

2

Traffic and Transportation

This chapter describes the traffic and transportation analysis performed for the Project, as requested in the Secretary’s Certificate on the DEIR. Specifically, this chapter includes the following information (with references to FEIR sections in bold):

- › A revised MBTA Green Line capacity analysis. (**Section 2.1**)
- › Review of bus operations improvements, shuttle service, and bike/ped accommodations. (**Sections 2.2, 2.5, and 2.9**, respectively)
- › An update on the City of Newton’s funding on transportation improvements. (**Section 2.3**)
- › Consideration of additional mitigation measures. (**Section 2.4**)
- › Additional information related to how the Project will achieve trip reduction and mode share shift goals. (**Section 2.6**)
- › An update on Road Safety Audit (RSA) results. (**Section 2.7**)
- › A discussion of how potential future development on the East Side of Needham Street would be coordinated with MassDOT. (**Section 2.8**)
- › Additional bicycle and pedestrian accommodations. (**Section 2.9**)
- › A description of MassDOT consultations. (**Section 2.10**)

The Proponent has coordinated with various MassDOT representatives and departments (the District 6 Office, Private Public Development Unit [PPDU] and the Highway Design Group) during the preparation of the FEIR. Coordination includes monthly meetings between the Proponent and MassDOT (Design Team for Needham Street) to ensure communication and coordination between projects. In addition, there has been additional meetings during the preparation for this FEIR between MassDOT (Design/District/PPDU/Safety) including meetings on October 29, 2020 and more recently on January 6, 2021 which also included the MBTA. The Proponent and Project Team will continue the conversation with these representatives to ensure agreement and alignment with proposed transit mitigation measures.

2.1 Revised Green Line Capacity Analysis

The Project Team has utilized the most updated methodology for transit analysis on the MBTA Green Line capacity. Measured against the peak period maximum load threshold, the future condition transit capacity analysis (as documented in the DEIR) found that the average peak passenger load on the Green Line is anticipated to remain below MBTA’s crowding threshold. Existing (pre-COVID) passenger levels suggest that shoulder periods of the peak period service

already experience crowding when measured against the off-peak threshold. However, the MBTA's on-going Green Line Transformation project, and related reliability and capacity improvements, are expected to increase passenger capacity on the MBTA D-Branch service. For example, 24 new trolleys (Type 9 cars) are currently being deployed to the Green Line D-Branch in preparation for the Green Line Extension in 2021: These new cars have room for up to ten percent more passengers (as compared to the older cars in the existing fleet).

2.2 Potential Bus Operations Improvements

As noted on Figure 3.20 of the Traffic Impact Analysis (TIA) provided in the DEIR, a mobility hub is proposed within the ground floor of Building 7, which abuts Needham Street. The mobility hub will provide shuttle and MBTA bus users with inside and outside dry places to wait for access to both transit opportunities. The Project Team is coordinating with MBTA to potentially locate a floating bus stop along Needham Street. Due to the proximity of the mobility hub, there is no need for a bus shelter on Needham Street. There is also a second bus stop proximate to the mobility hub on the northbound side of Needham Street at the north east quadrant of the Needham Street/Charlemont Street signalized intersection. Transit priority along the corridor could be considered should the City of Newton decide that it is a priority. Funding from the Project mitigation fund being provided to the City by the Proponent could be utilized for this purpose.

2.3 City-Implemented Improvements

As part of the Special Permit issued for the Project by the City of Newton, the Proponent agreed to contribute \$5,000,000 to the City of Newton for off-site traffic, transportation and safety improvements. As described in the Project's Board Order/Special Permit (see Appendix B), the Newton Director of Planning and Development, in consultation with the Commissioner of Public Works and the Proponent, shall recommend projects for funding to the City Council. Many potential projects have been included in an example list included in the Special Permit. It is expected that the majority of improvements will take place on roadways under local jurisdiction, as MassDOT is currently reconstructing the Needham Street corridor after going through a design process that took several years and included consideration of the proposed Project.

2.4 Assessment of Additional Mitigation Measures

The Proponent is proposing significant Transportation Demand Management (TDM) initiatives as outlined in the TIA of the DEIR. As requested by MassDOT, the Proponent has committed to adding "Guaranteed Ride home for participants of car-pool van pool program" to the TDM program. There will also be convenient parking spaces dedicated to electric cars/low emission vehicles.

The Proponent will monitor conditions and consider the following additional measures if needed to meet the traffic reduction requirements imposed by the City:

- › Offer subsidies to local transit provider to increase frequency or span of service during weekend, midday, and evening periods;
- › Provide incentives to commute by carpool, vanpool, transit or active mode of transportation;
- › Create a parking cash-out program; and
- › Charge higher parking rates and require shorter payment periods to reduce high turnover in congested portions of the Project Site to reduce vehicle usage.

2.5 Shuttle Service

The 128 Business Council has been an important part of the team during Project planning and development of its TDM plan. The Proponent will certainly be considering all options for operators of the shuttle system including the 128 Business Council. However, no firm commitment to the end user can be made at this time.

The Proponent is committed to bringing alternative transportation options to Needham Street as part of this Project. To help achieve this goal, the Proponent will implement a free shuttle service for Site residents, workers, customers, and visitors, as well as area residents. The shuttle will run between the mobility hub on-site and Newton Highlands Station on the D-Branch of the MBTA Green Line. The shuttle will initially run seven days a week for 16 hours per day. Depending on demand, the shuttle system may be expanded or adjusted to include other regional resources, such as Founders Park, Newton Center, and any other nearby points of interest. The shuttle is currently envisioned to operate on ten-minute headways.

2.6 TDM Trip Reduction and Mode Shift

Mode share data was reviewed from the U.S. Census Bureau's 2014-2018 American Community Survey (the most recent five years of data that is available). Based on this data 78 percent of all Newton residents who commute to work travel via private vehicle, 14 percent commute via public transportation, and 8 percent commute via walking or bicycling. The Proponent is providing a robust TDM program that is expected to greatly impact mode share shifts to decrease the share of private vehicle commutes. The Proponent has committed to reducing the vehicular traffic to the Project Site by 20 percent (residential and office) through TDM initiatives. As detailed in the Project's Special Permit, the Proponent is required to conduct annual monitoring, including surveys of the TDM plan. If the vehicular traffic reduction goal is not met, adjustments and or additions to the TDM plan must be made. This document's draft Section 61 Findings includes a very specific monitoring plan and description of the penalty for not meeting the mode shift goal. Please see Appendix B and Section 5.2 of Chapter 5, *Draft Section 61 Findings and Proposed Mitigation* for more details.

The most significant aspects of the TDM program include the free shuttle system that will connect the Project Site with public transit (available to anyone on or in proximity to the Site, and with headways of approximately ten minutes), and substantial new bicycle and pedestrian infrastructure, as well as strong connections to existing facilities. Because the

Project is proposing such an extensive TDM program, it has been difficult to identify other projects that would be commensurate with the Northland Newton Development's efforts and that could provide meaningful comparisons or supporting data. However, while it is not possible to determine the exact level of participation that will be realized, the Proponent and 128 Business Council have estimated that significant mode shifts are likely possible. Based on discussions with the 128 Business Council and the City's third party peer consultant, it has been estimated that the proposed TDM measures will cause a 15 percent shift to public transit and 5 percent shift to walking or biking.

2.7 RSA Results

The Project Team conducted an RSA in May 2020 at the intersection of Centre Street and Walnut Street in Newton. The findings and recommendations of the RSA are summarized in Appendix C. As part of the Special Permit issued by the City of Newton on this Project, the Proponent agreed to contribute \$5,000,000 to the City of Newton for use in constructing the off-site traffic, transportation and safety improvements of their choice. The safety improvements at the Centre Street and Walnut Street intersection are expected to be included in the City's list of selected projects.

2.8 Future Development Coordination

Prior to 2017, the parcel on the east side of Needham Street at 260 Needham Street was occupied by a TJ Maxx retail store. The building was re-tenanted in 2019 by the Marshalls retail store that had been located on the Project Site. The access and circulation of the 260 Needham Street parcel has been contemplated in the improvements that are to be introduced along Needham Street and the traffic associated with that building have been included in the Project's traffic analysis. Since the 260 Needham Street building was recently re-tenanted it is unlikely to be redeveloped in the near future. However, if the parcels on the east side of Needham Street were to be redeveloped at some point in the future, the appropriate permitting and environmental review documents would be developed and input from MassDOT would be sought at that time.

The Proponent has coordinated extensively with MassDOT, with periods of communication on a weekly basis. The Proponent will continue to coordinate project activities with MassDOT as necessary to promote coordinated construction efforts.

2.9 Bicycle and Pedestrian Accommodations

It is our understanding that the former railroad bridge across I-95 was removed as part of the MassDOT "Add A Lane" project several years ago. If the City of Newton desires to rebuild the bridge to create a pedestrian/bike amenity, they would be able to use a portion of the Project's \$5,000,000 contribution to the City's fund for off-site traffic, transportation and safety improvements.

The Proponent commits to designing the connection to the Upper Falls Greenway at Mechanic Street as a welcoming ADA-compliant pathway for people walking and bicycling between the Upper Falls neighborhood and Needham Street.

2.10 MassDOT Consultation

The Proponent has coordinated with various MassDOT representatives and departments (the District 6 Office, Private Public Development Unit [PPDU] and the Highway Design Group) during the preparation of the FEIR. The Proponent and Project Team will continue the conversation with these representatives to promote agreement and alignment with proposed transit mitigation measures.

This Page Intentionally Left Blank.

3

Climate Change Adaptation and Resiliency

This chapter reviews the regulatory context for addressing climate change as it relates to the Project and projections for future climate conditions. It also outlines mitigation and adaptation strategies that will be employed to improve the Project's resilience to climate change.

This chapter provides the following in response to the Secretary's Certificate on the DEIR (with FEIR sections referenced in bold):

- › An analysis of the drainage system capacity using available extreme precipitation data for the region. (**Section 3.1**)
- › Evaluation of potential impact by flooding from South Meadow Brook based on the projected climate conditions. (**Section 3.2**)
- › Considerations of resilience measures for the Project. (**Section 3.3**)
- › Discussion of the Project's revised energy model and solar readiness. (**Sections 3.4 and 3.5**, respectively)

3.1 Drainage System Capacity

The stormwater management system will be designed to meet or exceed the current Massachusetts Stormwater Handbook requirements for the 2-, 10-, and 100-year storm events and the 25-year storm event per The City of Newton requirements. Existing conditions analysis will use current rainfall depth data available from Cornell University's Northeast Regional Climate Center per the City of Newton's Department of Public Works requirements.

There is currently no future rainfall model for the state of Massachusetts at the watershed level. In the absence of this data, there is no standard approach for analyzing the effects of future rainfall in inland riverine environments that works well for all types of streams and projects. To address this, MassDEP's Stormwater Advisory Committee is looking to update their Wetlands Regulations and Stormwater Handbook to reflect current and future precipitation patterns. They have developed a preliminary methodology referred to as NOAA14 PLUS, wherein the NOAA Atlas 14 Upper Confidence Interval rainfall depth is multiplied by 0.9. This off-the-shelf method incorporates risk observed in the current data to reflect a range of larger storms while avoiding the need for complex downscaling.

The Project Team will conduct a proposed conditions analysis using rainfall depths following the NOAA14 PLUS approach. This approach will inform the design of the drainage

conveyance systems and stormwater management basins and confirm that they have the additional capacity needed to accommodate future projected large and intense storm events during the life of the Project.

The Resilient Massachusetts Action Team (RMAT) is currently finalizing their *Climate Resilience Design Standards for State Agencies*, along with a web-based decision-support tool intended to be used by such agencies for capital planning purposes. The Project Team will re-evaluate the stormwater design based on those guidelines if they become available to the public prior to final design.

3.2 South Meadow Brook Flooding

The Project Team conducted a hydrologic and hydraulic analysis to evaluate the potential for South Meadow Brook to flood the Site under projected climate conditions. As described below, the team confirmed that the system will have capacity to handle increased flood discharges without resulting in flooding on the developed portion of the Site.

A hydraulic model of South Meadow Brook was developed using EPA's Stormwater Management Model (SWMM) software. The hydraulic model begins in the open channel sections of the brook upstream from the Site near Tower Road and continues under the Site, through the various culvert geometric sections, ultimately discharging to the Charles River. Existing condition flood discharges for the brook were estimated using the United States Geological Survey (USGS) regional regression equations and compared to the effective flood discharges published in FEMA's Flood Insurance Study (FIS) report of Middlesex County dated July 6, 2016. The FEMA discharges were found to be significantly higher than the estimates generated using the USGS regression equation. As shown in the table below both data sources were consulted in our existing condition analysis for the 10-, 50-, 100- and 500-year flood events associated with South Meadow Brook.

Table 3-1 - South Meadow Brook Summary of Discharges

Flood Recurrence Interval	USGS (CFS) ¹	FEMA (CFS) ²
10-year	209	605
50-year	340	1,045
100-year	403	1,265
500-year	570	1,620

CFS = cubic feet per second

1 Regression equations for Massachusetts (Zarriello, 2017); watershed area = 2.9 mi²

2 FEMA Middlesex County FIS dated 2016 published discharges at Tower Road; watershed area = 2.8 mi²

Using the hydraulic model, various flood flows were evaluated to determine the point at which the culvert would become overwhelmed and flood flows would be conveyed overland through the Site. It was determined that South Meadow Brook flows exceeding 1,850 CFS could cause the water within the existing daylighted section of the Brook to rise to elevation 117.0, which would then begin to flood the roadways and buildings. This flow was estimated to have a 1,100-year recurrence interval (0.05% annual exceedance probability [AEP]) based on a logarithmic relationship interpolated from the published FEMA discharges. Based on our analysis, the culvert inlet and open channel sections of South Meadow Brook have the capacity to handle increased flood discharges before flooding the Site well beyond any

reasonable current day design criteria for riverine conveyance (e.g. 100-year or 500-year based on RAT guidelines). The additional capacity will help protect the Site under future conditions where such a flood will still be extremely rare, but will have a higher probability of occurrence than the 0.05% AEP.

3.3 Resilience to Projected Precipitation

The Project Site will accommodate more intense rainfall and storm events by designing the proposed conditions to manage rainfall depths derived from the NOAA14 PLUS method described in Section 3.1 above. This approach will allow the Project Team to size the drainage conveyance systems and stormwater basins with the appropriate capacity needed to mitigate future projected large and intense storm events during the life of the Project.

3.4 Revised Energy Model

By implementing the methodology contained in ASHRAE 90.1-2013 Appendix G, *Performance Rating Method*, the envelope, HVAC, lighting, and service water heating systems have been modified for Buildings 2 through 8 to meet the minimum requirements. As PV systems are no longer included in the proposed energy models (although PV systems may still be employed on the Project Site), the analysis has been updated to comply with Section C406.8, *Enhanced Envelope*. Additionally, three energy conservation measures (ECMs) from the eight efficiency packages of Section C406 will be implemented, including:

- › 10 percent more efficient HVAC performance over ASHRAE 90.1-2013;
- › 10 percent reduction in lighting power density over ASHRAE 90.1-2013; and
- › Enhanced Envelope Performance in accordance with Section C406.8.

This model is used as the baseline for MA Stretch Energy Code analysis. Baseline models for Buildings 3 through 8 use a 24 percent window-to-wall ratio. The baseline and proposed design energy models for Buildings 1 through 8 use the Appendix G leakage rate of 0.4 cfm/ft² at 0.3 inches H₂O.

Table 3-2 below provides a summary of combined energy consumption, energy savings, cost savings and CO₂ emissions for Buildings 1, 2, 3, 4, 5a-b, 6a-c, 7 and 8. Refer to Appendix D of this FEIR for a full revised energy performance analysis report.

Table 3-2 Summary of Energy Consumption, Cost Savings, and CO₂ Emissions Reduction for Buildings 1-8

	Baseline Design	Proposed Design	Savings	% Savings
Annual Energy Consumption (MBTU)	61,495	37,637	24,127	39.2%
Annual Energy Cost (\$)	2,279,904	2,109,111	170,793	7.5%
Annual CO ₂ Emissions (Kg)	5,612,538	4,629,239	983,298	17.5%

Table 3-3 below provides a summary of combined energy consumption, energy savings, cost savings, and CO₂ emissions for Buildings 9-12. Refer to Appendix D of the FEIR for a full revised energy performance analysis report.

Table 3-3 Summary of Energy Consumption, Cost Savings, and CO₂ Emissions Reduction for Buildings 9-12

	Baseline Design	Proposed Design	Savings	% Savings
Annual Energy Consumption (MBTU)	2,042.27	1,374.11	668.16	33%
Annual Energy Cost (\$)	169,553	80,567	8,986	52%
Annual CO ₂ Emissions (Kg)	301,820.72	203,391.06	98,429.66	33%

3.5 Solar Readiness

While PV systems are no longer included in the proposed energy models, the Proponent remains committed to ensuring the Project will be solar ready. As the design progresses, the Proponent will consider solar-ready design for areas where green roofs and mechanical systems are not installed or designated on the Project Site.

4

Wetlands

This chapter provides responses to the comments related to wetlands resource areas in the Secretary of EEA's Certificate on the DEIR. Specifically, this chapter includes a detailed description of Riverfront Area impacts and proposed mitigation measures, which include a restoration plan for South Meadow Brook.

