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CONTINUED PUBLIC HEARING MEMORANDUM

DATE: July 8, 2016

MEETING DATE: July 12, 2016

TO: Land Use Committee of the City Council

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

CC: Petitioner
Planning Board
Law Department

PETITION #179-16 & #180-16 **NW corner of Washington and Walnut Streets**

Request for a change of zone to Mixed Use 4 and for special permits to construct a mixed-use development consisting of three buildings with heights up to 60 feet and 5-stories incorporating 171 residential units, approximately 40,000 of commercial space and 346 parking spaces.

The Land Use Committee (the "Committee") opened the public hearing on June 7, 2016, and the hearing was held open. A site visit was held by the Committee on June 13, 2016. In response to questions raised at the Land Use Committee public hearings, and/or staff technical reviews, the Planning Department is providing the following information for the upcoming continued public hearing. This information is supplemental to staff analysis previously provided at public hearings.

The July 12, 2016 meeting will focus on the Traffic Impact and Access Study (TIAS).

Peer Review of Petitioner's Traffic Impact and Access Study

The City has contracted with Howard Stein Hudson (HSH) to perform a critical review of the petitioner's submitted Traffic Impact and Access Study. The review includes an analysis of all data submitted including methodologies, assumptions, analysis and findings, and a review of proposed mitigation at proximate intersections and roadways. An Associate from HSH will be available on July 12, 2016 to present their findings. In general, HSH agrees with the analysis performed by the petitioner's consultant by finding that the project will have minimal impact on surrounding roadways. Furthermore, HSH believes the proposed improvements at the intersection of Washington and Walnut Streets are sufficient to mitigate the impact of the project on surrounding roadways. A quick

summary of those improvements include; new traffic signal equipment, intersection resurfacing, curb extensions, upgraded crosswalks, traffic signal timing and coordination plan, and several Transportation Demand Management (TDM) measures to reduce vehicle trips. HSH's review is attached (**Attachment A**).

Complete Streets Policy

As part of the ongoing Transportation Strategy, the City is developing a Complete Streets Policy to ensure Newton's roadways serve all residents and their preferred modes of transportation **(Attachment B)**. The petitioner has committed to the measures listed above to improve the intersection of Washington and Walnut streets as mitigation for the project. In addition, the petitioner has suggested adding a second southbound travel lane on Walnut Street to reduce the queue at the intersection. However, HSH suggests adding a bicycle lane will provide a better multi-modal upgrade at the intersection. The Planning Department agrees with HSH, believing the bicycle lane will provide safer access for bicyclists and pedestrians. Additionally, the Planning Department believes installing the bike lane is an important first step in implementing a robust Complete Streets program. In addition, the Planning Department would recommend the petitioner consider the installation of a special paving detail to encompass the entire Washington and Walnut intersection to emphasize this as an identifiable pedestrian/bike crossing.

Other Reviews

Since the last public hearing the City has received reviews from the Fire Department and the Engineering Division of Public Works (**Attachments C & D**).

The Fire Department has approved the site for accessibility and will further review the project prior to the issuance of any building permits.

The Engineering Division of Public Works has also reviewed and provided comments on the conceptual site plan. No significant issues are raised. Should this project be approved the Engineering Division of Public Works will review this project for conformance with the City of Newton Engineering Standards prior to the issuance of any building permits.

ATTACHMENTS:

Attachment A: Howard Stein Hudson Peer Review of TIAS
Attachment B: Draft Complete Streets Policy
Attachment C: Fire Department Review
Attachment D: Engineering Division Review

TECHNICAL MEMORANDUM

TO:	Alexandra Ananth, LEED AP Chief Planner for Current Planning City of Newton, Massachusetts	DATE:	July 8, 2016
FROM:	Michael Santos, P.E., PTOE Andrew Fabiszewski	HSH PROJECT NO.:	2016089.00
SUBJECT:	Peer Review Washington Place Proposed Mixed-Use Development Newtonville, Massachusetts		

As requested, Howard/Stein-Hudson Associates (HSH) conducted a peer review of the materials prepared for the proposed Washington Place mixed-use development at the corner of Washington Street and Walnut Street in the Newtonville section of Newton. Our evaluation is based on the following documents:

- *Traffic Impact and Access Study (TIAS), Washington Place Mixed Use Transit Oriented Redevelopment, Newton Massachusetts*, prepared by VHB, dated May 2016;
- *Washington Place Special Permit Plans*, dated May 5, 2016.

This evaluation also incorporates feedback obtained from a meeting with City of Newton staff on Monday June 27, 2016 and a conference call with the Applicant's transportation consultant (VHB) and City staff on Thursday June 30, 2016.

The purpose of this review is to ensure that the traffic analysis conforms to industry standards, to confirm that the traffic study methods are appropriate for the setting, and to ensure that the recommendations and proposed mitigation adequately address potential project impacts and are consistent with the City of Newton's planning vision and recommended guidelines for transportation improvements.

The Project site is located at the corner of Washington Street and Walnut Street, situated in the Newtonville section of Newton. The Project will include the demolition of the existing uses on the site, which includes residential and commercial uses and a gasoline/service station that is currently in operation. A United States Post Office is also located immediately to the west of the site and will share Washington Terrace as an access point with the Project.

The proposed development will consist of approximately 171 residential units and 43,985 square feet (sf) of retail/commercial space. A total of 110 parking spaces will be provided at grade level for the

commercial uses on the site and 236 parking spaces will be provided in a single level of below-grade parking for the residential uses. Storage for over 180 bicycles will be provided in the garage for the residents, with additional bicycle racks located along the exterior of the building for visitors and patrons of the site. Access to the site will be provided at two locations: a new driveway located along Walnut Street, north of Washington Street, and Washington Terrace, an existing roadway that currently serves the United States Post Office and residential uses. The Project will also close six of the existing access points that serve the site.

The key findings of our review of these documents are summarized below and presented in the following sections. The comments are organized by the same headers used by the Applicant in their submitted documents.

Summary of Review

HSH has conducted a comprehensive peer review of the TIAS and the site plans prepared for the proposed Washington Place mixed-use development to be located in the northwest corner of the Washington Street/Walnut Street intersection in the Newtonville area of Newton. This memorandum consists of a review of the methodology and assumptions used in the TIAS, the key findings of the TIAS, the appropriateness of the proposed mitigation, the consistency of the mitigation with existing and ongoing planning studies in the area, and a review of the site plan and operations.

The review of the methodology and assumptions used in the TIAS indicates that in general, the traffic study conforms to industry standards and best engineering practices. The TIAS includes an analysis of Existing, No-Build (future conditions without the Project), and Build (future conditions with the Project) conditions for the surrounding roadway network and nearby intersections including the signalized intersections of Washington Street/Walnut Street and Washington Street/Lowell Avenue. The Applicant identified the potential transportation related impacts of the Project by estimating the number of trips expected to travel to and from the Project site during the weekday a.m. and p.m. peak hours of traffic operations using data provided in the Institute of Transportation Engineers' *Trip Generation Manual* and assigning the projected traffic volumes to the study area to develop the Build conditions.

