

City of Newton, Massachusetts

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

Director

Barney S. Heath

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

Ruthanne Fuller Mayor

PUBLIC HEARING MEMORANDUM

DATE: March 20, 2024 **MEETING DATES:** March 27, 2024

TO: **Zoning Board of Appeals**

FROM: Barney Heath, Director of Planning and Development

Jennifer Caira, Deputy Director of Planning and Development

Katie Whewell, Chief Planner for Current Planning

Alyssa Sandoval, Deputy Chief Planner for Current Planning

COPIED: Mayor Ruthanne Fuller

City Council

In response to questions raised at the Zoning Board of Appeals public hearing on February 28, 2024, 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 #11-23 78 Crafts Street

Boylston Properties requesting a Comprehensive Permit, pursuant to M.G.L. Chapter 40B, to construct four multifamily buildings as well as a separate two-story parking structure. The site comprises a total of 11 parcels fronting Crafts Street on a 4.76-acre site. There would be a total of 307 apartments ranging from studios to three-bedroom apartments, of which 62 (20%) would be affordable at 50% of area median income (AMI).

The Zoning Board of Appeals (Board) opened the public hearing on this petition on January 10, 2024, 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. Previous Planning Department memos have focused on an overview of the project, the neighborhood context, zoning and recently approved projects in the project's vicinity, relevant planning studies, and documents, site design and building massing, and other issues related to the project.

EXECUTIVE SUMMARY

The Applicant, Boylston Properties, is seeking a Comprehensive Permit pursuant to Massachusetts General Laws Chapter 40B, Sections 20 through 23, to develop 78 Crafts Street into an all-residential multifamily development. The subject site is located in Newtonville along the west side of Crafts Street between Court Street and Washington Street to the south and Watertown Street to the north. The subject properties are zoned Manufacturing (MAN) and Multi-Residence 1 (MR-1) and contain a variety of light industrial uses, such as automotive services, engineering office, as well as one two-family residence.

The Applicant proposes a series of four multifamily buildings as well as a separate two-story parking structure. The site comprises a total of 11 parcels fronting Crafts Street on a 4.76-acre site. As proposed, there are a total of 307 apartments ranging from studios to three-bedroom apartments, of which 62 (20%) would be affordable at 50% of area median income (AMI). A total of 263 parking spaces are proposed. Parking will be located within ground level parking garages of the residential buildings as well as a separate parking structure.

Reflected in this memo are comments from Planning and BETA, the City's on-call consultant who have been engaged by the City to review and analyze relevant aspects of the proposed development's traffic impacts (Attachment A). In addition, this memo provides additional context for the peer review memo provided on stormwater/engineering, received February 16, 2024. The applicant has submitted updated shadow studies and a sustainability narrative but no other materials have been received recently from the applicant as of the writing of this memo. The project materials submitted for review can be viewed here.

I. <u>Traffic Impact Assessment</u>

The Applicant submitted a Traffic Impact Assessment on January 16, 2024. According to the assessment, the Project is expected to generate the following:

- Approximately 1,020 automobile trips, 322 transit trips and 72 pedestrian/bicycle trips on an average weekday.
- During the weekday morning peak-hour, the Project is expected to generate 90 automobile trips, 28 transit trips and 7 pedestrian/bicycle trips.
- During the weekday evening peak hour, the Project is expected to generate 88 automobile trips, 28 transit trips and 6 pedestrian/bicycle trips.

Concerns of neighbors and residents abutting the proposed project have focused on existing traffic levels at area intersections and the potential of the project to worsen traffic in the area in addition to concerns regarding pedestrian safety at area intersections.

A. Transportation Peer Review

The City's transportation peer reviewer for this application, BETA, submitted a memorandum reviewing the applicant's traffic impact assessment report on March 11, 2024 (Attachment A). The following is a summary of the key points highlighted in BETA's analysis.

Traffic operations

Traffic volume: Based on existing and projected queue lengths and traffic volume, the peer reviewer noted that the traffic conditions would likely worsen at the intersection of Washington and Crafts Street during the AM peak hour from Level of Service (LOS) D to LOS E (deficient) with the addition of project-related traffic. The intersection would continue to operate at LOS E (deficient) in the PM peak hour with project-related traffic. At the intersection of Washington Street at Lewis Terrace and Adams Street will operate at LOS F (deficient) in both AM and PM peak hours with or without the project but the addition of project-related traffic will increase vehicle delay and queuing.

The peer reviewer observed the existing levels of southbound traffic delay and queue length on Crafts Street to Washington Street, which may increase due to project-related traffic. BETA remarked that the southbound Crafts Street queue length would likely extend back to Maguire Court in the future and that project-related traffic would exacerbate the queue length. The queuing on Crafts Street could potentially impact the ability of vehicles to exit from side streets (including Maguire Court) onto Crafts Street during peak periods.

Bikes and pedestrians: All sidewalks within the project should be a minimum of 5 feet wide. Currently the sidewalks along the traffic circle and the Crafts Street frontage are shown to be four feet wide. There should be additional information provided on bicycle and pedestrian trips, pedestrian/vehicle crashes, school children walking to school such as to F.A. Day Middle School and Horace Mann Elementary School; and walking routes to the Newtonville Commuter Rail Station and nearby bus stops.

Off-site improvements: The applicant provided some proposed transportation improvements in the study area, such as traffic signalization timing optimization. The applicant should consider other improvements, including improvements at Washington Street at Crafts Street; Watertown Street at Crafts Street; Washington Street at Lewis Terrace; and Adams Street and Washington Street at

Jackson Road. Planning Staff will work with the applicant, BETA, and the Transportation Division of Public Works to identify and prioritize improvements in the area as part of the project's proposed mitigation.

Parking

The peer review highlighted parking as an area that warranted additional analysis and clarification from the applicant including:

- Location of EV vehicle and bicycle parking
- Adequacy of proposed parking supply to meet parking demand
- Address resident concern there is not enough parking provided
- Identify visitor parking including short-term or long-term parking and locations

Site Plans: Circulation, Access, and Parking

BETA also asked for clarification on the emergency access connection to Court Street and the extent of the public/private roadway on Maguire Court. The applicant should also provide an explanation of how the operations within the site would work, including moving trucks, delivery vehicles, rideshare pickups and drop-offs, fire access, and loading areas. There is an existing utility pole on the southwest corner of Maguire Court at Crafts Street, which may impair sight distances exiting Maguire Court and should be reviewed further.

Additional suggestions for the applicant to consider to the roadway layout and parking include creating additional greenspace in front of Building A by converting proposed offstreet parking to parallel parking and reconsidering the three angled parking spots in the traffic circle. Planning and peer review, NBBJ, have already provided comments in previous memos that the amount of ground-floor parking (particularly on Building A) and the minimal setback of Building A fronting Crafts Street (less than 10 feet) detracts from a pedestrian-oriented experience on Crafts Street.

