



# CITY OF NEWTON, MASSACHUSETTS

City Hall

1000 Commonwealth Avenue, Newton, MA 02459-1449

Telephone: (617) 796-1065 TDD/TTY: (617) 796-1089 Fax: (617) 796-1086  
www.ci.newton.ma.us

Ruthanne Fuller  
Mayor

## ZONING BOARD OF APPEALS

**To:** Zoning Board of Appeals Members  
**From:** Adrianna Henriquez, Clerk  
**Date:** April 30, 2020  
**Subject:** Materials for **May 6, 2020** Public Hearing

---

Hello - Please see the following supplemental materials for the upcoming hearing on May 6, 2020 Public Hearing. The following board members are scheduled to sit:  
**Brooke Lipsitt (Chair), William McLaughlin, Barbara Huggins Carboni, Michael Rossi, Stuart Snyder, and Treff LaFleche**

1. Letter dated April 24, 2020 from Andreae Downs
2. Letter dated April 28, 2020 from Green Newton
3. Planning memorandum dated April 30, 2020
4. Supplemental Material from the applicant submitted electronically April 16, 2020

**Please note, the applicant had the following items delivered directly to board members and staff – if you have not received the following, please contact the board clerk:**

- Transmittal from Aaron Mackey of Allen & Major Associates dated April 22, 2020
- Schlesinger and Buchbinder cover letter dated April 22, 2020
- Architectural Plans dated April 21, 2020
- Site Development Plans dated April 17, 2020
- Criterion Development Partners memorandum dated April 20, 2020
- Sustainability report dated April 21, 2020

Thank you,

Adrianna Henriquez

**ahenriquez@newtonma.gov | (617) 796 1133**

## Memo for ZBA re: Parking

Andreae Downs <adowns@newtonma.gov>

Fri 4/24/2020 1:58 PM

To: Adrianna Henriquez <ahenriquez@newtonma.gov>

Cc: brooke.paul.lipsitt@gmail.com <brooke.paul.lipsitt@gmail.com>; Susan Albright <susansophia.albright@gmail.com>; Jacob D. Auchincloss <jauchincloss@newtonma.gov>; Alicia Bowman <abowman@newtonma.gov>; Victoria Danberg <vdanberg@newtonma.gov>; Alison M. Leary <aleary@newtonma.gov>; Brenda Noel <bnoel@newtonma.gov>

 2 attachments (33 KB)

parking Newton grid.docx; ZBA Parking memo.docx;

Dear Ms. Henriquez:

Attached please find a memo to the ZBA from several City Council colleagues and myself on parking requirements for two multifamily 40B applications before the board.

Also attached for background is a chart showing Newton results of a parking study conducted recently by the Metropolitan Area Planning Council.

Best

Andreae Downs  
Newton City Council

**To:** Zoning Board of Appeals, Brooke Lipsitt, chair

**From:** Andrae Downs, Susan Albright, Jake Auchincloss, Alicia Bowman, Vicki Danberg, Alison Leary, and Brenda Noel, City Councilors

RE: Riverdale (#01-20); Dunstan East (#09-19)

Thank you for the opportunity to comment on these proposals before you.

We are writing to urge you, members of the ZBA, to carefully consider parking for automobiles and bicycles in the petitions before you.

In the past, Newton's multifamily buildings have built more car parking than necessary, and, in many cases, under built bicycle parking. Data from current buildings is fortunately now available to help inform your body, and we offer some analysis of why some apartment structures see higher parking space usage than others.

Building more automobile parking than is necessary for the market success of a multifamily structure has three undesirable consequences:

- It increases housing costs
- It depresses usage of more sustainable transportation options
- By incentivizing driving, it increases traffic congestion and associated greenhouse gas emissions.

**Cost:** Underground parking, which is what both petitions are proposing, costs between \$60,000-100,000/space to construct. In agreeing to lower the parking minimum per apartment, the ZBA can instead ask for **deeper levels of affordability** or **higher levels of energy performance**. The latter are City of Newton goals.

According to the MAPC's report, [Perfect Fit Parking](#) (2109), along with other sources, parking supply is one of the major factors affecting parking demand.

**Congestion:** Other studies note a strong correlation between high levels of available parking (particularly free parking and easily accessed parking) and increased traffic ([studies](#)). Newton residents have overwhelmingly complained in public hearings and constituent emails about increases in traffic congestion.

Newton's [Climate Action Plan](#) (11/16/19) specifically recommends reducing parking minimums—and thus increasing the demand for more sustainable transportation options—as a key component of the City's meeting its transportation emissions goals and reduction in heat island effects.

### **What is the right amount of parking?**

According to the MAPC's study, multi-family developments in and around Boston had, on average, parking spot utilization of .73 spaces/unit.

In Newton, MAPC examined four recently-constructed multifamily developments and found demand on average was slightly above 1 space per unit (see chart in attachments).

Higher utilization of parking (at Woodland) is found where the WalkScore is lowest (13 out of 100). \* It appears, then, that apartments closest to a wide variety of services have lower parking demand than those that are not.

The newly opened apartments at 28 Austin St. (WalkScore 86) are 85% leased (58 of 68). Tenants so far have rented 56 parking spaces (less than 1:1 demand) at between \$125 and \$175/month.

Looking at Riverdale and Dunstan East, their WalkScores are 77 and 84, respectively. Using the above data, we can expect that both will be viable with 1 car space/unit or less.

Further, most of the Newton apartment complexes MAPC studied have one car parking space “bundled” with the rent or purchase price—that is, the tenant or owner gets the space for “free” (the only exception is Avalon Chestnut Hill, where the first space costs \$125/month). The two proposals, like Austin St., “unbundle” the parking—the rent for the unit and the parking space are separated, and the costs more transparent to prospective tenants/buyers. This is shown to dampen parking demand (and increase affordability for car-free households), which is why our Planning Department is now adding this tool to all multifamily buildings using Newton’s Special Permit process.

**In sum, we urge you to lower the parking ratio in these projects in exchange for greater affordability and/or sustainability. It would be a forward-thinking measure that would advance Newton’s goals towards walkability and carbon-neutrality.**

### **Bicycle Parking**

In contrast to the above, we believe the *secure* bicycle parking in both complexes can be expanded.

(Outside bicycle parking is vulnerable to weather and thieves. In contrast to automobile parking, secure bike parking is relatively inexpensive—and roughly 20 bikes can fit into a typical car space.)

When **the Merc in Waltham** (corner of Moody & Main) opened a few years ago (designed ca. 2012), they quickly found that the bike room was too small to meet demand (90 inside bike spaces for 269 units). Like Riverdale, the Merc is near the Charles River Path.

**Riverdale** is planning 206 indoor bike parking spots for 204 units. We believe two spaces/unit is probably a better number (408), given that couples and families can be expected in units with more bedrooms.

**Dunstan East**, similarly, is on Washington Street, where the City is planning to pilot (and eventually to build) protected bike lanes that should make biking a highly attractive option for tenants. With an indoor bicycle parking ratio of 1.87, we are less concerned at the adequacy of indoor bike parking, but suggest that the developer leave flexibility in planning the parking garage to accommodate additional secure bike parking should it become needed.

