Preliminary Construction Management Plan (CMP) (Updated 6/25/20)

This Preliminary CMP describes the Project schedule and sequencing and identifies steps that will be taken during construction to minimize potential temporary environmental impacts related to the demolition and construction phase of the Project. More specifically, this CMP identifies the steps that will be taken to minimize impacts related to noise, air quality (dust), wetlands, water quality, and construction related traffic. Careful consideration has been given to developing plans to minimize construction phase impacts – specifically to pedestrian access and safety, potential impacts to the local neighborhoods, and protection of the Charles River Watershed.

Generally, measures to reduce construction period impacts include controlling erosion and sedimentation, controlling dust, machinery air emissions and noise, properly managing construction related truck traffic and protection of pedestrians. Additionally, a final CMP will be developed with input from the City of Newton Inspectional Services, Public Works and Planning Departments as well as the MBTA, MassDOT and other State agencies. Guided by considerable input from the selected general contractor, the CMP will include detailed information on construction activities, specific construction mitigation measures, and construction materials and access and staging plans to minimize impacts to patrons, abutters, and the local community. The CMP will define truck routes that will help in minimizing the impact of trucks on local streets. Barricades, walkways, lighting, and signage will be identified to address public safety throughout the construction period.

Overall, Project construction is expected to be completed in approximately 5 years. The Proponent estimates that the construction of the replacement parking garage would commence in Late 2021 and the full project would be completed in 2025. A preliminary timeline of the project is shown below in **Figure 1**.

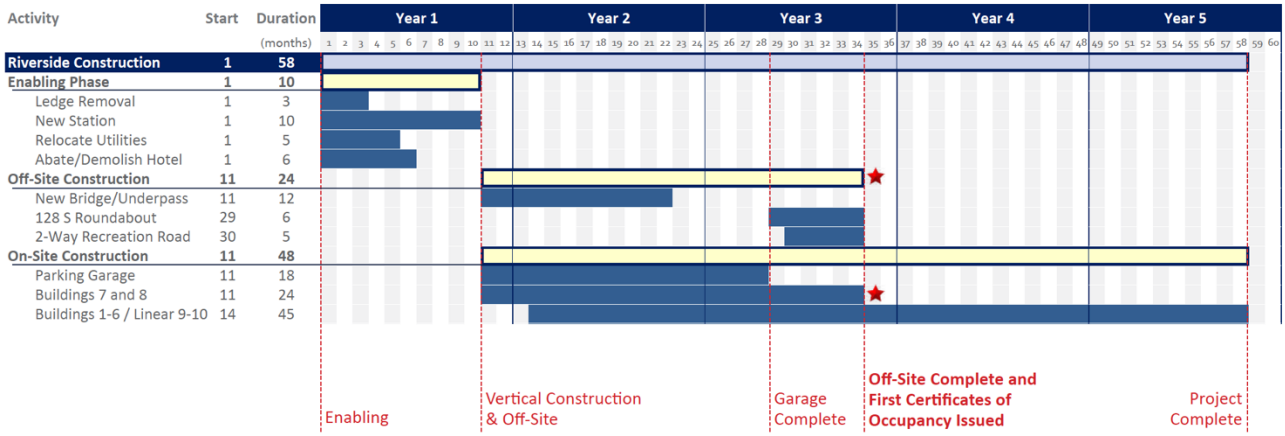

Figure 1 - Preliminary Project Timeline

It should be noted and is explicitly acknowledged by the proponent that the timeline in **Figure 1** above is preliminary and will ultimately vary dependent on factors such as approval timing, seasons/weather conditions and the interdependency or "critical path" of events. This timeline above illustrates the overall intent of the construction progression and illustrates key factors such as the requirement of completion of the offsite highway work prior to the issuance of Certificates of Occupancy by the City.

This CMP also describes the Project's planned compliance with the various environmental regulations including but not limited to the Massachusetts Contingency Plan (MCP) and EPA's National Pollution Discharge Elimination System (NPDES) General Permit Program for Stormwater Discharges from Construction Sites.

1.0 – MU-3 (TOD) Zone Requirements

The following section identifies how this Preliminary Construction Management Plan specifically addresses the criteria established in Section 7.3.5.A.9 of the Newton Zoning Ordinance for the MU-3 Zone.

■

1.1 – Proposed Construction Phasing Schedule

The Project schedule and sequencing plan have been preliminarily planned and coordinated with existing MBTA facilities to minimize construction impacts and efficiently complete the proposed improvements. As noted above, careful attention must be paid to the construction sequencing of the site improvements and individual buildings due to the unique nature of the project site as an active MBTA commuter facility. The construction phase of the Project will proceed in a manner that protects the adjacent resource areas, minimizes site erosion, and provides safe working conditions for the contractor. The construction phases of the Project will likely proceed as follows:

- 1.0 Enabling Phase
  - 1.1 Temporary Parking, Ledge Removal and Abatement (**Figure 2**)
  - Erosion control barriers will be installed prior to the start of construction along the down gradient limit of work line, and site security fencing will be installed, where appropriate, around the Project's working limits. In addition, security fencing and protective measures; lighting, signage, and overhead protection as deemed necessary will be provided along all pedestrian routes to maintain safe and efficient access for patrons and employees to all MBTA facilities.
  - The southern portion of the MBTA Maintenance Yard will be prepared for construction laydown including blasting of existing ledge
  - Adjustments will be made to the West Parking Area Hotel Indigo property to allow vehicular access routes for construction and MBTA service vehicles.

- The Hotel Indigo will be prepared for demolition including the abatement of any hazardous materials

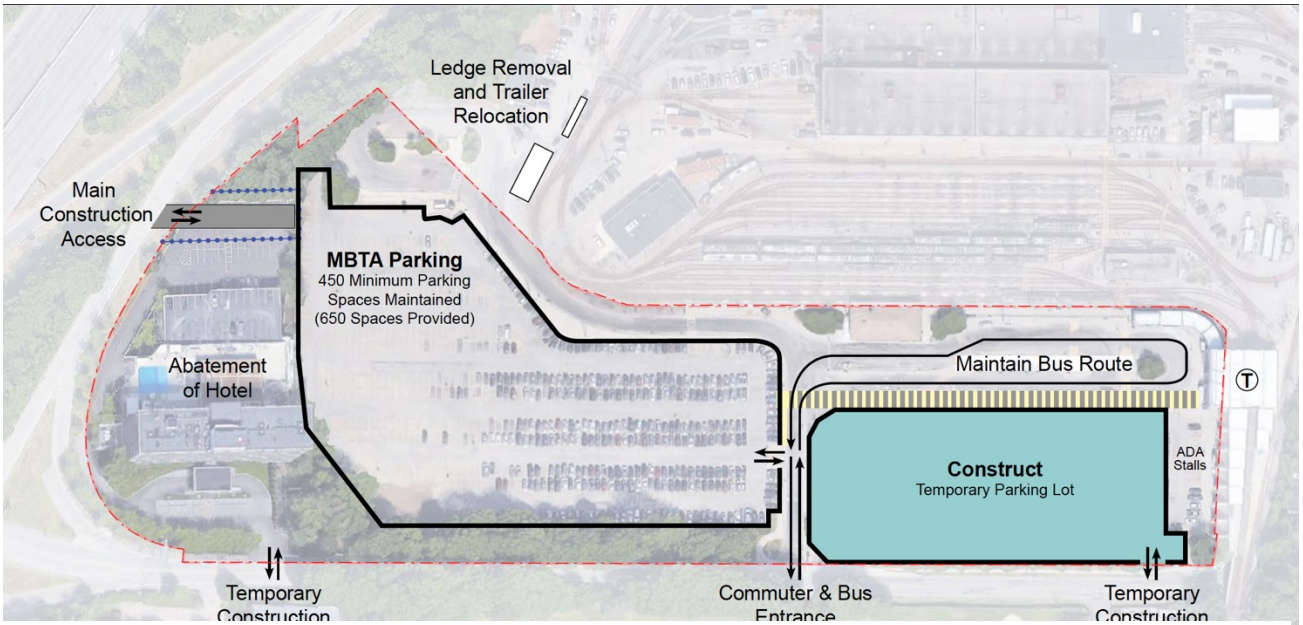

Figure 2 – Site Enabling (Months 0-2)