MITIGATION

The Proponent has proposed several mitigation measures within the study area to improve safety and operations in the area, including the following:

- **Washington Street/Walnut Street**: The Applicant is proposing to install new traffic signal equipment, install curb extensions on the north side of the intersection, upgrade the crosswalks, install a second travel lane along Walnut Street southbound, and provide an optimal traffic signal timing and coordination plan.
- **Washington Street/Lowell Avenue:** The Applicant is proposing to provide an optimal traffic signal timing and coordination plan.
- **Washington Terrace:** The Applicant will reconstruct this street to improve the roadway conditions.

The proposed mitigation at the Washington Street/Walnut Street and Washington Street/Lowell Avenue intersections was discussed at the meeting between HSH and City staff on June 27, 2016. As the design of these improvements progresses, some flexibility should be included to allow for the potential installation of a bicycle lane along Walnut Street southbound in lieu of the installation of the second travel lane which will provide greater security for cyclists and better conform to a "Complete Streets" policy by providing for all modes of transportation. The City recently installed temporary pavement markings for the bicycle lane to provide better multi-modal accessibility throughout the area. The installation of the bicycle lane would help prioritize non-vehicular modes of travel and provide a safer transportation facility for bicyclists. The details of the traffic signal timing and phasing (including the pedestrian phases) should also remain flexible, as the City is currently conducting another study that may provide some additional guidance and recommendations for traffic signal upgrades.

CONSISTENCY WITH WASHINGTON STREET CORRIDOR STUDY

HSH also reviewed the Washington Street Subregional Priority Roadway Study in Newton, published by the Boston Region Metropolitan Planning Organization (MPO) to determine if the proposed mitigation is consistent with the long term plans for the corridor. Based on this review, the mitigation is generally consistent with the MPO recommendations, as the mitigation will update and improve traffic signal operations at the two signalized locations in the study area. The planning study also recommends the following improvements, which were not included in the proposed mitigation listed in the TIAS:

- Reduce the curb radii and install curb extensions at the Washington Street/Lowell Avenue intersection;
- Install a midblock crosswalk across Washington Street at the Post Office; and
- Restripe Washington Street and implement a "road diet" to include a three lane cross section (one travel lane in each direction with a center turn lane where needed), a bicycle lane in each direction, and parking on both sides of the roadway.

Based on input received at the June 27, 2016 meeting it was determined that implementation of the recommendations in the planning study would not be required by the Applicant, as it would be more practical to implement corridor-wide improvements at the same time to provide a cohesive and continuous cross section along Washington Street.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

The Applicant is proposing to implement a Transportation Demand Management (TDM) program that will include secure and covered bicycle parking for residents, bicycle racks for visitors and patrons, and will also provide transit information to residents and employees of the Project. Other possible TDM measures that the Applicant should implement were discussed at the June 27, 2016 meeting and include the following:

- Work with a car sharing service to locate spaces within the surface parking lot for use by the residents and the surrounding neighborhood;
- Decouple rent and parking to help reduce parking demand;
- Install electric vehicle charging stations for up to 5 percent of the total parking supply on the site; and
- Develop a transit subsidy program to encourage the use of the nearby commuter rail and express bus lines.

It is expected that with the implementation of the above TDM measures, the demand for vehicle ownership and usage during the peak commuter periods would be significantly reduced. These measures would also allow the Applicant to market the residential units to tenants that are looking for alternative transportation options.

DISCUSSION WITH VHB

HSH also participated in a conference call with the VHB and City staff on June 30, 2016 to discuss the findings and recommendations in the TIAS. Based on this conversation, VHB indicated that the Applicant has committed to the recommended additional TDM measures listed above. VHB also indicated that the Applicant is:

- Working with the City and the Massachusetts Department of Transportation (MassDOT) on improvements to the Walnut Street Bridge over the Massachusetts Turnpike, which were not described in the TIAS.
- Proposing to provide a more efficient cross section along the bridge; and
- Providing numerous pedestrian enhancements including an upgrade to street lighting.

It is expected that these improvements will greatly improve the pedestrian connections between the Project site and the surrounding neighborhood to the business district in Newtonville located along Walnut Street south of the Massachusetts Turnpike. HSH has not reviewed any proposed plans for improvements on the Walnut Street Bridge and recommends that the Applicant provide these plans to the City when they are ready. The Applicant should continue to work with the City and MassDOT on these improvements.

Based on the review of the TIAS, the June 27 meeting, and the additional information provided on the June 30 conference call, HSH generally agrees with the methodology used in the TIAS and the proposed mitigation. HSH recommends that the Applicant provide draft plans for the improvements on the Walnut Street Bridge to the City for further review. HSH also recommends to the City and the Applicant that all proposed improvements be consistent with the current and ongoing planning studies and that there is agreement on the priority level of the proposed improvements, as there is a significant amount of transportation infrastructure upgrades that were identified within the immediate vicinity of the Project including those being proposed along the Walnut Street Bridge and the recommendations identified in the Washington Street corridor planning study.

A formal response letter from VHB will not be necessary, as all outstanding issues that came out of the review were discussed and addressed.

Scope of Review

The following issues were reviewed in the traffic study as part of the peer review:

- Study Area
- Study Methodology
- Existing Traffic Volumes
- Crash History
- Public Transportation
- No-Build Conditions
- Build Conditions
- Traffic Operations Analysis
- Mitigation
- Parking/Site Plan

Study Area

The Applicant identified ten study area intersections (two signalized, eight unsignalized) for study as part of the TIAS. Study area intersections are typically those that will receive a significant portion of Project traffic. Study area roadways are typically targeted to assess a Project's impact for both operations and safety. The Applicant identified the two signalized intersections that are closest to the site (Washington Street/Walnut Street and Washington Street/Lowell Avenue) and the nearest seven unsignalized sections to be included in the study area. The Applicant identified Washington Street and Walnut Street as the study area roadways. These two roadways provide direct access to and from the site. HSH agrees with the identification of Washington Street and Walnut Street as the primary study area roadways.

Study Methodology

The Applicant prepared the TIAS using methodologies that are consistent with City of Newton, MassDOT, and industry standards. HSH agrees with the general methodology that the Applicant used when conducting the TIAS.

Existing Traffic Volumes

The Applicant collected automatic traffic recorder (ATR) counts and turning movement counts (TMC's) in November 2015 and were increased by a growth rate of 0.5% per year to reflect a 2016 base year. Turning movement counts (TMCs) were conducted during the weekday a.m. and weekday p.m. peak periods. The ATR counts were conducted on Washington Street west of Walnut Street and

on Walnut Street north of Washington Street over a 24-hour period on November 19, 2015. Washington Street currently carries approximately 12,300 vehicles on an average weekday with 1,010 vehicles during the a.m. peak hour and 1,140 vehicles during the p.m. peak hour. Walnut Street currently carries approximately 10,000 vehicles on an average weekday with 760 vehicles during the a.m. peak hour and 765 vehicles during the p.m. peak hour. The TMCs were conducted at the study area intersections during the a.m. peak period (7:00-9:00 a.m.) and p.m. peak period (4:00-6:00 p.m.). These data collection time periods represent peak weekday traffic conditions and are typical of data collection time periods for traffic studies conducted for mixed-use developments. HSH agrees with the data collection methodology and time periods used by the Applicant.