Again, thank you for your careful attention to this matter, and for your service to the City of Newton.

---

\*By comparison, Avalon Chestnut Hill: Walk Score 51, parking demand 1.26/unit  
Avalon Newton Highlands: Walk Score 64, parking demand 1.03/unit  
Village Falls Condos: Walk Score 80, parking demand 1.04

<b>Site Name</b>	<b>Site Address</b>	<b>Total # of Res. Units</b>	<b>Occupied # Res. Units</b>	<b>Total # of Res. Parking Spaces Provide</b>	<b>Total # Spaces Occupied OR Rented</b>	<b>% utilization</b>	<b>Parking demand/unit</b>	<b>Parking supply/unit</b>
Woodland Station Apartments	1940 Washington Street	180	175	268	240	90%	1.37 spaces/unit	1.53 spaces/unit
Avalon at Chestnut Hill	160 Boylston Street	204	197	404	248	61%	1.26 spaces/unit	2.05 spaces/unit
Village Falls Condominium Trust	173-193 Oak Street	122	122	243	127	52%	1.04 spaces/unit	1.99 spaces/unit
Avalon at Newton Highlands	99 Needham Street	294	294	498	303	61%	1.03 spaces/unit	1.69 spaces/unit

\*Source: MAPC Transportation Division, Study: Perfect Fit Parking (<https://perfectfitparking.mapc.org>)

# Celebrating 30 Years of Environmental Leadership



**GreenNewton**

## Board of Directors

Marcia Cooper  
*President*

Jim Purdy  
*Vice President*

Dan Ruben  
*Chair*

Sharon Cushing  
*Treasurer*

Jack Cheng  
*Clerk*

Cory Alperstein  
Craig Forman  
Paul Holt  
Joana Canedo  
Beverly Craig  
Barbara Brousal Glaser  
Sunwoo Kahng  
John Lewis  
Brita Lundberg  
Ken Mallory  
Andrew Reed  
Mindy Gregory Sieber  
Peter Smith  
Andrew Thompson  
Tony Zelle

## Advisory Board

Ana Zarina Asuaje Solon  
Louise Bruyn, *Founder*  
Sheila Clawson  
Beverly Droz  
Kevin Dutt  
Paul Eldrenkamp  
Margaret Ford  
Ellie Goldberg  
Barbara Herson  
Ira Krepchin  
Lois Levin  
Brooke Lipsitt  
Jean MacRae  
Eric Olson  
Matt Pawa  
Heather Tausig

Tuesday, April 28, 2020

City of Newton Zoning Board of Appeals  
Chairwoman Brooke Lipsitt  
ZBA Members

Cc: Criterion Development Partners  
Cc: Newton City Councilors

Date: April 28, 2020

Re: Proposed Riverdale Project

Dear Chair Lipsitt and Members of the Zoning Board of Appeals,

Green Newton is pleased to hear that Criterion Development Partners has committed to achieve Passive House certification for the residential units in Building 2 (36 units) in the updated Riverdale proposal. We are also pleased that Criterion will be using electricity (heat pumps assumed) for heating and cooling, and studying electricity for hot water.

However, we are concerned that the developer does not seem to be taking advantage of the generous planning and energy modeling money available through the MassSave new construction program to robustly consider Passive House certification in Building 1, which represents the majority of the square footage of and 166 units in the updated proposal. In our estimation, building 1 is the best candidate for Passive House construction in the development and it seems foolhardy not to study it for Passive House certification. The energy modeling will likely lead to a much better building envelope and mechanical system design, even if Criterion Development Partners chooses not to include Passive House levels of efficiency or to certify the building to the Passive House standard. These design efforts will likely save residents both operating and maintenance costs.

Green Newton urges the ZBA to require Criterion Development Partners to apply to the Massive program for Passive House planning incentive money for each of the 2 buildings (more info at: <https://www.masssave.com/saving/residential-rebates/passive-house-incentives>). For each building, Criterion should be required to apply for:

- 1) Up to \$5K per building for a Passive House feasibility study.
- 2) 75% of the cost up to \$20,000 for Passive House energy modeling for each building.

These analyses can provide Criterion with a more informed understanding of how to improve the building envelope and mechanical systems at low to no cost. If after this analysis, Criterion decides to go forward with certifying Building 1 to the Passive House standards, they would also be eligible for \$3,000 per unit as an incentive (\$498,000). Even if Criterion chooses not to pursue Passive House certification, by going through this planning incentive, Criterion will qualify for double the normal new construction incentive under the MassSave program. There is little downside for pursuing this planning money.

Green Newton also urges the ZBA to require that Criterion conduct an embodied carbon study of proposed building material choices in the project, as Northland and Mark Development (Riverside) have committed to in their developments. Green Newton is increasingly concerned about how critical the building material choices are on climate impact in new construction buildings. With some slight changes in building material choices to other available off-the-shelf materials, the

climate impact of a building can be dramatically reduced and can even approach sequestration of carbon. There are a number of embodied carbon tools such as Tally, EC3, and Athena that can help with this analysis. In addition, the publicly available study from Mark Development of the Washington Place material choices can serve as a starting point if similar materials are being considered. Being informed about the climate impact of building materials is the first step in understanding how to make low or no cost changes that reduce green house gas emissions.

Neither taking advantage of the MassSave planning incentives nor studying the embodied carbon of the material choices will significantly impact costs for this project. We urge the ZBA to include these two requirements and are happy to answer any questions ZBA members or the developers have about our request.

Sincerely,

Green Newton

**Green Newton Building Standards Committee**

Dan Ruben, Chair, 175 Auburn Street

Peter Barrer, 60 Endicott Street

Marcia Cooper, 170 Evelyn Road

Beverly Craig, 9 Arlington Street #2

Paul Eldrenkamp, 111 Spiers Road

Betsy Harper, 19 Fairmont Avenue

Jonathan Kantar, 672 Chestnut Street

Lois Levin, 497 Chestnut Street

Jim Purdy, 943 Chestnut Street

Peter Smith, 130 Washington Street

Jay Walter, 83 Pembroke Street





Ruthanne Fuller  
Mayor

**City of Newton, Massachusetts**  
Department of Planning and Development  
1000 Commonwealth Avenue Newton, Massachusetts 02459

Telephone  
(617) 796-1120  
Telefax  
(617) 796-1142  
TDD/TTY  
(617) 796-1089  
www.newtonma.gov

Barney S. Heath  
Director

---

## PUBLIC HEARING MEMORANDUM

DATE: April 30, 2020

MEETING DATE: May 6, 2020

TO: Zoning Board of Appeals

FROM: Barney Heath, Director of Planning and Development  
Neil Cronin, Chief Planner for Current Planning  
Katie Whewell, Senior Planner

COPIED: Mayor Ruthanne Fuller  
City Council

In response to questions raised at the Zoning Board of Appeals public hearing on February 5, 2020 and April 1, 2020, 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 #01-20

**15 Riverdale Avenue**

CPC Land Acquisition Company, LLC applying to the Zoning Board of Appeals, pursuant to Massachusetts General Laws Chapter 40B, for the issuance of a Comprehensive Permit authorizing the applicant to construct a 204 unit residential development, which will include 51 affordable housing units and approximately 22,382 square feet of, office and retail space, all on approximately 3.4 acres of land located in a Manufacturing Zoning District at 15 Riverdale Avenue in Newton, Massachusetts "Residences on the Charles". 51 of the units (25%) will be deed restricted to remain permanently affordable to households earning up to 80 percent of Area Median Income.