- 1.2 Utility Relocation, Hotel Demolition and Station Entrance (**Figure 3**)
  - Support posts for the green line catenary power system will be relocated to accommodate the project.
  - Permanent or temporary adjustments will be implemented to accommodate access to the MBTA station.
  - Existing utilities will be relocated, and new utilities will be installed in the Main Street corridor in preparation for new building foundations
  - Interim adjustments will be made to the existing parking area to accommodate a minimum of 450 parking spaces as well as maintaining adequate space for bus, shuttle and other station dropoff activities.
  - A carefully planned wayfinding and informational program will be coordinated with the MBTA as detailed later in this document

- The Hotel Indigo will be demolished

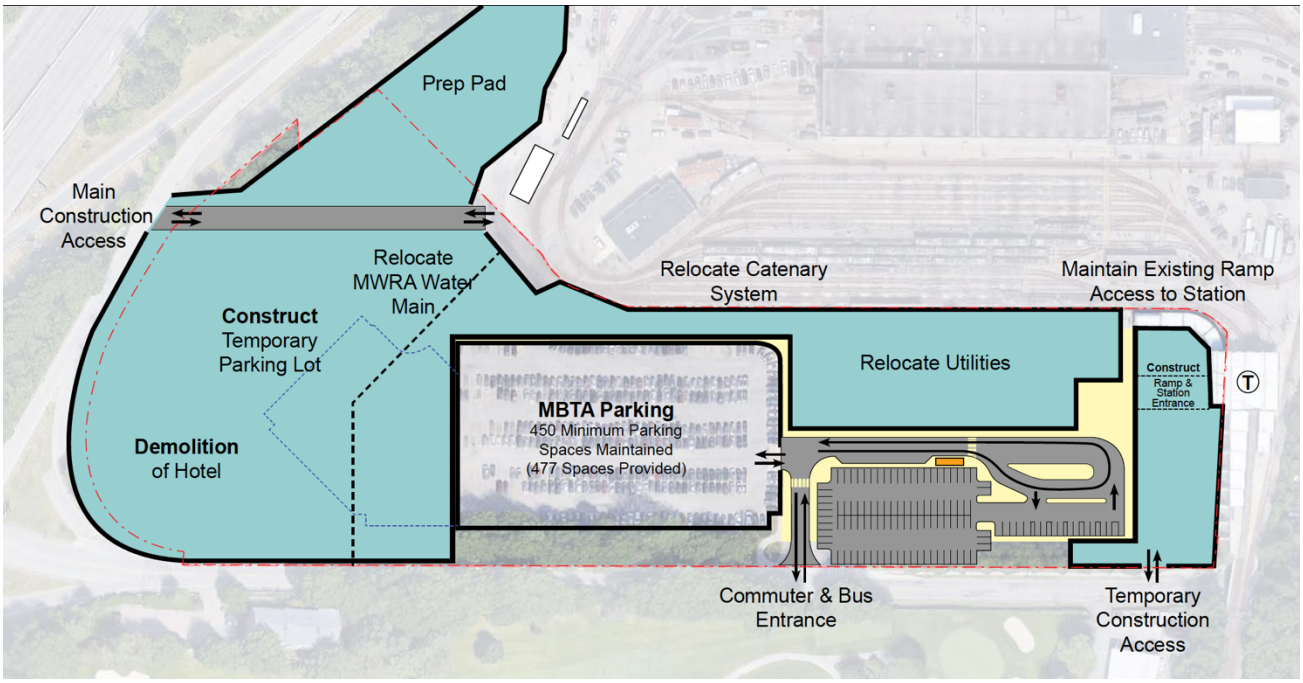

Figure 3 - Site Enabling (Months 3-10)

- 2.0 Vertical Construction Phase
  - 2.1 Off Site Construction **(Figure 4)**
    - Construction of the off-site highway improvements will begin at the start of vertical construction. Greater detail on the offsite work is included in the next section of this document. This work will include:
      - **A:** The new roundabout and associated improvements at the I-95/128S Grove Street on-/off-ramp
      - **B:** The relocation of the existing I-95/128N Grove Street on-/off-ramp to its new location at the Recreation Road/Main Street Intersection
      - The installation of three traffic signals at:
        - **C:** Grove Street/Road B,
        - **D:** Grove Street/Recreation Road
        - **E**: Grove Street/Main Street/I-95/128N ramp
    - Pedestrian and bicycle facilities from the I-95/128 S on-/off-ramp (**A**) across the Grove Street bridge (**B**) and up to the Grove Street/Recreation Road intersection (D) will be completed at this time.
    - The remainder of the bicycle and pedestrian facilities will not be completed until the adjacent buildings are open and occupied. In locations along Grove Street where buildings are under construction or construction has yet to commence, the existing or a temporary pedestrian walkway will be maintained to connect pedestrians from Lower Falls to Auburndale and the train station.

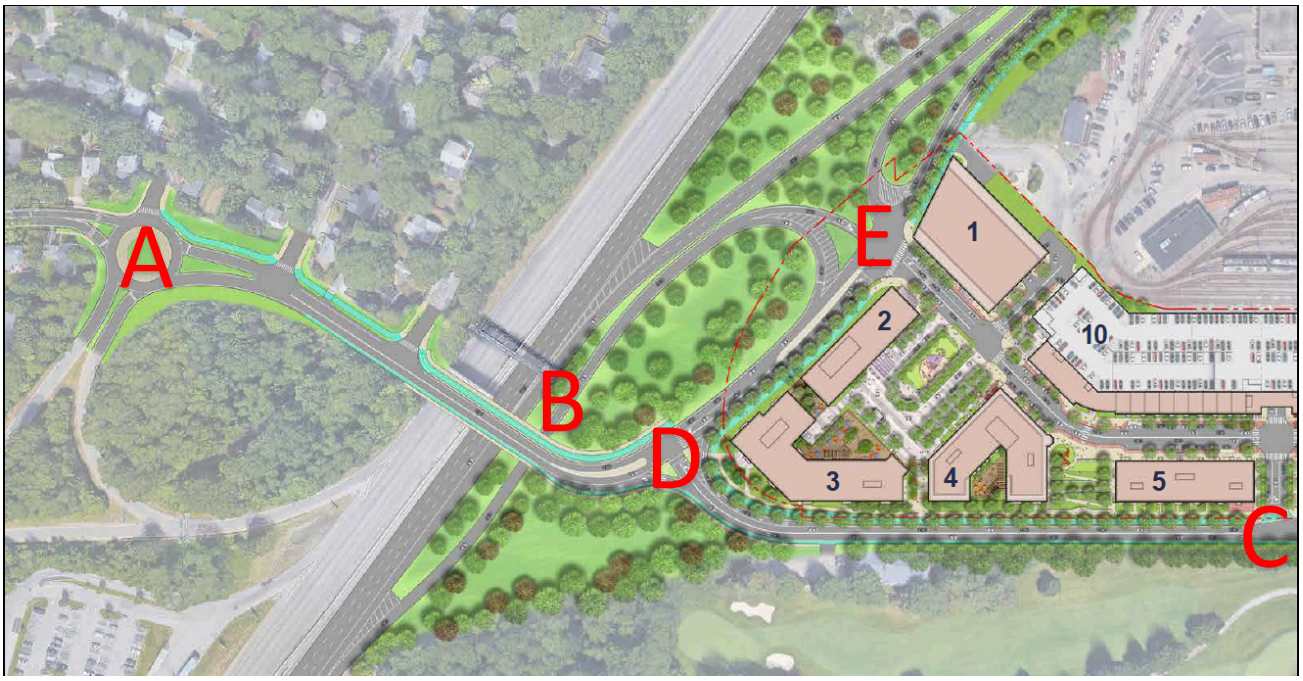

Figure 4 - Off-site Construction (Months 11-34)

- 2.2 Garage Construction (**Figure 5**)
  - Contractor will prepare the location for the new parking garage and a portion of the development buildings. Bituminous pavement from the Project Site will be demolished and processed for re-use on-site as fill material.
  - Construction of cast-in-place foundations for the parking garage and foundations for the adjacent buildings.

