the time; New York City estimates such cruising at 41%.

A paper from University of Kentucky civil-engineering professors presented last year at the Transportation Research Board estimates that after Lyft and Uber enter a city, bus ridership will decrease by 1.7% a year and subway ridership by 1.3% a year, based on data from 22 U.S. cities.

The traffic study needs to be revised to include realistic TNC traffic counts. The traffic impact of delivery vehicles should also be considered and added to the counts.

The Developer has indicated that TNC vehicles will not be permitted north of the central garage entrance, and that they will use geofence technology to accomplish this. There is no guarantee that TNC drivers will comply. Strict enforcement is needed—without it, the Transit Square will face additional congestion. The rest of the site will have four TNC pick up spots. In the likely event that TNC ridership swells, the four locations will likely be undersized leading to double parking and drop-offs in the middle of the road, which is a very dangerous situation, and will add to traffic congestion. To avoid this, pick up/drop off facilities should be designed with sufficient space.

Transit Square

The Transit Square located at the north end of the development is under-designed to handle the multiple needs of the development and the transportation hub. It is a dead end of sorts, which requires through traffic from any vehicle dropping off apartment residents or tenant packages to buildings 6, 7, 8 and 9, while at the same time accommodating regional transit needs. The Transit Square is expected to accommodate local bus shuttles, T buses, regional buses, commuter pick up and drop offs and retail pick up and drop offs. Pedestrians and bicyclists are supposed to be able to navigate it as well. All this is to occur along a 500 foot perimeter. The limited curb length will not accommodate Green Line shuttle buses (nowhere to stage when shuttles are necessary).The existing facility has over 2400 feet of curbing to accommodate "only" transportation needs.

There is no traffic analysis done for the Transit Square. We find this to be unacceptable.

The very long curb lines of the existing facility are often crowded for a variety of reasons, such as MBTA Bus service for Green Line outages, ball games, parades/special events in Boston, holiday activity, etc. To add traffic from the proposed 1.025 million square foot development, and greatly reduce the available curb (docking ability) is troublesome.

The Transit Square should be enlarged, so that it can permit unimpeded MBTA related traffic. If not, it could certainly fail and diminish both current and future transit opportunities. The "emergency use only" road that the MBTA is requiring to be built into the transit green, at the north end of Building 6, is insufficient to solve what will be an ongoing traffic problem.. In addition, it will create a new problem — it will reduce the efficient movement of Grove Street traffic by creating a second Grove Street access,.

It's important to us that there is only one access to the site along Grove St. We were promised this long ago. The creation of the Direct Access ramp and new TOD Rear Access are a result of a decade long commitment by all parties to limit traffic on Grove Street. We worry that the MBTA emergency egress road could become permanent, hence creating another Grove Street intersection, which would have a whole host of issues such as 1) stop and go traffic between the adjacent signalized intersection, 2) unsafe sight lines, and 3) queuing between the two intersections. The MBTA emergency access must never become permanent. The Transportation Demand Plan should state this. We also request that the City Council require that a robust and meaningful set of bollards and signs block it from everyday vehicular use, and that a written plan for who manages the bollards and metrics for emergency use be defined (as to when the passageway is to be used).

Another challenge with the Transit Square is its geometry. Approximately 60% of its 500-foot outer perimeter precludes or adversely effects drop offs. Much of the perimeter is radial, hence hard to park against, causing awkward angling by vehicles both large and small. Also, much if it can't be used for drop offs, as it defines the following passage ways: access to Garage 9, access to Residential Building 7 delivery corridor, and the MBTA emergency road described above.

Although the Transit Square is two vehicle lanes wide, with a drop off lane, it is challenged by long length vehicles (buses) that have to make wide radial maneuvers, and queue in outer lanes when the curb lines are occupied by other buses and cars.

The center island of the Transit Square has a proposed public bike storage station. Bike riders will be constantly riding and walking across the bustling three vehicular lanes to access the storage facility. This will only add to already tense vehicular maneuvers during peak demand hours. For safety and transit efficiency reasons, we recommend that the center island have no bike or pedestrian function at all, and be reduced in size to accommodate more efficient vehicular flows.

We have concluded the Development has reduced what was once thousands of feet of docking and drop off locations to approximately 300 feet (200 feet in the Transit Square and 100' in the garage). The Developer and the MBTA need to be realistic and reconfigure the Transit Square.