## **EXECUTIVE SUMMARY**

The Applicant, CPC Land Acquisition Company, LLC, is seeking a Comprehensive Permit pursuant to Massachusetts General Laws Chapter 40B, Sections 20 through 23, for the construction of a mixed-use project consisting of two buildings of up to five stories, containing 204 dwelling units, and approximately 627 square feet of retail, 2,046 square feet of community space, and 1,177 square feet of neighborhood amenity space on Riverdale Avenue in Nonantum. The subject property comprises approximately 128,887 square feet on one lot in a Manufacturing (MAN) zoning district (the "Project").

The Zoning Board of Appeals (Board) opened the public hearing on this petition on February 5, 2020, 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. At that meeting the Board authorized peer reviews of the Project.

On April 1, 2020, the public hearing addressed issues related to stormwater, civil engineering, and site design as presented by the applicant and reviewed by the City's consultant. The applicant should continue to work with City staff and their consultants to address all comments and concerns. The Planning Department received revised site plans and supplemental information and responses to issues raised thus far. Those materials will be incorporated into a memorandum in advance of the next hearing.

The applicant submitted a Transportation Impact and Access Study (TIAS) prepared by MDM Transportation Consultants, Inc. (MDM) dated December 17, 2019 to analyze the transportation aspects of the Project. The applicant then submitted a revised TIAS, dated March 23, 2020, following the elimination of the "innovation" space from Building 2. The Planning Department engaged Green International Affiliates, Inc. (Green) to peer review MDM's analysis.

### **I. TRAFFIC IMPACT AND ACCESS STUDY**

The applicant submitted a revised Traffic Impact and Access Study, which reflected the removal of the innovation space from Building 2 and added three new intersections in the study area. The TIAS projects that the weekday morning peak hour is expected to generate 86 vehicle trips, approximately 22 vehicles entering and 64 exiting while the evening peak hour is expected to generate 86 vehicle trips, with 55 vehicles entering and 31 exiting the site. Green concurs with the trip generation land use code used in the studies; however, Green suggests that the daily trip generation be provided rather than only the peak hours. As part of the additional data, staff suggests that the applicant provide the Saturday midday peak hour as well. Green notes that the trip generation rates are not the latest figures and should be updated to reflect the most recent figures from the Institute of Traffic Engineers Trip Generation Manual. Green also notes that the studies use different time periods for crash rates among the studied intersections. Additionally, Green suggests that the applicant modify the background growth rate to reflect City of Newton conditions. Lastly, Green notes that parked vehicles and landscaping impacted intersection site

distance. Because both Riverdale Avenue and Los Angeles Street are private ways, abutters may park along their frontage of these ways, up to the midpoint. Staff suggests that the applicant respond to the items raised in Green’s memorandum and provide some information as to how these parking arrangements may impact residents and guests accessing the site.

## II. OFF-SITE IMPROVEMENTS

MDM states that the applicant is proposing to work with the City on a few pedestrian improvements to the intersection of California Street and Bridge Street and the intersection of California and Los Angeles Streets. Specifically, the applicant proposes a bump out at California and Bridge Streets to shorten crosswalks and better align the California Street westbound approach. As the intersection of California and Los Angeles Streets, the applicant proposes new Americans with Disabilities Act-compliant ramps, and a new pedestrian crossing with a rapid reflectorized flashing beacon (RRFB). The applicant is also proposing two pedestrian connections to the Forte Park. MDM also states that the applicant is continuing to work with abutters to install a sidewalk along the eastern portion of Los Angeles Street, staff suggests that the application provide an update on this improvement at the public hearing. The Planning Department will consult with the Transportation Division of Public Works regarding the improvements at the intersection of Bridge and California Streets, and well as the proposed RRFB at the intersection of California and Los Angeles Streets.

Figure 1. Conceptual Improvements, California Street and Bridge Street Intersection

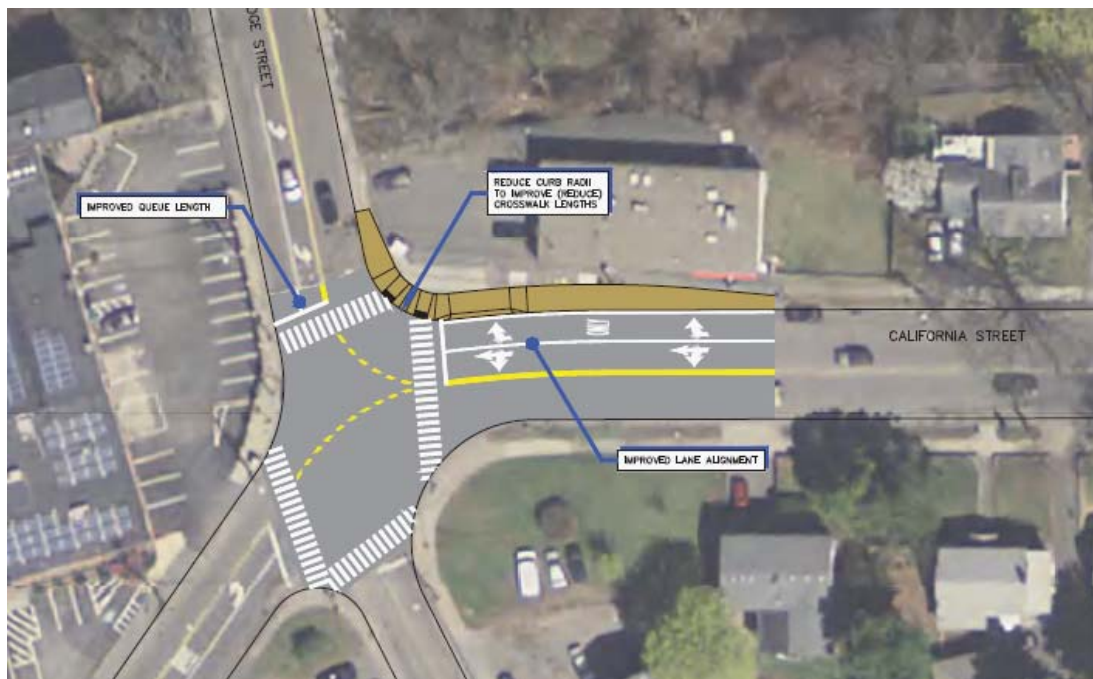


Figure 2. Conceptual Improvements, California Street and Los Angeles Street



### III. PARKING

The applicant submitted a Parking Summary which outlines how parking will be allocated (**Attachment B**). The project will have a ratio of 1.1 spaces per dwelling unit: there are 46 surface parking stalls associated with Building 2; 187 parking stalls (garaged and surface) associated with Building 1; and five surface stalls along Midland Avenue. Each dwelling unit will have one parking stall which will leave eight surface stalls associated with Building 2 and fifteen surface stalls associated with Building 1 available to guests, if not rented by a resident. Of the five Midland Avenue spaces, one parking stall will be dedicated for transportation network companies e.g. Uber and Lyft, one space will be for short term parking, and three spaces will be reserved for visitors. The applicant states that twelve parking stalls will be equipped with electric vehicle charging stations and that an additional twelve stalls will be electric vehicle ready; however, the applicant has yet to determine the locations of these stalls.