The Applicant determined that it was not necessary to apply seasonal adjustment factors to the data collected in November 2015, as November volumes are generally higher than the average month based on seasonal factors provided by MassDOT. HSH agrees with this assessment.

Crash History

The Applicant assessed the crash data from the most recent five year period for which data is available (2009-2013) to identify particular areas where traffic safety may be an issue. No intersections had crash rates that were higher than the MassDOT District 6 average crash rate. The MassDOT District 6 average crash rate for signalized intersections is 0.70 crashes per million entering vehicles and the crash rate for unsignalized intersections is 0.53 crashes per million entering vehicles. Most crashes were property-damage only crashes, and no fatalities were reported at the ten intersections over the five-year period studied. The Applicant is proposing improvements at the intersection of Washington Street/Walnut Street to enhance the pedestrian facilities and is also closing several curb cuts that currently serve the site. These measures will help reduce the number of vehicle conflicts and will provide pedestrians with safer crossings along Washington Street.

Public Transportation

The Applicant listed each of the public transit services located within a ½-mile radius of the Project site. The Newtonville commuter rail station and the bus stops listed by the Applicant are all within walking distance to the Project site and are realistic options for access to the site. The Project is well suited to take advantage of the nearby transit services for residents that commute into Boston on a daily basis, which will reduce the peak commuter hour vehicular demands of the Project. The Project is also located within walking distance to numerous retail and commercial opportunities, allowing residents to make trips by walking.

It should be noted that the Applicant did not assume that any trips generated by the Project will be transit trips in order to present a conservative analysis of the Project's impact on the roadway network.

No-Build Conditions

In order to estimate how a roadway network will operate after a project is built, a future design year is chosen. The TIAS uses a 7-year planning horizon, which is generally consistent with City of Newton and MassDOT standards for development projects (typical planning horizons are generally between five and ten years for projects of this size). HSH agrees with the selection of the planning horizon used in the TIAS.

Background Traffic Growth

The Applicant used historic count data and recent area traffic studies to determine a 0.5% per year background growth rate. HSH agrees that this background growth rate is representative of expected growth in the area.

Planned/Approved Developments

The future conditions presented in the TIAS include traffic associated with other proposed development projects in the area that may impact the Project study area. Traffic expected to be generated by the three projects identified (Garden Remedies, 75-83 Court Street, and 28 Austin Street) is shown in detail in the technical appendix, and is included in No-Build traffic volumes. HSH agrees with the methodology used to account for background projects in the TIAS.

No-Build Traffic Volumes

Figures 7 and 8 of the TIAS show estimated 2023 traffic volumes based on 2016 existing volumes plus a 0.5% growth rate over seven years, plus any trips associated with nearby planned or approved developments. These figures show volumes that would represent expected traffic volumes in 2023 if the Project were not built. HSH agrees with the Applicant's methodology in determining No-Build traffic volumes.

Future Roadway Conditions

Planned or proposed roadway infrastructure projects are typically identified and included as part of the future traffic conditions scenarios if they are expected to be implemented within the planning horizon year (seven years in the case of this TIAS). The TIAS did not identify any roadway improvement projects within the study area. However, the Boston Region Metropolitan Planning Organization (MPO) conducted a planning study of the Washington Street corridor between Chestnut Street to the west of the Project, and Church Street to the east of the Project in 2015 that

identifies specific recommendations for intersection and corridor improvements. At the time that the TIAS was conducted, there were no definitive plans to implement these recommendations and they were not included in the future conditions analysis. Further, based on discussions with the City of Newton, there are ongoing planning studies related to the development of Complete Streets guidelines and alternative recommendations for enhancements and improvements along the Washington Street corridor. These studies have not yet been completed at this time.

The Applicant has proposed mitigation improvements that are consistent with the MPO study and with the ongoing studies that the City is conducting, which will be discussed later in this memorandum.

Build Conditions

Build conditions represent a condition where the Project is built and fully occupied in 2023, the Build horizon year. The Applicant reiterated that, while the Project site is located within a reasonable walking distance to public transit, the Build conditions assume that 100% of Project trips are made by automobile. This method provides a worst case scenario for traffic conditions and shows that the roadway network will continue to operate at similar levels as the No-Build conditions. This methodology may overstate the overall traffic impacts of the Project and present worse operations than might be expected. This is generally standard practice when it is necessary to present a worst case scenario for vehicular traffic operations. HSH agrees with this methodology.

SITE-GENERATED TRAFFIC VOLUMES

The TIAS estimates the trips generated by the Project based on the *Institute of Transportation Engineers (ITE)'s Trip Generation, 9th Edition*, using Land Use Code (LUC) 220 – Apartment and LUC 820 – Shopping Center.

The Applicant also conducted counts at the existing driveways that will be removed as part of the Project. The existing driveway trips were accounted for in the trip generation estimates and were removed from the future Build conditions traffic volumes. Some of the existing trips that were removed are related to the existing Sunoco gas station along Washington Street in the southwest corner of the site. Some vehicular trips to and from gasoline stations are "pass-by" trips and are not necessarily destination trips and would be traveling along Washington Street, regardless of the existence of the gas station. The Applicant did not account for these "pass-by" trips in the trip generation calculations and may have overestimated the number of trips to be subtracted from the study area.

The Applicant estimates that 89 new trips (24 entering, 69 exiting) will be generated by the Project in the a.m. peak period and 2 fewer trips (18 entering, -20 exiting) will be generated in the p.m. peak period. The trip generation estimates also account for potential "pass-by" trips related to the commercial uses on the site and "internal trips" that will occur between the residential and commercial uses. As previously noted, the Applicant also did not account for potential transit usage during the peak hour, which would be expected based on the location and the uses of the Project site. It is expected that the vehicular trip generation would be reduced by potential usage of the commuter rail and express buses that provide easy access to/from Boston. The daily trip generation estimates were not provided in the TIAS. The Applicant should provide projections to estimate the daily trip generation characteristics on a typical weekday.

HSH generally agrees with the Applicant's trip generation methodology, but has asked the Applicant to provide an updated trip generation table that accounts for the pass-by trips related to the existing gas station and the transit usage reduction that is expected during the peak commuting hours. HSH does not expect that the trip generation estimates will vary much from what is presented in the TIAS and additional analysis should not be required.