4.1 Riverfront Area Impacts and Mitigation

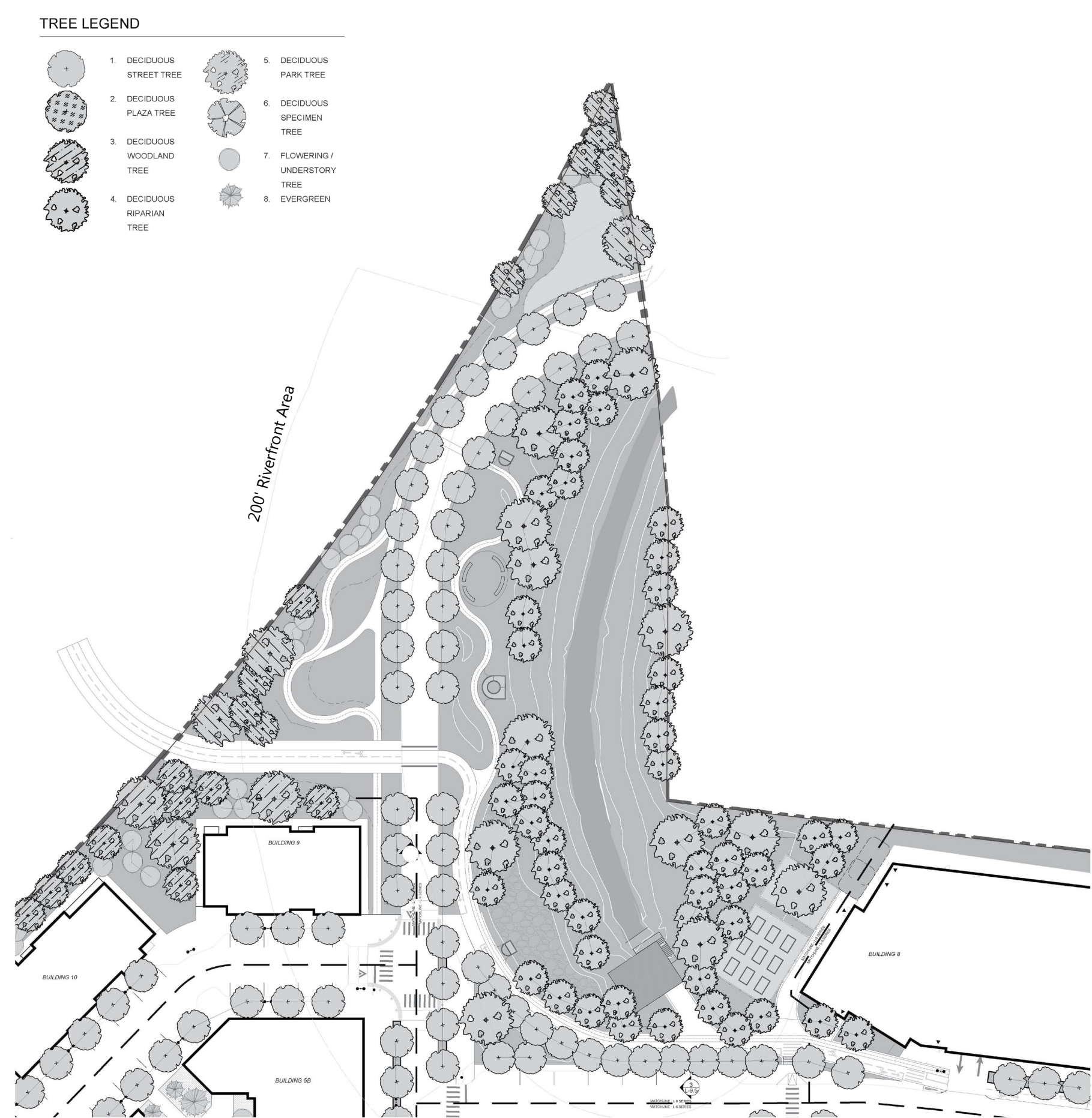
Work within the 200-foot Riverfront Area (RA) was previously quantified in Table 6-1 in the DEIR. The Project includes a comprehensive suite of improvements over existing conditions within the RA. The Project will result in a reduction of approximately 14,943 square feet of impervious surface within the RA by removing portions of the parking lot adjacent to South Meadow Brook and abandoned paved areas to the west.

The Project also restores a portion of the South Meadow Brook RA. On the lowest and steepest portions of the slopes above the stream, the Project will selectively remove invasive species and install groundcover, slope-stabilization plantings, and supplemental native shrub and perennial plantings. Further up the slopes where the grades are less severe, the Project will clear the existing vegetation, which is characterized mainly by several invasive species, and restore the area with a robust planting plan featuring a broad array of native evergreen and deciduous trees, shrubs, ground cover, and multiple grass seed mixes. The remaining areas of the RA associated with the stream will be converted from the existing condition of paved and unmanaged areas into an open public access space featuring viewing and seating areas and walking paths connecting to the Upper Falls Greenway multi-use path. Additional work within the RA includes reconstructing the existing driveway (Tower Road) with utilities and constructing a bioretention basin. Figures 4.1 through 4.3a-h provide information on the plantings proposed for the Project and work within the existing daylighted section of South Meadow Brook. No work is proposed within Land Under Waterbodies and Waterways.

During the construction period, erosion and sedimentation controls will be installed as needed to mitigate discharge of any sediment material into South Meadow Brook. The erosion controls will be maintained and replaced as necessary until the installation the establishment of stabilized vegetation in areas around the Brook.

The Project is not located within the FEMA floodplain. See Chapter 3, *Climate Change Adaptation and Resiliency* for further discussion of potential future flooding.

This Page Intentionally Left Blank.



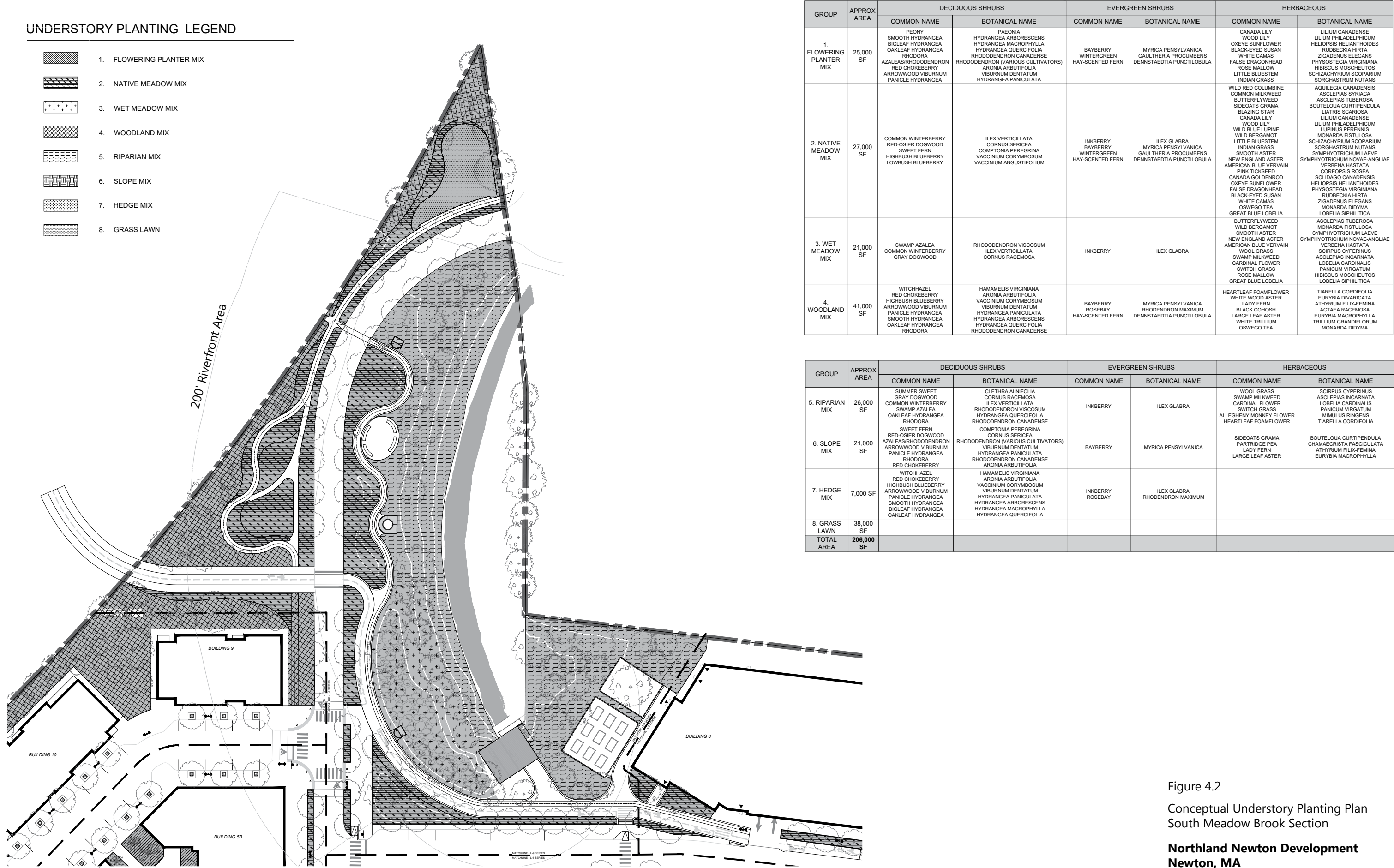
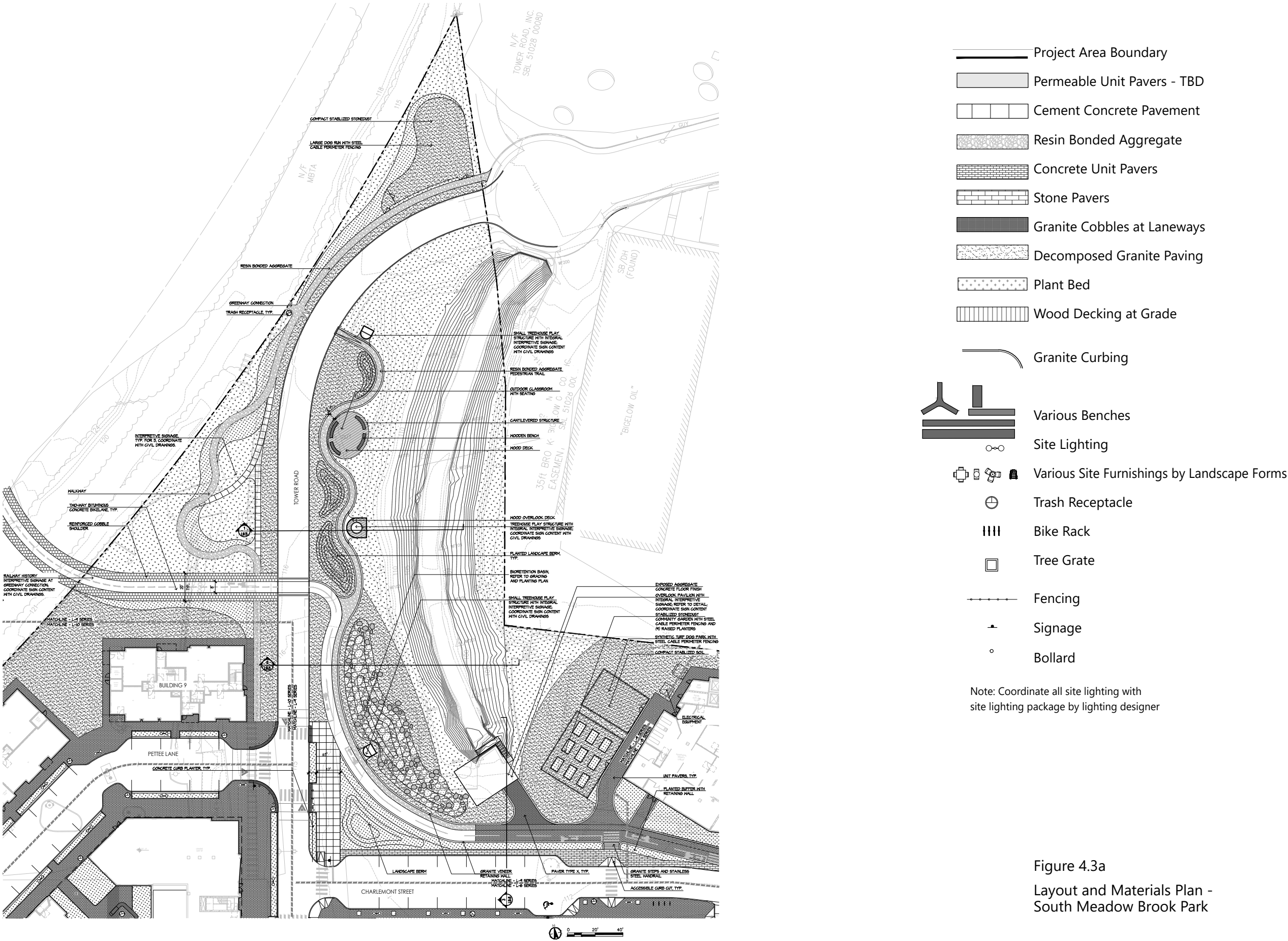