Green notes that the drive aisle for a portion of the surface parking facility accessory to Building 2 is 20-foot wide where 24 feet is required per the City of Newton Zoning Ordinance. Green suggests that the applicant provide a turning template for stalls to demonstrate proper maneuverability. In addition, staff suggests that a turning template be provided for the compact stalls and the tandem stalls in the garage of Building 1. Staff suggests that the applicant provide more information on these tandem stalls, especially as to whether they will be initially reserved for the three-bedroom units. Staff suggests the petitioner consider allocating one accessible-

visitor parking stall. Lastly, Green notes that a visitor parking stall along Midland Avenue is within 20 feet of a pedestrian crossing, Green recommends shifting the stall or removing the stall nearest the crosswalk.

#### **IV. TRANSPORTATION DEMAND MANAGEMENT**

The applicant is proposing to implement a Transportation Demand Management Plan (TDM) to reduce vehicle trips to the site and to increase use of alternative modes of transportation. The applicant proposes the following measures: transit subsidies for a two-month period for up to two adults per unit, membership in the Watertown Transportation Management Association (TMA) which includes guaranteed ride home, and funding to the Watertown TMA for creation and maintenance of shuttle service. The applicant should clarify any preferential parking measures for carpools, vanpools, and ride sharing, as indicated in the December 2019 TIAS. The Planning Department suggests the applicant provide more information on the shuttle service, the transit subsidy and whether the cost of parking will be separated from the cost of rent.

City staff believes that the site has rich access to transit due to its proximity to Watertown Square and Watertown Yard and is close to the amenities in the Nonantum Village Center as well as Watertown Square. Furthermore, the site is adjacent to the Charles River Greenway which provides pedestrian and bicycle access to regional points of interest. City staff notes that there is a lack of a pedestrian connection along Los Angeles Street to California Street and suggests the applicant work with neighbors along Los Angeles Street to the goal of installing sidewalk connections for a stronger pedestrian experience and to better connect the Project to California Street. The City encourages the applicant to explore pedestrian connections wherever possible and is supportive of proposed pedestrian connections to Forte Park.

#### **V. ADDITIONAL INFORMATION AND MATERIALS**

The applicant should be prepared to respond to all of the peer reviewer's comments and questions at the public hearing and subsequently in writing for appropriate review by the peer reviewer, City staff, and the Board in advance of future meetings.

#### **VI. CONCLUSION AND NEXT STEPS**

The Planning Department will continue to review the proposal and, where appropriate and authorized, coordinate reviews of the project by City agencies and consultant peer reviewers and provide updated and expanded memoranda in advance of future Board hearings. It is anticipated that the next meeting will focus on project updates (including any design changes) and the applicant's responses to the peer reviews that have been submitted to date.

**ATTACHMENTS**

**Attachment A:** Green International Inc. Peer Review entitled "Traffic Engineering Peer Review- Proposed Mixed Use Development 15 Riverdale Avenue," dated April 21, 2020

**Attachment B:** Residences on the Charles, 15 Riverdale Ave, Parking Summary, submitted by CDP

**GREEN INTERNATIONAL AFFILIATES, INC.**

239 LITTLETON ROAD, SUITE 3 WESTFORD, MA 01886

T: (978) 923-0400 | F: (978) 399-0033 | WWW.GREENINTL.COM

April 21, 2020

Ms. Katie Whewell  
Senior Planner  
Planning and Development Department  
Newton City Hall  
1000 Commonwealth Ave  
Newton, MA 02459

Subject: **Traffic Engineering Peer Review –  
Proposed Mixed-Use Development  
15 Riverdale Avenue  
Newton, Massachusetts**

---

Dear Ms. Whewell:

On behalf of the City of Newton (the City), Green International Affiliates, Inc. (Green) is submitting this letter report of the findings from our engineering peer review of the application package for the proposed residential development at Riverdale Avenue and Los Angeles Street. The scope of our review included a review of the traffic study and the proposed site plan, as they relate to vehicular access, bicyclist and pedestrian access, and parking at the proposed site and to local traffic circulation at and near the proposed site. The project is before the Planning Board for approval.

This review included an examination of the following documents submitted in support of the proposed project:

- Traffic Impact Assessment (TIA) Memorandum titled “Proposed Mixed-Use Development – Supplemental Analysis, 15 Riverdale Avenue – Newton, MA”, prepared by MDM Transportation Consultants, dated March 23, 2020.
- TIA Memorandum titled “Proposed Mixed-Use Development, 15 Riverdale Avenue – Newton, MA”, prepared by MDM Transportation Consultants, dated December 17, 2019.
- Plan titled “Site Development Plans for Residences on the Charles, 15 Riverdale Avenue, Newton, MA”, prepared by Allen & Major Associates, Inc., dated March 13, 2020.

In addition to the above documents, Green visited the project site and the surrounding roadways on April 7, 2020 to gain a better understanding of the existing conditions and the context of the proposed project. Our review evaluated the documents for consistency with MassDOT’s “Transportation Impact Assessment (TIA) Guidelines” (March 13, 2014), typical industry practice for traffic studies, the City of Newton’s regulations and general bylaws, and Americans with Disabilities Act (ADA) and Massachusetts Architectural Access Board (AAB) design standards.

Green offers the following comments resulting from our review of the above documents:

## December 2019 and March 2020 Traffic Impact and Access Reviews

1. The two memorandums included the following eight study intersections:

### December 2019 TIA

- California Street at Bridge Street
- California Street at Los Angeles Street
- California Street at Riverdale Avenue
- California Street at 5<sup>th</sup> Avenue
- California Street at Watertown Street (Route 16)

### March 2020 TIA

- California Street at Jasset Street
- California Street at Rustic Street
- California Street at Faxon Street

Green concurs with the study area used in the TIA documents.

2. Traffic count data were collected in January of 2019 for the first five study intersections observed previously, and in the first week of March 2020 for the latter three intersections. Seasonal data suggests below-average annual conditions during each of those months, hence, revisions to volumes were made according to the month. Automatic Traffic Recorders (ATRs), including 24-hour counts and speed data were collected on Wednesday, January 2<sup>nd</sup>, 2019. Turning Movement Counts (TMCs) were collected on Tuesday, December 18<sup>th</sup>, 2018; Thursday, January 17<sup>th</sup>, 2019; and Thursday, March 5<sup>th</sup>, 2020. Green concurs with using seasonally adjusted data to perform the analysis.
3. Crash data were presented from information provided by the MassDOT Highway Division Safety Management/Traffic Operations Unit for the years 2014-2016 for the first five study intersections and the years 2017-2019 for the latter three study intersections. During the three-year periods that were examined, the California Street at Bridge Street intersection was stated to have experienced 17 crashes, the California Street at Watertown Street (Route 16) intersection was stated to have experienced 3 crashes, and each of the other intersections were stated to have each experienced 0-4 crashes.