TRIP DISTRIBUTION

The Applicant used Journey-to-Work data from the 2010 U.S. Census for the City of Newton to develop the trip distribution patterns for the residential uses on the site. The Applicant used existing traffic patterns throughout Auburndale to develop the trip distribution patterns for the commercial uses on the site. This methodology is consistent with industry standards and HSH agrees with this methodology.

SIGHT DISTANCE

The Applicant provided detailed stopping sight distance (SSD) and intersection sight distance (ISD) for the Project site driveways. Required and desired sight distances are based on the 85th percentile speeds of the traffic along each roadway. Based on a review of the measurements, there will be adequate sight distance at both of the driveways that will serve the site.

POST OFFICE ACTIVITY ASSESSMENT

The Applicant included an assessment of activity related to the United States Post Office, located on the northwest corner of the Washington Street/Washington Terrace intersection. The assessment included parking and delivery activity and pedestrian activity at the intersection of Washington Street/Washington Terrace. The observations indicate that a total of 9 trucks/vans access the Post Office during the morning peak period (7-9 a.m.) and 13 trucks/vans access the Post Office during the evening peak period (4-6 p.m.). The observations also indicate that the largest trucks serving the Post Office encroach upon Washington Terrace, but the majority of the deliveries fit entirely within

the loading bays. The Applicant has committed to reconstructing Washington Terrace to accommodate the Project's needs and to improve the operating conditions for the Post Office vehicles.

Pedestrian counts were also conducted at the intersection of Washington Street/Washington Terrace. A total of 241 pedestrians crossed Washington Street near the Post Office throughout the period between 6:00 a.m. and 7:00 p.m., with a peak crossing volume of 34 during the p.m. peak hour. These pedestrian crossings are most likely due to the on-street parking and the Commuter Rail Station located on the south side of Washington Street.

TRAFFIC SIGNAL WARRANTS

The Applicant conducted an evaluation of the need for signalization at the intersection of Washington Street/Washington Terrace. Based on the evaluation, the traffic volumes exiting Washington Terrace and pedestrian volumes crossing Washington Street are too low to justify the installation of a traffic signal at this location.

Level of Service Criteria

To assess the potential traffic impact of the development on the adjacent traffic network, several steps are involved, as follows:

- Determine existing volumes and analyze existing traffic operating conditions for the study intersections;
- Generate No-Build traffic volumes by applying a background growth factor to the existing traffic volumes and adding approved/pending developments as well as planned transportation improvements. Analyze No-Build conditions;
- Determine the traffic volumes to be generated by the proposed development; distribute and assign traffic throughout the study area network; and
- Combine the background traffic volumes with the proposed traffic volumes to establish Build traffic volumes, analyze traffic operating conditions, and identify mitigation of potential impacts.

The traffic operations analysis presents detailed measures of effectiveness (MOEs) to assess the operating characteristics of the study intersections. The MOEs reported are average vehicle delay, level of service (LOS), volume-to-capacity ratio, and queue lengths. The LOS is a letter grade that is assigned to a range of vehicular delays at the intersection. LOS A represents little delay and is usually associated with low volume movements. LOS F represents higher delays and could indicate issues related to traffic congestion. Traffic operations throughout busy commercial districts and along arterials such as Washington Street with parking maneuvers, pedestrian activity, and bicycle

activity typically range from LOS D to LOS E, with some movements possibly experiencing LOS F during the peak hours, as the traffic volumes approach or meet the overall operating capacity of the transportation facilities.

HSH reviewed the existing traffic operations analysis. The Applicant used the Synchro traffic engineering software to analyze all the intersections in the network.

All study area intersections operate at the same LOS in the Build conditions as they do in the No-Build conditions, except for the intersection of Washington Street at Walnut Street during the weekday p.m. peak hour, which worsens from an overall LOS E to LOS F, with moderate queue increases which is consistent with other intersections in commercial districts. Additionally, proposed mitigation measures listed below will look to improve the LOS. The Applicant also observed that current queues along Walnut Street southbound regularly need more than one traffic signal cycle to clear, indicating that this approach is over capacity during the p.m. peak hour.

Mitigation

The Applicant has proposed several mitigation measures to both offset the Project's impacts and to enhance and upgrade the existing infrastructure conditions throughout the study area. The Applicant has also proposed several Transportation Demand Management (TDM) measures to help reduce the demand for single occupancy vehicle (SOV) trips to and from the Project. The following sections describe the mitigation proposed by the Applicant.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

In the TIAS, The Applicant proposes to display public transit schedules and provide maps of the area for pedestrian purposes in central locations throughout the site. There will also be secure and covered bicycle storage in the garage for residents and bicycle racks along the exterior of the building to promote bicycle travel to and from the site.

HSH has also recommended that the Applicant work with a car sharing service to locate spaces within the surface parking lot to serve both the Project and the surrounding neighborhood. Providing car sharing spaces will help reduce demand for vehicle ownership and will provide residents with access to a vehicle when they need one. We are also recommending that the Applicant equip five percent of the parking supply with electric vehicle charging stations to serve those residents and visitors that own an electric vehicle. We also recommend that the Applicant develop a transit subsidy program for its residents to promote commuter rail and express bus usage. With the implementation of a car sharing service and transit subsidies, the Project can attract those people

that can use public transportation for commuting needs and car sharing services for the times when they need a vehicle.

Based on conversations with the Applicant's consultant, all of the recommended TDM measures will be implemented, but the specific details still need to be determined.

HSH is also recommending that the Applicant explore the feasibility of decoupling parking from rent/ownership of the units. This measure may also help reduce the demand for parking on the site and the overall vehicular impacts. It is understood that this is highly dependent upon market conditions at the time of lease/sale and may not be economically feasible.

PROPOSED INTERSECTION IMPROVEMENTS

The Applicant has proposed specific improvements at the intersections of Washington Street/Walnut Street and Washington Street/Lowell Avenue.

The Applicant is proposing traffic signal equipment upgrades, curb extensions, new crosswalks, and the installation of an exclusive right-turn lane along the Walnut Street southbound approach at the Washington Street/Walnut Street intersection. These improvements are generally consistent with the MPO's planning study and will provide pedestrian safety improvements and vehicular capacity improvements along Walnut Street.

The Applicant is also proposing traffic signal equipment upgrades at the Walnut Street/Lowell Avenue intersection. These improvements will improve the efficiency of signal operations at the intersection.

HSH also reviewed the Washington Street corridor planning study to determine the consistency between the Applicant's proposed mitigation and the MPO's specific recommendations. Based on this review, the MPO recommends modifying the Washington Street cross section to include a single lane of travel in each direction with a center median/turning lane, bicycle lanes in each direction, and a parking lane on both sides of Washington Street. The MPO's study also recommends the installation of a mid-block pedestrian crossing at Washington Terrace and the installation of curb extensions at the intersection of Washington Street/Lowell Avenue.

The Applicant has also indicated that they have been working with the City and the Massachusetts Department of Transportation (MassDOT) related to improving the pedestrian connections along the Walnut Street Bridge over the Massachusetts Turnpike. These improvements would include a more efficient cross section over the bridge, lighting enhancements, and upgraded pedestrian routes.