B. Interdepartmental Review

Planning held a meeting with BETA and the Transportation Division of Public Works on March 18, 2024 to review the results of the traffic peer review. The Transportation Division concurred with the recommendations of the BETA peer review confirming the need for additional parking analysis and information on operations of deliveries, loading, and tenant moves. The DPW confirmed that the mitigation suggested by BETA seemed reasonable as a starting point for traffic mitigation recommendations. The DPW also concurred with the peer reviewer's recommendations for pedestrian improvements and sidewalks, noting that the applicant should refer to the Newton Street Design Guide.

C. Parking Fit and Transportation Demand Management Analysis

The Newton Zoning Ordinance requires two parking stalls per unit which is widely believed to result in an oversupply of parking in a community with multiple modes of transit, rapid transit, express bus, light rail, and commuter rail. At 307 units and 263 parking stalls, the project presents a ratio of .86 stalls per unit. While Planning believes this to be a more appropriate ratio of parking than the required two stalls per unit, Planning and NBBJ previously suggested the configuration of parking should be revisited to provide for active ground floor and asked whether the applicant can underground or partially underground the parking that is presently proposed at ground level. 147 parking spaces will be provided beneath the residential units in three of the proposed buildings, with 92 parking spaces provided in the standalone parking structure and 24 surface parking spaces will be provided along the main drive aisle within the Project site.

The City of Newton was a participant in the "Perfect Fit Parking" study by MAPC. The study examined overnight residential parking data from nearly 200 multi-family buildings in Greater Boston between 2015 and 2019. The study captures parking supply (stalls per unit), parking demand per unit (occupied parking spaces divided by number of occupied housing units), and parking utilization (the number of occupied parking spaces divided by the total number of parking spaces). Across 10 sites in Newton, the parking supply was 1.52 stalls per unit, the demand was .83 stalls per unit and utilization was 50%.

The applicant submitted a TDM plan where they identified four nearby bus routes and the Newtonville Commuter Rail Station. Amongst other measures, they have committed to unbundling parking, providing weather protected bicycle parking for 71 bicycles and unlimited bus/subway pass (Monthly LinkPass) for the first six (6) months of tenancy, limited to two (2) passes per unit. Planning and BETA advise the applicant to consider expanding the option to commuter rail passes, which carry a higher cost, due to the project's proximity to the commuter rail. Alternatively, City Staff can work with the applicant on designating a more flexible fund for alternative transportation measures consistent with more recent Comprehensive Permit Projects. The fund would set aside a dollar amount for residents to utilize and if the funds are not expended within five years would be returned to the city for other transportation improvement or measures. The fund may also cover bikeshare, subway, commuter rail, etc. The applicant would be subject to annual reporting of this fund.

II. Stormwater/Engineering

Planning received the peer review report from Horsley Witten regarding stormwater/engineering (Attachment B) on February 16, 2024. The City Engineer is still

reviewing the project as well from the City's perspective and will provide this analysis in a future memo. Due to the presence of public utilities and a City storm drain onsite, an analysis concerning the protection of City-owned infrastructure will be provided as part of the DPW's review. The applicant should review the memorandum from Horsley Witten and provide a written response to questions and comments raised in the memo. Horsley Witten noted that the applicant should provide additional details that confirm all stormwater will be captured onsite and that they have considered overflows from offsite areas such as the DPW site north of the project. The applicant is currently seeking a waiver of the City's stormwater requirements as part of the waivers requested.

III. Additional Information and Materials

The following materials are still needed from the applicant for the evaluation of the project. The applicant has indicated that they are working on the 3D model to present at a ZBA meeting.

- a three-dimensional (3D) physical model of the project
- additional renderings of project from abutting neighborhoods/streets

IV. Next Steps

Should the Applicant revise the design, the revised design will need to be reviewed by the peer reviewers as well. The Planning Department expects to continue to review the proposal and provide updated and expanded memoranda in advance of future ZBA hearings. Future public hearings may focus on any design changes proposed by the applicant, associated updated peer reviews, sustainability, and proposed affordable housing.

ATTACHMENTS

Attachment A: BETA Traffic Peer Review Memo

Attachment B: Horsley Witten Stormwater Peer Review Memo

Attachment A



March 11, 2024

Alyssa Sandoval
Deputy Chief Planner
Department of Planning & Development
City of Newton
1000 Commonwealth Avenue
Newton Centre, Massachusetts 02459

Re: Proposed Multifamily Residential Development Transportation Peer Review

Dear Ms. Sandoval:

BETA Group, Inc. (BETA), in accordance with our scope of services, has conducted a transportation engineering peer review for the proposed Multifamily Residential Development located along the south side of Crafts Street in the Newtonville area of Newton, Massachusetts. The Site is 4.76 acres located on 11 parcels at 78 Crafts Street. The Site is surrounded by the City of Newton DPW facility to the north; Court Street and residential properties to the south; residential and commercial properties to the east; and residential properties to the west. Existing buildings on site are currently occupied with various automotive services (salvage/storage, maintenance, repair, and sales), a mechanical engineering and contracting operation, and a two-family residence. The proposed design consists of five buildings, four of which will include 307 mixed-income rental apartment units, including studio, one, two- and three-bedroom units, and residential amenities. The fifth building will be a two-level parking structure.

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:

- Transportation Impact Assessment (TIA) for Proposed Multifamily Residential Development, 78
 Crafts Street Newton, Massachusetts, dated January 2024, prepared by Vanasse & Associates, Inc.
- Transportation Demand Management Program for Proposed Multifamily Residential Development, 78 Crafts Street Newton, Massachusetts, dated January 2024, prepared by Vanasse & Associates, Inc.
- Location Map and Aerial Photos, dated December 3, 2023, prepared by McPhail Associates, LLC.
- Site Context Photographs, Dated December 3,2023
- 78 Crafts Street, Newton, MA Development Description
- 78 Crafts Street Comprehensive Permit Application for Comprehensive Permit Waiver Analysis
- Letter regarding 78 Crafts Street Project Eligibility/Site Approval MassHousing ID No. 1208 dated December 8, 2023.

In addition to the above materials BETA staff attended the project site tour on February 27, and two site visits during the morning and afternoon peak commuting periods in March 2024.

The Transportation Impact Assessment (TIA) was conducted according to industry and state guidelines.

BETA's comments are shown in **BOLD** below.

TRANSPORTATION IMPACT AND ACCESS STUDY

The transportation impact and access study (TIA) focuses on the traffic operations, parking distribution, and existing transportation amenities within the project study area, including the transit, walking, and biking facilities. The TIA concludes with the project impacts and proposed mitigation.

Parking will be provided under three of the residential units. A separate parking garage is proposed to be constructed in the west portion of the project site. On-site parking will be provided for 263 vehicles, with 147 parking spaces to be provided beneath the three of the proposed residential buildings, 92 parking spaces to be provided in the standalone parking structure and 24 surface parking spaces to be provided along the main roadway within the project site.

Primary access/egress to the Site on Crafts Street is proposed via an extension to Maguire Court to accommodate residents and service/delivery vehicles, and a secondary access for emergency vehicles will be provided via a shared driveway with 63 Court Street that will also provide pedestrian connectivity.