Green reviewed the numbers of crashes with data available from the MassDOT IMPACT Crash Query and Visualization tool, and identifies 4 crashes as being reported at the California Street at Watertown Street intersection in the same three-year crash period. This is anticipated to increase the crash rate at this intersection, though the rate will still be below average.

Considering that the tools used to review crash data for the March 2020 TIA were available when the December 2019 TIA was being prepared, Green recommends conducting an updated review of crash history at the initial five study intersections and taking the updated information into consideration when evaluating potential impacts and improvements.

4. Green notes that the traffic volumes used to calculate the crash rate worksheets for the first five intersections in the December 2019 TIA are close to, but do not match, the afternoon peak hour volumes used in the figures or the unadjusted TMC data. Green recommends reviewing and explaining the discrepancy in traffic volumes used.



5. The speed data utilized for calculating the required Stopping Sight Distance and Intersection Sight Distance is very limited. The data consists of 43 vehicle speeds measured by MDM in the field. There is no information regarding the time of day, or the period of measurement. This is a very limited sample size that could have been highly impacted by the timing of the measurement. The industry practice is to collect speed data along with the ATR counts for a 48-hour period. While spot speed studies such as those conducted in this instance are acceptable in certain circumstances, the state of MA recommends a sample size of 100 vehicles in each direction, which was not provided. Revised speed data with a larger sample size should be provided.
6. Intersection sight distance (ISD) was listed in the December 2019 TIA as having exceeded 500 feet in each direction at the intersection of Riverdale Avenue and Los Angeles Street. However, Green's review indicated that ISD was restricted to less than this by parked vehicles in the daytime (looking to the left from Riverdale Avenue) and by landscaping. Green recommends that the Applicant further review sight distances as relates to on-street parking and landscaping along California Street. Stopping sight distances were satisfied at this location.
7. The background growth data was calculated based on four MassDOT count stations. However, three of these count stations are located outside of the city of Newton in Quincy, Abington, and Weymouth. The one count station located in the City of Newton reflected a background growth rate of 0.6% per year, while the Abington and Weymouth traffic growth was negative during that time period. Taking the average of these locations does not reflect the Newton experience. The background growth should be adjusted upwards to 0.6% per year, or additional count data from the vicinity of the site should be provided to accurately reflect average conditions in the area.
8. The future conditions were evaluated for a seven-year horizon which is consistent with MassDOT TIA guidelines which require a minimum of seven years, and with regional general practice. The background growth is indicated to be 0.5% per year, with two specific planned developments in the area consisting of one 20-unit multi-family building proposed at the Los Angeles Street study intersection and a 6-unit residential building proposed approximately one-quarter mile from the site. Considering the proximity of the 20-unit site to the project site, the moderate size of the 20-unit site, and the low background growth rate used, Green recommends separately incorporating the expected number of trips from the Los Angeles Street development from the background growth rate.
9. Green concurs that the trip generation land use code 221 is appropriate for this site. However, the trip generation is only provided for the AM and PM peak hours in the report. While the daily trip generation is provided in the Appendix it should also be discussed in the trip generation section as it relates to the existing traffic. In addition, the trip generation rates in the Appendix do not reflect the latest 10<sup>th</sup> edition trip generation rates given by ITE for dwelling units. The trip generation rates should be updated to reflect the 10<sup>th</sup> edition ITE trip generation for Land Use Code 221 vs. dwelling units. The rates used are "occupied units" rather than "dwelling units". While this would appear to represent a more conservative condition, the rates provided are lower during the PM and daily peak hours. This is likely a reflection of the much more limited sample size for that variable and as a result should not be utilized for this project.
10. Green notes a typographical error. The footnote to Table 1 in the March 2020 TIA states that the previous plan had proposed to include of 217 residential units, but the previous TIA and plan state 204 units. Please clarify the discrepancy.

11. The intersection capacity analysis for the unsignalized intersections in the December 2019 TIA was conducted using the *Highway Capacity Manual 2010* rather than using the latest HCM reference that was published in MassDOT's *TIA Guidelines* and MassDOT's *Traffic and Safety Engineering 25% Design Submission Guidelines*. Although it may provide similar results, the applicant should have performed the analyses using *Highway Capacity Manual 6<sup>th</sup> Edition* to be consistent with the analyses performed for the March 2020 TIA intersections. Any updates to the analysis, given the network updates requested above, should utilize the latest HCM and the available tools that are based on that version.
12. The transportation demand management program (TDM) included by the proponent contains the statement that the plan "may include the following", before describing the proposed TDM measures. The proponent should clarify which of these items will be implemented. In addition, a traffic monitoring program should be included to ensure that the proposed development does not exceed the trip projections, with the potential for an expanded TDM in the event that the projections are not met.

### March 2020 Site Plans

13. The site plans generally conform to the City of Newton regulations.
14. Although a "Bike Room" is proposed at Building 1, there are no bicycle parking facilities proposed for Building 2. Residents of Building 2 may appreciate having bicycle parking close to their unit especially if they do not have a car. The Applicant should depict additional bicycle parking, at Building 2.
15. The site plans do not clearly depict if/where there is a loading area for the proposed cafe. The Applicant should depict the location of the loading zone for the cafe. While there is a loading zone depicted on Riverdale Avenue this is not an ideal location for deliveries to the amenity areas.
16. The December 2019 TIAS mentions that as part of TDM measures, preferential parking will be allotted for carpools, vanpools, and car sharing. The site plans do not depict the locations of these features. The Applicant should depict the location of the preferential parking spaces.
17. It is not clear from the plans whether any of the proposed handicap parking spaces will be allocated for visitor parking. There should be at least one handicap accessible visitor parking space.
18. The proposed parking aisle width to the east of Building 2 is only 20 feet, less than industry standard practice. Although the plans state that relief is sought from the City of Newton, the Applicant should demonstrate that vehicles are able to efficiently enter and exit parking spaces along this aisle utilizing AutoTurn.
19. There is one visitor/short-term parking space on Midland Avenue within 20 feet from the pedestrian crossing on Midland Avenue at Los Angeles Street. Parking spaces shall be located a minimum of 20 feet from the nearest crosswalk and 30 feet from the Midland Avenue / Los Angeles Street intersection per the 2000 Uniform Vehicle Code and the MUTCD. Green recommends either shifting the parallel parking spaces further east or removing the parking space closest to the crosswalk.

### Mitigation

20. The proposed wheelchair ramp shown in Figure 11 in the March 2020 TIA, at the northeast corner for the California Ave / Bridge Street intersection adjacent to the driveway entrance appears to have

**Ms. Katie Whewell**  
**April 21, 2020**

---

a ramp transition length immediately next to the transition piece for the driveway entrance. Please review this location further to see if it is possible to provide level walking areas between ramps for providing ADA-accessible facilities. In the event that the ramp remains flush with the driveway, a barrier should be provided, similar to existing conditions, to prevent vehicles from exiting the property through the ramp.

21. In Figure 12 in the March 2020 TIA there are RRFB units are proposed approximately where there are existing street lamp posts. The Applicant should consider removing and replacing/relocating the lamp posts to avoid sign clutter or blocked visibility.