These improvements are not discussed in the TIAS and HSH has not reviewed the specific proposals beyond what was discussed through conversation.

Based on conversations with the City of Newton staff and VHB, and with the understanding that there are still ongoing planning studies related to alternative recommendations for improvements to Washington Street, we are recommending that the Applicant implement their recommendations as proposed in the TIAS, allowing for some flexibility during the design process to allow for minor modifications. One such modification to the proposed improvements is to allow for the installation of a bicycle lane along the Walnut Street southbound approach in lieu of an additional right-turn lane. A bicycle lane along this approach will enhance the bicycle mobility in the area and improve safety for bicyclists. The installation of a bicycle lane would also help prioritize other non-vehicular modes of transportation throughout the area, consistent with the goals of the Washington Street corridor planning study. HSH is also recommending that the Applicant provide the City with more detailed plans of their proposed improvements to the Walnut Street Bridge. This will allow the City to determine and prioritize the long-term improvements to Washington Street and the shorter-term improvements across the bridge.

Site Plan Assessment

The site plan depicts 110 surface-level parking spaces at the Project site. The site plan also indicates that 236 below-grade spaces will be provided under the Project site for residential use at the Project site. Assuming the below-grade parking spaces are to be reserved for residential uses, the parking ratio for the residential portion of the Project would be 1.38. 74 of the 171 units will be 2-bedroom units and the remaining 97 units will be one-bedroom units or studios. The demand for the residential parking supply will also be reduced with a robust TDM program, such as the one described earlier. The residential parking supply is adequate according to City of Newton zoning codes if a special permit is acquired. HSH agrees that the residential parking ratio is appropriate for the Project.

The parking ratio for the commercial portion of the Project will be approximately 2.5 parking spaces per 1,000 square feet. HSH agrees that this parking ratio is appropriate for this Project, based on the proposed uses and location of the site.

There is also time-restricted, metered on-street parking available along Washington Street in the vicinity of the Project site that is expected to partially serve the Project's needs. The Applicant is proposing to modify the curb usage in two locations adjacent to the Project site by designating two 40-foot long short-term loading areas that will serve deliveries to both the Project and nearby commercial businesses.

The site will provide an on-site location for move-in/move-out activity and deliveries to the commercial tenants. Trash and recycling will also occur on-site, along the Washington Terrace frontage.

The two site-driveways will be full-access and allow left-turns into and out of the site. Due to the potential for extensive queuing along the Walnut Street southbound approach at the intersection with Washington Street, HSH recommends that pavement markings be installed on Walnut Street at the site driveway to indicate a "do not block" zone. This will help left-turning vehicles enter and exit the Walnut Street driveway.

Conclusions

Based on the review of the TIAS, the June 27 meeting, and the additional information provided on the June 30 conference call, HSH generally agrees with the methodology used in the TIAS and the proposed mitigation. HSH recommends that the Applicant provide draft plans for the improvements on the Walnut Street Bridge to the City for further review. HSH also recommends to the City and the Applicant that all proposed improvements be consistent with the current and ongoing planning studies and that there is agreement on the priority level of the proposed improvements, as there is a significant amount of transportation infrastructure upgrades that were identified within the immediate vicinity of the Project including those being proposed along the Walnut Street Bridge and the recommendations identified in the Washington Street corridor planning study.

ATTACHMENT B

City of Newton

DRAFT Complete Streets Policy

§ 1. Vision

The City of Newton is committed to developing complete streets throughout the community. It is hereby the policy of the City to accommodate all users equally by creating a roadway network that meets the needs of everyone, without regard to their age, abilities, income, or the mode(s) of transportation they use.

This Complete Streets Policy envisions streets that serve as public spaces and community resources, and further aims to expand transportation choices within Newton by creating an integrated network of inviting facilities for those choosing to travel on foot and by bike, transit, motor vehicle, or a mix of these and other transportation modes. The City undertakes this policy with the goals of encouraging active lifestyles and overall wellbeing for residents, improving air quality and stormwater quality, and preventing transportation-related deaths and injuries.

It is the City's vision that the roadway network will be designed and operated in accordance with complete streets principles – to provide safety, comfort, and access for all the users of our streets, including, but not limited to, pedestrians, bicyclists, transit riders, motorists, motorcyclists, freight haulers, service and delivery personnel, and emergency responders, etc. (collectively, all users). Broadly, the principles of complete streets design and operations include promoting safety, health, economic growth, environmental protection, accessibility, livability, and a better quality of life for users of all ages and capacities. Complete streets also advance fairness by providing safe travel options for all, regardless of income.

Complete streets design and operations values the preservation and enhancement of scenic, aesthetic, historical, and environmental resources while maintaining or improving safety, mobility, and infrastructure conditions. Complete streets design and operations also values inclusion, transparency, sensitivity to the immediate context, and the broader physical, economic, and social setting of any particular project.

This policy directs City staff to consistently incorporate complete streets principles and values into all planning and decisions related to the city's roadways.

§ 2. Core commitments

A. The City of Newton affirms that all users of all transportation modes have an equal right to safe use of the roads. The City will plan, design, operate, and maintain Newton's streets so that they are safe for users of all ages and abilities.

B. The City endeavors to meaningfully involve community members in relevant processes of complete streets prioritization and individual projects, and to involve them in ways that reflect a commitment to inclusiveness and equity.

C. The City recognizes that all roadway projects, including new construction, maintenance, and reconstruction offer the opportunity to apply complete streets principles and values. The City will avail itself of those opportunities to the maximum extent practical, and will integrate complete streets principles and values into all roadway projects in order to provide a balanced and connected network for all users.

(1) Complete streets design recommendations shall be incorporated into all publicly and privately funded projects, as appropriate. All transportation infrastructure and street design projects requiring funding or approval by the City of Newton, as well as projects funded by the state and federal governments, including but not limited to Chapter 90 funds, City improvement grants, Transportation Improvement Program (TIP), the MassWorks Infrastructure Program, Community Development Block Grants (CDBG), Capital Funding, and other state and federal funds for street and infrastructure design shall adhere to the City of Newton Complete Streets Policy.

Private developments and related roadway design components shall adhere to the complete streets principles. In addition, to the extent practical, state-owned roadways will comply with the Complete Streets Policy, including the design, construction, and maintenance of such roadways within City boundaries.

(2) City departments, in consultation with a Complete Streets Committee (described below), will use best judgment regarding the practicality of applying complete streets principles for routine roadway maintenance and projects, such as repaving, restriping, and so forth.