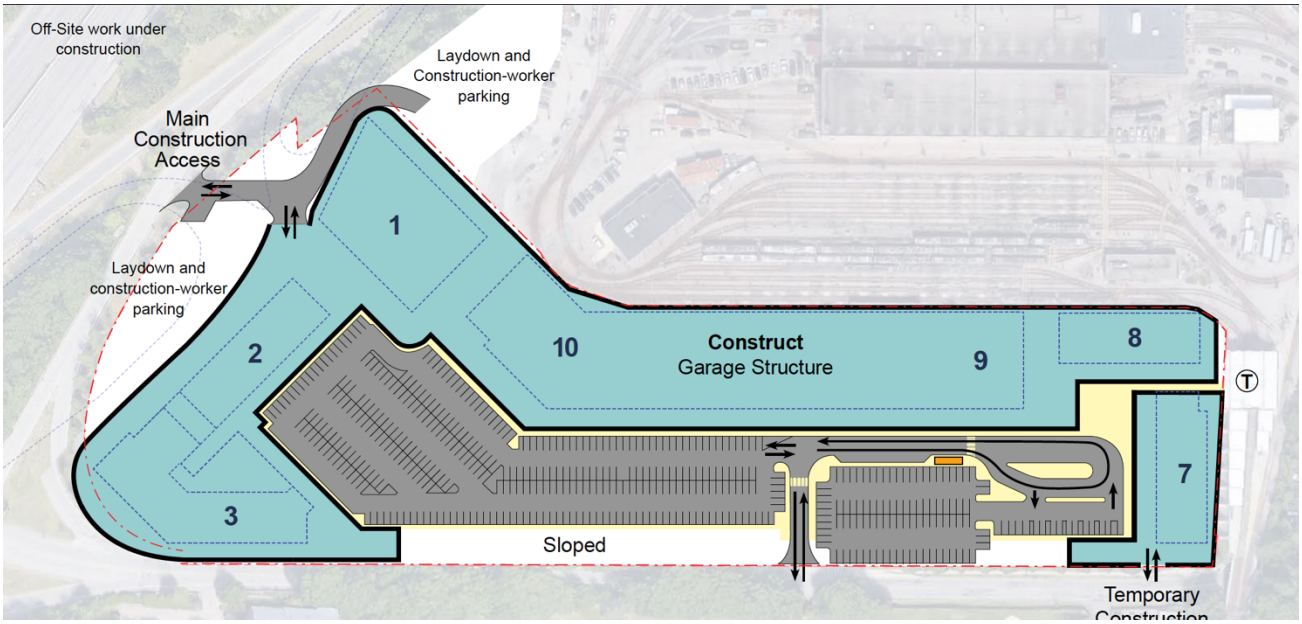

Figure 5 - Garage Construction (Months 11-28)

- Placement of pre-cast concrete structural elements for the floors of the parking garage. Vertical construction of adjacent buildings.
- Primary construction vehicle and MBTA yard access will be via Recreation Road
- A secondary construction vehicle access will be created for Building 7 via Grove Street
- Interim commuter parking will be maintained for a minimum of 450 vehicles
- Vertical construction will begin for a portion of the remaining buildings
- Off-site construction will commence per section 2.1 above.

- 2.3 MBTA Garage Opening, Completion of Buildings 7, 8 and Transit Square (**Figure 6**)
  - Upon completion and Occupancy Permit for the garage, all parking will be relocated to the new garage
  - A temporary protected pedestrian route will be established from the garage to the station
  - An interim drop-off and bus loop will be relocated
  - Buildings 7 and/or 8 will complete construction

Off-site construction will complete construction

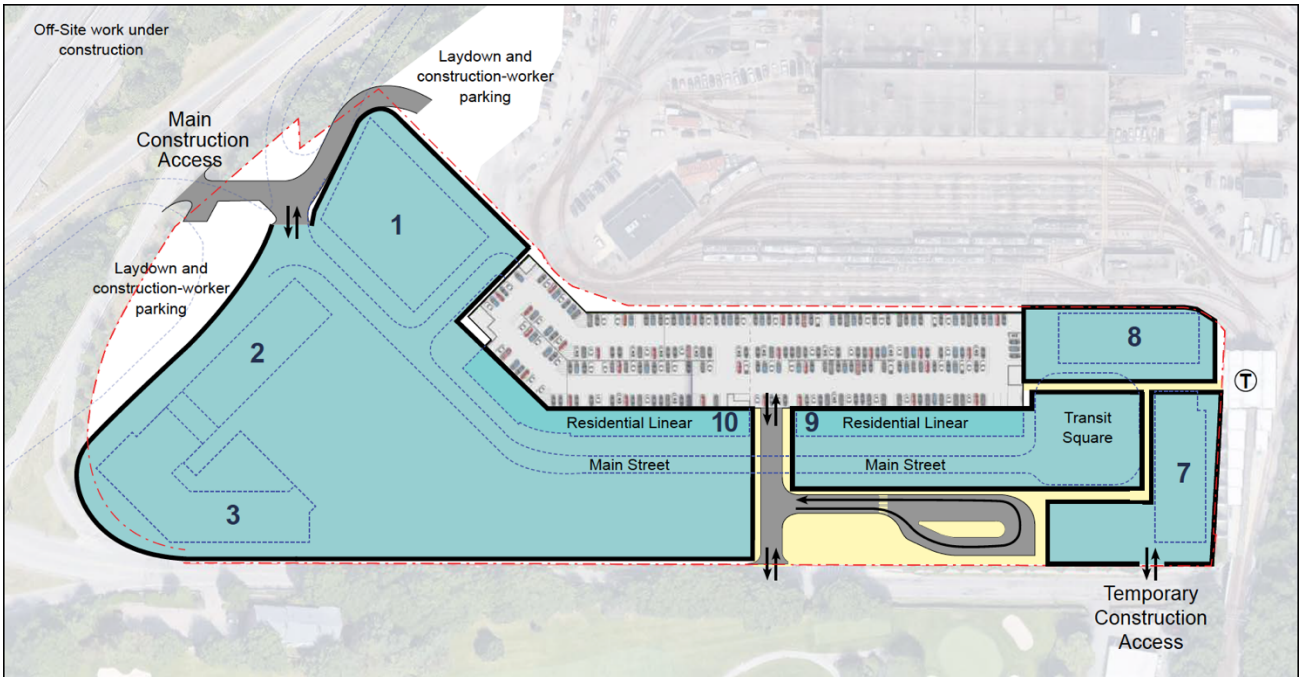

Figure 6 - Garage Structure Temporary Access (Months 29-34)

- 3.0 Remainder of project construction (**Figure 7**)
  - During this stage, the offsite highway access, garage, transit loop and Buildings 7 and 8 will be complete.
  - The remainder of the proposed development will continue construction. This remaining portion to work will continue to include:
    - Construction of the remaining structures
    - Earthwork activities, which includes excavation and backfill to bring the Project Site up to proposed grades.
    - Installation of final utilities and continued building pad preparation.
    - Installation of curbing, pavement, and Project Site features including signage, fencing, guardrail, etc.
    - Building construction and completion of Project Site features.
    - Installation of landscaping.