A Grove Street pedestrian crossing has recently been added to the plan, adjacent to the Transit Square, which we have learned is designed to provide bike trail connectivity across Grove Street. This crossing is extremely dangerous as it has a limited sightline as Grove Street bends under the Green Line trestle. Local drivers are aware of this as there have been many close calls with pedestrians running across the road, instead of using the cross walk at the Riverside Office center. We recommend that this crossing be eliminated, and instead that bikers and pedestrians be required to use the existing pedestrian crossing at the southern end of the Riverside Office Center. Since that Riverside Office property owner is required, per special permit conditions, to make roadway and pedestrian improvements connecting to the MBTA site, if the MBTA develops the Riverside Site, there is an opportunity to coordinate and make single safe crossing in front of their facility.

Intersection Capacity Analysis

Because the Project was twice reduced in size since March 2019, there are a variety of documents that detail the changes, in obvious chronological order. The most recent, a 2/6/20 VHB Memo, only sparsely reflects the latest changes. To understand the challenges our neighborhood will face, we had to refer back to older documents and make our own calculations and plots to understand how traffic flows. The lack of queuing diagrams showing intersection levels of service leaves the Newton City Council without the ability to see how far traffic backs up. We believe the December 2019 TIAS should be replicated in its entirely to reflect the 1.025 million square foot project. The following paragraphs will explain why.

From the VHB 2/6/20 memo we used queue data from Signalized and Un-signalized Analysis with Mitigation for Year 2029 and plotted it on the Special Permit application civil drawings. We found a very serious problem. At the new Rear Access Signalized intersection, PM Peak Demand queues are so long they block both A Street and Building 2-3-4 West Driveway. At the same time A Street (which branches from Main Street to Garage 10 and Office Building 1) is queuing past the Garage 10 entrance, effectively blocking the garage, and creating queues inside the garage. A similar arrangement of minor streets, arteries, and highway ramps exists at the New Brighton Landing development, home to WGBH, New Balance, Bose and others. Vehicles are often queued during peak demand hours in the that garage for over 25 minutes before finding daylight, and still need to traverse clogged streets before getting on clogged highways. A situation like this would be unacceptable at Riverside. The Developer states that their personnel will be available to assist with this situation, but the reality is that a person cannot control a traffic jam that could extend 1000 feet out onto Rte 128, and a few stories up into a parking garage.

We also plotted queues on the proposed roundabout on Grove Street in Newton Lower Falls. The queues on Grove Street ranged from 239 feet to 321 feet. The queues now, in 2020, are typically limited to one or two car lengths (15-30 feet) during peak am and pm rush hours. This increase in queue length is an unacceptable condition that has an unreasonable negative effect on the adjacent neighborhood.

The traffic study peer reviewer has indicated that the Woodland- Grove intersection, adjacent to the Williams School and Lasell University warrants traffic signal under the 2029 mitigated build condition. The developer indicates that they will work with the City of Newton to improve pavement marking and signage. This is an insufficient commitment. Funds should be earmarked to design and build a signalized intersection, and this condition should be included in the TDM Plan.

Adaptive Traffic Signals

The Developer states the highest level of operations possible and flexibility to accommodate fluctuations in traffic demand will be possible with the use of adaptive traffic signals. This new technology uses historical data and real time conditions to optimize traffic signalization. Many transportation engineers agree that the technology is only helpful at the beginning and the end of peak demand periods. In this case, the demand is heavy for two hours in both the am and pm commutes. We feel that this technology will only be useful for intersections that have a high level of service, which unfortunately is not the case at the new access at the west end of Main Street and the roundabout on Grove Street.

Section 2: MBTA Shortfalls and Transit Capacity Study

Parking

From meetings we attended over the past year with MBTA we learned that they have made no attempt to study, predict or manage parking needs at Riverside, or on the Green Line in general. We assume that they will maintain the 960 spots that are now at the site during construction and if they intend to reduce the number of spots, make every effort to relocate the maximum number of spaces elsewhere on site. They must make a written, transparent effort with the City of Newton and those actions should be posted on the City's website. If parking spots are reduced, they must provide a long lead time notification to local and state political leaders, as well as to commuters/and Green Line users. The time to get this right is now. We don't want our neighborhood streets to become their overflow parking because they lacked a proper plan. This is what happened on several of their TOD projects in Quincy and Braintree.