Figure 4.2
Conceptual Understory Planting Plan
South Meadow Brook Section

Northland Newton Development
Newton, MA



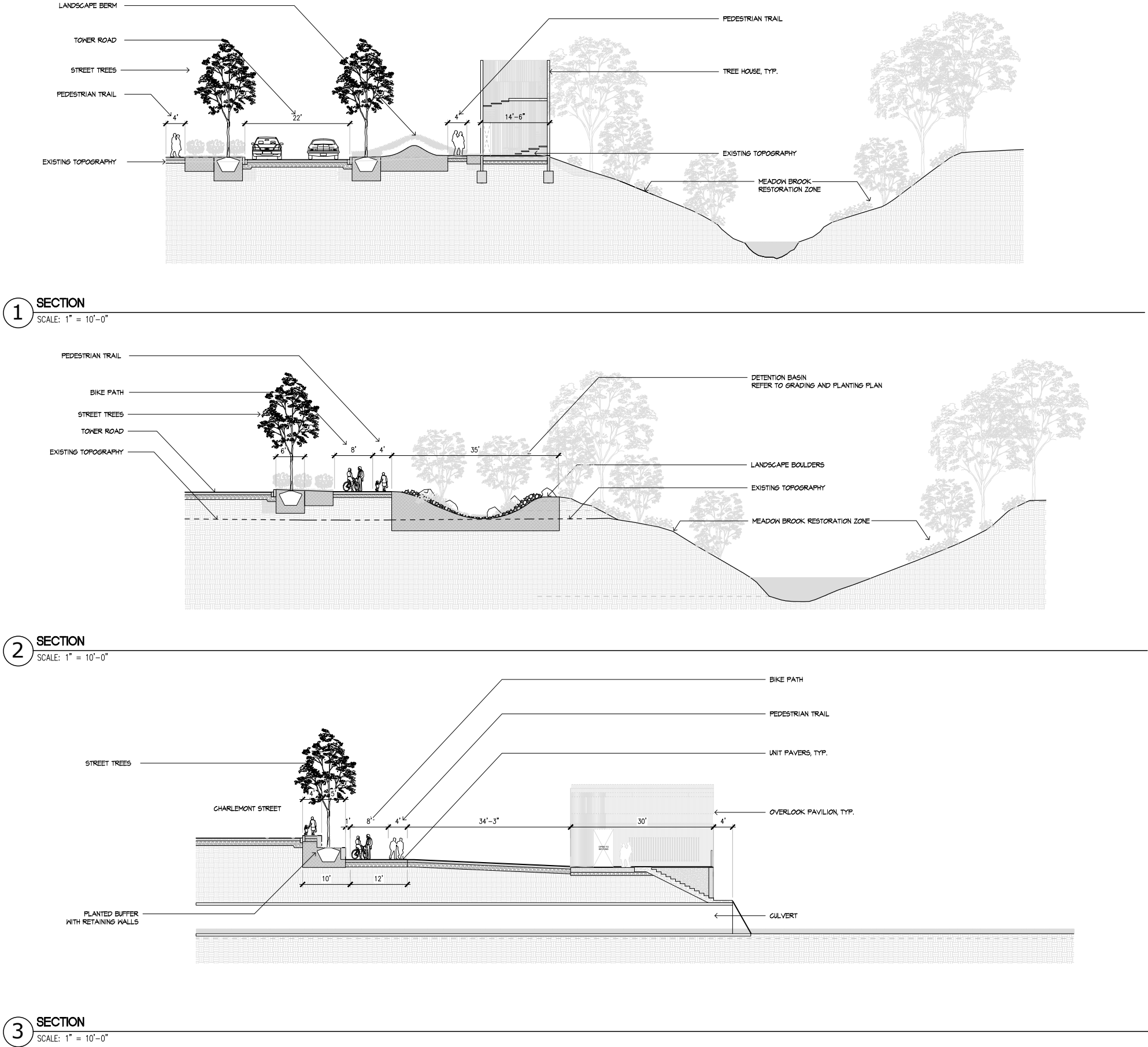
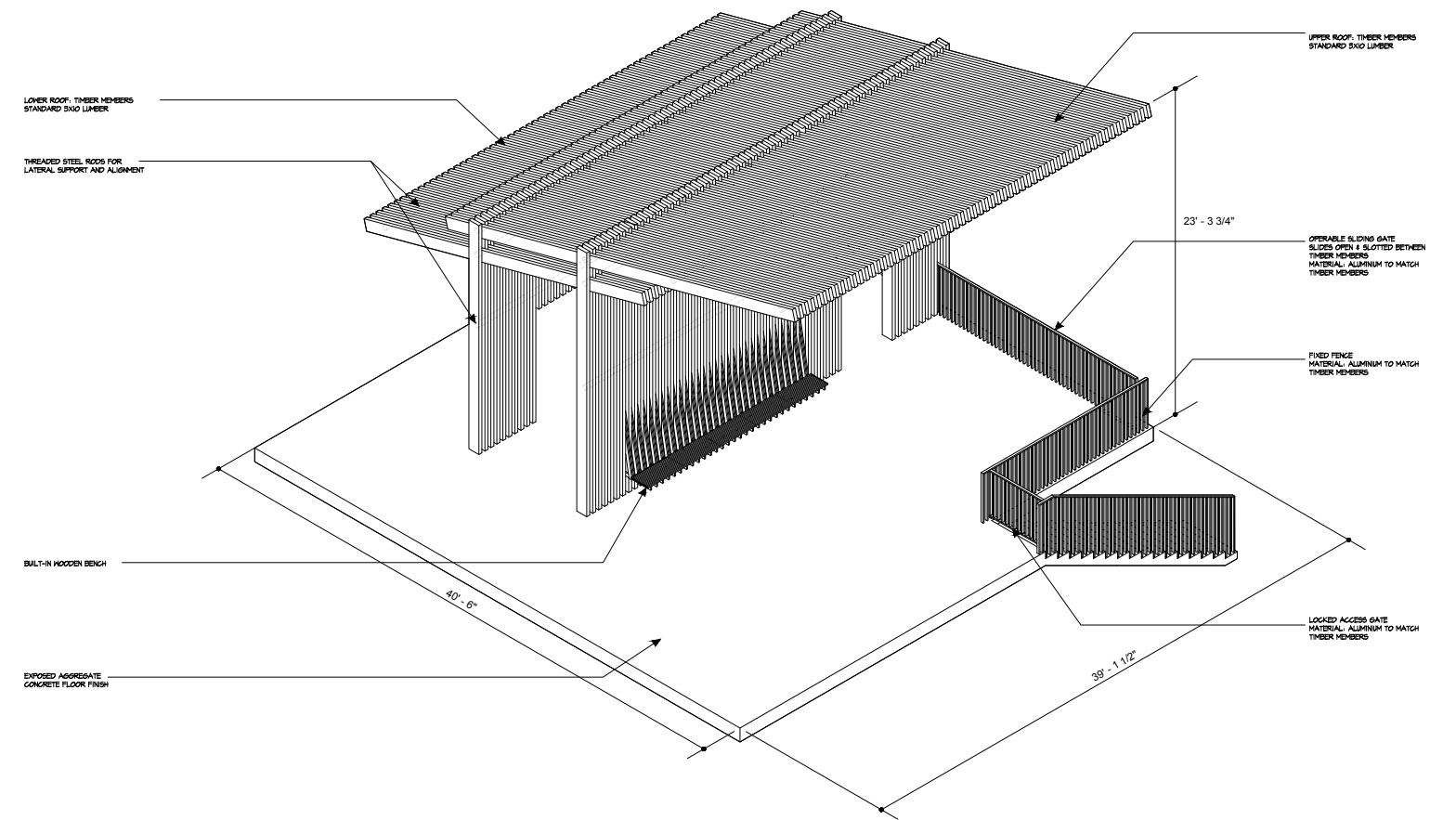
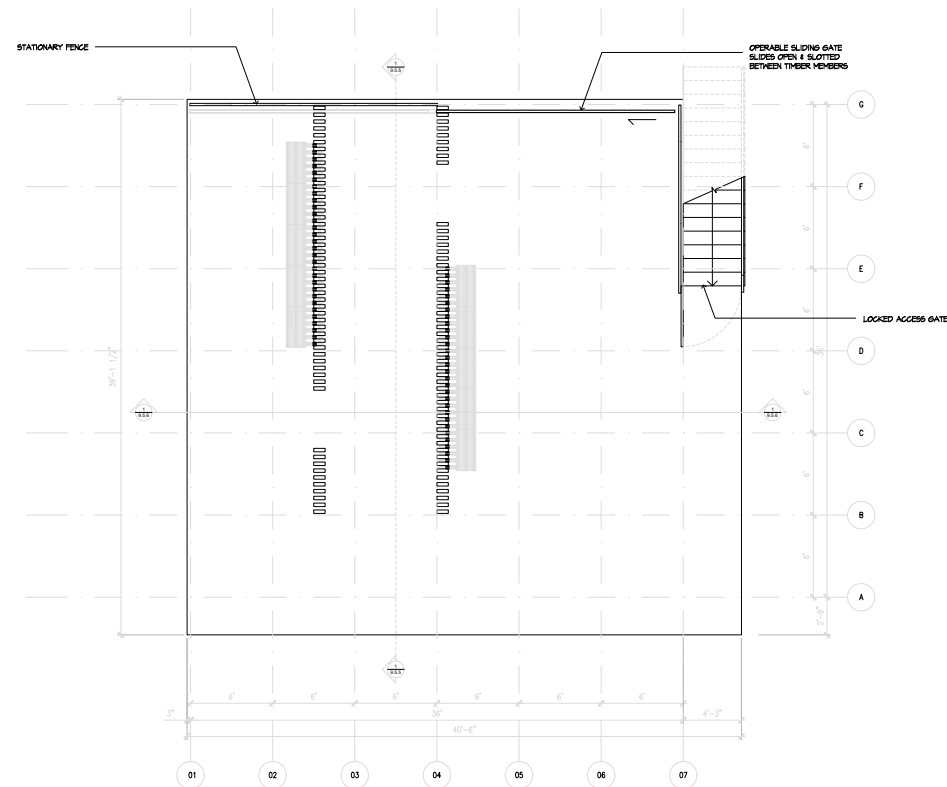


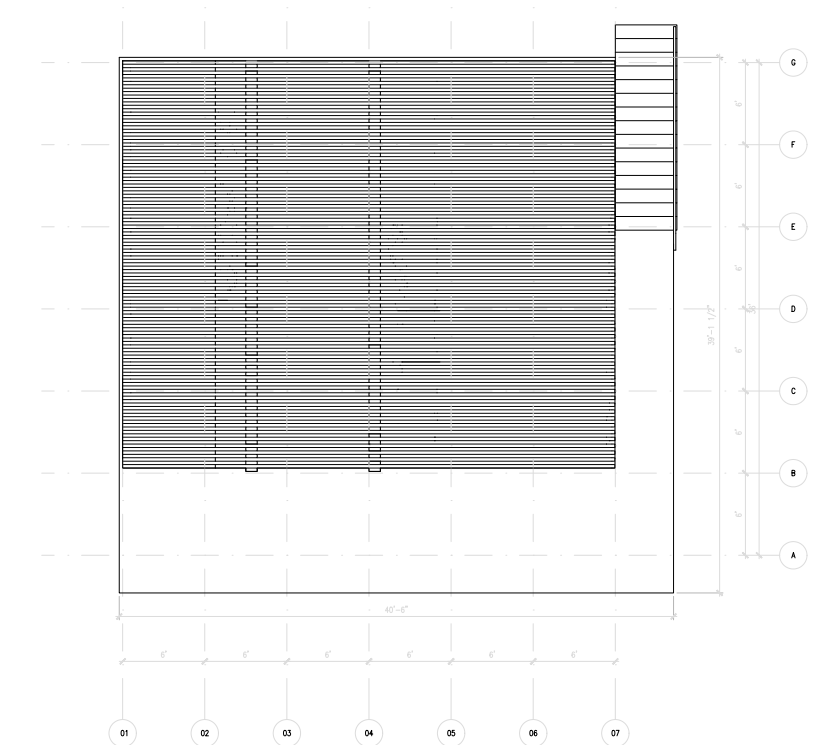
Figure 4.3b
Sections - South Meadow Brook
**Northland Newton Development
Newton, MA**



1 PAVILION AXON VIEW
SCALE: NTS



1 PAVILION FLOOR PLAN
SCALE: 1/4" = 1'-0"



3 PAVILION ROOF PLAN
SCALE: 1/4" = 1'-0"

Figure 4.3c
Site Details - South Meadow Brook
Park
Northland Newton Development
Newton, MA

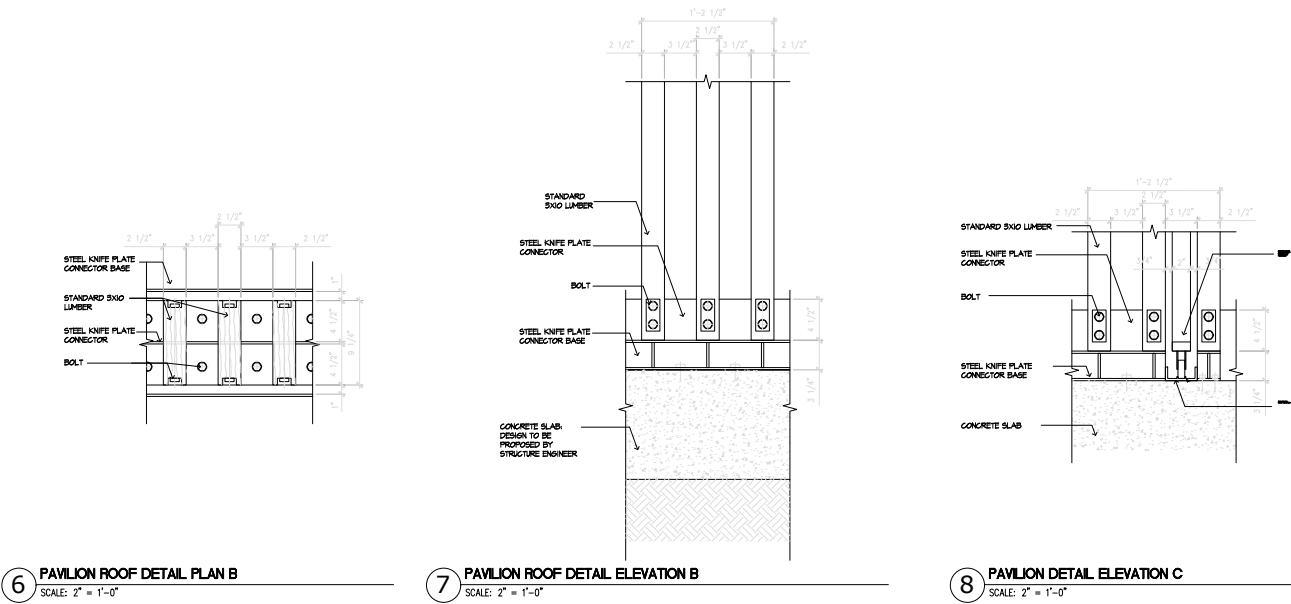
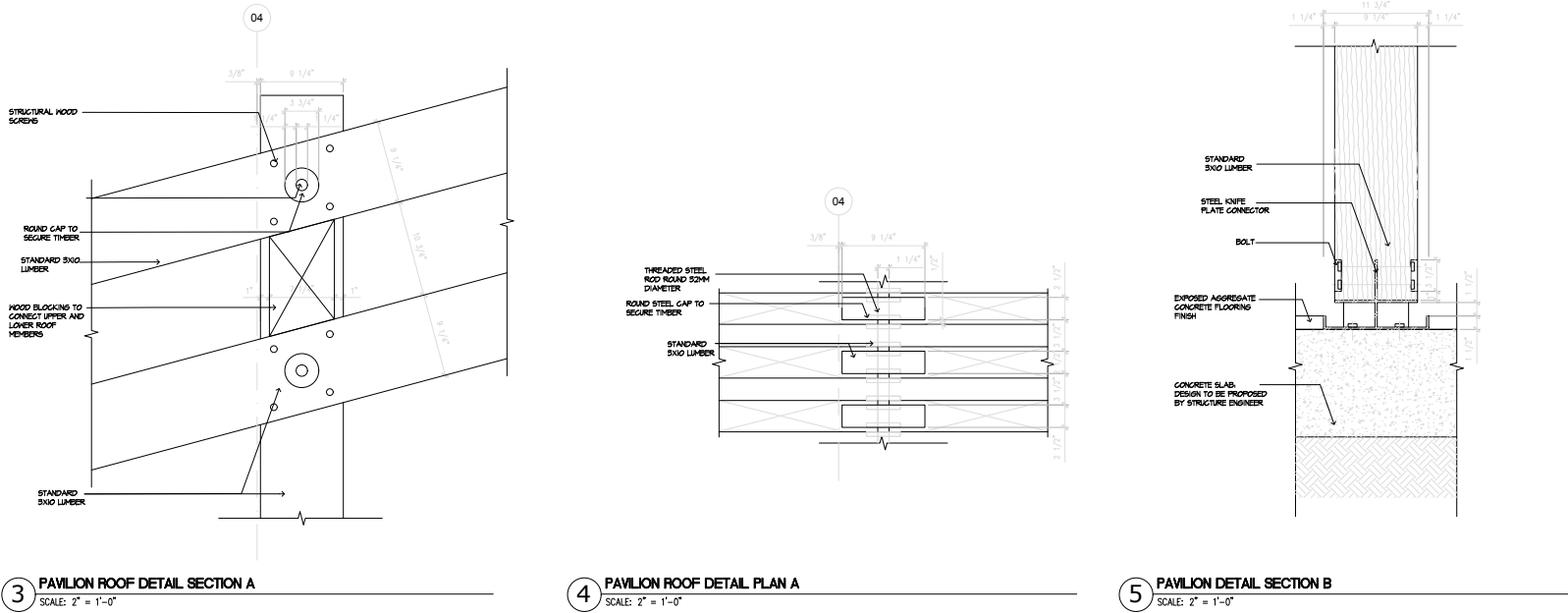
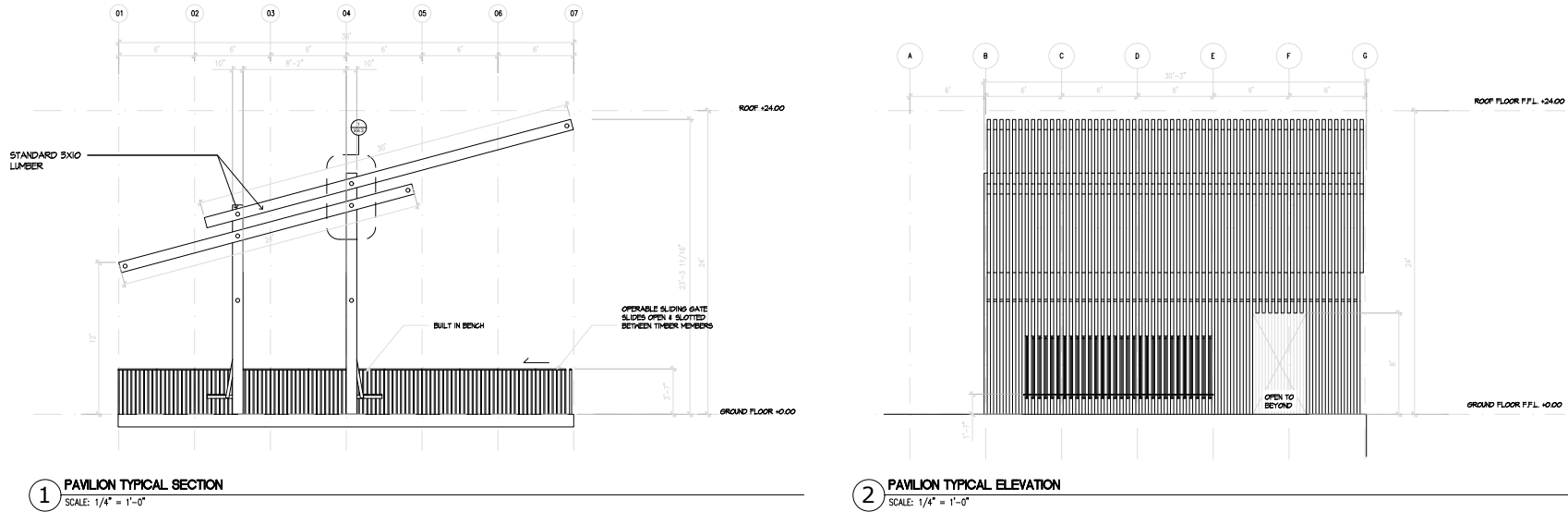
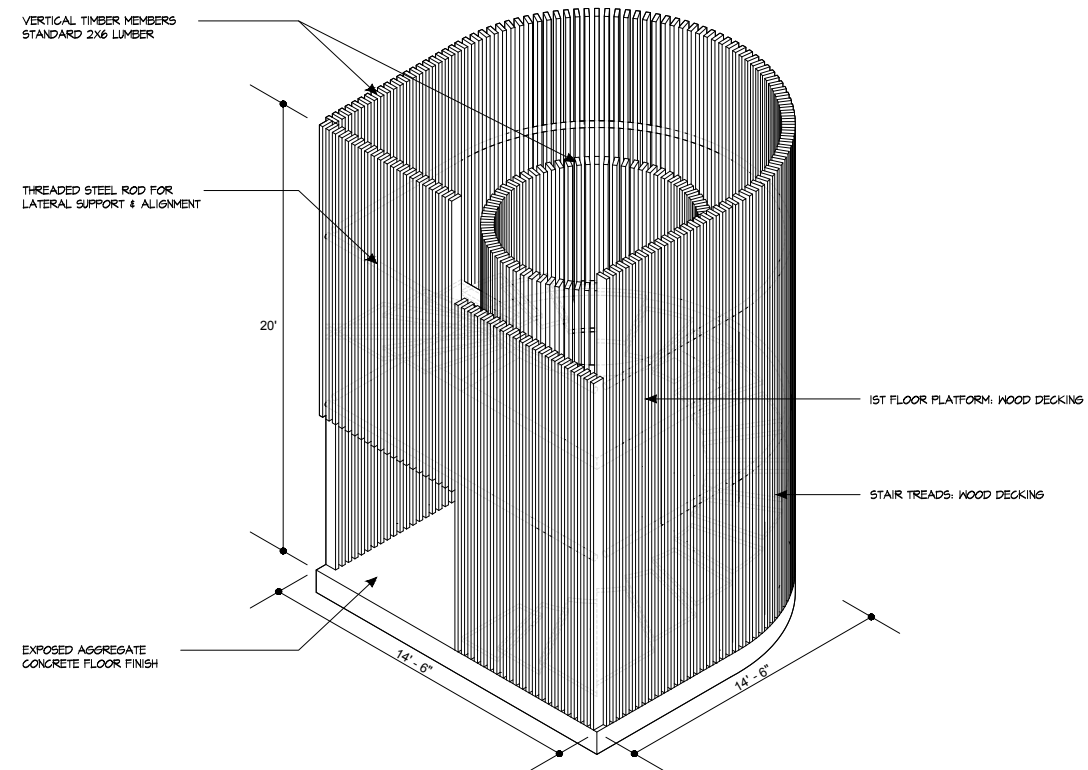
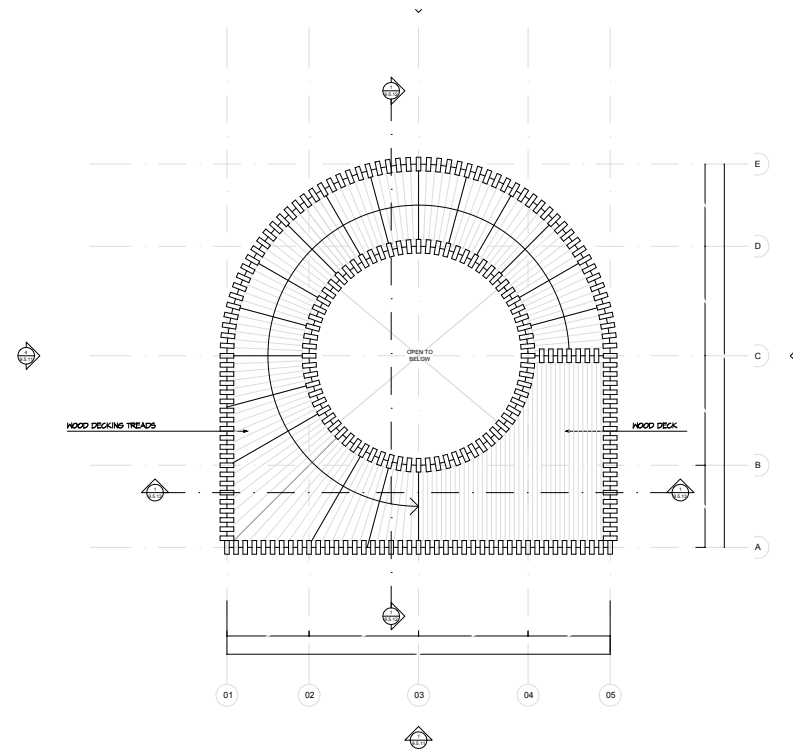