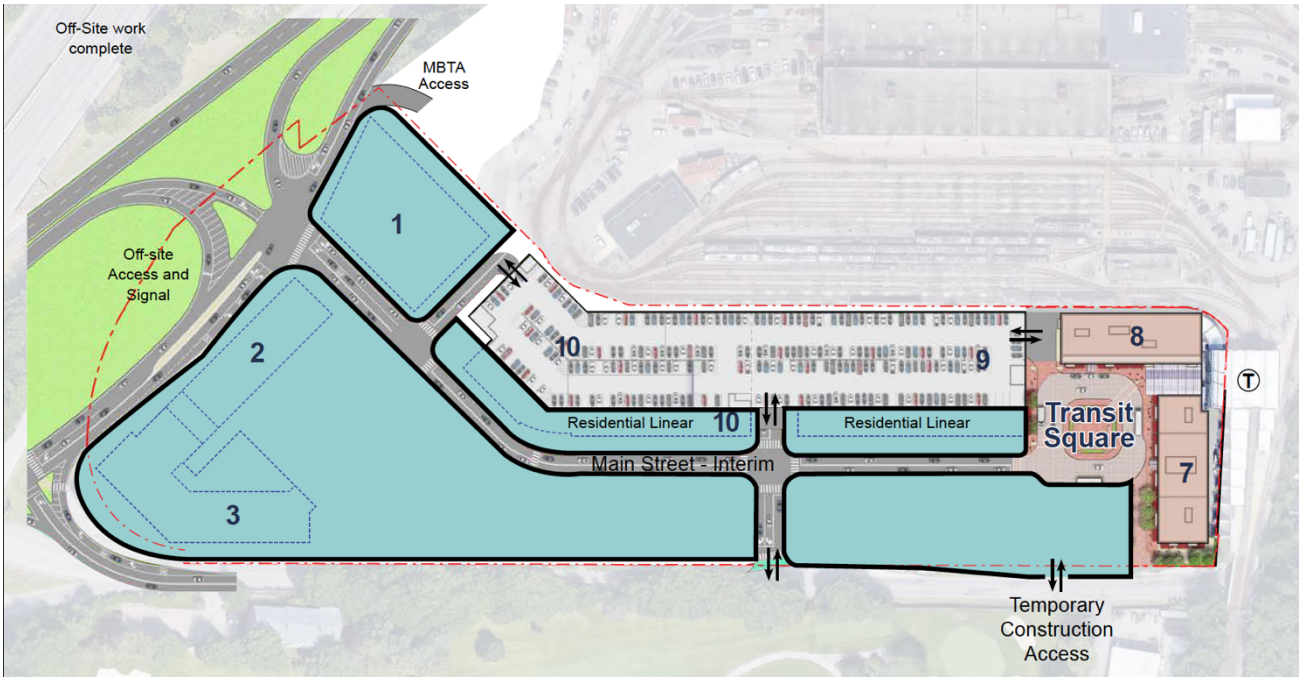

Figure 7 - Remainder of Construction (Month 35-on)

As demonstrated above, the construction sequence of the buildings other than the MBTA garage will progress in one rolling phase beginning at the start of the garage construction. The order of commencement of each building is subject to market conditions, site logistics and further coordination with the MBTA. It is expected that Buildings 7 and/or 8 will be the first to complete construction after the garage. Although the exact buildings have yet to be determined, we will commit that a Certificate of Occupancy for the privately-owned buildings (i.e. non-MBTA) will not be allowed until the agreed upon scope of the offsite work is completed.

As referenced above, it is expected that construction will be continuous and uninterrupted. However, certain buildings will start later in the timeline. To the extent that the construction pad area for any building has been cleared and stripped and has not or is not planned to start construction within a two month period, the pad area will be stabilized with seeding or stone covering to minimize erosion and to limit unsightliness.

■

1.2 – Off-site Roadway Improvements

Grove Street Bridge Modifications

The relocation of the Grove Street off-ramp (Item **B** in **Figure 4**) will require the modification or replacement of the end span of the Grove Street bridge. This can be accomplished in one of two ways (see **Figure 8**). The first option involves underpinning the existing bridge abutment with mini piles, retaining the earth under the existing abutment with a soil nail wall or similar earth support system, and then excavating the existing embankment to allow the new off ramp to pass under the bridge. The second option involves the complete reconstruction of the abutment with a new full-height abutment and the replacement of the existing deck. Both options will require adjustments to the routing of traffic through the work zone, subject to a final Traffic Maintenance Plan (TMP) to be approved by MassDOT during the design review process.

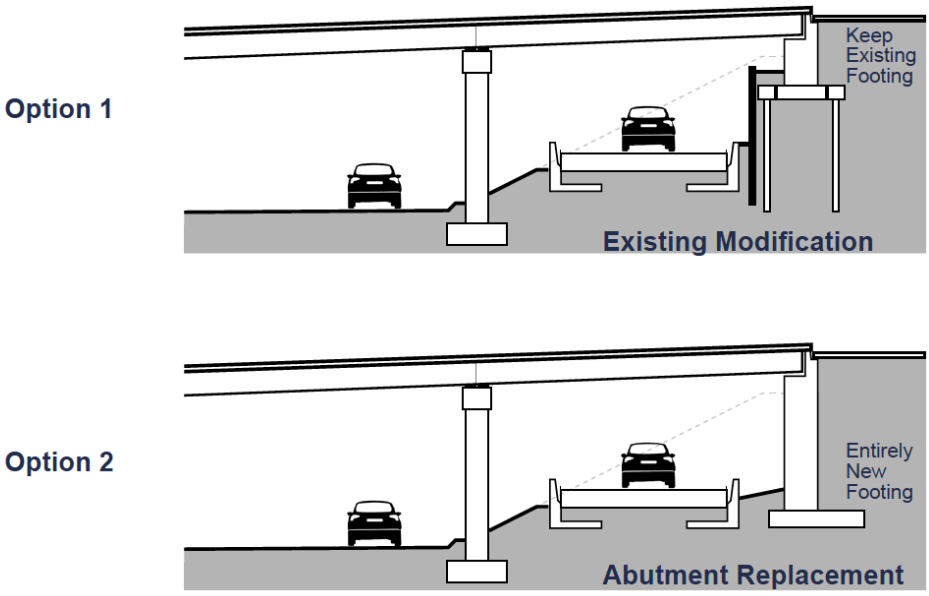

Figure 8 – Grove Street Bridge Modification Options

Option 1 presents an opportunity to shorten the timeframe and minimize the impact to the neighborhood by reducing the period of traffic routing adjustments when compared with Option 2. **Figure 9** shows an example of how traffic patterns would change through the work zone while construction is proceeding on this portion of the scope.