If either the City staff or the Applicant's engineer would like to discuss any of these comments further, please feel free to contact me at 978-923-0400.

Sincerely,  
Green International Affiliates, Inc.



Corinne Tobias, P.E., PTOE  
Transportation Planning Group

cc: W. Wong, Green  
W. Scully, Green

F:\Projects\2018\18078\18078.0035\DOCS\RPTS\The Residences on the Charles Peer Review - Green.docx



## RESIDENCES ON THE CHARLES 15 RIVERDALE AVE, NEWTON PARKING SUMMARY

### Project Description

Residences on the Charles (the “Project”) includes the following major components:

#### Residential

204 apartment units with associated support and amenity space, and 238 parking spaces. Parking spaces will be available for lease separate from the residential apartment lease to encourage residents to utilize other modes of transportation in lieu of vehicle ownership. The Project is specifically designed with a limited but adequate parking supply for both residents and visitors.

#### Tenant/Neighborhood Amenity Space

This space, totaling approximately 3,500 square feet (“sf”), is open to the public and designed to serve tenants of the apartments, residents in the neighborhood, and users of both the Charles River Bike Path and Forte Park. In addition to an approximately 750 square-foot sports court, other intended uses for the tenant/neighborhood amenity space include a 700 square-foot café, a 1,350 square-foot self-service bicycle repair room and a 700 square-foot bike and/or kayak rental. We do not expect that the amenity space will have a typical retail market draw due to its small size and location.

#### Community Space

Possible uses for the community space include a meeting room and exhibit space for local artists or for educational displays.

The Project is designed as a Transit-Oriented Development and is accessible to public transportation. The Project is approximately one-half mile from the transit options available at Bridge Street to the west and Watertown Square to the east. It is also located across the street from a supermarket, pharmacy, fitness center and other small retail establishments. Proximity to these services will reduce residents’ reliance on private vehicles. The Project includes bikes available for tenants for shopping, commuting and other trips. The Project is located along the Charles River Bike Path which makes biking and walking convenient modes of transportation for tenants and visitors. Additional measures to reduce reliance on single-occupancy vehicles and vehicle ownership are included in the Project’s Transportation Demand Management program.

The Project includes two buildings – one on the north side of Midland Avenue (Building 1) and one on the south side of Midland Avenue (Building 2). Building 1 is comprised of two 5-story building wings separated by a landscaped courtyard and joined by an overhead pedestrian bridge. The westerly wing, Building 1A, provides 70 units on floors 2 through 5. Parking at Building 1A includes 76 spaces – 56 spaces in a podium garage, 12 spaces in individual garages and 8 exterior spaces along the building. First floor uses in Building 1A include a residential lobby, a portion of two proposed residential live/work units, and approximately 1,400 sf of tenant/neighborhood amenity space including a café. As described previously, this amenity space is open to the public and is intended to draw pedestrian and bike

enthusiasts using the Charles River Bike Path. The easterly wing, Building 1B, provides 96 units on floors 2 through 5 and 111 parking spaces – 95 spaces in a podium garage, 12 exterior spaces along the building and 4 exterior spaces along a privately-owned section of Riverdale Avenue. First floor uses in Building 1B include a residential lobby, activated tenant space and approximately 1,300 sf of tenant/neighborhood amenity space. This amenity space is intended to house a bike repair room and will attract bikers using the Charles River Bike Path.

Building 2, on the south side of Midland Avenue, includes 38 residential units on the top three floors. First floor space includes a residential lobby, 2,600 sf of community space and 750 sf of tenant/neighborhood amenity space. The latter space will house a sports court. A 46-space surface parking lot is located at Building 2 with many of the spaces located under the canopy of the building's upper floors.

Five on-street parking spaces will be located along Midland Avenue in front of Building 1.

The Project will include 12 EV parking spaces (locations to be determined) with the ability to convert 12 additional spaces for EV use.

## Parking Management

The Project includes two main categories of parking:

- Garage parking – All parking in the podium-level of Buildings 1A & 1B will be controlled by a rolling garage door and residents will use a key fob, or other such device, to access these spaces. Each space will be numbered and assigned to a specific unit. The individual exterior garages on the west side of Building 1A will be similarly controlled and assigned.
- Exterior parking – All exterior parking spaces will be numbered and signed. Numbered spaces will be assigned to specific units and signs will indicate that these spaces are reserved for residents. Unnumbered parking spaces will have signs designating them for use by visitors and other non-residents of the Project.

## Parking Strategy

The Residences on the Charles is programmed at 1.1 spaces per unit (225 spaces) to accommodate residents who may have more than one car. Additionally, 13 spaces are provided for visitors and pick-up/drop-off. Visitors include both residential guests and users of both the public amenity space and community space. The 225 residential spaces will be assigned to each of the 204 rental units<sup>1</sup> on a for-rent basis. None of the 13 visitor spaces will be available for rent.

---

<sup>1</sup> Note that the development will generally be at 95% occupancy so approximately twelve (12) additional spaces (not yet assigned) will consistently be available for additional visitor parking.

## Parking Designation

### Building 1A (70 units & 76 parking spaces)

- 68 access-controlled garage parking spaces (2 HP)
  - 63 spaces assigned to residents of Building 1A
  - 5 tandem spaces assigned to residents of Building 1A with a second car
- 8 uncontrolled exterior spaces
  - 7 numbered spaces assigned to residents of Building 1A
  - 1 space assigned to a resident of Building 1A with a second car (if not rented, this space will be available to visitors)

### Building 1B (96 units & 111 parking spaces)

- 95 access-controlled spaces in the podium garage (4 HP)
  - 95 spaces assigned to residents of Building 1B
- 16 uncontrolled exterior spaces
  - 1 numbered space assigned to a resident of Building 1B
  - 15 numbered spaces for residents of the Project with a second car (if not rented, spaces will be available to visitors)

### Building 2 (38 units & 46 parking spaces)

- 46 uncontrolled exterior parking spaces (2 HP)
  - 38 numbered spaces reserved for residents of Building 2
  - 8 spaces reserved for visitors (including users of the public amenity space)

### Midland Avenue (5 parking spaces)

- 5 uncontrolled exterior parking spaces
  - 1 space reserved for ride-share vehicles (shuttle van, Uber, etc.)
  - 1 space reserved for short-term parking (15 minutes)
  - 3 spaces reserved for visitors

**Building 2**

- 38 units, 2,588 sf community space, 751 sf tenant/neighborhood amenity space
- 46 exterior parking spaces
  - 38 reserved for residents
  - 8 spaces reserved for visitors

**Building 1A**

- 70 units, 1,385 sf tenant/neighborhood amenity space
- 76 spaces
  - 51 access-controlled, podium garage spaces assigned to residents
  - 5 access-controlled, tandem podium garage spaces available to rent for additional car
  - 12 access-controlled exterior garage spaces assigned to residents
  - 7 exterior spaces assigned to residents
  - 1 exterior space available to rent for additional car

**Building 1B**

- 96 units, 1,353 sf tenant/neighborhood amenity space
- 111 spaces
  - 95 access-controlled podium garage space assigned to residents
  - 1 exterior space assigned to resident
  - 15 exterior spaces available to rent for additional car