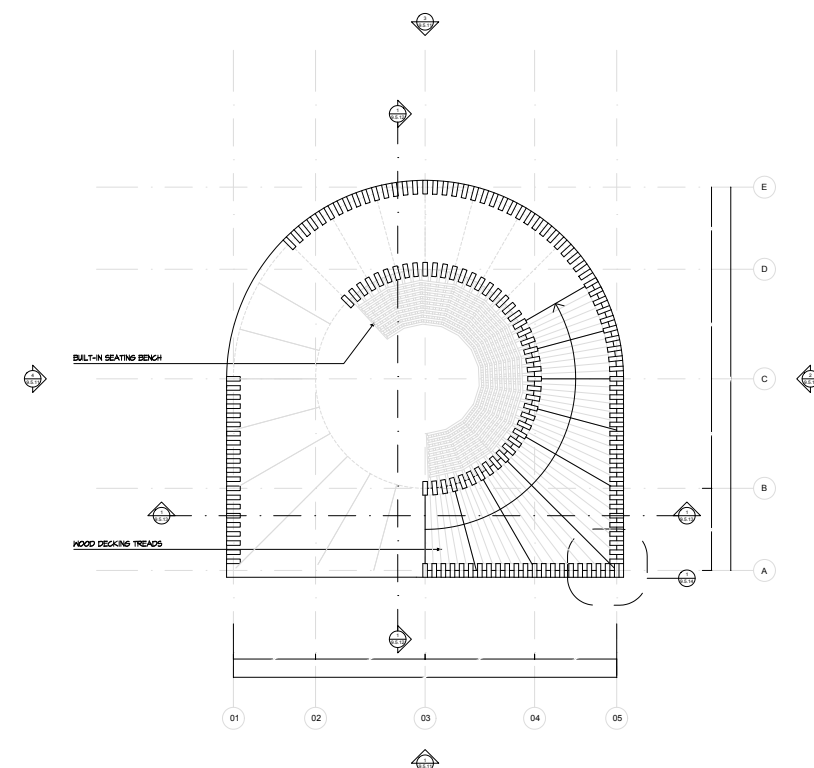
Figure 4.3d
Site Details - South Meadow Brook Park