The study area includes the following seven intersections:

- Watertown Street (Route 16) at Crafts Street (Signalized)
- Crafts Street at Maguire Court and Clinton Street (Unsignalized)
- Crafts Street at Lincoln Road (Unsignalized)
- Washington Street at Harvard Street (Signalized)
- Washington Street at Crafts Street (Signalized)
- Washington Street at Adams Street and Lewis Terrace (Signalized)
- Washington Street at Jackson Road (Signalized)

The following roadways were included in the study:

- Washington Street
- Crafts Street
- 1. Street included 10 study intersections versus seven for this project. Confirm why the intersections of Crafts Street with Lenglen Road/Whole Foods exiting driveway and Ashmont Avenue were not included as study intersections.
- 2. The signalized intersection of Washington Street and Walnut Street would typically be included as a study intersection, being in the vicinity of the proposed project. However, since this intersection was recently improved and reconstructed, it does not need to be evaluated for this study.



- 3. People walking to the Newtonville Commuter Rail station and the local commercial corridor may interact with both the Washington Street and Central Avenue and Washington Street and Walnut Street intersections. These intersections should be included for pedestrian activity.
- 4. Court Street, Beach Street, Central Avenue, Ashmont Street, Lincoln Road, and Clinton Street should be included in the study roadway network as these streets will be used by project pedestrians, bicyclists and emergency vehicles.

EXISTING CONDITIONS

EXISTING TRAFFIC VOLUMES & SPEEDS

Traffic volume data in the form of turning movement counts (TMCs) were collected at the study area intersections in September 2023 during the weekday AM Peak (7:00 AM - 9:00 AM) and weekday PM Peak (4:00 PM – 6:00 PM) periods to coincide with peak traffic activity of the proposed uses and the adjacent streets. The study also collected 48-hour automatic traffic recorder (ATR) counts in February 2023 at two locations – Crafts Street north of Clinton Road and Court Street east of Beach Street. Traffic data collected in September/February 2023 represents average or slightly above average traffic conditions with schools in session. To present a conservative existing conditions analysis, the traffic volumes were not adjusted.

- 5. Traffic volumes at the Lewis Terrace/Adams/Washington intersection are reported incorrectly in the AM and PM period.
- 6. Provide information on truck movements in the study area.

PUBLIC TRANSPORTATION

Public transportation services are provided to the area by way of the MBTA buses 553, 554, 556, and 59 bus, commuter rail and paratransit service, as well as City of Newton's Newton-in-Motion on-demand shared ride service providing trips to medical appointments for seniors, low-income residents, and residents with disabilities. The closest bus stops to the development are located along Washington Street.

- 7. Commuter Rail services carry a Zone 1 fare in the area worth noting due to the higher cost of
- 8. The frequencies on the buses run every 45 min to 2 hours, depending on time of day and route. Please provide the frequencies of each bus route and whether the services are provided on weekdays only, or also on weekends.
- MBTA Route 558 runs on Adams Street to the east of the project area. Include in the description the 558 bus and the location of the nearest stop pair at Adams Street and Lincoln Road/Middle Street.
- 10. In Figure 2, show the train station entrances.
- 11. In the first paragraph of the public transportation section, note the two bus stops at Washington and Crafts Street serving MBTA routes 553/554/556.
- 12. Provide ridership information for nearby bus routes and commuter rail to assess whether the services have the capacity to add additional passengers.

PEDESTRIAN AND BICYCLE ACCOMMODATION

The team conducted a field inventory of bicycle and pedestrian facilities within the study area. There is a lack of bicycle accommodation within the project area, but bike lanes do exist on Crafts Street north of Watertown Street. Sidewalks are generally on both sides of the study area roadways and crosswalks are generally provided on one or more legs of the study intersections.



- 13. Provide information regarding the existing crossing times/pedestrian delay at each study intersection. This is particularly important at the intersection with Route 16 and Crafts Street (two pedestrian crashes were reported) where school children walk to the F.A. Day Middle School and Horace Mann Elementary School; at the intersection of Washington Street at Adams Street, Lewis Terrace, and Jackson Road; as well as at intersections where people are expected to walk to the train station and bus.
- 14. Provide the source for footnote #5 regarding that 14' is a minimum width for a shared lane.
- 15. In Figure 2, show the mid-block crosswalk on Washington Street north of Maguire Court and BlueBike Stations.
- 16. Provide a figure showing existing walking and biking volumes during the peak periods.
- 17. The following should be noted that at the intersection of Washington Street/Adams Street/Lewis Terrace/Jackson Road:
 - a. Pedestrian signals operate concurrently with traffic movements
 - b. There is no crosswalk across Lewis Terrace
 - c. There is a gap in the sidewalk network east of Lewis Terrace where there is a well-worn pedestrian path
 - d. The pedestrian signals across Jackson Road and Washington Street at Jackson Road do not have countdown signals
- 18. It should be noted that there are no pedestrian countdown signals at the Route 16 Street and Crafts Street intersection.

CRASH HISTORY

Crash data were obtained from the MassDOT database for the most recent five-year period available from 2016 to 2020. The Washington Street/Adams Street/Lewis Terrace/Jackson Road intersection has been identified by MassDOT as a high crash cluster location for the 2018-2020 reporting period and Highway Safety Improvement Program (HSIP). Recommendations have been provided to advance safety-related improvements at the intersection within the TIA report.

19. The crash description in paragraph two of this section should discuss the eight pedestrian crashes that occurred in the study area.

FUTURE CONDITIONS

The TIA evaluated impacts for the future year 2031, for both the No-Build and Build conditions.

BACKGROUND GROWTH & OTHER PROJECTS

An annual growth rate of 1% was applied to the raw volumes at study intersections. The rate was derived by looking at historical growth rates of nearby roadways (averaging 0.64% and then rounded up). The projected future traffic for 2031 included traffic volumes associated with the proposed Elderly Housing development at 36-48 Crafts Street.

20. BETA finds the growth rate to be acceptable and confirmed with the City of Newton that no other large developments are currently proposed in the project area.

PROJECT TRIP GENERATION

The TIA indicates that the proposed project would generate approximately 90 vehicle trips (20 entering and 70 exiting), 28 transit trips and 7 walk/bike trips during the weekday morning peak hour and 88 vehicle



trips (54 vehicles entering and 34 exiting), 28 transit trips and 6 walk/bike trips during the weekday evening peak hour.

Trip generation for the project was estimated using the Institute of Transportation Engineers, *Trip Generation*, 11th Edition Land Use Code 221 (Mid-Rise Residential). Mode share of site trips was stated to be 73% vehicle, 22% transit and 5% walk/bike.

- 21. The census data used to determine mode share was from 2015 to 2019. This is out of date, especially with pandemic era mode shifts. Recent census data from 2018-2022 should be reviewed.
- 22. The project location is in Census Tract 3733 and the on the border of Tract 3732. Tract 3732 shows a mode share of 70 percent drive alone, while Tract 3733 has a drive alone mode share of 53 percent according to the 2022 estimates. Explain why the 73% vehicle mode was used.
- 23. Why use the average rate for weekday trip generation rather than the fitted curve equation?
- 24. Provide information on the number of trucks expected to be generated by the project.

TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution of trips was calculated using Journey to Work data and existing traffic patterns. The trip distribution estimates that 70% of vehicles will enter from and leave via Washington Street (45% from the east on Washington Street, 5% from Lewis Terrace, 5% from Harvard Street and 15% from Washington Street (from the west). The other 30% of vehicles are estimated to arrive and depart from Watertown Street (18%), Crafts Street to the north (10%) or Clinton Street (2%). Therefore, the highest volume movement for vehicle trips is entering and exiting to the east on Washington Street.

- 25. The approach is reasonable based on evaluation of existing movements and Journey to Work data.
- 26. Show the trip distribution and assignment of peak hour bicycle and pedestrian trips including those walking to and from transit.
- 27. Can the number of project-generated student walk trips to Newton F.A. Day Middle School and Horace Mann Elementary School be estimated?

BUILD CONDITION

The Build condition was calculated for the AM and PM peak hours by adding the project-generated vehicle trips to the 2031 No-Build network. The existing traffic volumes on Maguire Court were not removed from the 2031 Build volumes as the road will continue to provide access to a single-family house and autobody repair shop.

- 28. Most of the vehicle trips currently coming in and out of the site are related to the automobilerelated businesses that will be replaced by the proposed project. Not removing these trips results in a conservatively high number of project-generated trips which is acceptable.
- 29. Table 6-Peak Hour Traffic Volume Increases should include Crafts Street south of Maguire Court.

TRAFFIC OPERATIONS

INTERSECTION CAPACITY ANALYSIS

Capacity analyses were performed for the study intersections using the Synchro 11 software for the 2023 Existing, 2031 No-Build, and 2031 Build traffic volumes for the weekday AM and weekday PM peak hours for the five signalized and two unsignalized intersections in the study area. During the AM hour, the



intersection at Washington Street and Crafts Street is expected to deteriorate from LOS D under No-Build conditions to LOS E (deficient) under Build conditions with the addition of project-generated traffic. The worst performing approach at the intersection is the southbound approach to Washington Street performing at a LOS F. The estimated queue 95th% vehicle queue length for the southbound Crafts Street approach to Washington Street in the Build AM peak hour is estimated at approximately 800 feet. This queue length would extend through the intersections of Lenglen Road, Lincoln Road, and Clinton Street, to near Maguire Road. The intersection would continue to operate at LOS E (deficient) in the PM peak hour with the addition of project-generated traffic.

With project traffic in the Build condition, the intersection of Route 16 and Crafts Street will continue to operate at LOS D in the AM peak hour and LOS E (deficient condition) in the PM peak hour.

The intersection of Washington Street at Lewis Terrace and Adams Street will operate at LOS F (deficient) conditions in both the No-Build and Build conditions for both peak hours. The addition of project-generated traffic will increase vehicle delay and queuing.

All other intersections are expected to maintain the same LOS under Build conditions as the No-Build condition, though some additional delay is expected under the Build conditions.

- 30. Tables 9 and 12 show the Watertown Street eastbound left-turn movement at Crafts Street as LOS D under No-Build and Build for the PM peak hour. It should be shown as LOS B.
- 31. In the AM peak hour, the Crafts Street southbound approach delay at Washington Street increases by 47 seconds between the No-Build to Build conditions (150 seconds to 197 seconds). In the PM peak hour, the delay increases from 182 seconds to 211 seconds. This impact should be noted as it deteriorates traffic operations on Crafts Street between Maguire Court and Washington Street.
- 32. BETA observed vehicle queue lengths on the Crafts Street southbound approach to Washington Street during the AM and PM peak period. The queue length in the AM peak period typically extended beyond the Whole Foods exit driveway and Lenglen Road (about 300 feet); occasionally to 36 Crafts Street (about 400 feet) and once to Maguire Court (about 850 feet). It should be recognized that the southbound Crafts Street queue length will at times extend back to Maguire Court in the future and the project-generated traffic will exacerbate the queue length. The vehicle queue length will impact the ability of vehicles to exit from side streets (including Maguire Court) onto Crafts Street during peak periods.

SITE DISTANCE EVALUATION

Sight distance analyses were performed at both proposed site driveways.

33. The results for Stopping Sight distance and Intersection sight distances show that required lengths are sufficient in both directions at the Maguire Court site driveway. BETA notes that there is a utility pole on the southwest corner of Maguire Court at Crafts Streets that is tilted less than 90 degrees toward Crafts Street. This utility pole may impair intersection sight distance exiting Maguire Court and should be evaluated for integrity and improvement or replacement.

SITE PLANS: CIRCULATION, ACCESS, PARKING

34. Will Maguire Road and the proposed emergency access connection to Court Street be reconstructed as part of the project?



- 35. Indicate the extent of Maguire Road and if it is a public or private roadway. Indicate who will maintain Maguire Road and the emergency access roadway.
- 36. Indicate where large moving trucks, smaller delivery vehicles, and Uber/Lyft TNC vehicles will load/unload and how they will circulate within the project.
- 37. Provide figures showing turning radius for garbage trucks and moving trucks.
- 38. Has the Newton Fire Dept reviewed the plan for access around the buildings and the traffic circle?
- 39. Describe the intended use (visitor's, etc.) for the small surface parking areas:
 - a. Building A 5 spaces north side
 - b. Buildings B 8 spaces north side, 4 spaces + 4 spaces south side, 3 spaces in traffic circle
- 40. Is there a need to designate additional accessible parking spaces in the areas identified above?
 41. Building A
 - c. Provide figures showing how trucks will maneuver in and out of loading and trash areas.
 - d. Explain the intended users of the loading area on the south side of Maguire Court and how inbound vehicles will access and park.
 - e. Can consideration be given to convert the proposed 5 off-street parking spaces on the north side of Maguire Road to parallel on-street spaces that would create a more continuous linear sidewalk and provide more greenspace in front of the building?
 - f. The proposed sidewalk terminates at the entrance to the interior parking. Explain where pedestrians will walk to/from at this point.

42. Building B

- g. Confirm that there will be one garage driveway for Building B on the east side and the driveway shown on Maguire Court is being removed from the site plans.
- h. Explain the intended users of the drop-off area on the north side of Maguire Court.
- i. Explain the intended users of the drop-off/loading areas in the traffic circle area. For the drop-off area at the top of the circle, it appears that due to the alignment it may be difficult for delivery vans trucks to pull against the curb, and therefore may block (or partially block) the 20-foot-wide travel way.
- j. The 3 angled parking spaces within the traffic circle will visually detract from what could be an attractive landscaped island in the middle of the circle. Could on-street parking spaces around the circle be provided instead?
- k. Provide figures showing truck turning radius within the circle.

43. Building C

I. Is there a drop-off/loading area for Building C?

44. Building D

- m. Explain the intended users of the drop-off/loading area on the west side of driveway.
- 45. Where will residents of Building D park bikes? Will bicycle racks be provided for visitors?
- 46. Are the locations of Electric Vehicle (EV) charging stations known at this time?
- 47. The site plan shows most sidewalks to be 5 feet wide, although around the traffic circle the sidewalk is shown as 4 feet wide. All sidewalks should be a minimum of 5 feet wide. Consideration should be given to providing wider sidewalks for a more comfortable pedestrian experience.
- 48. The Site Plan (Inset 1) shows "Do Not Enter" signs at the project driveway on Court Street. Will this eliminate access to residents 61 Court and limit access to Maguire Road?
- 49. Confirm the Court Street entrance will be available to the walking public.