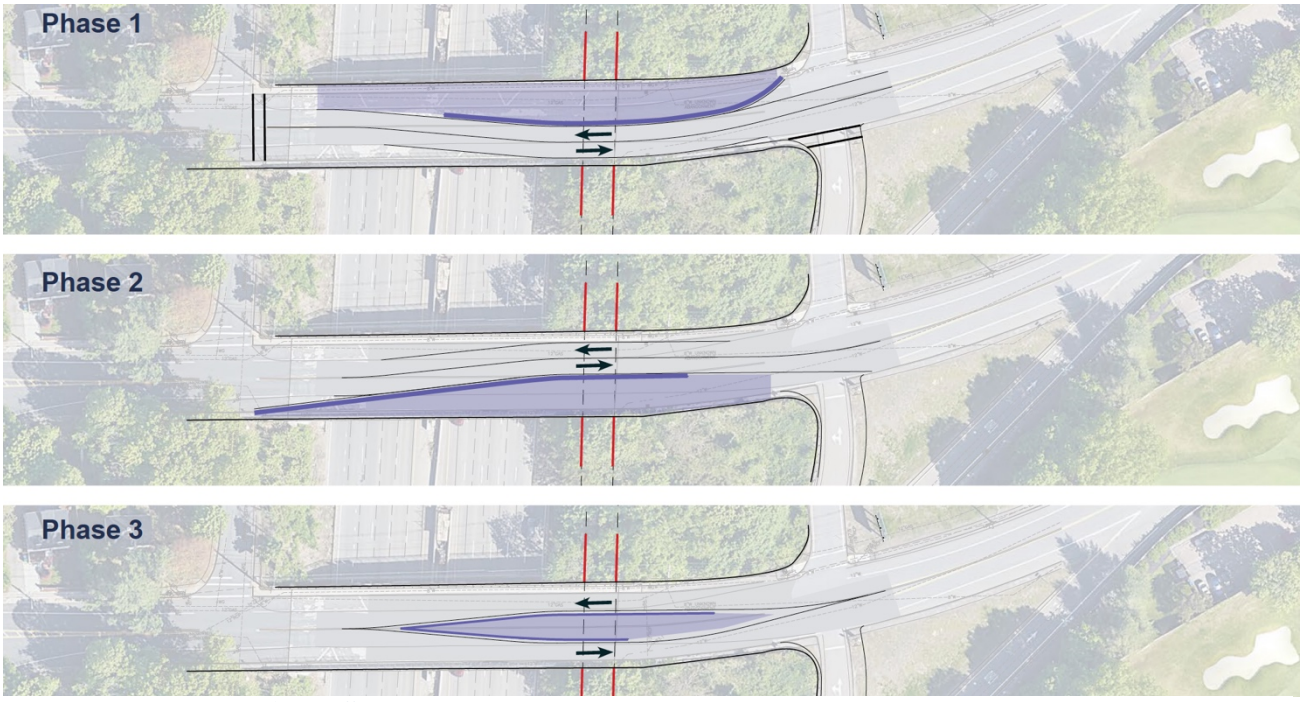

Figure 9 – Grove Street Bridge Traffic Maintenance

Throughout the course of the construction of these offsite improvements, all efforts will be made to provide uninterrupted two-way traffic flow as well as maintaining safe routes for bicycles and pedestrians as demonstrated above in **Figure 9**. This will be more challenging to accommodate if bridge modification requires the installation of a new abutment as referenced above as the work in the roadway above would be much more extensive and time consuming. The two other locations that will require careful attention to traffic maintenance are at the on- and off-ramps from Route 128 south and the intersection of Grove Street and Recreation Road. The majority of this work is subject to further design, coordination and review by MassDOT as the construction document review process continues. A final Traffic Maintenance Plan will be developed and approved by MassDOT during this process.

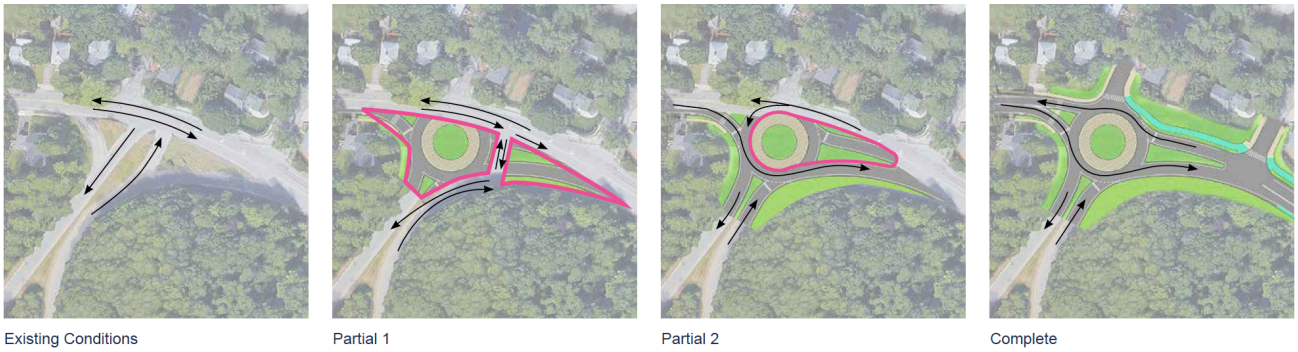

Figure 10 – 128 South Roundabout Traffic Maintenance

However, **Figure 10** shows conceptually how this work could proceed at the Route 128 south roundabout and **Figure 1**1 shows Grove Street/Recreation Road. The proponent recognizes that it is important to maintain two way

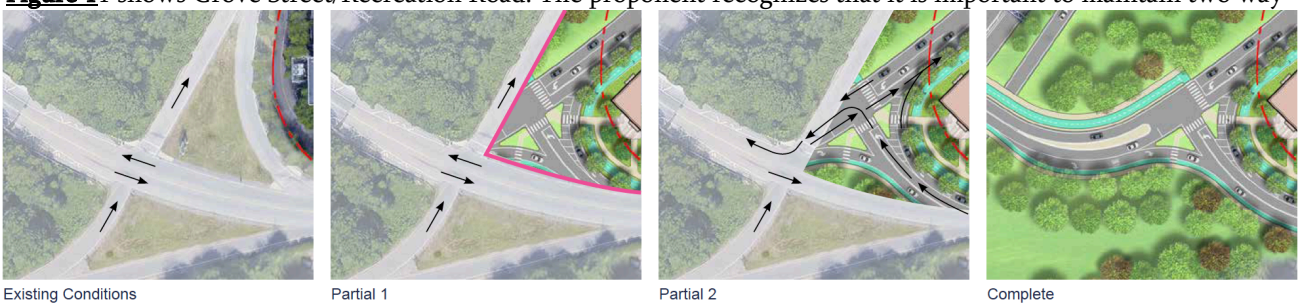

Figure 11 – Grove Street/Recreation Road Traffic Maintenance

flow on Grove Street, especially through the Lower Falls Neighborhood. Detours, if necessary, will be coordinated with the Liaison Committee, Public Works Department and Police Department and will avoid routing traffic through the adjacent streets in Lower Falls.

■

1.3 – Impacts to Adjacent Neighborhoods

In order to limit the potential for any construction vehicle traffic on local roadways, it is anticipated that all contractors will be required to access the property primarily by means of the Route 128/Grove Streetinterchange. At this time, the Proponent is considering two options for the main construction access.

- Option 1: provides a new dedicated construction access from the existing Recreation Road. This option is intended to further limit the amount of construction traffic on Grove Street and is subject to MassDOT and FHWA approval.
- Option 2: the Project would provide a temporary secondary means of access through the Hotel Indigo property. Construction access via the Grove Street frontage will be limited and subject to approval by the City's transportation and public works departments.

Preliminary discussions with MassDOT indicate that Option 1 will be the most likely solution

Where access is infeasible from the primary construction entrance, such as for portions or all of the construction of buildings along Grove Street, temporary access points along Grove Street will be created. These access points will be consolidated to the greatest extent practicable and will be managed by a police detail during construction hours.

All construction vehicles will be directed from the site to the I-95/128 interchange to use either I-95/128 or the Mass Pike/I-90 to limit and minimize disruption to the adjacent neighborhoods of Newton Lower Falls and Auburndale. **Figure 12** shows the proposed truck routing

Limitations further detailed in the subsequent portions of this document will be placed on construction hours, air quality/dust control, noise, and construction traffic to further address the impacts of the project construction to the neighborhood.