We adamantly insist the MBTA document, with supporting detail, their parking needs to support Bus Rapid Transit or associated changes to the 558 bus, the Green Line Transformation Project (which is expected to double Ridership), and Urban Rail service at Riverside, and if they don't, we recommend the Newton City Council withhold special permit approval until they do so.

Green Line Transformation

This exciting multibillion dollar project continues to unfold with major components such as the extension to Somerville in a few short years, and by 2030, a new fleet of much larger T10 "Super Trains". The Riverside Green Line Maintenance Yard will have to accommodate repairs and storing needs for these new trains, which when placed end to end are 2 miles longer than the current fleet. We recommend that the MBTA document all capital improvements required in the yard to accommodate all the new changes, so as not to affect operations of the TOD and other MBTA functions. Vague statements at City Council hearings are not sufficient.

Urban Rail

MBTA's ongoing *Rail Vision* plan identifies strategies to better improve the commuter rail for improved mobility and economic competitiveness. It will soon be determined if the Urban Rail that will traverse the Worcester-Framingham Commuter line will be linked to Riverside on the existing spur track. We see no way that the Riverside TOD, as designed, can handle the additional traffic and parking needs of this potential new rail line.

Transit Matters, in their *Fall 2019 Case Study: Worcester/Framingham Line*, indicates that the three existing Newton commuter rail stations need high platforms built right now, on both sides of the tracks, to support the commuting needs of the region while the Mass Pike Allston Interchange is built. Construction at the Allston Interchange Project is scheduled to commence within two years. We believe that the City of Newton has the power to make this happen, without Newton private-public partnerships, but instead by carefully and quickly planning with MASSDOT/ MBTA and requiring them to commit to the commuter station high rail platform project. If they are not willing to do so, the Riverside Special Permit should not be granted.

Bus Rapid Transit

MBTA and other transportation advocacy groups have widely supported Bus Rapid Transit as a wave of the future to reduce vehicular travel by commuters and support cleaner air initiatives via electric buses. Since Riverside is the largest transportation hub in Metro West, there needs to be a plan to link this technology to Riverside. Charging Stations, queuing locations, night time storage, etc need to be built into the site plan. If these initiatives are not incorporated into the site plan, a commitment should be made by MASSDOT/MBTA to build an MBTA facility close to the Pike/128 interchange without Newton private-public partnerships, but instead by carefully and quickly planning and requiring MASSDOT/MBTA to commit to a BRT project, and not approving the special permit until it is agreed.

Garage Foundation and Structure Future Accommodations

In a meeting in the office of Newton Mayor Ruthanne Fuller, along with state Representative Kay Kahn, MBTA committed to over-sizing the garage fountains and columns so as to add future parking capacity above and to the west (out over the rail yard). We insist that the MBTA document their intentions on this matter, particularly since driving habits will likely change in the future as a result of policies that promote a much higher use of public transportation, such as congestion pricing, and/or Transportation Climate Initiative.

Transit Capacity Study

We asked in our 2019 survey, "What do you want to see at Riverside?", and the most popular response was better Green Line service. We were happy to report that the transit Capacity Study was added to the traffic study at the request of the Newton City Council. It is well done, and appears to address concerns over how the added use created by the project will be accommodated with respect to the Green Line and the MBTA 558 bus. We are all excited to see the eventual introduction of the Green Line (T-10) Super Cars, a necessary component to accommodate the increased TOD usage. If these trains are not delivered, the study indicated that there will be a capacity problem, and consequently, more vehicular use will likely occur. This scenario should be addressed in the event that an economic downturn or some other problem halts the Super Car delivery.

We acknowledge that the MBTA 558 bus has plenty of future spare capacity including the new project volume. However, the bus has very limited headways, approximately 4 trips in and out of Boston during peak demand hours, roughly every 45 minutes. If the headways were reduced to every 15 minutes at those times, ridership would be robust. This was the case in the late 1990s, until very poor MBTA on time performance curtailed ridership. Simply put, we couldn't stand around for a bus that only ran hourly, and filled at the initial stop, leaving those at the next stop out of a ride. We insist that an express bus with a frequent schedule be made, with 15 minute headways, for two am peak hours and two pm peak hours. We believe that the MASSDOT/MBTA make a commitment to this bus service, and if not, the City Council should hold the special permit until it is agreed. By working together, we can increase ridership on the558 bus in a timely manner so as to provide an alternative to driving the Pike during the Allston Interchange project.