- 50. What type of device will be used on the driveway at Court Street to prohibit general traffic (gate, bollards, etc.)? If bollards are used, will they be retractable, breakaway or other? Has Newton Fire Department approved?
- 51. Will construction of the project impede access to the single-family house and autobody shop on Maguire Court?
- 52. Consider providing a buffer strip between the sidewalk and the street/parking.
- 53. Can street trees be provided in the proposed landscape strip along the Crafts Street frontage?
- 54. Surface parking spaces on the site plan are shown as 18 and 19 feet long. The City's minimum requirement is 19 feet. Parking spaces in the Building E garage are shown as 17 and 18 feet long which do not meet requirement. Show parking space dimensions for all surface and garage spaces.
- 55. Provide information on where residents of each residential building will park.

TRANSPORTATION DEMAND MANAGEMENT

The proponent proposes to implement a Transportation Demand Management (TDM) program in an effort to minimize single-occupant vehicles and mitigate the project's impact on the surrounding roadways.

- 56. The proponent will need to coordinate with the Newton Planning Department on TDM program elements, implementation, and monitoring efforts.
- 57. The duration of the Monitoring Program beyond two years should be determined in coordination with the Planning and Development Department.

PUBLIC TRANSPORTATION

The project proponent proposes providing information on public transit, locating a place to add money to CharlieCards nearby, and giving out up to two unlimited bus and subway passes for six months to residents who sign up for a year lease.

- 58. Passengers boarding the Framingham/Worcester Line at Newtonville (Zone 1 Commuter Rail station), cannot use a monthly subway/bus pass. To encourage people to take the train to access Boston area jobs, the project should incentivize taking the commuter rail line. Instead of providing a monthly bus/subway LinkPass, the proponent should provide Commuter Rail tickets or Zone 1 Commuter Rail monthly passes. Another option would be to give residents the choice of a monthly LinkPass or commuter rail tickets.
- 59. Can the developer provide discounted transit passes/cards beyond the first six months of new tenancy and discounted bike-share memberships beyond the first 12 months of new tenancy?
- 60. Indicate if NewMo buses will be able to enter and exit the site.

PEDESTRIAN/BICYCLE OPTIONS

The project proponent proposes sidewalks throughout the new development that connect to the existing sidewalks on Crafts Street and Court Street. They will also provide bike and pedestrian maps to residents, the option for a bike share membership for the first year of residency (for those who do not choose the transit option) and protected bicycle parking and a bicycle repair fix it station.



- 61. Will the bike parking be secured and how will it be accessed by residents? Will bicycle racks also be provided for visitors?
- 62. Can charging equipment be provided at the bike parking areas for electric bicycles, scooters, etc.?
- 63. The manual count of bicycles on-site should be conducted for seven days (one week).

RIDE-SHARING

The project proponent proposes to market a ride-matching program to facilitate carpooling and to offer pick up / drop off locations for delivery and rideshare services.

64. Identify ride-matching services that could potentially be used.

CAR-SHARING

The developer will coordinate with ZipCar to locate car-share vehicles at the Project site.

65. Is there an opportunity to offer residents a Zip Car membership as part of the TDM program?

ON-SITE PARKING

Parking will be provided for 263 vehicles with a parking ratio of 0.86 spaces per unit. The project proponent proposes unbundling parking from resident's leases, making available a space for each affordable unit without additional charge, providing one parking space per unit, providing EV charging stations at a minimum of 26 spaces, and giving preferential parking to residents in low-emission vehicles.

- 66. Provide information on the adequacy of the proposed parking supply to meet anticipated parking demand by both residents and visitors.
- 67. Address the concern that if not enough parking is provided for residents and visitors, they may end up parking on adjacent roadways such as Court Street.
- 68. Provide information on how many visitor parking spaces will be provided, where they will be located, and how they will be managed for short-term and long-term (including overnight) periods. If short-term or long-term visitor parking will occur in the garages, how will visitors gain access to the garages?
- 69. On-street parking occupancy and utilization on adjacent roadways should be monitored by the proponent after project occupancy to measure impacts of the project on on-street parking. The proponent should review and coordinate with the City to address and mitigate identified parking impacts.

WAYFINDING

The proponent proposes wayfinding signage to the Commuter Rail Station, other destinations and bike parking.

70. Has a draft wayfinding signage plan been developed?

OFF-SITE STUDY RECOMMENDATIONS

The proponent has committed to designing and implementing traffic signal timing and phasing optimization at the following intersections:



- Route 16 at Crafts Street;
- Washington Street at Crafts Street; and
- Washington Street at Lewis Terrace and Adams Street and Washington Street at Jackson Road

"The traffic signal timing and phasing improvements will be designed and implemented by the Project proponent prior to the issuance of a Certificate of Occupancy for the Project, subject to receipt of all necessary rights, permits and approvals, with operating conditions at the subject intersections to be re-evaluated upon achieving 80 percent occupancy of the Project and the traffic signal timings further adjusted as may be necessary, again, subject to receipt of all necessary rights, permits and approvals. With implementation of an optimal traffic signal timing and phasing plan, overall intersection operations will be generally or improved over 2021 Build conditions."

"Independent of the Project, the Washington Street/Lewis Terrace/Adams Street intersection has been identified by MassDOT as a high crash location for the 2018-2020 reporting period. In order to assist the City in advancing safety improvements at the intersection, the Project proponent will facilitate the completion of a Road Safety Audit (RSA) at the intersection and will design and construct the short-term, low-cost improvements that are suggested as an outcome of the RSA subject to receipt of all necessary rights, permits and approvals, and to the extent that the improvements are limited to signs, pavement markings and traffic signal timing. The RSA and the short-term, low-cost improvements will be completed prior to the issuance of a Certificate of Occupancy for the Project."

- 71. The following additional improvement measures are offered for consideration to further improve intersection operations and safety for all users and mitigate impacts of the proposed project:
 - Washington Street at Crafts Street
 - Install Adaptive Signal Control to improve traffic operations during peak and offpeak periods. This measure would include the monitoring and adjusting of signal timing and phasing as necessary in coordination with the City.
 - Improvements at this intersection should be coordinated with the City and those proposed as part of the elderly housing project at 36-48 Crafts Street.
 - Route 16 at Crafts Street
 - o Install vehicle detection and pedestrian countdown signal heads.
 - Washington Street at Lewis Terrace and Adams Street and Washington Street at Jackson Road
 - All pedestrian phases operate concurrently with traffic movements. Install Lead Pedestrian Interval (LPI) phasing. Install pedestrian countdown signal heads where missing – Jackson Road and Washington Street east leg.
 - Install vehicle detection on Washington Street approaches.