■

Interim Commuter Accommodations

The Proponent has and will continue to coordinate extensively with the MBTA to ensure that customer experience and safety is preserved during construction. The erection of the new garage to accommodate commuters will be the first step of construction. During this initial step, a minimum of 450 commuter parking spaces will be maintained within the existing lot, portions of the unimproved MBTA property, and potentially on the Hotel Indigo site. During this and subsequent stages of construction, a clear and safe access route for all vehicles to the parking areas and the station drop-off will be maintained. Additionally, safe and accessible pedestrian routes will be created and maintained from the parking, drop-off, bus berths, and Grove Street to access the station. Typically, the Riverside Station parking facility sees a peak demand of 650 vehicles. Additional parking capacity exists at the Woodland Station Garage, typically in excess of 200 spaces, which will accommodate any displaced commuters.

The proponent acknowledges that with the unique routing of the MBTA Green Line D branch to the Fenway station, the Riverside Terminal serves an important role in providing parking for those commuting to Red Sox games from the metro west region. For both weekend day games and evening night games the peak number of Red Sox commuters will be handled by the excess space available at Woodland Station as during this period the combined availability of parking at Riverside and Woodland will exceed this quantity. For the very few occasions that the Red Sox day games occur, the proponent will work with the MBTA to advertise the limited parking availability on these days and encourage the use of the Framingham Commuter Rail to Yawkey Station as an alternative.

The proponent is working with the MBTA and MassDOT on both an interim and permanent signage program to direct commuters on 128 to the stations that have available parking. These signs will be located strategically so that drivers make the correct decision to drive to the station with available parking rather than arriving at riverside only to find that they need to head to Woodland. Additionally an informational campaign will be coordinated in advance of the reduction in parking to allow commuters time to plan for adjusting their behaviors as they adjust to potentially parking at Woodland instead of Riverside.

The Proponent will also work with the appropriate City agencies and the Lower Falls community to establish a resident-only parking plan for the Lower Falls neighborhood during this period of reduced availability.

Upon interim completion of the garage building, the structure will be opened for commuters and a safe vehicular access route to the garage and a safe pedestrian route from the garage to the station will be maintained throughout the remainder of construction.

■

Contractor Parking

During the initial stages of construction prior to the opening of the garage, approximately 150 construction workers will park on site. During this phase, we have allocated space for contractor parking on portions of the existing Hotel Indigo site and a presently unused portion of the MBTA Maintenance yard that will be cleared and leveled prior to the start of the garage construction. After the opening of the garage, construction parking will peak at about 250 vehicles. At that point there will be approximately 1,000 unused parking spaces available for construction workers in the garage in addition to the space in the MBTA maintenance yard. Until completion of the project at least 250

spaces will be available in the garage. Construction vehicle and construction parking outside of designated areas and/or neighborhood streets shall be strictly prohibited.

Construction Hours

Construction of the Project will conform to all local, state, and federal laws and employ reasonable means to minimize inconvenience to residents in the general area. Exterior construction of the Project will occur predominantly during daytime hours no earlier than 7:00 AM and no later than 7:00 PM on any weekday, except for certain operations such as concrete finishing and emergency repairs. On Saturdays, exterior construction will occur no earlier than 8:00 AM and no later than 5:00 PM, with the same exceptions. The Mayor's office may allow longer hours of construction under special circumstances, if a written request is provided to the Mayor's office in advance (except in emergencies). There shall be no exterior construction on Sunday or any state or federal legal holiday except under unusual circumstances and with the consent of the Mayor's office.
Blasting activities will have greater restrictions. Preparation, excavation, removal of rock and other related activities may occur during the hours referenced above however the detonation of blast charges will be limited to weekdays no earlier than 10:00 AM and no later than 3:00 PM.

Air Quality Emissions

Dust generated from earthwork and other construction activities will be controlled by spraying with water. If necessary, other dust suppression methods will be implemented to ensure minimization of the off-site transport of dust. There also will be regular sweeping of the pavement of adjacent roadway surfaces during the construction period to minimize the potential for vehicular traffic to kick up dust and particulate matter.

All contractors will be required to adhere to all applicable regulations regarding control of dust and emissions. This will include, but not be limited to, maintenance of all motor vehicles, machinery, and equipment associated with construction activities and proper fitting of equipment with mufflers or other regulatory-required emissions control devices. The Proponent will require that the machinery of the contractor hired and the machinery of other sub-contractors hired to perform site work will utilize Low Sulfur Diesel (LSD) fuel or Ultra-Low Sulfur Diesel (ULSD) fuel in off-road construction equipment.

The construction process typically involves operations that may introduce two main types of air emissions: dust and vehicle exhaust. Clearing of vegetation, earthwork, blasting/excavation, and demolition activities provide the potential for release of fugitive dust emissions. The use and operation of construction vehicles and equipment provides the potential for increases of motor vehicle engine emissions.
Blasting will be carried out in accordance with all federal, state, and local blasting permit practices. No perchlorate containing explosives will be utilized. The proposed blasting is anticipated to be limited to the initial enabling phase of the project and last approximately 2 months.

Dust will be controlled using wetting agents, as necessary, and the direct transfer of excavated soil into covered trucks will greatly diminish the potential for soil migration. If necessary, other dust suppression methods will be implemented to ensure minimization of the off-site transport of dust. There also will be regular sweeping of the pavement of adjacent roadway surfaces during the construction period to minimize the potential for vehicular

traffic to kick up dust and particulate matter. Dust control and street cleaning will be components of the contractor's SWPPP under the EPA GCP.

The Proponent is aware of the Clean Construction Equipment Initiative actively promoted by the Department of Environmental Protection (DEP) (engine retrofit program and/or use of low sulfur fuel). A number of construction managers and contractors already are participating in this program. To the greatest practical degree, the Proponent will seek to engage a contractor familiar with and participating in this program.

The Proponent will require the use of ultra-low-sulfur diesel fuel exclusively in all diesel-powered construction equipment. Ultra-low sulfur diesel has a maximum sulfur content of 15 parts per million as opposed to low sulfur diesel fuel, which has a maximum sulfur content of 500 parts per million. In fact, by using ultra-low sulfur diesel fuel, there is a 97 percent reduction in the sulfur content as compared to low sulfur diesel fuel. In addition, the Proponent will direct its contractor(s) to retrofit any diesel-powered non-road construction equipment rated 50 horsepower or above to be used for 30 or more days over the course of the Project with EPA-verified (or equivalent) emission control devices (e.g., oxidation catalysts or other comparable technologies).

The Proponent and its contractors will comply with state law (M.G.L. Chapter 90, Section 16A) and DEP regulations (310 CMR 7.11(1)(b)), which limit vehicle idling to no more than five minutes in most cases. There are exceptions for vehicles being serviced, vehicles making deliveries that need to keep their engines running, and vehicles that need to run their engines to operate accessories.

The Proponent will contractually require the construction contractors to adhere to all applicable regulations regarding control of dust and emissions. This will include, but not be limited to, maintenance of all motor vehicles, machinery, and equipment associated with construction activities and proper fitting of equipment with mufflers or other regulatory-required emissions control devices. No significant uncontrolled dust or air quality impacts are anticipated to be generated by construction activities.

■

Air Quality Monitoring Requirements

The proponent will contract with a vendor specializing in air quality monitoring. The parameters of the monitoring will be as follows:

- Monitoring stations will be established at the start of and throughout any scheduled work that includes demolition, earthwork or blasting
- The perimeter will be monitored in four (4) directions to determine the effectiveness of dust control measures and notify the contractor and proponent of excessive dust migration. The reporting and data from the monitoring devices will be shared with the Liaison Committee

Earthwork Activities

The development plan strives to minimize significant cut and fill to the extent possible. Site imported fill materials will primarily include structural materials to support the development. These materials include bituminous

pavement, concrete pavement, and slab base sections and building structural fill. All disturbed undeveloped areas will receive six inches of topsoil and, at a minimum, will be planted with an appropriate seed mix.