**Midland Ave.**

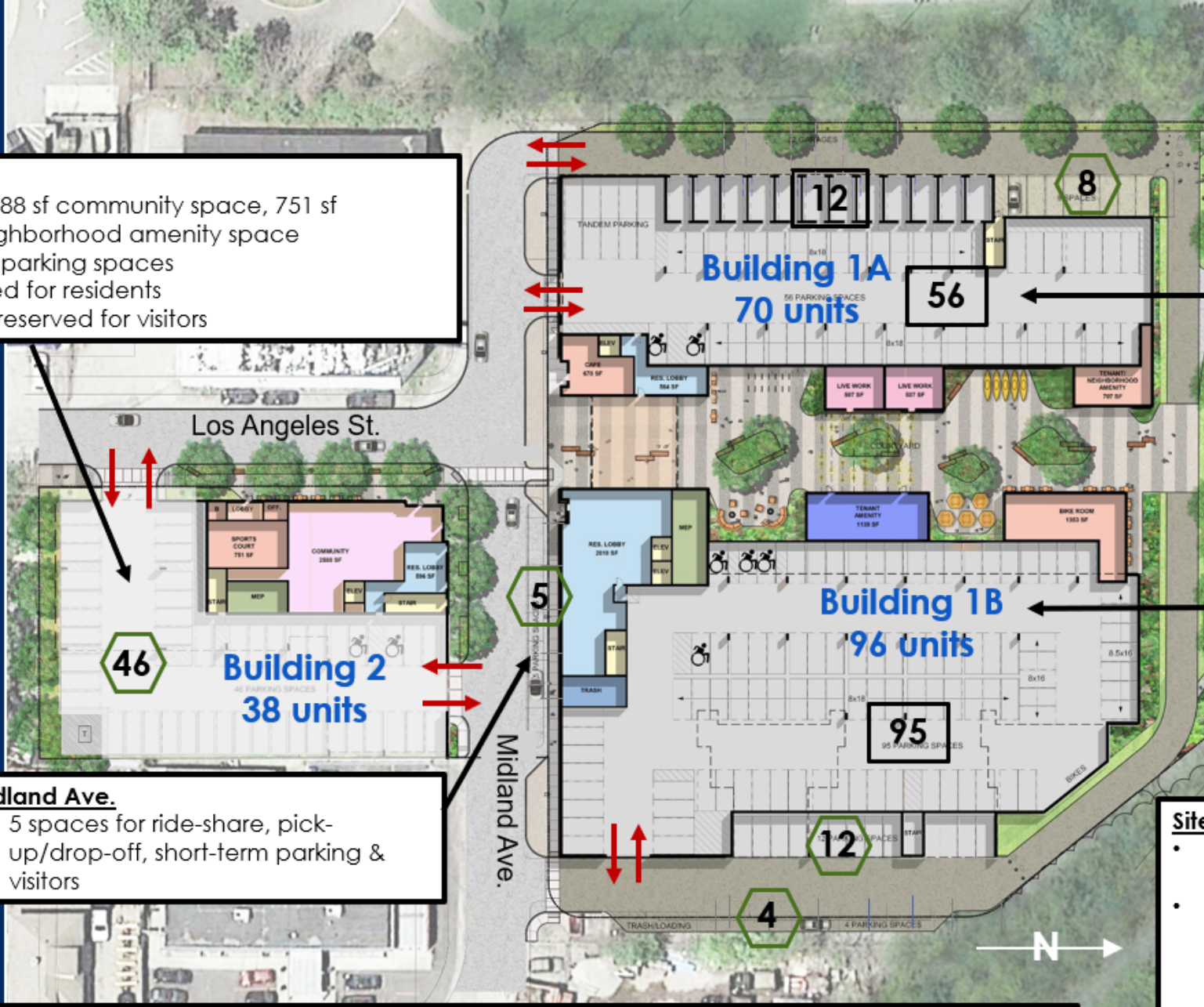
- 5 spaces for ride-share, pick-up/drop-off, short-term parking & visitors

**Site-wide**

- 12 EV parking spaces (5%) plus another 12 spaces pre-wired for conversion to EV spaces
- Parking space dimensions (min.)
  - 8'x18' standard
  - 8'x16' compact
  - 8'x18' handicap
- Additional detail shown on Site Plan

**Project Parking Utilization (at 100% occupancy)**

- 204 assigned spaces (1.0 space/unit) for rent by tenants
- Up to 21 spaces (0.1 space/unit) available for rent by tenants as additional space
- A minimum of 13 spaces reserved for visitors