- Construct sidewalk to fill the existing gap (approximately 300 feet) in the pedestrian network east of Lewis Terrace where there is a well-worn pedestrian path.
- 72. The City has identified the Crafts Street corridor as a high priority for implementing Complete Streets improvements to address mobility and safety concerns for pedestrians and bicyclists. The following improvements along Crafts Street should be considered:
 - Install a raised intersection at Crafts Street and Maguire Court to safety accommodate pedestrian crossings in this area, increase driver awareness of pedestrians, and to reduce the impacts of vehicle queueing along Crafts Street at the site access on Maguire Court.
 - Any improvements along Crafts Street should not preclude the potential to provide bicycle lanes in the future.

OTHER

- 73. A construction transportation management plan should be developed as the project progresses to minimize construction traffic impacts to abutters and residents.
- 74. There is a utility pole on the southwest corner of Maguire Court at Crafts Street that is tilted toward Crafts Street and should be evaluated for integrity and improvement or replacement.

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

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

Jeffrey Maxtutis Senior Associate

Project No: 10337.03

Seff Maxtulis



Attachment B



February 15, 2024

Alyssa Sandoval, AICP
Deputy Chief Planner
City of Newton
Planning and Development Department
1000 Commonwealth Avenue
Newton, MA 02459-1449

Re: Peer Review Civil Engineering and Stormwater Management

Comprehensive Permit Project 78 Crafts Street, Newton, MA

Dear Ms. Sandoval:

The Horsley Witten Group, Inc. (HW) is pleased to submit this peer review regarding the civil engineering and stormwater management design for the proposed residential development located at 78 Crafts Street in Newton, MA. We understand that the Comprehensive Permit Application, pursuant to M.G.L. Chapter 40B, includes the construction of five separate multistory buildings with variable heights containing a total of 307 rental apartments, amenity space, and 262 parking spaces on 4.76 acres of land. HW understands that the proposed development has been designed to create a "village-like" environment.

The existing project site is mostly impervious, consisting of 11 parcels and is occupied by several commercial buildings, one residential home, pavement, and hard packed gravel surfaces. Presently, most of the stormwater is collected by closed drainage systems onsite and discharges into a 36-inch by 48-inch concrete culvert that runs through the center of the combined parcel, or into a 60-inch culvert located in Crafts Street. The proposed development does not appear to be within 100 feet of a wetland resource area and is not located within a 100-year flood plain as documented by the Federal Emergency Management Agency (FEMA).

The Applicant proposes to combine the 11 parcels into one parcel and remove all the existing improvements and buildings. The project qualifies as a mix of redevelopment and new development as detailed in the Massachusetts Stormwater Handbook (MSH). The Applicant proposes to install a new stormwater system including deep-sump hooded catch basins, water quality units, and three subsurface infiltration chamber systems in accordance with the MSH.

HW conducted a site visit on February 15, 2024 to confirm the existing site conditions. As part of the stormwater management design review process, HW reviewed the following documents and plans:

- Comprehensive Permit Application, prepared for 78 Crafts Street Newton LLC, signed December 2023 (8 pages);
- 78 Crafts Street, Newton, MA, Development Description (7 pages);
- MassHousing Project Eligibility/Site Approval, dated December 8, 2023 (9 pages);
- 78 Crafts Street Comprehensive Permit, Waiver Analysis (8 pages);





- Tabular Zoning Analysis, 78 Crafts Street (1 page);
- Stormwater Report, 78 Crafts Street, Newton, Massachusetts, prepared by Weston & Sampson, dated December 7, 2023 (423 pages);
- Project Location Plan, Maguire Court & Crafts Street (4 pages);
- Site Context Photographs (12 pages);
- ALTA/NSPS Land Title Survey, prepared by Feldman Geospatial, stamped November 28, 2023 (3 sheets);
- 78 Crafts Street Comprehensive Permit Application, Landscape Plans, prepared by Gregory Lombardi Design, Inc., dated December 7, 2023 (7 Sheets); and
- Site Plans, 78 Crafts Street, Newton, MA, prepared for Boylston Properties, prepared by Weston & Sampson, revised through December 7, 2023, including:

0	Cover Sheet	G000
0	Abbreviations, Notes and Legend	G001
0	Demolition Plan	CD100
0	Erosion and Sediment Control Plan	C100
0	Site Plan	C101
0	Fire Emergency Response Plan	C102
0	Grading and Drainage Plan	C103
0	Drainage Schedule	C104
0	Utility Plan	C105
0	Lighting Plan	C106
0	Details	C500-C506

Stormwater Management Review

This review of the submitted materials is based on the Massachusetts Stormwater Management Standards (MASWMS), and the City of Newton Stormwater Management and Erosion Control Rules & Regulations (Stormwater Regulations), dated April 15, 2022, as well as standard engineering practices.

In accordance with Stormwater Regulations § 5.C.2 of the Stormwater Regulations, this project is required to comply at a minimum with the performance standards of the MSH. Therefore, we have used the MSH as the basis for organizing our comments as they pertain to stormwater. However, in instances where the additional criteria established in the Stormwater Regulations require further recommendations, we have referenced these as well. HW understands that the Applicant has requested a waiver from complying with all City of Newton stormwater regulations.

HW offers the following comments:

1. Standard 1: No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

- a. The Applicant has evaluated the stormwater management system with seven design points (DP-A) at the property boundaries.
 - DP-A is the 36-inch by 48-inch concrete culvert that bisects the site from west to east. Stormwater from 168,438 square feet (sf) of primarily impervious surfaces is collected by a closed drainage system that discharges into the culvert at several locations.
 - 2) DP-B captures a small, mostly vegetated area that sheet flows off the site to the south.
 - 3) DP-C is a catch basin on Maguire Court just south of the project area. It appears that the catch basin pipes the stormwater from a large impervious area of the existing project site south through the property that Roche Collision occupies.
 - 4) DP-D is the 60-inch culvert that is located to the east of the site in Crafts Street. The existing impervious area flowing towards DP-D is captured by a closed drainage system that is piped to the culvert.
 - 5) DP-E is to the west of the site. The westernmost area of the project site where the existing concrete bins are located flows towards an existing depression that overtops towards the property boundary near Wilton Road.
 - 6) DP-F captures a small, mostly vegetated area that sheet flows off the site to the southeast towards the property at 20 Maquire Court.
 - 7) DP-G is Court Street to the south of the site. A small, mostly grassed area sheet flows off the project site towards Court Street.
- b. HW recommends that the Applicant confirm that there are no additional offsite areas flowing onto the project site that may be captured by the proposed stormwater system. Specifically, the City of Newton property north of the Project Site.
- c. Under proposed conditions the Applicant has reduced the drainage areas discharging towards design points, DP-B, DP-C, DP-E, DP-F, and DP-G. The peak flows and peak volumes will be reduced at the property boundary for each of these locations under the proposed conditions. No further action requested.
- d. Prior to discharging to DP-A (36-inch by 48-inch concrete culvert) the Applicant has proposed two subsurface infiltration systems to reduce the peak flows and volumes discharging into the culvert and flowing off site. The catchment area of 182,245 sf includes four buildings and most of the proposed pavement. The peak flow and peak volume will be reduced at the culvert under the proposed conditions. No further action requested.
- e. It appears that a portion of proposed subcatchment A4 sheet flows off the Project Site towards the north. Under existing conditions, it does not appear that a portion of the site flows towards the City of Newton property. HW recommends that the Applicant justify the direction of flow behind Building B.