The source of the import material has not yet been determined. This determination will occur during the construction/bidding process when the site contractor is selected. However, the Proponent and their consultants will produce Project specifications that define the parameters of the materials that can be used at the Project Site for both structural and non-structural needs.

Construction Noise

The Project will generate typical sound levels from construction activities, including foundation construction, truck movements, heavy equipment operations, blasting for ledge removal, and general construction activities. It should be noted that the proponent has committed to remove all ledge and demolition materials in the largest form possible and will not use a material crusher on-site. Construction activity associated with the Project may temporarily increase nearby sound levels due to the use of heavy machinery. Heavy machinery will be used intermittently throughout the Project's construction phases. The contractor will be required to comply with the MassDEP noise policy maintaining noise levels not to exceed 10 dBA over ambient levels at the location of sensitive receptors.

The Proponent will implement mitigation measures to reduce or minimize noise from construction activities. Specific mitigation measures may include:

- Construction equipment will be required to have installed and properly operating appropriate noise muffler systems and contractors will be required to maintain all original engine noise control equipment.
- All exterior construction activities, such as site excavation/grading and new building construction, will be managed and conducted in accordance with the City of Newton's requirements. Any necessary off-hour work will be minimized to the extent practicable.
- Appropriate traffic management techniques implemented during the construction period will mitigate roadway traffic noise impacts.
- Proper operation and maintenance, and prohibition of excessive idling of construction equipment engines will be implemented as required by DEP regulation 310 CMR 7.11.
- The Project Site will be surrounded by safety fencing to provide security, as well as to mitigate construction noise and fugitive dust.
- Work hours and relevant noise generating activities will be reviewed with the City of Newton prior to construction.
- Appropriate operational specifications and performance standards will be incorporated into the construction contract documents.

Limited ledge removal will be required during the site work phase of the Project. Blasting activities to remove rock and ledge will be restricted to daytime periods only during approved construction hours. All blasting will be conducted in accordance with applicable safety regulations and immediate residential abutters to the Project Site will be notified prior to any blasting activities. A typical rock blast produces a maximum sound level in the audible range of 94 dBA Lmax at 50 feet. The estimated instantaneous maximum (Lmax) sound levels at the nearest residential properties from blasting on the site are 69 to 84 dBA. These levels are similar to existing daytime sound levels at these same locations of 60 to 87 dBA Lmax. Therefore, blasting sound for brief periods during the day is not expected to create a noise nuisance condition to surrounding residential properties. Furthermore, all blasting

activity will be done by a licensed blasting contractor in full compliance with all state and federal regulations for protecting residential areas.

■

Noise Monitoring Requirements

The proponent will contract with a vendor specializing in noise monitoring. The parameters of the monitoring will be as follows:

- A baseline noise level will be established in terms of A-weighted decibels (dBA). Currently this is established using historical levels by MassDOT due to the inconsistent sound levels related to COVID-19. The proponent will use the process that is in effect at the start of construction.
- A monitoring station will be established at the nearest sensitive receptor during demolition, earthwork and blasting activities
- The activities will be required to maintain sound levels that do not result in an increase of 10 dBA over the baseline level.

■

Vibration Monitoring Requirements

The proponent will contract with a vendor specializing in the monitoring of vibration monitoring. The parameters of the monitoring will be as follows:

- Monitoring stations will be established at the start of and throughout any scheduled work that includes demolition, earthwork or blasting
- The perimeter will be monitored in four (4) directions to determine conformance with the vibration limitations set forth by the City and notify the contractor and proponent of excessive vibration. The reporting and data from the monitoring devices will be shared with the Liaison Committee

Wetlands and Water Quality

During construction, the Project will include installation of redundant erosion and sedimentation controls to eliminate discharge of any sediment material into nearby wetland resource areas or off-site drainage systems. Site preparation activities, construction staging, and other requirements are described below. Additionally, a Stormwater Management Plan, as described in the Stormwater Management Report, has been developed to minimize impacts on nearby resource areas from construction activities, and long term operation of the Project.

There is no work anticipated directly within wetland resource areas. Work within the 100-foot wetland buffer zone is also limited and includes minor re-grading and restoration of open space to accommodate the roadway improvements and future connection to the DCR bike path. Erosion and sedimentation controls including silt fence and hay bales will be installed along appropriate downgrade portions of the perimeter of the excavated areas to prevent construction materials from contaminating the storm drainage system.

Site Preparation, Construction Staging and General Construction Requirements

The Project Site preparation and construction staging for the Project will include several important steps. The contractor will establish site trailers and staging areas to minimize impacts on natural resources. The site trailers and staging areas will provide a location for erosion control equipment and supplies, documentation related to the Project's local and State permits as well as NPDES compliance, and spill control equipment. It is expected that the staging area will be located on compacted gravel or a paved surface, which will reduce potential erosion. As previously noted, the vast majority of the site has been previously altered with predominately paved areas associated with commuter parking areas. As such, these areas will be far more manageable as compared to a previously undisturbed site.

The following are some general requirements related to construction vehicle fueling and storage:

- Any refueling of construction vehicles and equipment will take place outside of the 100-foot wetlands buffer zone or riverfront area and will not be conducted in proximity to temporary sedimentation basins or diversion swales.
- No on-site disposal of solid waste, including building materials, is allowed in the 100-foot buffer zone.
- No materials will be disposed of into the wetlands or existing or proposed drainage systems. All contractors, including concrete suppliers, painters and plasterers, will be informed that the cleaning of equipment is prohibited in areas where wash water will drain directly into wetlands or stormwater collection systems.
- The contractor will establish a water resource to supply a "water truck", or other means, to provide moisture for dust control and irrigation. Water will not be withdrawn from wetland areas.

Upon establishing the staging area, the contractor will then establish sedimentation and erosion controls as identified in the next section. Although specific construction and staging details have not been finalized, the Proponent will work with the Contractor to verify that materials staging and storage areas will be located to minimize impact to the surrounding neighborhood, pedestrian, and vehicular traffic. All staging and vehicular unloading is anticipated to occur on-site.

Sedimentation and Erosion Control

The Project will include implementation of erosion and sedimentation controls during each phase of construction through implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will be adapted to fit the contractor's equipment, weather conditions, and specific construction activity. The following sedimentation and erosion control measures will be employed, as well as additional construction methods, in order to minimize impacts.

The program incorporates Best Management Practices (BMPs) specified in guidelines developed by the DEP and the U.S. Environmental Protection Agency (EPA). Proper implementation of the erosion and sedimentation control program will:

- Minimize exposed soil areas through sequencing and temporary stabilization;
- Place structures to manage stormwater runoff and erosion; and

- Establish a permanent vegetative cover or other forms of stabilization as soon as practicable.

The structural and non-structural practices proposed for the Project comply with criteria contained in the NPDES General Permit for Discharges from Large and Small Construction Activities issued by the EPA. Non-structural practices include:

- Temporary Stabilization;
- Temporary Seeding;
- Permanent Seeding;
- Pavement Sweeping; and
- Dust Control.

Structural practices include:

- Erosion Control Barriers,
- Stabilized Construction Exits;
- Temporary Sediment Basins;
- Diversion Swales;
- Temporary Check Dams;
- Catch Basin Inlet Protection; and
- Dewatering Filters.

In addition, a hay bale/silt fence line will be installed along the down gradient slope at the limit of work line. The installation of this hay bale/silt fence line will provide erosion and sedimentation controls for the Project, and will define the limit of disturbance for the site contractor.