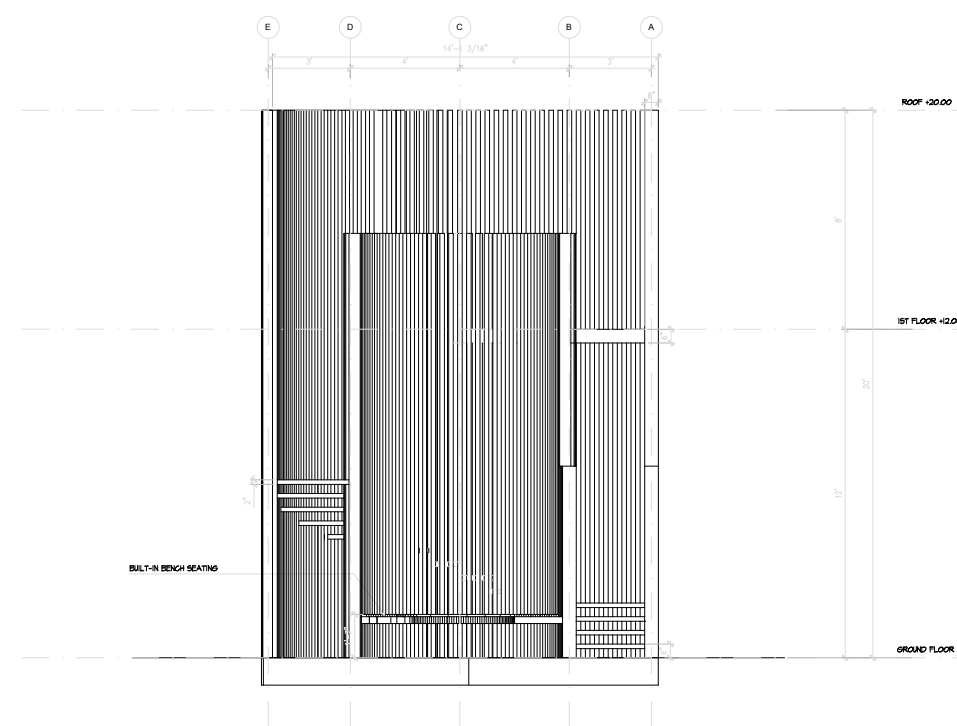
1 TREEHOUSE AXON VIEW
SCALE: NTS



2 TREEHOUSE GROUND FLOOR PLAN
SCALE: $1/2" = 1'-0"$



3 TREEHOUSE 1ST FLOOR PLAN
SCALE: 1/2" = 1'-0"



4 TREEHOUSE TYPICAL SECTION
SCALE: 1/4" = 1'-0"

Figure 4.3e
Site Details - South Meadow

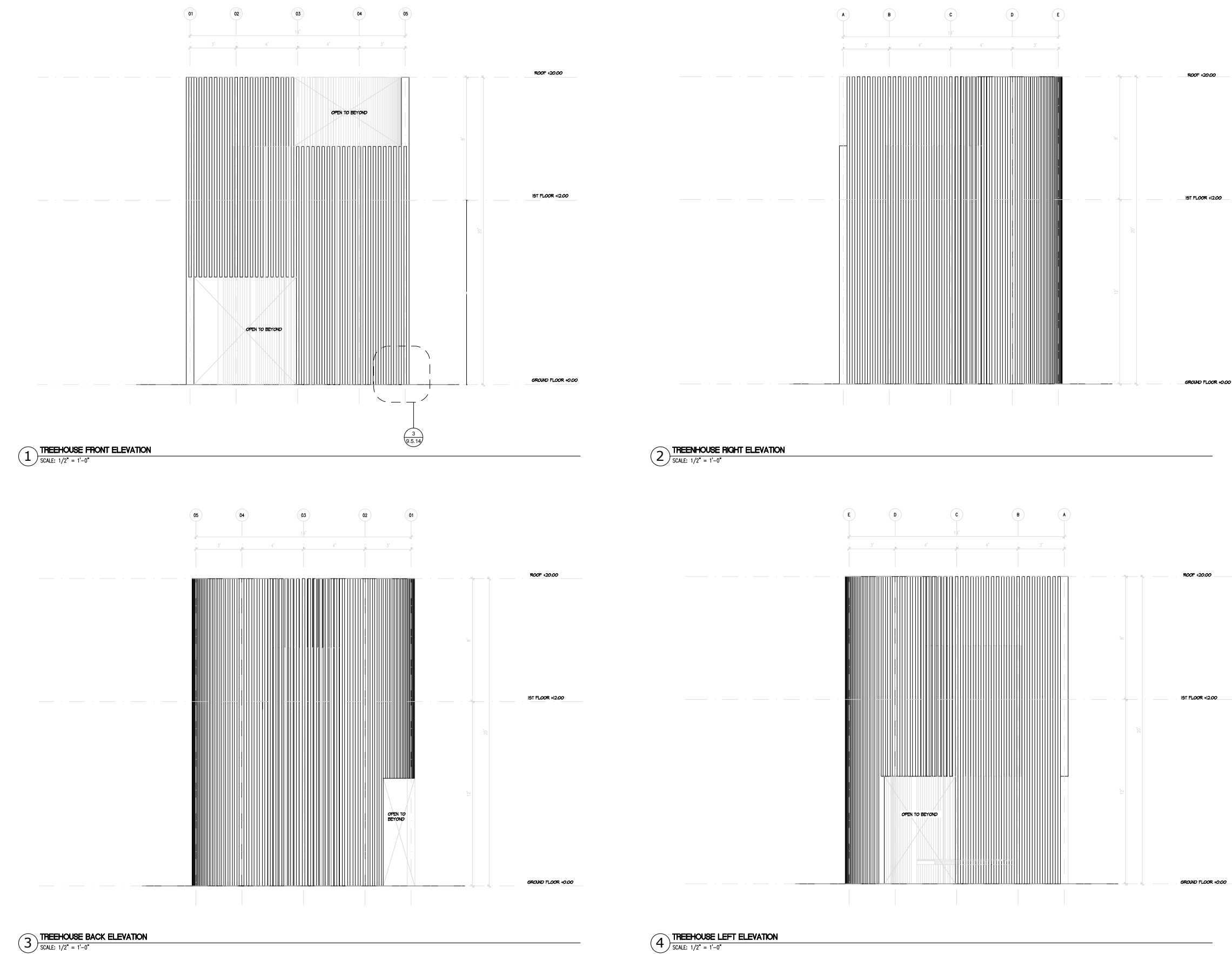


Figure 4.3f
Site Details - South Meadow Brook Park

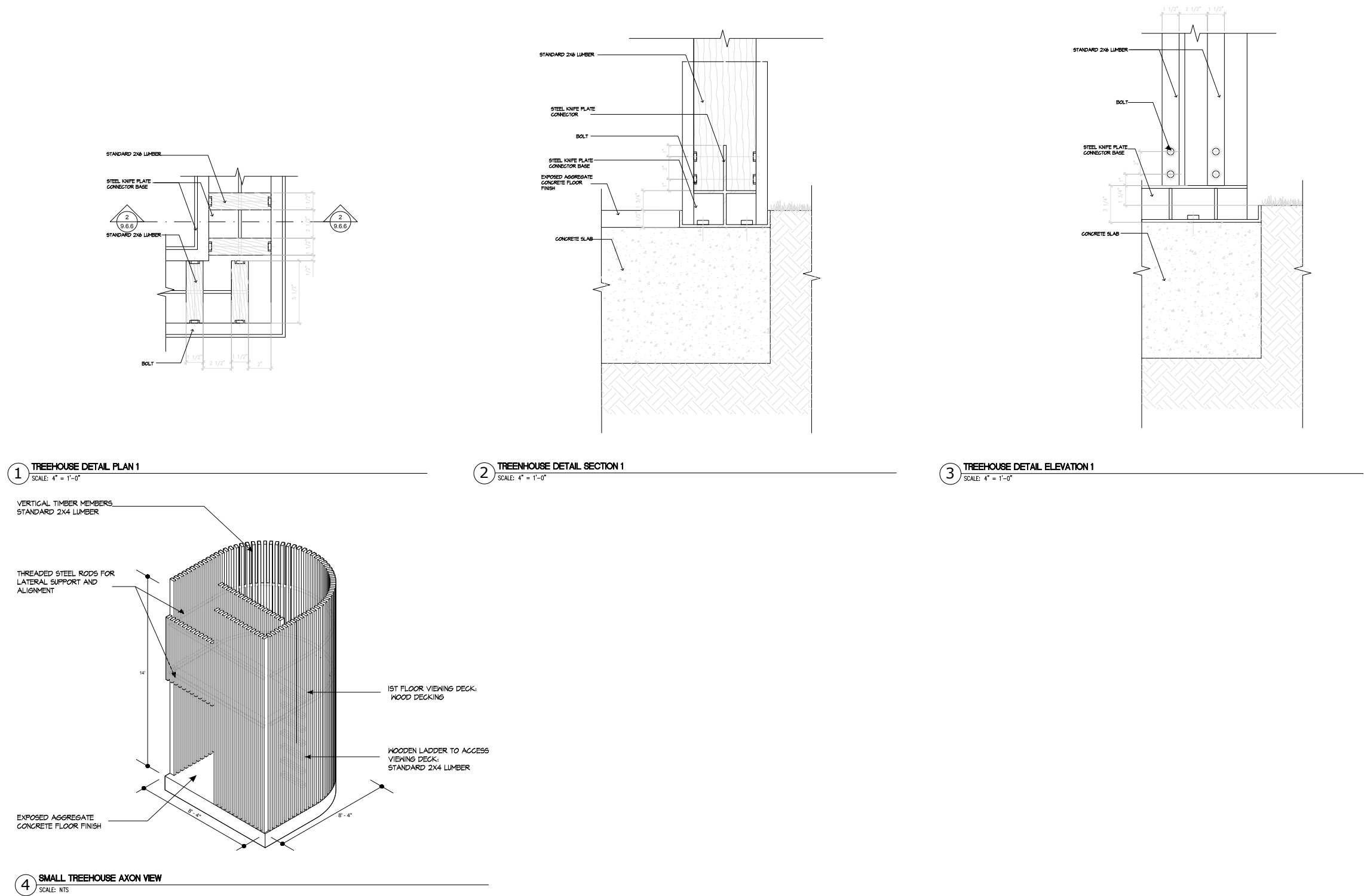


Figure 4.3g
Site Details - South Meadow Brook Park

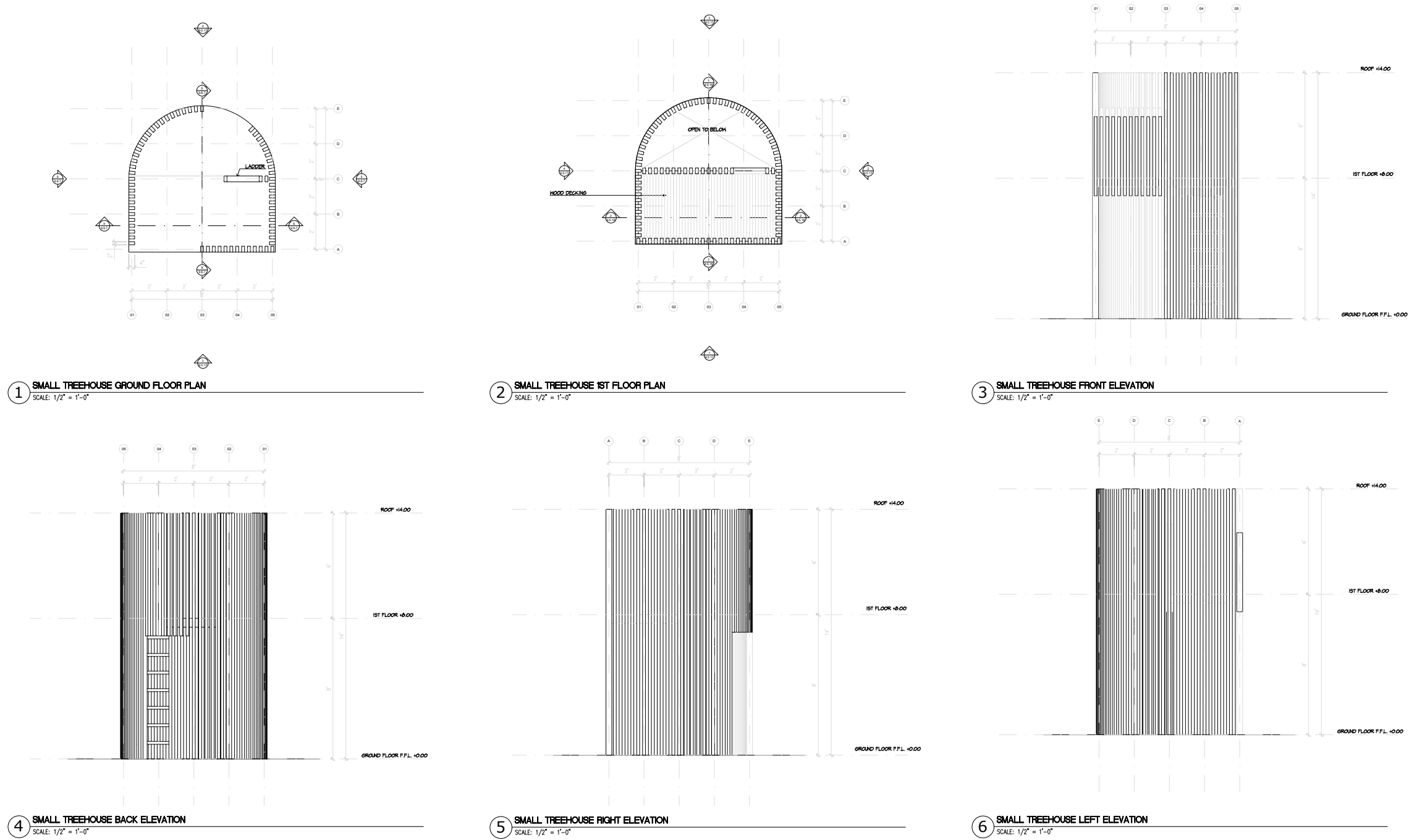


Figure 4.3h
Site Details - South Meadow Brook Park

5

Draft Section 61 Findings and Proposed Mitigation

As requested in the EEA Secretary’s Certificate on the DEIR, the following additional information is also provided, in accordance with the DEIR Scope (with FEIR section references in bold):

- › A summary of the proposed mitigation measures to avoid, minimize and mitigate environmental impacts. **(Section 5.1, Table 5-1)**
- › Draft Section 61 Findings for all State Permits that specify in detail all feasible measures and clearly identify parties responsible for funding and implementation, and the anticipated implementation schedule that will ensure mitigation is implemented when appropriate in relation to environmental impacts. **(Section 5.2)**
- › A draft GHG self-certification to the MEPA Office indicating that all of the GHG mitigation measures, or equivalent measures that are designed to collectively achieve identified reductions in stationary source GHG emissions and transportation-related measures, have been incorporated into the Project. **(Section 5.3)**

5.1 Mitigation Measures

Table 5-1 below summarizes the mitigation measures to which the Proponent has committed. Implementation is the responsibility of the Proponent except where otherwise noted.

Table 5-1 Summary of Mitigation Measures

Mitigation Measure	Timing/Schedule
Traffic and Transportation	
<i>Traffic and Circulation Improvements</i>	
› Provide land along the Charlemont Street site frontage to allow the State to align Charlemont Street with the site access (northern) driveway as part of the Needham Street reconstruction project.	› Completed (during design)

Mitigation Measure	Timing/Schedule
<ul style="list-style-type: none"> › Contribute \$5,000,000 to the City of Newton for offsite traffic mitigation and improvements (Special Permit Condition 13). 	<ul style="list-style-type: none"> › \$2,500,000 at the first building permit for a residential building in the Project. › \$2,500,000 at the first residential unit occupancy permit (temporary or final) in the Project.
<i>Bicycle and Pedestrian Accommodations</i>	
<ul style="list-style-type: none"> › Conduct a Roadway Safety Audit (RSA) at the intersection of Centre Street and Walnut Street. › Provide 1,100 bicycle parking spaces (Special Permit Condition 57). › Provide bicycle maintenance station and make shared bicycle and shared cars services available. › Construct a bike path through the Project Site from the Greenway to Needham Street as shown on the Project Master Plans (Special Permit Condition 50). 	<ul style="list-style-type: none"> › Completed › As areas are developed › As areas are developed › Prior to final occupancy
<i>Traffic Demand Management (TDM)</i>	
<ul style="list-style-type: none"> › Construct a Mobility Hub. › Provide convenient access to alternative transportation opportunities. › Integrate car free site design and support elements. › Provide incentives. › Provide free shuttle service as provided for in the Special Permit. 	<ul style="list-style-type: none"> › During construction Stage 1 › As needed based on occupancy › During design and as needed based on occupancy › As needed based on occupancy › As needed based on occupancy
<i>TDM Trip Reduction Obligations</i>	
<ul style="list-style-type: none"> › Prepare an initial Transportation Demand Management Work Plan and submit to City of Newton. › Submit any changes or updates to TDM Work Plan. › Implement TDM Work Plan. › Conduct traffic monitoring and monitor, count, and report a sitewide Total Trip Count in accordance with Conditions 61-64 of the Special Permit Decision. › Comply with TDM Metric Enforcement protocol. 	<ul style="list-style-type: none"> › Submitted October 24, 2019 › Prior to the issuance of the first building permit for any new vertical construction › Phased as per approved TDM Work Plan › As indicated in Special Permit Decision › As indicated in Special Permit Decision

Mitigation Measure	Timing/Schedule
Air Quality and Greenhouse Gas	
<ul style="list-style-type: none"> › Design and construct high R-value, durable, environmentally sensitive buildings; Design all new buildings for modern energy and resource conservation; Choose and size all mechanical, electrical and plumbing systems to meet reduced heating and cooling loads and to ensure occupant comfort; Conduct proper commissioning, optimization, and education for building management and tenants to be able to operate the building at the designed level of performance; Make diligent efforts to utilize durable building materials, high performance building envelopes and energy efficient appliances (Special Permit Condition 53). › Construct the Project to achieve, and pursue LEED Certification for, Neighborhood Development v3 at the Silver Level (Special Permit Condition 54). › Renovate the Saco-Pettee Mill building at 156 Oak Street to achieve and pursue LEED Core and Shell (CS) v3 Certification at the Silver Level (Special Permit Condition 54). › Design all new buildings within the Project Site to achieve either: (i) a LEED v3 Gold certifiable standard, or (ii) a LEED v4 Gold for Building Design and Construction Multifamily Midrise certifiable standard (Special Permit Condition 55). › Construct the residential portions of Buildings 3, 4 and 8 to achieve Passive House certification in accordance with the requirements of the Passive House Institute US (PHIUS), the Passive House Institute (PHI) or other recognized passive house certification organization (Special Permit Condition 56). › Achieve/implement the following sustainability strategies (Special Permit Condition 57): <ul style="list-style-type: none"> ○ Conduct Passive House feasibility studies, incorporating energy modeling, for Buildings 5a/b, 6a, 6b/c, 7 and 12. ○ Utilize electric heat pumps for heating and cooling in all buildings in order to reduce fossil fuel use unless another technology becomes available that is at least as equally efficient and environmentally sustainable. ○ Utilize electric "Energy Star" appliances (or functional equivalent), except that domestic hot water equipment may utilize natural gas as an energy source, for all residential units. ○ Design and construct all building roofs that are not essential locations for mechanical systems (which Proponent will make every effort to consolidate), not desirable for residential use, and not designated as green roof area to be solar ready. 	<ul style="list-style-type: none"> › During design and construction › During construction. Evidence of compliance to be filed with Department of Inspectional Services prior to issuance of occupancy permit. › During construction. Evidence of compliance to be filed with Department of Inspectional Services prior to issuance of occupancy permit. › During design. Evidence of compliance to be filed with Department of Inspectional Services prior to issuance of occupancy permit. › During construction. Evidence of compliance to be filed with Department of Inspectional Services prior to issuance of occupancy permit. › Implementation schedule varies

Mitigation Measure	Timing/Schedule
<ul style="list-style-type: none"> ○ Provide electric car charging stations for 5 percent (66 spaces) of the striped parking with expansion built in to double the amount (to 10 percent, 132 spaces) of charging stations. › Depending on the results of the Passive House feasibility studies for Buildings 5a/b, 6a, 6b/c, 7 and 12 noted in Condition #57(a) above and Proponent's return on investment analysis, the Proponent will seek to achieve Passive House Certification similar to those contemplated in Condition #56 for the residential portions of some or all of these buildings to the fullest extent feasible (Special Permit Condition 58). › Utilize the best available information to assess embodied carbon in building materials and incorporate that information into the design process so that low embodied carbon materials can be incorporated when cost, availability and performance is feasible (Special Permit Condition 58). › Depending on the future utilization of the electric car charging stations and the level of future potential demand, the Proponent will explore the feasibility of securing increased electrical service to provide charging stations for up to 90 percent (1,215) of the striped parking spaces as the market demand for charging stations increases. (Special Permit Condition 58). › Monitor and evaluate the feasibility of incorporating new technologies for electric domestic hot water equipment and either incorporate such technologies into the Project or make provisions to facilitate their installation in the future (Special Permit Condition 58). 	<ul style="list-style-type: none"> › Based on results of Passive House feasibility studies › During design › Based on electric car charging station utilization › During design
Climate Change Adaptation and Resiliency	
<ul style="list-style-type: none"> › Construct a network of vegetated open spaces. › Specify native species in landscaping. › Employ rainwater capture for irrigation use. › Install light-colored hardscape surfaces. › Construct cool and green roofs to help reduce local ambient air temperature and keep buildings cooler. › Build to Passive House and LEED standards to lower heating and cooling needs and reduce reliance on mechanical systems to maintain interior thermal comfort. › Explore incorporating storm response actions and resiliency measures into leasing agreements or Tenant Manuals. › Explore designating a community Cool Room. 	<ul style="list-style-type: none"> › During construction › During design › During operations › During construction › During construction › During construction › During operations › During design

Mitigation Measure	Timing/Schedule
Open Space <ul style="list-style-type: none"> › Design and construct, at a cost to the Proponent not to exceed \$1,000,000.00 (including up to \$120,000 for design), a public splash park located on a 7,000 - 8,000 square foot portion of the Project located in the southwest corner of the Project Site adjacent to the Upper Falls Greenway and the Depot building (Special Permit Condition 15). › Construct Village Green and Mill Park Open Spaces (Special Permit Condition 16). › Maintain the Project Site open to the Greenway without fencing or screening, with the exception of fencing, if necessary, to enclose the splash park and low hedges behind the townhouse units (Special Permit Condition 51). 	<ul style="list-style-type: none"> › Final design plans to be submitted for review and approval by the City's Department of Parks and Recreation prior to the Proponent's first application for a building permit. › Construction of the splash park shall be completed, the license agreement shall be executed, and custody and control of the splash park shall be turned over to City prior to the issuance of the first residential unit occupancy permit. › Substantial completion must be achieved before the issuance of the occupancy permit for the 400th residential unit. › During design, construction and operation
Wetlands <ul style="list-style-type: none"> › Seek Orders of Condition from the Conservation Commission for any work subject to jurisdiction (Special Permit Condition 41). › Daylight a portion of the South Meadow Brook between Buildings 1 and 2 as shown on the Project Master Plans, subject to Condition #49 of the Order of Conditions by the Conservation Commission. › Remove invasive plant species along South Meadow Brook's banks and within the Riverfront Area; add appropriate native plantings. 	<ul style="list-style-type: none"> › Prior to issuance of related building permit › During construction › During construction, Stage 2
Stormwater <ul style="list-style-type: none"> › Utilize a rain harvesting system to capture some roof rainwater for Irrigation (Special Permit Condition 57). › Install drought tolerant and indigenous plants as the predominant species in landscaped areas (Special Permit Condition 57). › Employ Low Impact Design (LID) strategies (including permeable pavement and pavers) in the design of the stormwater management system (Special Permit Condition 57). › Comply with the nutrient TMDL for phosphorus as per Table ES-3 of the Total Maximum Daily Load for Nutrients in the Upper/Middle Charles Technical Report (CN 272.0). › Design and construct stormwater best management practices to comply with the MassDEP Stormwater Management Standards. 	<ul style="list-style-type: none"> › During operations › During construction › During design. All landscaping must be completed prior to requesting an occupancy permit for the related portion of the Project. › During operations › During design and construction

Mitigation Measure	Timing/Schedule
<ul style="list-style-type: none"> › Design and maintain stormwater management for the parking garages in accordance with 360 CMR: Massachusetts Water Resources Authority, Section 10.000: Sewer Use and 248 CMR: Board of State Examiners of Plumbers and Gas Fitter Section 10.00: Uniform State Plumbing Code; install gas/oil separators. › Prepare a Long-Term Pollution Prevention Plan. 	<ul style="list-style-type: none"> › During design and operations › Prior to construction
Infrastructure	
<ul style="list-style-type: none"> › Make payments in the aggregate amount of \$1,850,000.00 to the City for municipal infrastructure improvements, which amount shall be deemed to be in satisfaction of the request of the Engineering Division for funding for infrastructure improvements for inflow and infiltration (I/I) (Special Permit Condition 11). › Undertake a post-occupancy measurement of the sewer flow from the Project (excluding any sewer flow associated with the spray park) (Special Permit Condition 12). › Install low flow plumbing fixtures in all buildings. › Locate all utility service lines on the Project Site underground (Special Permit Condition 47). › Make best efforts to diligently obtain all necessary municipal, utility and private party approvals to relocate all overhead utility service lines along the Project's frontage on Needham Street and Oak Street, Christina Street, Tower Road and Charlemont Street underground (Special Permit Condition 48). › If such approvals are received, relocate the utility service lines at its own expense (Special Permit Condition 48). 	<ul style="list-style-type: none"> › \$925,000.00 at the first building permit for a residential building in the Project › \$925,000.00 at the first residential unit occupancy permit (temporary or final) in the Project › Within sixty days after the Project reaches 95 percent residential occupancy › During construction › During construction. Evidence of compliance to be filed with Department of Inspectional Services prior to issuance of occupancy permit. › As soon as practically feasible and in no event later than the issuance of the last temporary residential unit occupancy permit in the Project › As soon as practically feasible and in no event later than the issuance of the last temporary residential unit occupancy permit in the Project
Historic Resources	
<ul style="list-style-type: none"> › Comply with the terms of the Proponent's Memorandum of Agreement (MOA) with the Massachusetts Historical Commission (MHC), dated September 21, 2018 (Special Permit Condition 42). › Produce photographic recordation of the seven Saco-Petee Machine Shops buildings proposed for demolition, › Develop the content, design, specifications, and locations of interpretive signage and elements that will provide information about the history and use of the Saco-Petee Machine Shops complex. 	<ul style="list-style-type: none"> › All phases of design and construction › Prior to demolition/construction › During design

Mitigation Measure	Timing/Schedule
<ul style="list-style-type: none"> › Study the feasibility of exposing a portion of the South Meadow Brook culvert under the Project Site, which formed part of the former mill race, to be utilized as a water feature. › Develop a Site plan with landscape improvements that include greenspace and pedestrian ways designed to enhance views of the existing Saco-Pettee Machine Shops buildings and incorporate historic markers and salvaged architectural elements. › File with the Department of Planning and Development and the Newton Historical Commission, for review and approval, a written statement that confirms compliance with the MOA with MHC (Special Permit Condition 79). 	<ul style="list-style-type: none"> › During design › During design › Prior to issuance of occupancy permit
Site Contamination and Waste	
<ul style="list-style-type: none"> › Manage oil and groundwater under the Release Abatement Measure (RAM) plan. › Conduct dust monitoring, if/as deemed necessary › Develop and follow an Ambient Air Monitoring Plan (AAMP) if VOCs are present in soil and/or groundwater at levels that require air monitoring. › Obtain and comply with a NPDES Remediation General Permit (RGP) › Provide opportunities for tenants to recycle and potentially compost. 	<ul style="list-style-type: none"> › During construction › During intrusive sitework activities › Prior to excavation activities associated with VOC-impacted materials › Prior to/during construction › During operations
Construction	
<ul style="list-style-type: none"> › Limit all construction activity to 7:00AM-7:00PM Monday through Friday and 8:00AM-7:00PM on Saturdays, excluding holidays, unless waived by the Mayor in accordance with Newton Ordinances (Special Permit Condition 34). › Comply in all material respects with the final Construction Management Plan to be submitted for review and approval to the Commissioner of Inspectional Services (Special Permit Condition 35). › Submit final engineering, utility, and drainage plans, and an Operations and Maintenance plan for Stormwater Management, for review and approval by the City Engineer (Special Permit Condition 36). › Establish a Construction Liaison Committee (Special Permit Condition 40). › Implement a Community Engagement Plan during the construction period of the Project in order to predict, preempt and address issues which may arise affecting the general community. › Comply with Solid Waste regulations pursuant to M.G.L. Chapter 40, Section 54 and the City's Solid Waste Master Plan. › Comply with Air Pollution Control regulations pursuant to M.G.L. Chapter 40, Section 54, as well as current Massachusetts Air Pollution Control regulations governing nuisance conditions › Comply with the City's noise control ordinance. 	<ul style="list-style-type: none"> › During construction › Prior to construction › Prior to construction › No fewer than two (2) months prior to the commencement of any Site work and/or other construction activities. › Prior to construction › During construction › During construction › During construction

Mitigation Measure	Timing/Schedule
› Install and maintain erosion and sedimentation controls to minimize discharge to wetland resource areas and off-site drainage systems.	› During construction
› Engage a Licensed Site Professional (LSP) to manage, supervise, and perform the necessary response actions at the Project Site.	› During construction

5.2 Draft Section 61 Findings

The following is a draft Section 61 Finding for the anticipated Vehicular Access Permit, Signal Permit and Entry License from the Massachusetts Department of Transportation (MassDOT).