(3) Transportation infrastructure projects, including but not limited to roadway reconstruction, roadway reconfigurations, or subdivisions, may be excluded upon approval by the Newton Complete Streets Committee, where documentation and data indicate that any of the following apply:

i. Roadways where specific users are prohibited by law, such as interstate freeways or pedestrian malls. An effort will be made, in these cases, for accommodations elsewhere.

ii. Cost or impacts of expanding multi-modal accommodations are excessively disproportionate to the need or probable future use.

iii. Minor, routine, and preventative maintenance of the transportation network that does not change the roadway geometry or operations; such as mowing, sweeping, overlay, microsurfacing, crack sealing, and spot repair.

iv. Private Ways, which are neither owned nor maintained by the City. Private ways shall be encouraged to consult with the Complete Streets Committee before beginning projects.

v. Other City policies, regulations, or requirements contradict or preclude implementation of complete streets principles.

§ 3. Best practices

In meeting the Complete Streets vision and commitments described above the following best practices will guide the activities of the Complete Streets Committee.

A. The City of Newton will carry out the Complete Streets Policy cooperatively within all relevant departments in the City and, to the greatest extent possible, with private developers, state, regional, and federal agencies, as well as members of the public.

B. The City commits to considering all potential complete streets projects in a context-sensitive way with regards to both potential infrastructure changes and the process through which they are adopted. The City will establish opportunities for ongoing and project-specific engagement around complete streets topics.

C. The City recognizes that complete streets principles and values may be achieved through major infrastructure projects as well as incrementally through a series of smaller improvements and maintenance activities over time.

D. The City will integrate the Complete Streets Policy into its existing policies, planning, and design efforts related to roadway development and maintenance as well as future policy, planning, and roadway design work.

E. The latest design guidance, standards, and recommendations available will be used in the implementation of complete streets principles, including but not limited to the most up-to-date versions of the following:

(1) Project Development & Design Guide; Massachusetts Highway Department, January 2006. https://www.massdot.state.ma.us/highway/DoingBusinessWithUs/ManualsPublicationsForms/ProjectDevelopmentDesignGuide.aspx

(2) A Policy on Geometric Design of Highway and Streets; American Association of State Highway Transportation Officials (AASHTO), 6th Edition - 2011.

(3) The Manual on Uniform Traffic Control Devices (MUTCD); the United States Department of Transportation Federal Highway Administration, 2009. http://mutcd.fhwa.dot.gov/

(4) 521 CMR Rules and Regulations; Massachusetts Architectural Access Board (MAAB), 2006. http://www.mass.gov/courts/case-legal-res/law-lib/laws-by-source/cmr/500-599cmr/521cmr.html

(5) Public Rights of Way Accessibility Guidelines (PROWAG) DRAFT; United States Access Board, July 2011. https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines

(6) ADA Standards for Accessible Design; United States Department of Justice, September 2010. http://www.ada.gov/regs2010/2010ADAStandards/2010ADAstandards.htm

(7) Urban Street Design Guide, National Association of City Transportation Officials, October 2013. http://nacto.org/publication/urban-street-design-guide/

(8) Boston Complete Streets Design Guidelines; City of Boston, October 2013. http://bostoncompletestreets.org/

(9) Documents and plans created for the City of Newton, including but not limited to, the 2007 Comprehensive Plan, 2006 Newton Tree Manual, 2011 Bicycle Network Plan, 2014 Parking Management Plan, 2015 Newton Centre Parking Strategy, and the 2016 Newton-in-Motion Transportation Strategy (forthcoming).

§ 4. Implementation

A. Complete Streets Committee Organization

(1) The City will utilize interdepartmental coordination to promote the most responsible and efficient use of resources for activities within the public way.

(2) The existing Complete Streets Working Group will be expanded and formalized as the Complete Streets Committee (the Committee). This committee is comprised of members of relevant City departments required to implement this vision. The Complete Streets Committee will be a multidisciplinary team and members will include representation from: Department of Public Works (DPW), Planning and Development Department, Department of Health and Human Services, Office of the ADA Coordinator, Office of the Director of Sustainability, Parks and Recreation Department, Mayor's Office, and other committees, departments, or organizations within the City as the Mayor shall determine.

(3) The City will secure training for relevant City staff and decision-makers on both the technical content of complete streets principles and best practices, as well as community engagement methods for implementing the Complete Streets Policy.

B. Complete Streets Committee Purpose Statement

The City of Newton, with the leadership of the Complete Streets Committee, shall make complete streets practices a routine part of everyday operations, shall approach every transportation project and program as an opportunity to improve streets and the transportation network for all users, and shall work in coordination with all relevant departments, agencies, and jurisdictions to achieve complete streets principles and values throughout Newton's transportation network.

C. Complete Streets Committee Activities

(1) In accordance with the vision, core commitments, and best practice of this policy, the Committee will review roadway projects and make recommendations regarding complete streets opportunities. As practicable, the Committee will provide recommendations for incorporating complete streets design and operations in a project's beginning stages of design.

(2) The Committee will develop context-specific community engagement strategies, as appropriate, in order to ensure that the perspectives of community members are considered and incorporated in the process of a project. The Committee will collaborate with the Community Engagement Manager and relevant stakeholder groups to ensure two-way communications about the implementation of this policy.

(3) The Committee will evaluate projects within the Capital Improvement Plan to encourage implementation of this policy.

(4) The Committee shall oversee the maintenance of a comprehensive inventory of walking and bicycling facilities, and shall highlight projects that eliminate gaps in the sidewalk and bikeway network.

(5) The Committee will seek out appropriate sources of funding and grants for implementation of the Complete Streets Policy.

(6) The Committee will make recommendations to the Mayor concerning the need to alter existing practices that may be impeding implementation of this policy.

(7) This policy in no way alters the decision making role of City Council committees that review and approve roadway projects. Twice a year, the Complete Streets Committee will provide updates to the Public Facilities Committee of the City Council and will provide guidance on particular projects as appropriate.

§ 5. Evaluation of effectiveness

The Complete Streets Committee will develop performance measures to periodically assess the rate, success, and effectiveness of implementing the Complete Streets Policy. The Committee will determine the frequency of assessment and utilize appropriate metrics for analyzing the success of this policy. These metrics may include the total miles of new bicycle lanes; the linear feet of new pedestrian accommodation; number of retrofitted pedestrian facilities or amenities; number of intersection improvements made to improve safety for vehicles, pedestrians, and bicyclists; number of accessible pedestrian signals; rate of crashes by mode; rate of children walking or bicycling to school; and/or number of trips by mode. The Committee will report on these metrics in its semi-annual reporting to the City Council's Public Facilities Committee.

Bruce A. Proia
Chief

CITY OF NEWTON, MASSACHUSETTS

FIRE DEPARTMENT HEADQUARTERS

1164 Centre Street, Newton Center, MA 02459-1584
Chief: (617) 796-2210 Fire Prevention: (617) 796-2230
FAX: (617) 796-2239 EMERGENCY: 911

Setti D. Warren
Mayor

June 28, 2016

City of Newton Chief Planner
Alexandra Ananth,

Washington Place Project:

Alexandra,

Deputy Chief Castro and I have reviewed the email that was sent to us last Friday. We have looked at the plot plan with the bus 45 template and it looks good. As they stated in their email:

"Please note that we have 14ft of clearance where the trucks are shown passing under the residential overhang in the vicinity of the commercial loading area near Washington Terrace."