Section 3: MASSDOT Shortfalls: Allston Interchange, Grove St. Bridge/Ramp

Allston Interchange Project

Most Metrowest residents know that MASSDOT is undertaking a huge project replacing the Mass Pike Allston Interchange. Plans to reconstruct the interchange by straightening out the huge curve around what used to be Beacon Yards (Train Freight Yard) and adding a multimodal train station are scheduled to start in less than two years. The train station will have a branch that extends to Cambridge via the existing Grand Junction line.

Upon completion, Harvard University and others will develop the land between the new highway and the Charles River.

The Riverside Project is scheduled concurrently with the MASSDOT/MBTA effort. The Riverside developer has proposed reducing existing commuter parking from 960 spots to approximately 400 at this time. This will decimate the Green Line ridership at the worst time, as commuters will be forced to drive the Pike. Unfortunately, the Allston Interchange project is likely to require a multiyear phase where the Pike will be reduced from eight lanes to six, and the Worcester–Framingham commuter rail may be reduced for multiple years from two tracks to one.

Until written assurances are made that commuter parking is not reduced to 400 spots and the Worcester-Framingham Line retains both tracks, we believe the City Council should not approve the Riverside special permit.

Grove Street Bridge/Ramp

One of the finest efforts the new development team made was to add direct access to Rt. 128 via a new direct ramp into the rear of the project at Exit 22. We greatly appreciate this. However, the ramp only accommodates approximately 20% of the project traffic. The other 80% will traverse Grove Street in one way or another.

The ramp is lengthy with a horizontal curve at its terminus, and a traffic signal. The traffic study details this ramp backing up 398 feet during PM peak demand, and more (as capacity is exceeded and the queue can be longer). Red Sox game day conditions are much worse, but queuing information is not available for those volumes, which increase by approximately 15%. These game events occur on 22% of all commuting days. The traffic study should include queuing diagrams for game day scenarios. This condition can be made safer by extending the green signal for those traversing the ramp, and relieving the ramp of a dangerous backup condition into fast moving highway traffic. However, this exacerbates the concurrent queue

inside the project, along Main Street, during the PM peak demand hour, blocking the Main Street - Road A intersection, office building 1 and Garage 9 (both on A. St). We urge the City Council to require that the site plan be reconfigured to eliminate both these conditions.

In a recent meeting with the developer, we agreed that there may be a better, quicker way to extend the new ramp under the existing Grove Street Bridge. Instead of removing the north abutment and that entire span of the bridge, and reconstructing the abutment in a two phase bridge project, the abutment can be supported with soil mix improvements and a retaining wall, all occurring underneath the bridge. We both hope that MASSDOT will approve this construction method, so the bridge deck does not have to be removed. Otherwise the City will be facing a lengthy, multiyear disruptive project that will squeeze Grove Street to half its width.

Section 4: Grove St. Bike Lanes

We oppose the additional 5 foot bike lane along the east shoulder of Grove Street.

There is a stretch of Grove Street, from the Green Line trestle to the top of hill at the existing Hotel Indigo that has three proposed bike lanes. One path is a 10 foot two lane bike track on the west side of the street, and the other is a 5 foot path along the east shoulder of Grove St. The bike lanes total 15 feet of width and are in addition to a 6-8 foot sidewalk for pedestrians. These 21-23 feet of paths will only carry approximately 42 combined bike and pedestrian trips during am and pm peak demand hours (the traffic study did not separate bike and pedestrian trips). The vehicular lanes, 11 feet in each direction, or 22 feet total, currently carry about 1,245 vehicle trips during the same period. Hence, vehicular travel is 29 times greater, in an artery that leads to the interstate highway. The current road width of that section averages 28', and reducing it by 5 feet to put in a redundant bike lane is unacceptable at the current usage rates. If bicycle traffic increases, the lane could be added in the future and the developer could be asked to create a fund to be used for this or other transportation improvements on Grove Street. You will likely hear that decreasing vehicular road width generally increases safety, but in this case it doesn't. This stretch is an approach to I-95 and not a typical city street—if anything it would be safer to have it increase in width as drivers head onto the highway.

This redundant lane extends across the Grove Street bridge to the south to the Asheville Roundabout where is conflicts with the I-95 southbound ramp onto Grove Street. Its inclusion has led MASSDOT to eliminate the slip ramp that currently allows a large volume of traffic to easily "slip" onto Grove Street—it's done that for 60 years. Because this slip ramp exists, the only time the ramp currently backs up onto Rt I-95 is during special events/ Red Sox games. Creating that dangerous backup on a daily basis for a handful of bikers who can use the two-

way bike track or the side roads in Lower Falls simply doesn't make sense. We request that the City Council not allow the inclusion of the additional 5 foot bike lane and instead require the developer to set aside funds for its creation should it become necessary in the future.