DRAFT ONLY

February 1, 2021

J. Lionel Lucien, P.E.

Manager - Public/Private Development Unit

Massachusetts Department of Transportation, Highway Division - Boston

10 Park Plaza, Room 4150

Boston, MA 02116

Re: EEA No. 15757 – Needham Street Redevelopment, Newton, Massachusetts

These findings for Needham Street Redevelopment (the "Project"), have been prepared in accordance with the provisions of M.G.L. c. 30, Section 61 and 301 CMR 11.00. On _____, the Secretary of Energy and Environmental Affairs issued a decision stating that the Project's Final Environmental Impact Report ("FEIR"), _____, adequately and properly complied with the Massachusetts Environmental Policy Act ("MEPA") and its implementing regulations.

Project Description

The Project will include approximately 1.4 million gross square feet of mixed-use development on a 22.6-acre site located along Needham Street and Oak Street in Newton. The redevelopment will consist of 193,200 SF of leasable office space, 800 residential units, and 115,114 SF of restaurant/retail space. The Project Site will be supported by 1,350 marked parking spaces, most of which will be in below-grade garages, with the ability to park an additional 250 vehicles through valet parking. Access to the Project Site will be provided from Needham Street and Oak Street via an internal street network of existing and proposed roadways.

The Project Site is comprised of three parcels primarily located along Needham Street at or near its intersections with Oak Street and Charlemont Street. The Project Site is generally bounded by the Newton Upper Falls Greenway to the west, Tower Road to the north, Needham Street to the east, and Oak Street to the south. The Project Site contains the Saco-Pettee Machine Shops complex, which is listed in the State and National Register of Historic Places. The existing 172,000-SF historic mill building that was previously converted to office space will be renovated and will remain on the Project Site while all the other structures on-site will be demolished.

The Traffic Impact and Access Study prepared with this filing quantifies existing and future traffic conditions with and without the Project. Based on the analysis of the future traffic conditions, the major impacts of the Project are expected to be mitigated by the proposed transportation initiatives, which include a robust Transportation Demand Management (TDM) program with monitoring and metrics, that have penalties if metrics are not met.

Project Impacts

Based on projections made in the TIA, the Project is anticipated to generate approximately 2,333 average daily new vehicle trips (1,150 entering and 1,183 exiting), with 155 new vehicle trips (30 entering and 125 exiting) during the weekday morning peak hour and 150 new vehicle trips (101 entering and 49 exiting) during the weekday evening peak hour. On an average Saturday, the Project is expected to generate approximately 2,505 average daily new vehicle trips (1,249 entering and 1,256 exiting) with 230 new vehicle trips (115 entering and 115 exiting) during the Saturday midday peak hour. Refer to the table below for a summary of adjusted Project trips.

Table 1 Net New Project-Generated Trips by Mode

	Net New Vehicle Trips ¹	Net New Transit Trips
Weekday Daily		
Enter	1,150	781
<u>Exit</u>	<u>1,183</u>	<u>886</u>
Total	2,333	1,667
Weekday Morning Peak Hour		
Enter	30	67
<u>Exit</u>	<u>125</u>	<u>66</u>
Total	155	133
Weekday Evening Peak Hour		
Enter	101	57
<u>Exit</u>	<u>49</u>	<u>77</u>
Total	150	134
Saturday Daily		
Enter	1,249	663
<u>Exit</u>	<u>1,256</u>	<u>676</u>
Total	2,505	1,339
Saturday Midday Peak Hour		
Enter	115	63
<u>Exit</u>	<u>115</u>	<u>65</u>
Total	230	128

¹ New vehicle trips with mode share and internal capture credits applied. New vehicle trips do not include pass-by trips associated with the retail portion of the Project Site or trips generated under existing conditions by the office and retail uses on-site.

Note: Office and residential vehicle trips have been reduced by 20-percent to account for the robust TDM program and the trip reduction requirement outlined in the City of Newton Board Order.

Mitigation Measures

Detailed traffic analyses indicate that some of the locations under MassDOT jurisdiction currently experience delays during the peak periods. Without the implementation of any improvement measures at these locations, delays and congestion would worsen with or without the proposed development in place. MassDOT currently has a project approved with construction starting in Summer 2020 along the entire Project Site frontage and beyond that includes significant bicycle, pedestrian, and motor vehicle improvements in the area between the Route 9 interchange to the north and Route 128 interchange to the south. As a result of these state initiatives, the Project mitigation has been focused on infrastructure improvements in certain places, but the primary mitigation is focused around alternative access to the Project Site through robust Traffic Demand Management (TDM) initiatives including a free shuttle system that will connect to MBTA train services. In addition, the Proponent's affiliate voluntarily engaged in an eminent domain procedure to provide land along Charlemont Street for the realignment of Charlemont Street with the north Site driveway, which are currently offset from each other. Access management will be further improved through the elimination of a curb cut on Needham Street.

The following recommendations summarize the roadway improvements within the study area necessary to provide safe and efficient access.

Traffic and Circulation Improvements

- › The Proponent will contribute \$5,000,000 to the City of Newton for off-site traffic mitigation and improvements. The director of Planning and Development, after consultation with the Commissioner of Public Works and the Proponent, shall recommend projects for funding to the City Council. The Proponent's payment shall be made as follows:
 - \$2,500,000 at the first building permit for a residential building in the Project.
 - \$2,500,000 at the first residential unit occupancy permit (temporary or final) in the Project.

Bicycle and Pedestrian Accommodations

- › Implement a bike path through the Project Site from Needham Street to the Greenway with connections in several areas of the Site.
- › Conduct a Roadway Safety Audit (RSA) at the intersection of Centre Street and Walnut Street (completed).
- › Provide 1,100 bicycle parking spaces, bicycle maintenance station, and availability of shared bicycle and shared cars services

Traffic Demand Management (TDM)

The TDM program will include a Mobility Hub, convenient access to alternative transportation opportunities, car free site design and support elements, incentives, and a free shuttle service, as described below.

Mobility Hub

A mobility hub will be located on-site in Building 7 and will serve as a coordinated, integrated transportation system facility that connects public transit, bicycling, walking, and automobiles in a center of activity. The mobility hub will be a central space for all forms of transportation and will provide information on alternative modes of transportation, bus and shuttle schedules, and other transportation alternatives including zip-car, carpool, bicycle and pedestrian connections. The space will include, at a minimum, the following amenities:

- › A shuttle stop built for the “connected rider;”
- › An indoor digital “TransitScreen” (or similar) information board displaying rider’s transportation choices and real-time transit information;
- › A variety of seating options;
- › Restrooms; and
- › A TDM Coordinator responsible for the TDM program including education, communication, marketing, and daily operations.

Alternative Transportation Opportunities

Convenient access to nearby alternative transportation modes includes:

- › Dedicated space for carshare services;
- › Bike share drop-off/pick-up location coordinated with a city-sponsored bike share service (e.g. BlueBike);
- › Designated parking for carpool and vanpool vehicles in key Site areas; and
- › Emergency ride home for all registered users of the carpool program.

Car Free or “Car-Lite” Site Design and Support Elements

To support and encourage ownership and use of fewer cars, the following will be implemented:

- › Limited parking supply;
- › Separate (unbundled) charges for residential parking spaces except for affordable units;
- › On-site alternative transit modes (see shuttle below);
- › 1,100 bicycle parking spaces which will be spread among the residential, office and retail/restaurant spaces;
- › Bicycle repair stations with air pumps;
- › On-site commercial areas including retail, restaurants, amenities;
- › Low-speed, multi-modal internal street network that will promote shared bicycle and vehicular traffic, as well as on-street parking in many areas;
- › Availability of showers for office tenants; and
- › Enhanced access to the Greenway.

Incentives

To introduce greater use of alternative transportation toward the trip reduction goal, both positive and negative incentives will be offered to residents. The incentives will include a combination of the following items:

- › Parking limitations for commercial tenants;
- › Subsidized T-Passes for residents and employees without cars; and
- › Free shuttle to induce ridership.

Free Shuttle Service

The Proponent will implement a free shuttle service for site residents, businesses, and area residents between the mobility hub and the D Branch of the Green Line at Newton Highlands Station. The shuttle will run 7 days per week for 16 hours per day. Depending on demand, the shuttle system may be expanded or adjusted to include other regional resources such as Founders Park, Newton Centre, or other nearby points of interest.

Traffic Monitoring

Trip counts will be gathered by a qualified professional firm, to be hired and overseen by the Director of Planning and Development and will be paid for by the Proponent. The counts will measure residential and office trips during the weekday morning and evening peak periods. These counts will be shared with the Proponent, who will then have 30 days to submit an updated TDM Work Plan to the Director of Planning and Development containing the list of measures proposed for the next reporting period.

Transportation Demand Management (TDM) Trip Reduction Obligations

As outlined in the Approved Special Permit Decision from the City of Newton, the Proponent is required to reduce the number of Project related residential and office trips that will be generated by the Project, as set forth herein as the Maximum Trip Count, in order to mitigate the traffic impacts of the Project.

The Maximum Trip Count shall not be exceeded, as follows:

- › The Total Maximum Trip Count for all office and residential uses within the Project is 306 vehicles during the weekday morning peak hour and 236 vehicles trips during the weekday evening peak hour, as outlined in the TIA prepared with this filing.

The Proponent will prepare, submit, and implement a Transportation Demand Management Work Plan (The “TDM Work Plan”), as outlined below:

- › Prior to the issuance of the first building permit for any new vertical construction, the Proponent shall submit any changes or updated to the initial TDM Work Plan, dated October 24th, 2019 (copy provided at end of this document) to the City of Newton Director of Planning and Development and Commissioner of Public Works for review and approval.
 - The initial TDM Work Plan shall include a detailed plan for the phase-in of the TDM measures.
 - Public transit subsidies and incentives shall begin with the initial occupancy permits.

- The full-time TDM Coordinator shall start no later than the issuance of a Certificate of Occupancy for 25,000 square feet of office space, or twelve (12) months after issuance of the first residential building permit, whichever comes first.
 - Full implementation of the TDM Work Plan shall begin no later than the issuance for a Certificate of Occupancy for 400 residential units.
 - The Initial TDM Work Plan shall also include an analysis of locating a shuttle stop along Needham Street.
- › The TDM Work Plan shall set forth sufficient Transportation Demand Measures (TDM) strategies and measures necessary to comply with the Maximum Trip Count, including but not limited to, last mile connections to mass transit, subsidies for transit passes for employees and residents, a full-time TDM coordinator, on-site support facilities and information, marketing and awareness programs, financial incentives, and car and bike share programs.
- › The TDM Work Plan may change over time to respond to changing transportation needs and circumstances, with the objective of meeting the trip reduction goal through compliance with the Maximum Trip Count. All changes must be reviewed and approved by the City of Newton Director of Planning and Development prior to implementation.
- › A TDM Work Plan will be submitted within thirty (30) days of the Proponent receiving the results of the trip count monitoring from the Department of Planning and Development. The TDM Work Plan will include a comprehensive list of the measures proposed for the upcoming reporting period, and will be based on best practices, results of prior counts and surveys, and additional data collected by the Proponent.

Transportation Demand Management (TDM) Metric Enforcement

If a TDM Monitoring Report shows that the Proponent/Project exceeded the Maximum Trip Count, the Proponent shall be required to invest funds into implementation of its TDM Work Plan as follows:

- › The Proponent will spend the TDM Investment Amount of \$1,500,000 in implementing its TDM Work Plan during the twelve (12) month period following the submission of the TDM Work Plan where the Maximum Trip Count was exceeded. The TDM Investment Amount will be adjusted annually from the date of commencement of Proponent's trip reduction obligation based on upon the Consumer Price Index.
- › In addition to the TDM Investment Amount, during the same time period the Proponent shall also expend Additional Investment Amount which shall be calculated as a percentage of the TDM Investment Amount (adjusted per the CPI) equal to the percentage of trips reported over the Maximum Trip Count.
- › There is no maximum cap on the Proponent's additional investment.
- › The TDM Investment Amount and the Additional Investment Amount shall be expended annually until the Director of Planning and Development verifies compliance with Maximum Trip Count.

If the Maximum Trip Count is exceeded, the Proponent will submit a revised TDM Work Plan for the next reporting period that shall include a narrative of how the changes to the TDM

Work Plan for the upcoming reporting period will reduce the number of vehicular trips during the peak hour and a detailed proposal of how the TDM Investment Amount and the Additional Investment Amount will be spent. The TDM Work Plan and the proposal for TDM expenditure shall be reviewed and approved by the Director of Planning and Development. The TDM Work Plan will set forth a plan to spend the TDM Investment Amount and Additional Investment Amount over a twelve (12) month period. If the monitoring period is six (6) months, the TDM expenditures at the end of the six-month period shall be prorated.

The Proponent agrees to and will embody these financial commitments in a contractual agreement with the City to be entered into prior to the issuance of the first building permit for a residential building in the Project, which agreement shall allow for the remedy of specific performance.

Failure to comply with the Maximum Trip Count by more than ten (10) percent for four (4) consecutive Reporting Periods will constitute a violation of this Special Permit/Site Plan Approval and no further occupancy permits of any kind will be issued until the Proponent submits a TDM Monitoring Report demonstrating compliance with the Maximum Trip Count. Provided the Proponent complies with the Maximum Trip Count, there is no minimum TDM Investment Amount required.

In addition to the Maximum Trip Count obligation, the Proponent shall monitor, count and report a sitewide Total Trip Count in accordance with Conditions #61-64 of the Special Permit Decision. The sitewide Total Trip Count for weekday peak hours shall be the total of the Maximum Trip Count plus the unadjusted retail trips set forth in the Expanded Revised Building Program Traffic Generation Memorandum submitted to the City on behalf of the Proponent, dated March 28, 2019 (provided as an attachment). The sitewide Total Trip Count for Saturday midday peak hour shall be the total of the unadjusted trips for office, residential, and retail from the March 28, 2019 Memorandum. If any monitoring Report submitted determines that the sitewide Trip Count exceeds either of these maximums by more than 20 percent (to account for variations in commercial uses and trips generated by public spaces), the Proponent shall meet with the Director of Planning and Development and make reasonable good faith efforts to jointly develop and implement modified TDM measures in order to reduce the sitewide Total Trip Count.

5.3 Greenhouse Gas Self-Certification

In accordance with the MEPA GHG Policy, the Proponent will provide a self-certification to the MEPA Office signed by an appropriate professional (e.g., engineer, architect, or general contractor) following completion of construction of each building to demonstrate that the stationary source GHG emissions have been mitigated as outlined in this document or equivalent measures have been implemented. The Proponent plans to submit a self-certification following the construction of the individual buildings. A draft commitment letter for this self-certification submission is provided below for the full-build Project.

DRAFT ONLY

February 1, 2021

Secretary Katie A. Theoharides
 Executive Office of Energy & Environmental Affairs
 100 Cambridge Street, Suite 900
 Boston, MA 02114

ATTN: Director Tori Kim, MEPA Office
 Re: Letter of Commitment for Greenhouse Gas Emissions Self-Certification
 Northland Newton Development
 Newton, MA (EEA No. 15757)

On behalf of Northland Development, LLC (the “Proponent”), VHB has prepared a summary of the estimated reduction in overall energy use and stationary source Greenhouse Gas (“GHG”) emissions for Northland Newton Development in Newton.

In accordance with the current MEPA Greenhouse Gas Emissions Policy and Protocol (the “GHG Policy”) dated May 2010, the stationary source GHG assessment was provided to the MEPA Office as part of the Draft Environmental Impact Report (“DEIR”) filed on August 17, 2020. The Design Case assumed building design and system improvements that would result in energy reductions, in accordance with the GHG Policy.