This information was helpful in determining Fire Department access and something that we will verify when the project is complete.

As for hydrant locations, sprinkler room location, and FDC (Fire Department Connection) as stated in their email:

"Hi Captain Binnall,
Please see the attached plans that were reviewed with Deputy Chief Castro on April 20. We discussed adding additional hydrants within the site once we're a little further down the road with the interior building MEP design and can better ID where the sprinkler room and FDCs will be located (with input from your department). Please let us know if this response/information is acceptable."

Thank you and have a great weekend.
Sincerely,

Josh Swerling, P.E. | Associate

There will be the need for additional fire hydrants on the property but the amount needed and locations will be determined at a later date. This will happen when the contractor and Deputy Chief Castro sit down for the plan review.

Captain Robert Binnall

Bureau of Fire Prevention
1164 Centre St.
Newton Centre, Ma,02459

rbinnall@newtonma.gov
617-796-2230 Office
617-796-2239 Fax

ATTACHMENT D

CITY OF NEWTON
Department of Public Works
ENGINEERING DIVISION

MEMORANDUM

To: Alderman Mark Laredo, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – Washington Place

Date: June 30, 2016

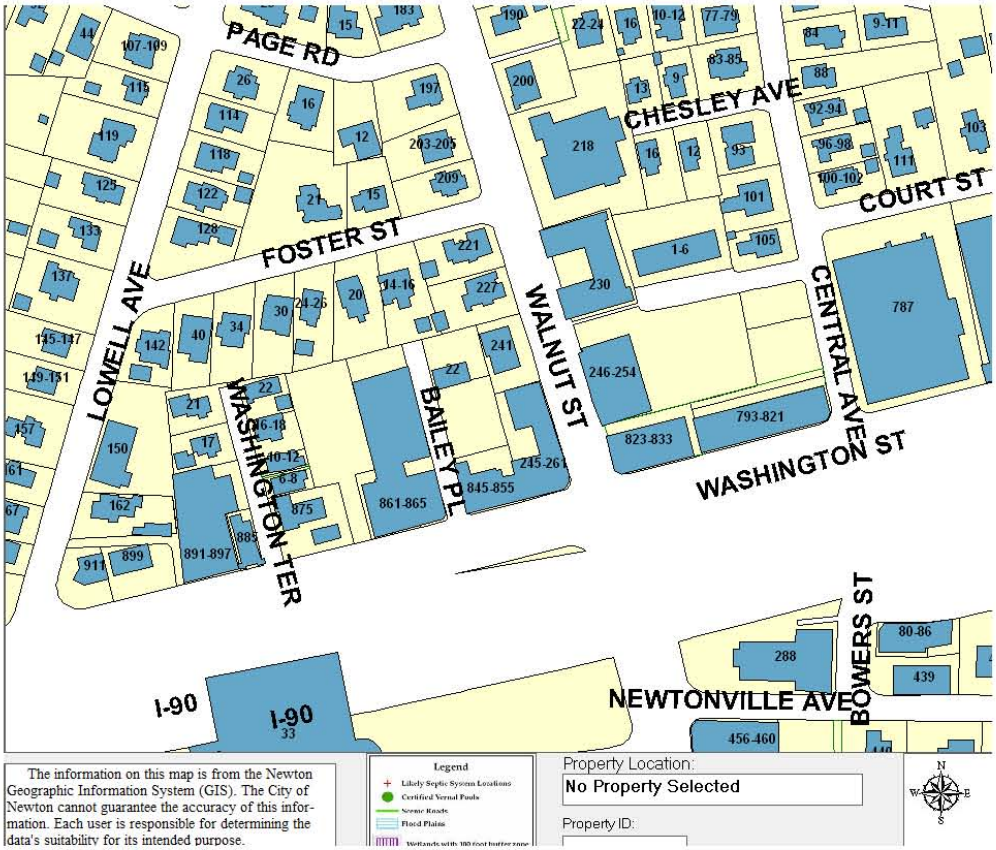
CC: James Mcgonagle, Commissioner DPW
Ted Jerdee, Director of Utilities
Lou Taverna, PE City Engineer
Nadia Khan, Committee Clerk
Alexandria Ananth, Chief Planner
Michael Gleba, Sr. Planner

In reference to the above site, I have the following comments for a plan entitled:

Washington Place
Washington Street at Walnut Street
Newton, MA
Prepared by: Bohler Engineering
Dated: 5-5-‘16

Executive Summary:

This application entails the demolition of the block of buildings from the corner of Washington Street at Walnut Street to the existing Sunoco gas station at #875 Washington Street, and towards the north to #241 Walnut Street, and residential dwellings along the easterly side of Washington Terrace [See map below].



The site is relatively flat and is approximately 98% impervious surfaces (buildings & pavement). The engineer of record has designed a stormwater collection and infiltration system to substantially reduce runoff from the site, in conformance with the Department of Environmental Protection (DEP) and DPW Stormwater Policy. The existing site has little to no stormwater water quality control; the proposed improvements will address and meet or exceed the DEP's Stormwater Standards that include groundwater recharging & proper operations and maintenance of stormwater facilities. Some of the details need to be fined tuned to meet the City standards and requirements.

The applicant wishes to construct *3* mixed use buildings that include a retail component on the ground level, followed up with residential units on the 2nd to 5th floor levels. Surface parking will be provided in back of the proposed buildings, and one level of underground parking is proposed via an access ramp along a driveway off Walnut Street. As part of the proposed development, Bailey Place (a private way off Washington Street) will be eliminated to allow the new building placement. Two curb cuts off Washington Terrace will allow for a looped circulation of the proposed parking lot.

If the special permit is approved an Approval Not Required (ANR) plan will be needed in accordance with Massachusetts General Laws Chapter 41 Section 81P requiring separate lots be combined into one lot.

The DPW and Planning Department are working with the neighborhood on traffic improvements within vicinity of this project; we ask that the developers work with the City to enhance the final design of this intersection. Some of the improvements that are being considered are: consolidation of parking meters, bus stop enhancements, ADA enhancements to curb cuts and sidewalks, and upgrading traffic and pedestrian crossing signals.

I&I Contribution:

This project site is within the Sanitary Sewer Basin "B" which has on going Infiltration & Inflow (I&I) issues, if this project is to be approved the DPW will request an 8:1 reduction contribution from the developer to be applied towards on-going I & I removal, based on Title 5 flow rates and type of use as proposed, the following is a breakdown based on Title 5 flow rates.

Type of Use	Square Footage	Per 1,000	Flow Rate Gal/Day	# of Seats	# Bedrooms	Total Daily Flow
Commercial	32,120	32.12	75	-		2,409
Restaurant	7,625	7.63	35	177		267
Office Space	2,150	2.15	75			161
Residential			110		245	26,950

Total for Project **29,787** Gallon per day

Requested Contribution calculation:
$8.40/Gallon (transmission & treatment cost) x 8 x 29,787 Gallon = $2,001,695

Regardless of this project the water main within Walnut Street is scheduled for cleaning and relining as part of the City's ongoing water works improvements.