- f. Prior to discharging to DP-D (60-inch culvert in Crafts Street) the Applicant has proposed one subsurface infiltration system to recharge the roof runoff. The peak flow and peak volume will be reduced at the property boundary under proposed conditions. No further action requested.
- 2. Standard 2: Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.
 - a. Based on the HydroCAD analysis, it appears that the proposed conditions of the site will result in lower peak runoff rates and volumes relative to existing conditions. The Applicant has provided a summary table comparing existing and proposed runoff rates and volumes in Appendix G of the Stormwater Report. HW has reviewed this table and concurs with the rates and volumes listed. No further action requested.
 - b. The Applicant has proposed a drainage manhole on the east side of the site, DMH-1. DMH-1 is proposed to discharge into an existing manhole in Crafts Street. The existing drainpipe is 8-inches, but it is not clear if this pipe is being replaced. One of the pipes entering DMH-1 is a 12-inch HDPE. HW recommends that the Applicant clarify the size of the pipe between DMH-1 and the existing drain manhole in Crafts Street.
 - c. HW recommends that the Applicant revisit the inverts of proposed area drain, AD-3. It appears that the inlet from AD-1 is lower than the outlet to DMH-1.
 - d. It appears that the inverts IN to DMH-6 are slightly lower than the invert OUT. HW recommends that the Applicant justify the design.
 - e. The Applicant has listed the total impervious area of the proposed site on Sheet C101 per Stormwater Regulations § 6.C.2.c.3. The Applicant is increasing the impervious area by approximately 32,300 sf. HW notes that the Applicant is eliminating the hard packed gravel on site and is increasing the landscaped area by approximately 32,900 sf. No further action requested.
- 3. Standard 3: The annual recharge from post-development shall approximate annual recharge from pre-development conditions.
 - a. HW recommends that the Applicant confirm that all proposed infiltration practices are located at least 2 feet above estimated seasonal high ground water (ESHGW) in accordance with Volume 2, Chapter 2 of the MSH. HW notes that Infiltration System IS-1, has the bottom of the system set at elevation 30.9 and mottling was observed in test pit TP-2 at elevation 29.0. Infiltration System IS-3 has the bottom of the system set at elevation 32.70 and mottling was observed in TP-5 at elevation 31.1.
 - b. The Applicant has provided the required recharge volume calculations in accordance with Volume 3, Chapter 1 of the MSH. The Applicant is providing recharge for the total proposed impervious area (149,382 sf) as required by the MSH. HW notes that the value included in the recharge calculations is not consistent with the Proposed Site Area Summary table provided on Sheet C101 (152,742 sf). HW recommends that the Applicant clarify the total impervious area proposed for the entire site.

- c. HW notes that the Stormwater Regulations § C. 3. a) requires that "Stormwater management systems on new development sites shall be designed to retain the volume of runoff equivalent to, or greater than, two (2) inches multiplied by the total post-construction impervious surface area on the site." HW understands that the Applicant has requested a waiver from this requirement, and we defer to the Zoning Board of Appeals and the City Engineer regarding the granting of this waiver.
- d. The Applicant has provided a mounding analysis for each of the proposed infiltration practices. HW is not in agreement with the value used for Recharge (R). It is HW's opinion that the Recharge Rate is determined by the following calculation:
 - R = Recharge Rate (feet/day): Recharge rate, also described as the Rate of Application, is calculated by dividing the volume (cf) designed to be infiltrated by the area (sf) of the basin bottom. If the basin has an overflow outlet, the infiltrated volume is the volume stored below the outlet of the basin. If the basin does not have an outlet the volume is what is conveyed to the infiltration facility from its contributing drainage area during the largest storm (potential 100-year) that is designed to be infiltrated. Divide that volume by 3 days as the MA Stormwater Standards require all facilities to empty within 72 hours. Recharge = volume/area/3 days = feet/day. Think of this as the column of water that must be infiltrated vertically per the system's design.

HW concurs with the Applicant's values for the other variables used in the Hantush (1967) equation. HW recommends that the Applicant revisit the R value and revise the mounding analysis as necessary.

- 4. Standard 4: The stormwater system shall be designed to remove 90% Total Suspended Solids (TSS), to remove 60% of Total Phosphorus (TP), and to treat 2.0-inch of volume from the impervious area for water quality.
 - a. The Applicant has provided the required water quality volume calculations for one inch of runoff over the proposed impervious area (125,723 sf) excluding the catchment area that includes Building E (23,659 sf) since it is not directed towards a recharge system. HW notes that the impervious area for catchment area A4 is modeled with 30,953 sf of impervious area in the HydroCAD calculations. HW recommends that the Applicant confirm the total impervious area on site directed towards an infiltration system as well as the total area being directed towards the Jellyfish proprietary separator.
 - b. HW notes that the Applicant is proposing a Jellyfish Filter to provide water quality for catchment area A4 that includes Building E. As noted above the Applicant has utilized an area of 23,659 sf in the Jellyfish Filter sizing calculation. This value is not consistent with the impervious area value in the HydroCAD model. HW recommends that the Applicant confirm the proposed impervious area and revise the calculations as applicable.
 - c. To obtain the required 90% TSS removal for the Jellyfish Filter (WQU-5), the Applicant has included 10% TSS removal for street sweeping. HW recommends that

- the Applicant confirm it can conduct the street sweeping in accordance with the TSS Removal Credits for Street Sweeping provided on page 9, Volume 2, Chapter 1 of the MSH.
- d. The Applicant has included the State of New Jersey certification for the proposed Contech CDS unit confirming that 50% TSS removal is appropriate. HW recommends that the Applicant provide a similar letter for the proposed Jellyfish Filter and the 85% TSS removal credit included in the TSS worksheet.
- e. In accordance with Stormwater Regulations § 5.C.3. c) The Applicant is required to calculate the existing and proposed average annual Total Phosphorus (TP) load and demonstrate 60% reduction. HW recommends that the Applicant provide the applicable calculation.
- 5. Standard 5 is related to projects with a Land Use of Higher Potential Pollutant Loads (LUHPPL).
 - a. In the Stormwater Report, the Applicant notes that the site is not considered a Land Use with Higher Potential Pollutant Loads (LUHPPL). HW notes that the estimated number of vehicle trips per day at the site will exceed 1,000 vehicle trips per day which classifies the site as a LUHPPL. However, because the parking spaces are primarily in garages the definition may not be applicable. HW recommends that the Applicant determine if the site qualifies as a LUHPPL and confirm it meets the applicable criteria in accordance with the Volume 1, Chapter 1, page 14 of the MSH.
- 6. Standard 6 is related to projects with stormwater discharging into a critical area, a Zone II or an Interim Wellhead Protection Area of a public water supply.
 - a. The Project does not appear to be located within or discharge to a critical area, Zone II, or Interim Wellhead Protection Area. Therefore, Standard 6 is not applicable.
- 7. Standard 7 is related to projects considered Redevelopment.
 - a. The proposed development is a mix of new and redevelopment. The Applicant intends to provide stormwater management in compliance with new development. HW has no further comment.
- 8. Standard 8 requires a plan to control construction related impacts including erosion, sedimentation, or other pollutant sources.
 - a. HW recommends that the Applicant note the total area to be disturbed per Stormwater Regulations § 6.C.4.a.
 - b. HW recommends that the Applicant designate a location for material staging and storage on the plan set per Stormwater Regulations § 6.C.2.c.7.
 - c. HW recommends that the Applicant include the information required in the Stormwater Regulations § 6.C.4.f) g) and h).
 - d. HW recommends that the Applicant provide inlet controls in all existing catch basins located within the project site, all proposed catch basins once they are installed, and all catch basins within 100 feet of the construction entrance.