The energy conservation measures for the Design Case are estimated to reduce the overall energy use by 40.9 percent resulting in a 29.4 percent reduction in stationary source CO₂ emissions when compared to the Stretch Code Baseline. The table below presents the estimated energy savings and CO₂ emissions reductions for the Proposed Project.

Building Name	Type	Energy Consumption (MMBtu/yr)			CO ₂ Emissions (tons/yr) ¹		
		Base Case	Design Case	Percent Savings	Base Case	Design Case	Percent Savings
Building 1 ²	Office	11,172	5,120	54.2%	793.3	464.2	41.5%
Building 2 ³	Retail	268	189	29.5%	22.2	18.2	18.2%
Building 3 ³	Residential	5,195	3,326	36.0%	416.2	319.5	23.2%
Building 4 ³	Residential	10,065	5,679	43.6%	747.6	544.4	27.2%
Building 5 ³	Residential	10,043	6,346	36.8%	799.7	609.6	23.8%
Building 6a ³	Residential	7,452	4,956	33.5%	610.4	476.5	21.9%
Building 6b-6c ³	Residential	7,026	4,257	39.4%	548.0	408.7	25.4%
Building 7 ⁴	Residential	2,211	1,533	30.6%	213.3	148.0	30.6%
Building 8 ³	Residential	5,670	3,695	34.8%	454.5	355.1	21.9%
Building 9-10-11 ⁴	Residential	5,035	2,907	42.3%	485.8	280.5	42.3%
Building 12 ⁴	Residential	1,077	682	36.7%	103.9	65.8	36.7%
Building 14 ⁴	Residential	606	210	65.4%	58.5	20.2	65.4%
Total		65,821	38,899	40.9%	5,253.6	3,710.8	29.4%

1 tons/yr = short tons per year

2 Base Case represents the existing components of the historic mill building and ASHRAE 90.1-2013 conditions with additional efficiency measures under the August 2020 energy code.

3 Base Case represents ASHRAE 90.1-2013 conditions with additional efficiency measures under the August 2020 energy code.

4 Base Case represents compliance with Section R406 based on the Stretch Energy Code.

The building energy model results/energy savings and estimated stationary source GHG emissions reductions are preliminary. Following completion of construction of each building, the Proponent will submit a self-certification to the MEPA Office, signed by an appropriate professional, which identifies the as-built energy conservation measures and documents the stationary source GHG emissions reductions from the baseline case. The finalized Self-Certification will include information on the Project's compliance with the proposed TDM measures.

If you have any questions, please contact me at (617) 607-2972 or via email at skruel@vhb.com.

Very truly yours,

Stephanie Kruei, ENV SP
Senior Environmental Planner, VHB

6

Response to Comments

In accordance with the MEPA Scope, this chapter directly responds to agency and public review comments within MEPA jurisdiction. Copies of the Secretary's Certificate on the Draft Environmental Impact Report (DEIR) and each comment letter received during the public review period of the DEIR are included in this chapter. This chapter provides responses to those letters.

6.1 List of Comment Letters

Each letter from an agency or organization received during the public comment period was assigned a number, as listed in Table 6-1 below.

Table 6-1 List of Comment Letters

Letter No.	Commenter	Organization	Date
1	MEPA	MEPA Office	October 2, 2020
2	David J. Mohler	Massachusetts Department of Transportation	September 25, 2020
3	Paul F. Ormond	Massachusetts Department of Energy Resources	September 25, 2020
4	Bethany Card	Massachusetts Water Resources Authority	September 25, 2020
5	Pallavi K. Mande	Charles River Watershed Alliance	September 25, 2020

6.2 Response to Comments

Responses to the letters above can be found in Table 6-2.

This Page Intentionally Left Blank.

Comment #	Comment	Response
1.01	The FEIR should identify measures the Proponent will adopt to further reduce the impacts of the project since the filing of the DEIR, or, if certain measures are infeasible, the FEIR should discuss why these measures will not be adopted.	There have been no changes to the Project since the filing of the DEIR. Refer to Section 1.1 of Chapter 1, <i>Project Summary</i> , for a description of the Project.
1.02	The information and analyses identified in this Scope should be addressed within the main body of the FEIR and not in appendices. In general, appendices should be used only to provide raw data, such as drainage calculations, traffic counts, capacity analyses and energy modelling, that is otherwise adequately summarized with text, tables and figures within the main body of the FEIR. Information provided in appendices should be indexed with page numbers and separated by tabs, or, if provided in electronic format, include links to individual sections. Any references in the FEIR to materials provided in an appendix should include specific page numbers to facilitate review.	<p>Comment noted. Each chapter of this FEIR provides responses to the Secretary's Certificate on the DEIR, as well as other comments from state agencies and local organizations. Refer to:</p> <ul style="list-style-type: none"> - Chapter 1, <i>Project Summary</i> for an overview of the Project, updated status on regulatory requirements, and updated plans for existing and post-development conditions; - Chapter 2, <i>Traffic and Transportation</i> for additional information on transit improvements and mitigation measures; - Chapter 3, <i>Climate Change Adaptation and Resiliency</i> for more information on strategies employed to enhance the Project's resilience to climate change; - Chapter 4, <i>Wetlands</i> for details related to Riverfront Area impacts and proposed mitigation measure; - Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> for a summary of proposed mitigation measures, draft Section 61 Findings for all State Permits, and a draft GHG self-certification; and - Chapter 6, <i>Responses to Comments</i>, which address all comments laid out in the Secretary's Certificate on the DEIR as well as other comments from state agencies and local organizations.
1.03	The FEIR should include a clear and consistent description of the project, including updated plans that identify existing and post-development conditions, including, at a minimum, site grading, buildings, public areas, impervious areas, pedestrian and bicycle accommodations and stormwater and utility infrastructure, at a legible scale.	Figures 1.1-1.5 present updated plans for existing and post-development conditions.

Table 6-2 Response to Comments

Comment #	Comment	Response
1.04	The FEIR should identify any changes to the project, including construction phasing, since the filing of the DEIR.	There have been no changes to the Project since the filing of the DEIR.
1.05	It should provide detailed information about each building and parking garage, open space area, pedestrian and bicycle facilities and wetland resource areas, including cross-sections and profiles as applicable.	Detailed information about the site elements is included in Chapter 1, <i>Project Summary</i> . Figures 1.1-1.5 present updated plans for existing and post-development conditions. Available building sections are provided in Figures 1.4a-m.
1.06	The FEIR should identify and describe State, federal and local permitting and review requirements associated with the project and provide an update on the status of each of these pending actions.	Section 1.3 of Chapter 1, <i>Project Summary</i> , presents all anticipated permits, approvals and review status to date for the Project.
1.07	It should include a description and analysis of applicable statutory and regulatory standards and requirements, and a discussion of the project's consistency with those standards.	Table 1-3 under Section 1.3 of Chapter 1, <i>Project Summary</i> , summarizes all anticipated permits, approvals and review status to date for the Project.
1.08	The FEIR should provide detailed plans showing site grades under existing and proposed conditions.	Refer to Figure 1.6 for the conceptual site grading plan. The proposed grading maintains existing drainage patterns to the maximum extent practicable.
1.09	It should provide volumes of any fill and excavation of soils and identify volumes of soil to be reused on site and transported off-site.	Current information about site grading is included in Section 1.4 of Chapter 1, <i>Project Summary</i> .
1.10	The FEIR should provide detailed descriptions of proposed open space, including the areas of open space consisting of pervious landscaping and hardscaped areas.	Proposed open space and greenway connections are depicted in Figure 1.5.
1.11	the DEIR did not provide an update on investigations of soil and groundwater conditions and potential mitigation measures or use restrictions that may be required. The FEIR should provide this information in the context of construction activities and uses proposed in areas where contaminated soil and/or groundwater is present.	Section 1.5 of Chapter 1, <i>Project Summary</i> includes updated details related to site soil and groundwater investigations.

Comment #	Comment	Response
1.12	It should include a map showing the area subject to the current and potential new RTNs and proposed structures and activities in the RTN area(s).	Figure 1.7 indicates the location of RTNs.
1.13	It should identify any subsurface structures proposed in these areas, including utilities, building foundations and garages, estimate the volume of contaminated soil associated with these activities, describe treatment, handling and disposal of these soils and any groundwater remediation that may be necessary.	Table 1-4 in Section 1.5 of Chapter 1, <i>Project Summary</i> presents a summary of estimated contaminated soil volume for each building excavation.
1.14	The FEIR should describe changes to the development program necessary to comply with AULs that may be placed on the site.	As described in Section 1.5 of Chapter 1, <i>Project Summary</i> , the known environmental conditions at the Site will not prevent the proposed future mixed used development as the observed conditions will be removed and/or be remediated (if necessary) as part of construction. An AUL is not anticipated.
1.15	The project described in the ENF included the development of two parcels on the east side of Needham Street that are no longer proposed to be developed in the DEIR. The FEIR should disclose any potential development of those sites. Any projects comprising a common plan proposed on those parcels within, at a minimum, the next five year, may be subject to MEPA review and the cumulative impacts of those projects will be reviewed together.	As described in Chapter 2, <i>Traffic and Transportation</i> , Section 2.8, since the 260 Needham Street building on the east side of the street was recently re-tenanted it is unlikely to be redeveloped in the near future. However, if the parcels on the east side of Needham Street were to be redeveloped at some point in the future, the appropriate permitting documents would be developed and input from MEPA would be sought at that time.
1.16	The FEIR should provide the information and analysis requested in MassDOT's comment letter, which is incorporated by reference herein.	Comment noted. Refer to Chapter 2, <i>Traffic and Transportation</i> , for details, as well as specific responses to Comment Letter #2 below.
1.17	It should provide a revised transit analysis of Green Line capacity based on MassDOT's updated passenger comfort metric methodology for rail transit service.	As demonstrated in Section 2.1 of Chapter 2, <i>Traffic and Transportation</i> , the Project Team has utilized the most updated methodology for transit analysis on the Green Line capacity.

Comment #	Comment	Response
1.18	The FEIR should review potential measures that could be implemented by the Proponent to improve bus operations on Needham Street, including providing land to facilitate construction of "floating" bus stops, installing shelters at each bus stop, and upgrading the Adaptive Traffic Signal system to incorporate Transit Signal Priority equipment.	Potential improvements to bus operations are detailed in Section 2.2 of Chapter 2, <i>Traffic and Transportation</i> .
1.19	The Proponent should consult with MassDOT and the MBTA prior to completing the updated transit analysis and evaluation of transit mitigation measures.	As described in Section 2.10 of Chapter 2, <i>Traffic and Transportation</i> , the Proponent consulted with various MassDOT representatives and departments during the preparation of the FEIR. Section 2.1 describes how the Project Team has utilized the most updated methodology for transit analysis on the MBTA Green Line capacity.
1.20	The FEIR should provide additional detail about the potential transportation improvements that may be implemented by the City with funding from the Proponent.	Details regarding the process by which the City may utilize the \$5,000,000 that the Proponent will provide for off-site traffic, transportation and safety improvements are included in Section 2.3 of Chapter 2, <i>Traffic and Transportation</i> and the Board Order/Special Permit included in Appendix B.
1.21	As recommended by MassDOT, the FEIR should review specific mitigation measures, such as implementing safety improvements identified in the RSA, enhancing multimodal access to the Newton Highlands Station, providing bus accommodations at the Newton Highlands Station, bicycle and pedestrian improvements on specific corridors that provide access to the site, and replacing the former railroad bridge over I-95 north of Highland Avenue to provide an off-road path connecting the site with the Town of Needham.	Information related to safety improvements, multimodal access, bus accommodations, and bicycle and pedestrian improvements are provided in Sections 2.7, 2.5, 2.2, and 2.9 of Chapter 2, <i>Traffic and Transportation</i> , respectively.

Comment #	Comment	Response
1.22	The FEIR should clarify whether the free shuttle service will be operated by the 128 Business Council and provide additional details regarding the operation of the service, such as marketing of the shuttle to area residents, potential capacity of the service based on the size and number of buses and frequency of service and selection of additional stops if warranted by demand.	The 128 Business Council's role in the Project and potential role in the proposed free shuttle service is described in Section 2.5 of Chapter 2, <i>Traffic and Transportation</i> .
1.23	The FEIR should evaluate the feasibility of running shuttles at 15-minute intervals.	As described in Sections 2.5 and 2.6 of Chapter 2, <i>Traffic and Transportation</i> , the shuttle is anticipated to run with ten-minute headways.
1.24	It should review how the success of the TDM plan will be tracked and evaluate additional measures that may be implemented if necessary to meet TDM goals.	A very specific monitoring plan is specified in the Section 61 Findings that shows how the TDM plan will be monitored. It also details the penalty that will be implemented if the plan does not meet its goals. Refer to Section 5.2 of Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> for more details.
1.25	The FEIR should address how GHG (mobile source) reductions will be estimated for the TDM measures, and what measures will be taken if the target percentage reductions are not achieved.	Details related to how GHG reductions will be estimated for the TDM measures and the remedy to be employed if the goals are not initially met are included in Section 5.2 of Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> .

Comment #	Comment	Response
1.26	<p>MassDOT recommends that the FEIR include commitments to adopt the following additional measures:</p> <ul style="list-style-type: none"> • Provide subsidies to local transit providers to increase frequency or length of service during weekend, midday, and evening periods; • Provide incentives to employees for commuting by alternative modes of travel, including carpool, vanpool, transit, walking or bicycling; • Provide a guaranteed ride home program for employees; • Provide a parking cash-out program to employee who use alternative modes of travel; • Charge higher parking rates and shorter payment periods to reduce use of vehicles; • Require employees to pay for parking; and, • Encourage commercial tenants to offer on-site services such as daycare, banking, dry cleaning and cafeteria to reduce off-site trips. 	<p>The Proponent is proposing significant Transportation Demand Management (TDM) initiatives as outlined in the Traffic Impact Analysis (TIA) section provided in the DEIR. Section 2.4 of Chapter 2, <i>Traffic and Transportation</i> lists additional mitigation measures to which the Proponent has committed. Information related to safety improvements, multimodal access, bus accommodations, and bicycle and pedestrian improvements are provided in Sections 2.7, 2.5, 2.2, and 2.9, respectively.</p>
1.27	<p>The FEIR should clarify which storm events, under existing and projected climate conditions, the stormwater management system has been designed to accommodate. The drainage system should be designed and sized to have the capacity for large and intense storm events projected during the likely lifespan of the project.</p>	<p>Section 3.1 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> provides the requested information.</p>
1.28	<p>The FEIR should include an analysis of the capacity of the drainage system using extreme precipitation data for the region available from the NOAA Atlas 14 or the Northeast Regional Climate Center⁵ to model 24-hour design storm depths, and should consider climate change data to model future anticipated storm depths to the extent feasible during the design life of the project.</p>	<p>Section 3.1 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> describes the methodology that will be used (NOAA14 PLUS in the design of the stormwater management system.</p>
1.29	<p>The FEIR should evaluate the potential for the site to be impacted by flooding from South Meadow Brook under projected climate conditions.</p>	<p>An evaluation of the potential of South Meadow Brook to flood the site is included in Section 3.2 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> for more details.</p>

Table 6-2 Response to Comments

Comment #	Comment	Response
1.30	The FEIR should address how the project will be made resilient to more intense rainfall and storm events.	Sections 3.1 and 3.3 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> provide the requested information.
1.31	The FEIR should provide the information and analysis requested in DOER's comment letter, which is incorporated by reference herein.	Comment noted. Refer to Chapter 3, <i>Climate Change Adaptation and Resiliency</i> for more details on mitigation and adaptation strategies to enhance the Project's resiliency.
1.32	The FEIR should revise the baseline and recalculate the level of mitigation provided by the Preferred Alternative.	As described in Section 3.4 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> , building models have been updated.
1.33	It should confirm the baseline fenestration levels in the modeling of the residential buildings, clarify commitments to reducing air infiltration above minimum Code requirements and clarify the Proponent's commitment to install rooftop PV systems and the generating capacity of the systems.	The requested information is provided in Section 3.4 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> .
1.34	The Proponent should consult with DOER to ensure that responsive information is provided in the FEIR.	Responses to all DOER comments are provided in the body of this FEIR.
1.35	The FEIR should provide a plan clearly showing all project components within the Riverfront Area, quantify potential impacts to all wetland resource areas and floodplain and describe mitigation measures.	Figures 4.1 - 4.4h provide information on the plantings proposed for the Project and work within the existing daylighted section of South Meadow Brook. No work is proposed within Land Under Waterbodies and Waterways. Refer to Section 4.1 of Chapter 4, <i>Wetlands</i> for more details.
1.36	It should provide a detailed restoration plan for South Meadow Brook and associated resource areas.	Section 4.1 of Chapter 4, <i>Wetlands</i> includes a description the restoration of elements of the South Meadow Brook Riverfront Area.
1.37	Based on existing and proposed site grades, the FEIR should evaluate the extent of flooding onto the site from South Meadow Brook.	The Project is not located within the FEMA floodplain. Refer to Chapter 3, <i>Climate Change Adaptation and Resiliency</i> for further discussion of potential future flooding.
1.38	The FEIR should include a separate chapter summarizing proposed mitigation measures, including construction-period measures.	Refer to Table 5-1 in Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> for list of all proposed mitigation measures and implementation details.