The I-95 Southbound ramp features a split, accommodating traffic heading to Quinobequin Road (Washington St/Wellesley) and Newton Lower Falls/MBTA. The proposed roundabout is projected to have a queue backing to this split, enabling a fast moving single lane queue on a short piece of road back onto Rt. I-95. The developer recommends clearing the vegetation so that the condition is more visible. We completely disagree, and instead request that the Council require that the ramp be widened so both routes are navigable. This will require very little earth work and no land taking.

Section 5: Trails and Trail Funding

The Charles River, the Greenway and the parks along its banks offer enormous recreation and transportation amenities for all of Newton. We appreciate the developer's contributions to the trails, including the design of the Two Bridges Trail connection, linking Newton Lower Falls to the rear of the site. We look forward to those commitments being included as a condition of the special permit. In addition, we request that the City and the developer work together to find commitments for additional sources of funding to make this construction possible.

Section 6: Riverside Office Center Board Order Requirements

In 1997 the City of Newton approved the Jordan Marsh Warehouse Complex to be converted to the Riverside Office Center. The project was eventually built and abuts the Riverside TOD.

The Board Order, dated 6/2/1997, granted special permit #40-97(2).

It requires the following:

The proponent will provide an annual contribution to the Newton Nexus Bus System, and an additional bus service between Auburndale and Newton Lower Falls during mid day hours as well as connections to the Auburndale commuter rail station during peak traffic hours.

And

That if the MBTA created a new access roadway from the Route 128 ramp into its Riverside property extending to its property line, the petitioner shall make all the necessary modifications on its site to connect to such a roadway and permit access to the site, thereby making it possible to reduce the use of Grove Street for vehicular access to and from the site.

And

That the access from the site to the MBTA property is approved by the MBTA as shown on plan "C3 Ste Layout and Materials Plan" and "L2 Tree Planting at Grove Street" cited in Condition #1. The petitioner shall construct a pedestrian walkway to the MBTA Riverside Station which walkway and access to it shall be open to the users of the site and the general public.

These requirements have been overlooked and need to be incorporated into the site plan. They could create a link between the two projects that would make it safer for pedestrians and could add a huge shared parking opportunity as most of the Office Center parking is empty at night.

Section 7: Transportation Management (TMD) Plan

Per MU3 Ordinance Provisions Concerning Post-Construction Traffic Mitigation, Section 7.3.5.A.5.c.iii: The special permit application must include: "The means of making mitigations if it is found pursuant to the monitoring under Sec. 7.3.5.E., that the trips counted exceed the projected adjusted volume by 10 percent or more"

And

Section 7.3.5.B.14, The special permit may not be granted unless the City Council finds: The traffic mitigation measures set forth in the special permit application pursuant to Section 7.3.5.A.6.c.iii, [sic] if required to be implemented, are expected to allow a development project in the MU3/TOD district to meet the trip generation standards set forth in Section 7.3.5.E.1.c.

What has been submitted is in a memo from VHB dated January 14, 2020. It says, essentially, that the developer cannot comply because, until the project is built and occupied and they ask people who live and work there to submit surveys, they can't know how they might go about reducing traffic volumes. What the developer has submitted is a list of things they might try, which are essentially, we could try giving more T pass subsidies, we could try to get employers to stagger work hours, we could try more bike sharing programs, we could try to get the MBTA to add more buses, we could try increasing parking fees, we could try add shuttles to other public transit or other unspecified locations.

Based on this submission, the City Council cannot possibly make the finding required to grant the special permit. There is no information provided from which anyone can say that it is expected that these measures will be successful in reducing traffic volumes to the allowed limit—which is no more than 10% over predicted volumes.

The reason the ordinance was written to require mitigations to be both proposed and evaluated before the project is built is that there is no going back once it is built. We understand that many think this issue was confronted and addressed for the Northland project by including the permit conditions requiring more spending on TDM if traffic volumes do not

meet specified limits. But, the MU3 zoning provisions which require specific mitigations to be proposed and assessed before the permit is granted don't apply to the Northland project, and a requirement to spend money doesn't address the key issue which is: can traffic volume be decreased by spending money?

