



August 12, 2022

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

**Re: Sunrise of Newton Senior Living Facility Transportation Peer Review**

Dear Ms. Whewell:

BETA Group, Inc. (BETA), in accordance with our scope of services, has conducted a transportation engineering peer review for the proposed Sunrise of Newton senior living facility on the existing Winston Florist/Nursery site located on the southwest corner of Florence Street at Route 9 in Newton, Massachusetts.

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

## **BASIS OF REVIEW**

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

- **Traffic Impact and Access Study (TIAS) Proposed Sunrise of Newton Senior Living Facility, Newton, Massachusetts, dated March 2022, prepared by Vanasse Hangen Brustlin, Inc (VHB).**
- Proposed Development Plan set entitled **Sunrise of Chestnut Hill**, dated July 30, 2021, prepared by VHB, Leonard Design Associates (Landscape Architect), and JSA (Architect).

In addition, BETA received the Zoning Review Memorandum for the requested zone changes from MR1 to BU4 for 11 Florence Street and from BU2 to BU4 for 318 Boylston Street from the City of Newton Department of Planning and Development, dated April 28, 2022

## **TRAFFIC IMPACT AND ACCESS STUDY**

The proposed development project proposes a 120-bed senior living facility in a new building to be constructed on the Winston Flowers site. Included within the building is a proposed underground parking garage to serve all users of the facility; residents, visitors, and staff. Access to the site will be provided by two driveways along Florence Street, one on the north side of the proposed building and one on the south side. The north driveway will be for short term parking and drop-off/pick-up operations, and the south driveway will be the primary access to the underground parking garage.

The study area includes the following five intersections.

- Route 9 at Employee Parking Lot Driveway (unsignalized)
- Route 9 at Florence Street (unsignalized)

- Florence Street at North Site Driveway (unsignalized)
- Florence Street at South Site Driveway (unsignalized)
- Florence Street at Tanglewood Road (unsignalized)

**1. The study area was found to be adequate.**

**TRAFFIC VOLUMES**

Existing daily traffic volumes were collected using an automatic traffic recorder on Florence Street north of Tanglewood Road for 48 hours on Wednesday, June 9, 2021, and Thursday, June 10, 2021. Turning Movement Counts (TMC) were also collected at the study intersections on Wednesday June 9, 2021 from 7:00AM to 9:00AM and 4:00PM to 6:00PM. These volumes were grown by a 0.5 percent growth rate for one year to reflect 2022 conditions. The TIAS states that nearby traffic volume counts conducted prior to the COVID-19 pandemic were utilized to determine a 19% adjustment factor to the existing count data.

**2. Provide the location of the pre-pandemic counts, as well as the data and calculations used to determine the 19% volume adjustment.**

**CRASH HISTORY**

Crash data were obtained from the MassDOT database for the most recent five-year period available from 2015 to 2019. The highest crash rate, quantified as crashes per million entering vehicles, occurred at the intersection of Florence Street at North Site Driveway, and was found to be 0.17 MEV which is lower than the 0.52 MEV district average crash rates for unsignalized intersections.

**3. Based on the data, there does not appear to be any safety deficiencies at the study area intersections.**

**PUBLIC TRANSPORTATION**

Public transportation options within the project area include the MBTA bus route 60 and the D branch of the MBTA's Green Line.

No credit was taken as part of this study for any trips arriving or departing via transit.

**4. This is appropriate given the proposed project use and proximity to transit.**

**FUTURE CONDITIONS**

The TIAS evaluated impacts over a seven-year period to 2029 from the 2022 traffic data, for both the No-Build and Build conditions.

An annual growth rate of 0.5% was applied to the raw volumes at study intersections based on the growth rate used in other studies within the City.

**5. BETA finds this growth rate to be reasonable.**

In addition to utilizing a historical growth rate, traffic generated by other planned developments near the site was considered in developing the 2029 No-Build traffic volumes. The TIAS identified four other developments that were considered to add traffic to the project study roadways and intersections. The four developments are located at 24-26 Elliot Street, 232 Boylston Street, 392-202 Langley Road, and 50 Jackson Street.

## **BUILD CONDITIONS**

Trip generation for the project was estimated using the Institute of Transportation Engineers, *Trip Generation, 11<sup>th</sup> Edition* Land Use Code 254 (Assisted Living).

### **6. The land use is appropriate.**

Based on 120 occupied beds, the project site is estimated to generate a total of 312 new trips on an average weekday and with 22 (13 entering, 9 exiting) during the weekday morning peak hour, and 29 (11 entering, 18 exiting) during the weekday afternoon peak hour.

Trip generation estimates were also provided for the existing Winston Florist/Nursery to determine if it would be appropriate to take any credits associated with the removal of the existing use. Although the estimates show a significant decrease in vehicular traffic with the site, no credits were taken in order to present a conservative analysis.

### **7. BETA agrees with this assessment given the low demand currently being generated by the nursery, as shown in the existing traffic volume data.**

New trips were distributed based on existing traffic patterns.