# FORTE PARK EXISTING CONDITIONS





**EXISTING TREES ALONG PROPERTY LINE**



**EXISTING TREES AND STONE DUST PATH ALONG PROPERTY LINE**



**EXISTING EVERGREEN TREES TO REMAIN**



**EXISTING INVASIVE KNOTWEED STAND TO BE REMOVED AND REPLACED WITH NATIVE SHRUBS**

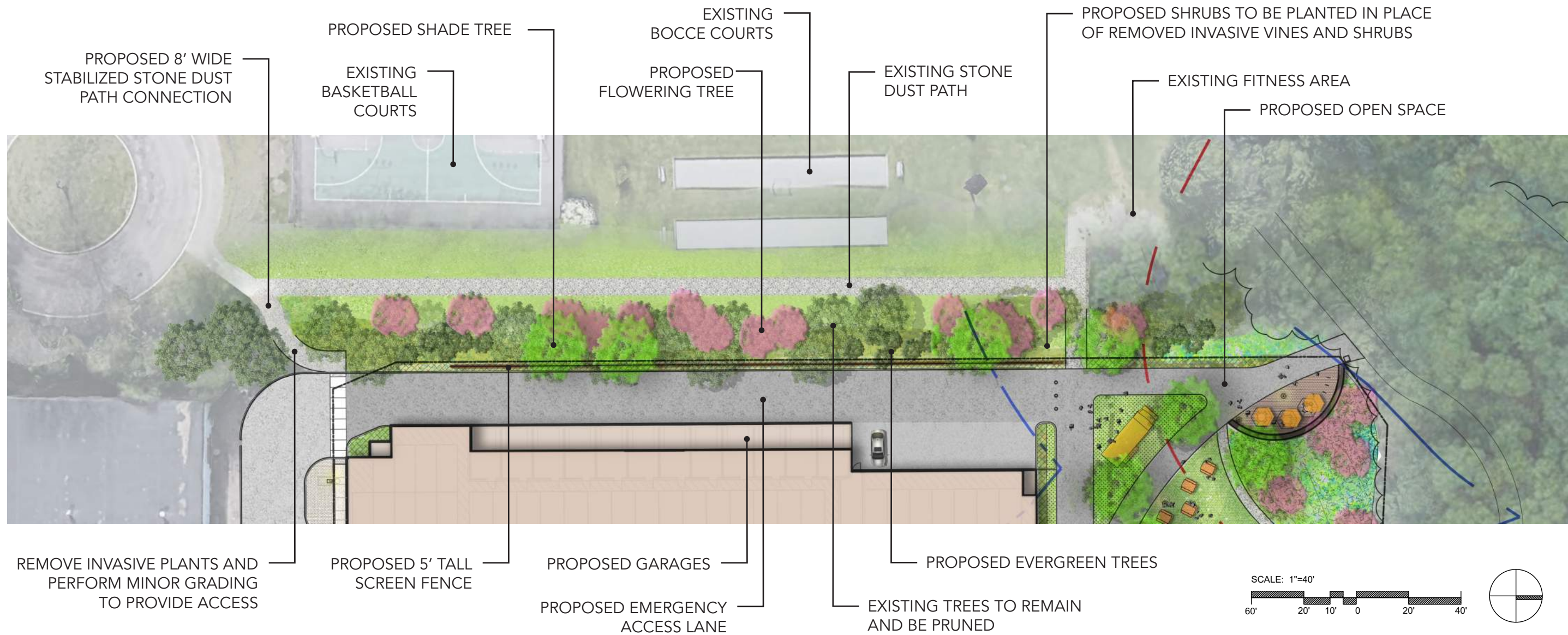


**EXISTING CHAIN LINK FENCE AND INVASIVE VINES TO BE REPLACED WITH NEW BOARD FENCE AND NATIVE SHRUBS**



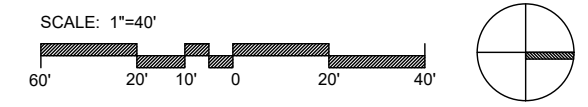
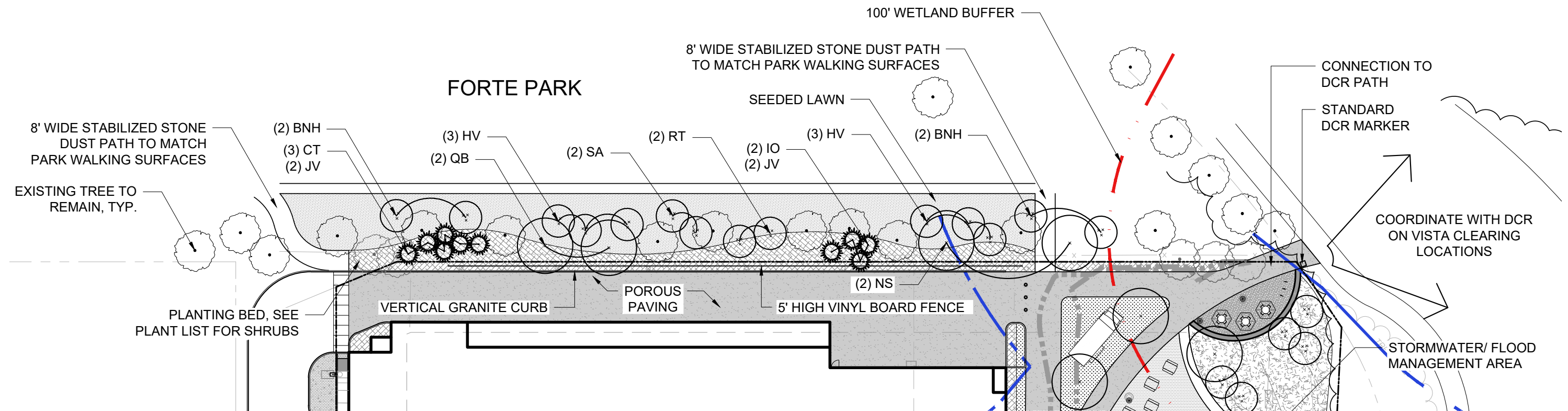
**EXISTING TREES TO BE PRUNED OF DISEASED AND DEAD WOOD**

## **FORTE PARK EXISTING CONDITIONS**



# FORTE PARK PROPOSED PLAN AND ELEVATION

15 RIVERDALE AVENUE | NEWTON, MA | CPC LAND ACQUISITION COMPANY, LLC | APRIL 29, 2020



## FORTE PARK PLANT LIST

Symbol	Qty	Botanical Name	Common Name	Size	Comments
<b>Deciduous Trees</b>					
BNH	4	Betula nigra 'Heritage'	Heritage River Birch	14'-16' Ht.	B&B, Multi-stem
HV	6	Hamamelis virginiana	Common Witch Hazel	8'-10' ht.	B&B, Multi-stem
NS	2	Nyssa sylvatica	Black Tupelo	2"-2.5" cal.	B&B, Matched
QB	2	Quercus bicolor	Swamp White Oak	2"-2.5" cal.	B&B, Matched
RT	2	Rhus typhina	Staghorn Sumac	4'-6' Ht.	B&B, Multi-stem
SA	2	Sassafras albidum	Sassafras	8'-10' Ht.	B&B, Multi-stem
<b>Evergreen Trees</b>					
CT	3	Chamaecyparis thyoides	Atlantic White Cedar	8'-10' Ht.	B&B, Matched
IO	2	Ilex opaca	American Holly	8'-10' Ht.	B&B, Matched
JV	5	Juniperus virginiana	Eastern Red Cedar	10'-12' Ht.	B&B, Matched

Symbol	Qty	Botanical Name	Common Name	Size	Comments
<b>Shrubs</b>					
CA	20	Clethra alnifolia 'Sixteen Candles'	Summersweet	18"-24" ht.	#2 Cont.
CR	20	Cornus racemosa	Gray Dogwood	18"-24" ht.	#2 Cont.
IG	80	Ilex glabra	Inkberry	18"-24" ht.	#2 Cont.
IV	10	Ilex verticillata	Winterberry	30"-36" ht.	#2 Cont.
JH	80	Juniperus horizontalis 'Wiltonii'	Creeping Juniper	12"-18" ht.	#2 Cont.
MP	50	Myrica pensylvanica	Bayberry	24"-30" ht.	#2 Cont.
RV	20	Rhododendron viscosum	Swamp Azalea	18"-24" ht.	#2 Cont.
RA	20	Rhus aromatica 'Gro Low'	Gro-Low Fragrant Sumac	12"-18" ht.	#2 Cont.
<b>VINES</b>					
PQ	8	Parthenocissus quinquefolia	Virginia Creeper	1 gal.	#1 Cont., train on fence

# FORTE PARK PROPOSED PLANTING PLAN AND PLANT LIST



PROPOSED SCREEN FENCE: 5' HIGH VINYL, DARK GREEN COLOR



PROPOSED PATH: 5' WIDE STABILIZED STONE DUST, COLOR TO MATCH



PROPOSED SHADE TREES: SWAMP WHITE OAK



PROPOSED SHADE TREES: BLACK TUPELO



PROPOSED ORNAMENTAL TREE: SASSAFRAS



PROPOSED ORNAMENTAL TREES: WITCH HAZEL AND RIVER BIRCH



PROPOSED EVERGREEN TREE: AMERICAN HOLLY

# FORTE PARK PROPOSED MATERIALS



PROPOSED LARGE SHRUB: SUMMERSWEET



PROPOSED LARGE SHRUB: BAYBERRY



PROPOSED MEDIUM SHRUB: INKBERRY



PROPOSED GROUNDCOVER: WINTERBERRY



PROPOSED GROUNDCOVER: GRAY DOGWOOD



PROPOSED GROUNDCOVER: JUNIPER

# FORTE PARK PROPOSED MATERIALS