Comment #	Comment	Response
1.39	This chapter should also include detailed draft Section 61 Findings for each permit or other approval to be issued by State Agencies.	Refer to Sections 5.2 in Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> , which presents the draft Section 61 Findings for the anticipated Vehicular Access Permit, Signal Permit and Entry License from MassDOT.
1.40	The FEIR should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and a schedule for implementation.	Refer to Table 5-1 in Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> for a list of all proposed mitigation measures and implementation details.
1.41	The FEIR should include a commitment to provide a GHG self-certification to the MEPA Office at the completion of the project. It should be signed by an appropriate professional (e.g. engineer, architect, transportation planner, general contractor) indicating that all of the GHG mitigation measures, or equivalent measures that are designed to collectively achieve identified reductions in stationary source GHG emission and transportation-related measures, have been incorporated into the project. To the extent the project will take equivalent measures to achieve the identified reductions, I encourage the Proponent to commit to achieving the same level of GHG emissions identified in the mitigated (design) case expressed in volumetric terms (e.g., tpy).	Refer to Section 5.3 in Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> , which presents a draft letter of commitment for the Project's Greenhouse Gas Self-Certification.
1.42	The FEIR should describe an approach for providing self-certifications to the MEPA Office based on project phasing or completion of individual buildings.	Refer to Section 5.3 in Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> , which presents a draft letter of commitment for the Project's Greenhouse Gas Self-Certification.
1.43	The FEIR should contain a copy of this Certificate and a copy of each comment letter received.	A copy of the Certificate and comment letters are provided herein in Section 6.2.
1.44	It should include a separate chapter that fully and specifically responds to each DEIR comment letter without merely referencing a chapter of the FEIR.	Responses to all comments (state agencies and local organizations) on the DEIR are provided herein in Section 6.2. These responses are also incorporated into narrative throughout the FEIR with specific section references where applicable.

Comment #	Comment	Response
1.45	The Proponent should circulate the FEIR to those parties who commented on the NPC and/or DEIR, to any State Agencies from which the Proponent will seek permits or approvals, and to any parties specified in section 11.16 of the MEPA regulations.	All parties, including state agencies and local organizations, who commented on the DEIR will be notified of the submission of the FEIR. Refer to Chapter 7 for the distribution list for this FEIR.
1.46	The Proponent should send correspondence accompanying the CD-ROM or website address indicating that hard copies are available upon request, noting relevant comment deadlines, and appropriate addresses for submission of comments.	Per the guidance from the MEPA Office on upcoming filings in light of COVID-19 response (revised May 20, 2020), an electronic version of this FEIR has been submitted to the MEPA Office, state agencies and others, as required. Refer to Chapter 7 for the distribution list for this FEIR.
1.47	The FEIR submitted to the MEPA office should include a digital copy of the complete document.	Per the guidance from the MEPA Office on upcoming filings in light of COVID-19 response (revised May 20, 2020), an electronic version of this FEIR has been submitted to the MEPA Office, state agencies and others, as required. Refer to Appendix A for the distribution list for this FEIR.
1.48	A copy of the FEIR should be made available for review through the Newton Public Library.	A copy of the FEIR has been available for review through the Newton Public Library.

Comment #	Commenter	Comment	Response
2.01	MassDOT*	MassDOT asks that the FEIR provide more documentation on how this trip reduction will be achieved, potentially including estimates of TDM effectiveness and comparisons with mode share at sites in Newton or nearby that have similar TDM programs. MassDOT would like to see documentation that this ambitious goal is achievable with the proposed TDM plan.	Additional information related to how the Project will achieve trip reduction and mode share shift goals is provided in Section 2.6 of Chapter 2, <i>Traffic and Transportation</i> .
2.02	MassDOT*	The RSA was conducted in May 2020. MassDOT asks that the FEIR include a summary of the recommendations in the Final RSA and a plan for how the recommendations will be implemented.	An update on Road Safety Audit (RSA) results is provided in Section 2.7 of Chapter 2, <i>Traffic and Transportation</i> .
2.03	MassDOT*	The Proponent should coordinate with MassDOT regarding the development potential of the parcel on the east side of Needham Street, to ensure that corridor design would accommodate future development on those parcels.	A discussion of how potential future development on the East Side of Needham Street would be coordinated with MasDOT is provided in Section 2.8 of Chapter 2, <i>Traffic and Transportation</i> .
2.04	MassDOT*	To the extent possible, MassDOT recommends that the Construction Management Plan stage work on or along Needham Street to coincide or precede MassDOT's construction effort, thus avoiding any reconstruction of a new facility. The Proponent should continue to coordinate with MassDOT on construction phasing.	A discussion of how potential future development on the East Side of Needham Street would be coordinated with MasDOT is provided in Section 2.8 of Chapter 2, <i>Traffic and Transportation</i> . The Proponent will continue to coordinate with MassDOT on construction phasing.
2.05	MassDOT*	MassDOT asks that the FEIR include a more detailed explanation of how these funds will be used to mitigate transportation impacts and if any is intended for improvements on MassDOT facilities.	An update on the City of Newton's funding on transportation improvements is provided in Section 2.3 of Chapter 2, <i>Traffic and Transportation</i> . Details related to how the City will potentially select transportation improvement projects are contained in a summary that was prepared by the City of Newton Planning Department in a June 14 Public Hearing/Working Session Memorandum (Attachment B), which is provided in Appendix C for reference.

Comment #	Commenter	Comment	Response
2.06	MassDOT*	The MBTA is undergoing a long-term program, Green Line Transformation, to enhance the Green Line capacity through the implementation of larger vehicles and increasing the frequency of trains. MassDOT asks that the FEIR use the most updated methodology for transit analysis on the Green Line.	A revised MBTA Green Line capacity analysis using the most updated methodology is included in Section 2.1 of Chapter 2, <i>Traffic and Transportation</i> .
2.07	MassDOT*	However, the Proponent should consult with MassDOT and the MBTA during the preparation of the FEIR on potential transit mitigations on the project frontage including, providing land to facilitate construction of “floating” bus stops, as applicable, installing shelters at each bus stop, and upgrading the Adaptive Traffic Signal system to incorporate Transit Signal Priority equipment.	Potential transit mitigation and improvements, including implementation of a floating bus stop along Needham Street, are discussed in Section 2.2 of Chapter 2, <i>Traffic and Transportation</i> .
2.08	MassDOT*	MassDOT asks that the Proponent commit to designing the connection to the Upper Falls Greenway at Mechanic Street as a welcoming ADA-compliant pathway for people walking and bicycling between the Upper Falls neighborhood and Needham Street.	The Proponent agrees to designing the requested connection. A description of potential additional bicycle and pedestrian improvements is included in Section 2.9 of Chapter 2, <i>Traffic and Transportation</i> .
2.09	MassDOT*	MassDOT also asks that the Proponent assess the utility of replacing the former railroad bridge over I-95 north of Highland Avenue, to provide an off-road path connecting the site with the Town of Needham.	If the City of Newton desires to rebuild the former railroad bridge to create a pedestrian/bike amenity, they would be able to use a portion of the Project’s \$5,000,000 contribution to the City’s fund for off-site traffic, transportation and safety improvements for that purpose. A description of potential additional bicycle and pedestrian improvements is included in Section 2.9 of Chapter 2, <i>Traffic and Transportation</i> .
2.10	MassDOT*	MassDOT encourages the Proponent to more strongly commit to some of the potential TDM measures as definitive measures. These measures include: (see letter for list)	The Proponent is proposing significant Transportation Demand Management (TDM) initiatives as outlined in the Traffic Impact Analysis (TIA) included in the DEIR submission. Additional TDM commitments are included in Section 2.4 of Chapter 2, <i>Traffic and Transportation</i> .

Comment #	Commenter	Comment	Response
2.11	MassDOT*	MassDOT requests more clarity about the 128 Business Council's role regarding the free shuttle. The DEIR notes that they were consulted on the development of the shuttle, including preparing a report on alternative route alignments. MassDOT recommends considering the 128 Business Council as the operator of the service and opening the shuttle to the general public.	The 128 Business Council's role in the Project and potential role in the proposed free shuttle service is described in Section 2.5 of Chapter 2, <i>Traffic and Transportation</i> .
2.12	MassDOT*	MassDOT also recommends a frequency of 15 minutes or fewer to situate the shuttle as a convenient alternative to driving.	As described in Sections 2.5 and 2.6 of Chapter 2, <i>Traffic and Transportation</i> , the shuttle is anticipated to run with ten-minute headways.
2.13	MassDOT*	The FEIR and the revised Section 61 findings should reflect the monitoring program described above (See p8 of MassDOT letter).	Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> , includes a revised Section 61 Finding that reflects the monitoring program described in the MassDOT Letter and City of Newton Board Order.
2.14	MassDOT*	MassDOT also requires the Proponent to commit to additional investment in TDM if the trips identified in the transportation monitoring exceed the agreed upon trip generation.	As described in Section 2.6 of Chapter 2, <i>Traffic and Transportation</i> ; Section 5.2 of Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> ; and Appendix B, the Proponent has committed to and is required to adjust the TDM plan if the residential and office trips to the Site are not reduced by 20 percent.
2.15	MassDOT*	The FEIR should include a revised draft Section 61 Finding prepared in consultation with MassDOT and the MBTA.	Section 5.1 of Chapter 5, <i>Draft Section 61 Findings and Proposed Mitigation</i> , provides a revised draft Section 61 Finding that has been prepared in consultation with MassDOT and the MBTA.
2.16	MassDOT*	The Proponent should continue consultation with appropriate MassDOT units, including PPDU and the District 6 Office, to discuss preparation of the FEIR.	Ongoing consultation with MassDOT is described in Section 2.10 of Chapter 2, <i>Traffic and Transportation</i> . The most recent call was on January 6, 2021 with representatives of the MBTA, MassDOT (PPDU/District/Design).

Comment #	Commenter	Comment	Response
3.01	DOER*	Correct the baseline for Buildings 9/10/11, 12, and 14 to HERs 55.	A revised energy model specifying the baseline for each building is included in Section 3.4 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> .
3.02	DOER*	The project is using C406.5 (solar PV) as one of the three additional measures. This measure can only be chosen if the proponent is actually committing to the requisite solar. Please clarify if the solar PV is a commitment, or, choose a different C406 pathway.	PV systems are no longer included in the proposed energy models and C406.5 (solar PV) was replaced with C406.8 (enhanced envelope). Refer to Section 3.4 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> for more information.
3.03	DOER*	Confirm that the baseline Appendix G residential building models set maximum fenestration to 24%.	Baseline models for Buildings 3 - 8 have 24 percent window-to-wall ratios. Refer to Section 3.4 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> for more information.
3.04	DOER*	Clarify commitments to air-infiltration reduction and compare commitments to minimum code standards.	The baseline and proposed design energy models for Buildings 1-8 use ASHRAE 90.1-2013 appendix G leakage rate of 0.4 cfm/ft ² at 0.3 inches H ₂ O. Refer to Section 3.4 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> for more information.
3.05	DOER*	Finalize solar readiness, explicitly distinguishing between solar required by Code (which would not be considered a mitigation measure) and beyond code solar readiness (which would be considered a mitigation measure).	Solar readiness is addressed in Section 3.5 of Chapter 3, <i>Climate Change Adaptation and Resiliency</i> for more information.
3.06	DOER*	In summary, the project is committing to the following: <ul style="list-style-type: none"> • Efficient electrification (electric air source heat pumps) of all space heating in the residential and retail buildings; • Electrification of water heating in the residential and retail buildings; • No use of curtain walls in any of the buildings; 	On page 1 of its comment letter, DOER noted that the Project is not committed to use of curtain walls in any of the buildings. This is an error. As noted in the DEIR, the Project is committed to utilizing high performance curtain wall assemblies in some of the buildings.

Comment #	Commenter	Comment	Response
5.01	CRWA	CRWA also supports increased public open space and urges the Proponent to incorporate a variety of GSI systems such as rain gardens, stormwater planters, tree trenches in addition to permeable pavement on walkways. These GSI systems should be sized and sited to most efficiently capture and treat stormwater runoff before it enters the South Meadow Brook and then eventually the Charles River. We specifically suggest the use of native plant species that can withstand periods of drought and can be used to capture and treat stormwater runoff.	As described in the DEIR, the Project will incorporate a variety of green infrastructure to treat stormwater, including but not limited to green roofs, bioretention basins, permeable pavement, street tree filters, infiltration, and rainwater harvesting for irrigation. The stormwater treatments systems will be sized and sited to most efficiently capture and treat stormwater runoff. The Landscape Architects will incorporate native plant species into their plant pallet to withstand periods of drought and to be used to capture and treat stormwater runoff.
5.02	CRWA	The proposed stormwater management strategy requires further design and documentation in the Final Environmental Impact Review (FEIR). We are concerned with the heavy use of permeable pavement to meet TMDL reduction requirements. Vegetated systems like bioretention areas can provide additional co-benefits such as reduced urban heat island effect as well as habitat and biodiversity enhancement. Also, if permeable pavement does not perform overtime, due to lack of maintenance, the overall project impervious surface could increase by 3-6% which would have substantial impacts on stormwater.	As described in the DEIR, the Project will incorporate a variety of green infrastructure to treat stormwater. Including but not limited to green roofs, bioretention basins, permeable pavement, street tree filters, infiltration, and rainwater harvesting for irrigation. The proposed stormwater management system will also include chambered infiltration systems. The chambered systems will be sized to meet MassDEP and the City of Newton requirements. Infiltration is not proposed only via permeable pavement and pavers, the thought being these permeable surfaces would promote infiltration and be in addition to meeting DEP requirements.
5.03	CRWA	Additionally, while the project fulfills the requirement of performing a drainage analysis for the 100-year storm event, there is not adequate documentation of stormwater retention on site. This information should be included as part of Table 1-4, so stormwater retention volumes can be compared between scenarios. We expect that the FEIR will include this documentation.	A drainage analysis will be part of the final design. The proposed stormwater system will be sized to meet MassDEP and the City of Newton requirements. The Project will infiltrate as much runoff as practical based on the approved site layout and Geotechnical Engineer recommendations.

Comment #	Commenter	Comment	Response
5.04 CRWA	<p>Finally, given that the project includes work proposed in the 200 ft. Riverfront Area (RA) of the daylighted section of the South Meadow Brook, the FEIR should contain more details regarding the nature of the work. While the Proponent has committed to improving the RA by reducing the area of pavement and by planting a diverse selection of native trees, shrubs, and other plants, the FEIR should include a much more comprehensive stream restoration plan and supporting details.</p>		<p>Section 4.1 of Chapter 4, <i>Wetlands</i> includes a description the restoration of elements of the South Meadow Brook Riverfront Area. Figures 4.1 - 4.4h provide information on the plantings proposed for the Project and work within the existing daylighted section of South Meadow Brook.</p>

7

Distribution List

7.1 Commonwealth of Massachusetts

Secretary Kathleen A. Theoharides
Executive Office of Energy and
Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114
MEPA@mass.gov

Commissioner Martin Suuberg
Department of Environmental Protection
One Winter Street
Boston, MA 02108
helena.boccadoro@mass.gov

DEP/Northeast Regional Office
Attn: John D. Viola
205B Lowell Street
Wilmington, MA 01887
john.d.viola@mass.gov

Department of Energy Resources
Attn: Paul F. Ormond
100 Cambridge Street, 10th Floor
Boston, MA 02114
paul.ormond@mass.gov

Massachusetts Department of
Transportation
Public/Private Development Unit
Attn: Lionel Lucien
10 Park Plaza, Suite #4150
Boston, MA 02116
lionel.lucien@dot.state.ma.us

Massachusetts Department of
Transportation – District #6
Attn: MEPA Coordinator
185 Kneeland Street
Boston, MA 02111
amitai.lipton@dot.state.ma.us

Metropolitan Area Planning Council
Attn: Marc D. Draisen
60 Temple Place, 6th Floor
Boston, MA 02111
mdraisen@mapc.org

Massachusetts Historical Commission
Attn: Brona Simon
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125
brona.simon@state.ma.us

Massachusetts Water Resources Authority
Attn: MEPA Reviewer
100 First Avenue, Building 39
Boston, MA 02129
Bethany.card@state.ma.us

7.2 City of Newton

City of Newton Council
Attn: Ward Councilor 5
1000 Commonwealth Avenue,
Newton Centre, MA 02459
bhumphrey@newtonma.gov

Newton Department of Planning &
Development
Attn: Director Barney Heath
1000 Commonwealth Avenue
Newton Centre, MA 02459
bheath@newtonma.gov

Newton Library
330 Homer Street
Newton, MA 02459
(via digital copy to the City)

Newton Conservation Commission
Attn: Jennifer Steel
1000 Commonwealth Avenue
Newton Centre, MA 02459
jsteel@newtonma.gov

Department of Health & Human Services
Attn: Commissioner Deborah Youngblood
1000 Commonwealth Ave
Newton, MA 02459
dyoungblood@newtonma.gov

7.3 Others

Charles River Watershed Association
Attn: Director of Watershed Resilience
190 Park Road
Weston, MA 02493
pmande@crwa.org