### **8. The trip distributions are acceptable.**

## **SIGHT DISTANCE**

Sight distance analyses were performed at the existing site driveways along Florence Street. Both Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD) were evaluated for both driveways. The posted speed limit of 30 mph was used for this assessment.

### **9. Both proposed access driveways for the new site will be at the same location as the existing driveways. Performing the measurements at these driveways and the use of a 30 mph speed is appropriate.**

The results show that the minimum SSD is met in both the northbound and southbound directions at the south site driveway, but is only met traveling northbound for the north site driveway. The Route 9 intersection at Florence Street limits the SSD for the southbound direction.

Minimum ISD is not met at the south site driveway looking either direction, left or right. Similar to the SSD for the north site driveway, the sight distance to the left is limited due to the proximity of the Route 9 intersection, however there is clear visibility to the intersection to see vehicles from Route 9 onto Florence Street.

### **10. BETA agrees with the assessment performed and the measurements recorded. However, the ISD measurement provided for the south site driveway looking right has a footnote that indicates the sight distance is visible to Route 9. Please clarify, as Route 9 is to the left of the driveway. Also, please identify what measures could be taken to provide the desired ISD to the right.**

## **TRAFFIC OPERATIONS**

Capacity analyses were performed for the study intersections using the Synchro software, based on the 2010 Highway Capacity Manual methodologies for the 2022 Existing, 2029 No-Build, and 2029 Build traffic volumes, during the weekday AM and weekday PM peak periods. The intersection of Route 9 at Florence Street currently operates at LOS F and is expected to continue to do so under both future scenarios. The

Route 9 at Parking Lot intersection currently operates at LOS E and is expected to continue to do so under both future scenarios. All other study area intersections are expected to operate with LOS B or better.

**11. The proposed project traffic is not expected to have significant impacts on operations at any of the study intersections, when compared to the existing conditions.**

## MITIGATION

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

- Displaying transit maps on site in a central location;
- Post maps that show the location of MBTA train and bus stop locations;
- Providing secure bicycle storage on-site within the parking garage; and
- Implementing a car-pool rideshare program.

**12. BETA agrees that these measures should be implemented. Applicant shall also coordinate with the City regarding additional measures that shall be incorporated based on the City's TDM standards and requirements.**

## SITE PLANS

The applicant proposes to construct 46 parking stalls on-site, with 31 in the proposed underground garage, and 15 surface stalls; 5 in the short-term parking area accessed from the north site driveway, and 10 in the adjacent parking lot. Bike racks are proposed in the garage along the south wall near the garage entrance.

**13. The 46 parking stalls proposed is more than what is required for 120 beds with 25 employees. The zoning regulations only require 38 spaces.**

**14. The proponent should consider providing only the number of parking spaces needed to meet the City's requirements, not exceed them. Provide information on the expected parking demand needs for employees, residents, and visitors.**

**15. Clarify the intended use of each parking area, and who is expected to utilize each one; residents, employees, visitors.**

**Additionally, the proponent should evaluate eliminating the 10-space surface parking lot adjacent to the proposed building and further evaluate maximizing the parking layout in the garage. The surface lot space should be considered for an additional green space.**

**16. Indicate how many bicycle stalls will be provided in the proposed racks within the garage. Also, please clarify how bicyclists will access the garage. Will the access be secure, and do you need a card key to gain entrance into the garage?**

**17. Clarify whether vehicular access to the garage will be secure. If so, what is the proposed method to provide access; card, key pad?**

Access to the trash area or dumpsters inside the garage is proposed at the rear of the building via the south site driveway.

**18. Provide vehicle turning diagrams to illustrate how both garbage trucks and food delivery vehicles will maneuver onto the site, to the dumpster and loading area, and then exit the site.**

On-street parking is currently allowed along Florence Street between the two site driveways.

**19. Is the Proponent proposing any changes to the parking regulations on Florence Street associated with on-street parking as part of the project?**

A pedestrian connection is proposed between the adjacent parking lot on Boylston Street and the site.

**20. Recommend providing an accessible route for this connection.**

Additional comments/considerations:

- 21. Coordinate with the Newton Fire Department regarding access and circulation of firetrucks at this site.**
- 22. Confirm that the plan for package delivery vehicles, such as UPS trucks, will be to utilize the north site driveway.**
- 23. Plans should include additional detail regarding proposed traffic signage and pavement markings within the site. For example, the north site driveway shall be clearly marked as one-way at both the entrance and exit.**
- 24. The site driveway in front of the building is 24 feet wide, which may be excessive. Evaluate whether the width of the driveway can be reduced. The Zoning Ordinance requires a minimum of 20 feet for two-way use, and 12 feet wide for one way use. The driveway in front of the building is indicates as one way use.**

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

Very truly yours,  
**BETA Group, Inc.**

Dennis Flynn, PE, PTOE  
Associate

Project No: 10174

cc:

Jeff Maxtutis, BETA