If money is the solution, then what is required under the MU3 zoning is that the developer specify what the money will be spent on and provide a basis on which the City Council can determine that spending the money will reduce traffic. Unless and until that is done, the permit cannot be granted.

MU3 (Riverside) Ordinance Provisions Concerning Post-Construction Traffic Mitigation

- Section 7.3.5.A.5.c.iii:

  The special permit application must include:

  "The means of making mitigations if it is found pursuant to the monitoring under Sec. 7.3.5.E. that the trips counted exceed the projected adjusted volume by 10 percent or more"

  - Section 7.3.5.A.5.E.i.c:

    If the volume is 10% or more over the projected volume, then:

    "the owner of the mixed-use development site shall begin mitigation measures (reflecting applicable . . . as described in the roadway and transportation plan submitted by the applicant and listed in the mixed-use development special permit in order to reduce the trip generation to 110 percent or less of the adjusted volume."

- Section 7.3.5.B.14:

  The special permit may not be granted unless the City Council finds:

  "The traffic mitigation measures set forth in the special permit application pursuant to Section 7.3.5.A.6.c.iii, [sic] if required to be implemented, are expected to allow a development project in the MU3/TOD district to meet the trip generation standards set forth in Section 7.3.5.E.1.c."

Alternative 6: Full Transformation

This alternative would use electric multiple units (EMUs) to provide service every 15-minutes to **key stations*** and **inner core stations**** all day, and to other stations during peak travel times. It also includes plans to use a North-South Rail Link for more convenient Commuter Rail service between the north and south of Boston.

***Key stations** are in gateway cities, dense areas outside central Boston, and/or locations that provide regional access and transit connectivity.

****Inner core stations** are located in dense urban environments up to 15 miles from downtown Boston. Kingston/Plymouth, Middleborough/Lakeville, and Greenbush lines do not receive urban rail service due to the nearby Red Line.

Riverside Bicycle Facilities

Presentation to Land Use Committee

February 25, 2020

BikeNewton

Everyday Biking For Everyday People!

1

Riverside is an opportunity to improve bicycle and pedestrian connections in Newton.

2

Distances to and from Riverside via Grove St.

Williams School - .4 miles

Lower Falls Community Center - .6 miles

Grove St. and Washington St. - .9 miles

Knotty Pine Restaurant - .8 miles

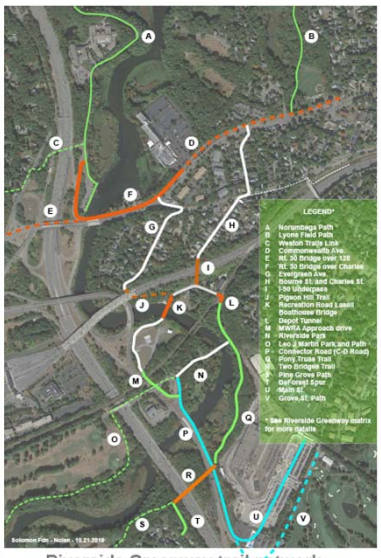
Auburndale Commuter Rail - .9 miles

3

Maintain the two-way cycle track on Grove St. (project side) and construct sidewalk level bike lane on golf course side.

4

Riverside is at the nexus of a new trail system.



Riverside Greenway trail network

5

Riverside Vision: Trails, Safety, Low-Carbon Lifestyle

"Immense interest in better pedestrian and trail connections to the Charles River and nearby parks and conservation lands."

-Riverside Vision

6

Riverside Vision: Trails, Safety, Low-Carbon Lifestyle

TRANSPORTATION HUB	Code	Principle
	T1	Advocate for improvements to the Green Line and Riverside MBTA Station to support increased ridership
	T2	Support potential expansion or connection of the commuter rail to Riverside
	T3	Enhance neighbor experience and safety along Grove Street
	T4	Link to and expand the trail network
	T5	Improve and manage traffic flow to and from Riverside
	T6	Maximize efficiency of on-site parking and minimize neighborhood parking over-flow
	T7	Prepare for future transportation trends and technology

MODEL FOR SUSTAINABILITY	Code	Principle
	S1	Provide options for residents to live low-carbon lifestyles
	S2	Prioritize energy-efficient building principles
	S3	Protect and improve the Charles River through site design
	S4	Improve Newton's climate resiliency
	S5	Reinforce connections to nature

7