Construction Management:

A construction management plan is needed for this project. At a minimum, it must address the following: staging site for construction equipment, construction materials, parking of construction worker's vehicles, phasing of the project with anticipated completion dates and milestones, safety precautions, emergency contact personnel of contractor. It shall also address any anticipated dewatering during construction, site safety & stability, and impact to abutting properties. Stabilized driveway entrances are needed during construction which will provide a tire wash and mud removal to ensure City streets are kept clean.

Prior to applying for a Building Permit the following items must be addressed:

Drainage:

1. An on-site soil evaluation needs to be performed to obtain the seasonal high groundwater elevation, percolation rate in accordance to Title V. This information must be submitted with the drainage study. The locations of these tests need to be shown on the site plan and must be performed within 25-feet of a proposed system.

2. When a connection to the City's drainage system is proposed, prior to approval of the Building Permit a Closed Circuit Television (CCTV) inspection shall be performed and witnessed by the Engineering Division, the applicant shall retain a contractor that specializes in CCTV inspection. The applicant shall contact the Engineering Division 48 hours in advance to schedule an appointment. At the end of the inspection the video or CD shall be given to the inspector. Furthermore, upon completion of the connection to the drainage system a Post – Construction video inspection shall also take place and witnessed as described above. This is required regardless of the connection point, the intent is to ensure that there are no downstream blockages or damaged pipe so that the contractor of record is not held accountable for preexisting conditions.

3. It is imperative to note that the ownership, operation, and maintenance of the proposed drainage system and all appurtenances including but not limited to the drywells, catch basins, and pipes are the sole responsibility of the property owner(s).

4. Due to the large number of infiltration units involved with the stormwater system, and proximity to the property line, two separate rows of impervious barriers will be required to encapsulate the on-site system.

Environmental:

1. Has a 21E investigation & report been performed on the site, if so copies of the report should be submitted the Newton Board of Health and the Engineering Division.

2. Are there any existing underground oil or fuel tanks, are they to be removed, if they have been evidence should be submitted to the Newton Fire Department, and Newton Board of Health.

3. Since the total site disturbance is over an acre, a Phase II General Construction (NPDES) Permit will need to be filed with DEP & EPA. A Stormwater Pollution Prevention Plan (SWPPP) will need to be developed.

Sewer:

1. A detailed profile is needed which shows the existing water main, proposed water service(s), sewer main and proposed sewer service(s) with the slopes and inverts labeled to ensure that there are no conflicts between the sewer services and the water service. The minimum slope for a service is 2.0%, with a maximum of 10%. Pipe material shall be 6" diameter SDR 35 PVC pipe within 10' of the dwelling then 4" pipe per Massachusetts State Plumbing Code. In order to verify the slopes and inverts of the proposed service connection, two manholes of the existing sanitary sewer system need to be identified on the plan with rim & invert elevations. The crown of the service connection & the sewer man need to match.

2. The existing water & sewer services to the building shall be cut and capped at the main and be completely removed from the main and the site then properly back filled. The Engineering Division must inspect this work; failure to having this work inspected may result in the delay of issuance of the Utility Connection Permit**.** *This note must be added to the final approved plans.*

3. Use City of Newton Details in lieu of the details submitted they are in PDF format on the City's website.

4. With the exception of natural gas service(s), all utility trenches with the right of way shall be backfilled with Control Density Fill (CDF) Excavatable Type I-E, detail is available in the City of Newton Construction Standards Detail Book. *This note must be added to the final approved plans.*

5. All new sewer service and/or structures shall be pressure tested or videotaped after final installation is complete. Method of final inspection shall be determined solely by the construction inspector from the City Engineering Division. All sewer manholes shall be vacuum tested in accordance to the City's Construction Standards & Specifications. The sewer service will NOT be accepted until one of the two methods stated above is completed. All testing MUST be witnessed by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until this test is completed and a written report is received by the City Engineer**.** *This note must be added to the final approved plans.*

6. All sewer manholes shall be vacuum tested in accordance to the City's Construction Standards & Specifications. The sewer service will NOT be accepted until one of the two methods stated above is completed. All testing MUST be witnessed by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until this test is completed and a written report is received by the City Engineer**.** *This note must be added to the final approved plans.*

Water:

1. Fire flow testing is required for the proposed fire suppression system. The applicant must coordinate this test with both the Newton Fire Department and the Utilities Division; representatives of each department shall witness the testing, test results shall be submitted in a write report. Hydraulic calculation shall be submitted to the Newton Fire Department for approval.

2. All water connections shall be chlorinated & pressure tested in accordance to AWWA and the City of Newton Construction Standards and Specifications prior to opening the connection to existing pipes. *This note must be added to the final approved plans.*

3. Approval of the final configuration of the water service(s) shall be determined by the Utilities Division, the engineer of record should submit a plan to the Director of Utilities for approval.

4. Dedicated domestic and fire suppression services connections are required for the units.

General:

1. All trench excavation contractors shall comply with Massachusetts General Laws Chapter 82A, Trench Excavation Safety Requirements, to protect the general public from unauthorized access to unattended trenches. Trench Excavation Permit required. This applies to all trenches on public and private property. *This note shall be incorporated onto the plans*

2. All tree removal shall comply with the City's Tree Ordinance.

3. Due to the total square footage of the building, a scale massing model will be needed.

4. The contractor is responsible for contacting the Engineering Division and scheduling an appointment 48 hours prior to the date when the utilities will be made available for an inspection of water services, sewer service, and drainage system installation. The utility is question shall be fully exposed for the inspector to view; backfilling shall only take place when the City's Inspector has given their approval. *This note should be incorporated onto the plans.*

5. The applicant will have to apply for Street Opening, Sidewalk Crossing, and Utilities Connecting permits with the Department of Public Works prior to any construction. *This note must be incorporated onto the site plan.*

6. The applicant will have to apply for a Building Permits with the Department of Inspectional Service prior to any construction.

7. Prior to Occupancy permit an As-Built Plan shall be submitted to the Engineering Division in both digital format and in hard copy. The plan should show all utilities and final grades, any easements and final grading, improvements and limits of restoration work. The plan shall also include profiles of the various new utilities, indicating rim & invert elevations, slopes of pipes, pipe material, and swing ties from permanent building corners. *This note must be incorporated onto the final contract plans.*

8. All site work including trench restoration must being completed before a Certificate of Occupancy is issued. *This note must be incorporated onto the site plan.*

Note: If the plans are updated it is the responsibility of the Applicant to provide all City Departments [Conservation Commission, ISD, and Engineering] involved in the permitting and approval process with complete and consistent plans.

If you have any questions or concerns please feel free to contact me @ 617-796-1023.