- e. HW recommends that the Applicant evaluate the need for an erosion control barrier at the property line of the proposed development adjacent to Maguire Court.
- f. HW recommends that the Applicant evaluate the need for an erosion control barrier at the property line with 67 Court Street.
- g. HW recommends that the Applicant provide a construction sequence and identify when the existing drainpipes will be removed and how the runoff will be managed in the interim.
- h. Projects that disturb one acre of land or more are required to obtain coverage under the NPDES Construction General Permit (CGP) issued by EPA and prepare a Stormwater Pollution Prevention Plan (SWPPP). HW recommends that a copy of the SWPPP be provided to the City a minimum of 14 days prior to land disturbance.
- 9. Standard 9 requires a Long-Term Operation and Maintenance (O & M) Plan to be provided.
 - a. The Applicant has included an O&M Plan in Attachment J of the Stormwater Report. HW recommends that this becomes a standalone document for use by the property owner.
 - b. HW recommends that an O&M Plan signed by the property owner is provided to the City prior to occupancy.
 - c. HW recommends that the Applicant include inspection ports for the three subsurface infiltration chamber systems and locate them on the site plan. An inspection port detail should also be provided.
 - d. HW recommends that the Applicant describes snow management procedures in the O&M Plan and include snow storage locations on the O&M Key Plan.
- 10. Standard 10 requires an Illicit Discharge Compliance Statement be provided.
 - a. The Applicant has included an illicit discharge compliance statement in the Stormwater Report. HW recommends that an illicit discharge compliance statement signed by the property owner is provided to the City prior to occupancy.

11. Other General Stormwater Comments

- a. HW recommends that the Applicant include a note on the plan set stating that "the Engineering Division Inspector shall be notified 48 hours prior to any site work in accordance with project permits," per Stormwater Regulations § 6.C.2.c.13.
- b. In accordance with Stormwater Regulations § 5.A.1, HW recommends that the Applicant provided the existing impervious surface on a table with the proposed impervious surface area.
- c. In accordance with Stormwater Regulations § 5.A.4, HW recommends that the Applicant clearly identify the existing trees that are 8 inches dbh and larger that are proposed for cutting.
- d. HW recommends that the Applicant confirm that all proposed infiltration practices are located at least 10 feet from the proposed building per Stormwater Regulations

Section 5.B.3. HW notes Infiltration System #2 appears closer than 10 feet from Building A.

Grading and Utilities

- 12. It does not appear that the project site is within 100 feet of a wetland resource area. The project Site is not within a FEMA 100-year flood plain.
- 13. Proposed Building A is set with a Finish Floor Elevation (FFE) at 39.38. The existing surface grade around Building A is between elevations 38 and 40.
- 14. Proposed Building B is set with an FFE at 38.74. The existing surface grade around Building B is between elevations 35 and 36.
- 15. Proposed Building C is set with an FFE at 38.54. The existing surface grade around Building C is between elevations 37 and 38.
- 16. Proposed Building D is set with an FFE at 37.50. The existing surface grade around Building D is between elevations 34 and 38.
- 17. Proposed Building E (garage) is set with a lower FFE at 36.00 and a higher FFE at 46.00. The existing surface grade around Building E is elevation 35.
- 18. HW notes that proposed Building E is located less than 10 feet from the existing 36-inch by 48-inch concrete culvert that bisects the site from east to west. HW recommends that the Applicant confirm the constructability of Building E without impacting the existing culvert.
- 19. The Applicant is proposing underground electrical and telecommunications conduit throughout the project site and connecting to the electrical manhole at Crafts Street.
- 20. There is no proposed gas noted on the Utility Plan, Sheet C105. However, there is an 8-inch gas main on the east side of Crafts Street.

Water and Sewer Flow

- 21. The Applicant is proposing a 4-inch ductile iron service line that connects to the 4-inch main in Court Street. The proposed 4-inch line connects to a proposed 8-inch ductile iron line that connects to the 10-inch water main in Crafts Street creating a looped system.
- 22. The Applicant is proposing three hydrants that feed from the proposed 8-inch ductile iron line.
- 23. There is an existing 8-inch sanitary main in Maguire Court that the Applicant is proposing to connect Buildings A, B, and E into with a proposed 8-inch PVC line.
- 24. Buildings C and D discharge into a 5,000-gallon septic tank with a grinder pump unit. The grinder pump discharges out through a 1-inch force main to an existing sewer manhole at Court Street which connects to the 8-inch sanitary main in Court Street via a 4-inch pipe. HW recommends that the Applicant clarify the maintenance schedule for the septic tank, grease and oil separator, and grinder pump unit.

25. In accordance with Section 29-171 of the Newton Zoning Ordinance, wastewater flow for a multi-family dwelling is calculated by multiplying 110 gallons per day (GPD) per bedroom.

The proposed development includes:

- o 178 1-bedroom/studio units: 178 units * 1 bed/unit = 178 bedrooms
- o 96 2-bedroom units: 96 units * 2 bed/units = 192 bedrooms
- o 33 3-bedroom units: 33 units * 3 bed/units = 99 bedrooms
- o Total anticipated flow: 469 bedrooms * 110 GPD/bed = 51,590 GPD

For purposes of encouraging the installation of water-efficient fixtures the city engineer may use a reduced flow based on low flow fixture usage.

o Reduced sewer flow: 469 bedrooms * 65 GPD/bed = 30,485 GPD

HW defers final acceptance of the estimated flow rate to the City Engineer.

Lighting and Photometric Review

- 26. The Applicant has provided a Photometric/ Lighting Plan on Sheet C106 and Details on Sheet C506. HW notes that the Photometric Plan does not indicate any light candles behind Building C. HW recommends that the Applicant confirm that there will be no lighting behind Building C. Furthermore, HW requests that the Applicant clarify the height of the poles, and that the proposed lights will be dark sky compliant.
- 27. HW did not receive any shadow studies for the proposed development. If applicable HW recommends that shadow studies are provided for review.

Conclusion

HW recommends that the Zoning Board of Appeals require the Applicant to provide a written response to address these comments as part of the permitting review process. The Applicant is advised that provision of these comments does not relieve him/her of the responsibility to comply with all Commonwealth of Massachusetts laws and federal regulations as applicable to this project. Please contact Janet Bernardo at 857-263-8193 or at jbernardo@horsleywitten.com if you have any questions regarding these comments.

Sincerely,

Horsley Witten Group, Inc.

Carela Burando

Janet Carter Bernardo, P.E.

Associate Principal