Pre-Construction Erosion Control

- Erosion control barriers (silt fences or hay bale dyke) will be installed prior to the start of construction. These barriers will remain in place until all tributary surfaces have been fully stabilized.
- The contractor will establish a staging area, outside the 100-foot wetland buffer zone and riverfront area, for the overnight storage of equipment and stockpiling of materials.
- In the staging area, the contractor will have a stockpile of materials required to control erosion on-site to be used to supplement or repair erosion control devices. These materials will include, but are not limited to, hay bales, silt fence, erosion control matting, and crushed stone.
- A temporary stone construction entrance is required to prevent tracking of silt, mud, etc, onto existing roads. The stone will be replaced regularly and, as needed, if silt-laden.
- The contractor is responsible for erosion control on the Site and will utilize erosion control measures where needed, regardless of whether the measures are specified on the construction plans or in supplemental plans prepared for the SWPPP.

General Erosion Control Measures

The most important aspects of controlling erosion and sedimentation are limiting the extent of disturbance and limiting the size and length of the tributary drainage areas to the worksite and drainage structures. These fundamental principles will be the key factors in the contractor's control of erosion on the Project Site. If appropriate, the contractor will construct temporary diversion swales, settling basins, or use a settling tank. If additional drainage or erosion control measures are needed, they will be located in the upland, up-gradient from the hay bales and silt fences.

All disturbed surfaces will be stabilized a minimum of 14 days after construction in any portion of the Project Site has ceased or is temporarily halted, unless additional construction is intended to be initiated within 21 days.

The contractor is responsible for the maintenance and repair of all erosion control devices on-site. All erosion control devices will be regularly inspected. At no time will silt-laden water be allowed to enter sensitive areas (wetlands, streams, and drainage systems). Any runoff from disturbed surfaces will be directed through a sedimentation tank that will discharge by gravity to the existing on-site drainage system.

Soil Stabilization Specifications

All disturbed areas to remain open will be graded and stabilized with plantings, sod, grass, riprap, or other suitable material as shown or specified on the plans. A minimum of six inches of loam will be applied to all surfaces to be seeded. Loam will be uniformly applied, compacted, shaped, and smoothed prior to being seeded.

Seeding may be performed by hand, mechanical, or by tractor-mounted spreader. Hydroseeding or sod may also be used. Seeding before April 15, or after October 15, will be reapplied between these dates if a minimum germination of 90 percent of surface area coverage has not occurred, or if the surface has become unstable. Seed will be lightly raked into a depth of ¼-inch to one inch, with raking to be perpendicular to slope. Seeded areas will be mulched using seed-free straw, covering the area to a depth of one inch.

Utility Construction

The Proponent will construct utility trenches in a manner that will not direct runoff toward wetlands or to drainage system structures.

Drainage System

The following will be employed during construction activities in order to minimize impacts to the local drainage system:

- Inlet works shall be constructed to a point that will allow the stabilization of the area over the pipe, if the tributary drainage works are not to be immediately extended.
- Hay bale check dams shall be used on roadways to divert runoff onto stabilized areas.
- The drainage system will be installed from the downstream end up.

- Until tributary areas are stabilized, catch basin inlets will be filtered with a siltsack, or by placing filter fabric over catch basin grates and surrounding the grate with stone or sand bags. If intense rainfall is predicted before all tributary areas are stabilized, erosion control measures will be reinforced for the duration of the storm. Downstream areas will be inspected and any sediment removed at the end of the storm.
- Unfiltered water will not be allowed to enter pipes from unstabilized surfaces.
- Trench excavation will be limited to the minimum length required for daily pipe installation. All trenches will be backfilled as soon as possible. The ends of pipes will be closed nightly with plywood.
- Silt-laden waters should be intercepted prior to reaching catch basins. Any gross depositions of materials on paved surfaces will be removed.
- All paved areas shall be vacuum swept during the April-May period.
- Catch basins should be inspected monthly and cleaned in anticipation of the winter season in November and at the same time the roads are swept in the spring.

Massachusetts Contingency Plan (MCP) Compliance

The project Licensed Site Professional (LSP) will prepare a draft Release Abatement Measure (RAM) Plan consistent with the MCP. The RAM Plan will detail soil and groundwater management activities during all site earthwork operations. Prior to submitting the RAM Plan to MassDEP, the draft will be provided to the City for review. The RAM will require the LSP or its designee to be on-site during all earthwork activity in areas where oil and/or hazardous material concentrations exceed the applicable Method 1 Standards. Modifications to the Plan and status reports prepared by the LSP shall be provided to the City. If additional contamination sources in excess of reportable limits are encountered the Proponent will notify City and provide recommendations on additional soil and/or groundwater testing to confirm the presence or absence of hazardous materials. If additional contamination in excess of reportable limits are in fact encountered, the Proponent and its LSP will prepare a Release Notification and submit to MassDEP. Air quality monitoring will be conducted throughout earthwork activities in accordance with the RAM Plan.

Maintenance of Erosion and Sedimentation Controls

Scheduled inspections and maintenance of erosion and sedimentation controls will be routinely performed by the Contractor and/or an Environmental Site Monitor to maintain the functional capacity of the stormwater system and to protect stormwater quality during construction. Sediment and erosion controls will be inspected within 12 hours following each storm event of 0.5-inch or greater. Immediate action will be taken to correct any failures that are observed and repairs and/or adjustments made promptly to any erosion and sedimentation control measures found to be inadequately performing. Silt sacks or hay bales will be installed in or around existing and new catch basins and a supply of replacement materials such as silt fence, hay bales, etc. necessary to make repairs or for first response in the event of an accidental release or failure, will be stored on-site. Catch basins in work areas will be cleaned when the sump becomes one-half full and accumulated sediment and debris should be removed from the site.

National Pollutant Discharge Elimination System

As previously discussed, the Project is subject to the provisions of the NPDES because the proposed development results in the disturbance of more than one acre of land. Prior to the start of construction, the property owner and/or general contractor must file a Notice of Intent (NOI) with the U.S. Environmental Protection Agency (EPA) under the NPDES General Permit for Construction Activities. The NOI will include a Storm Water Pollution Prevention Plan (SWPPP), largely consisting of the erosion and sedimentation control plan described herein. A SWPPP will be prepared by the general contractor prior to filing the NOI for the NPDES Phase II Stormwater General Permit. The general contractor is solely responsible for developing and implementing the SWPPP. The final CMP will include a copy of the SWPPP as filed with the EPA in the appendix. The SWPPP will include the final phased Erosion and Sedimentation Control Plan, a Spill Prevention, Control and Countermeasure Plan and the Operations and Maintenance checklist for use in the log to be maintained on site. This log will be kept in the field office available for review and will be reviewed as part of the Liaison Committee meetings.

The SWPPP will be implemented during construction to comply with the requirements of the NPDES General Permit. The Project contractor will be responsible for implementing and maintaining all erosion and sedimentation control measures. Below are specific recording and inspection requirements:

NPDES Record Requirements

- A copy of the NPDES submittal and SWPPP must be kept on-site at all times during construction and will be made available to all interested parties.
- Records must be maintained pursuant to the permit for a period of three years from the date of stabilization of the Project Site as required. Stabilization occurs when the Project Site has over 70 percent vegetative growth and/or mechanical stabilization throughout.
- The detailed plans of completed work must be added to the NPDES and SWPPP information specified above as they become available.

NPDES Inspection Requirements

- All inspections will be conducted by qualified personnel who will produce written quantitative and qualitative reports on the construction methods, general condition of the Project Site, the condition of erosion control measures, and the status of the installation of drainage structures.
- Inspections are required during site alteration a minimum of one out of every seven days while surfaces are not stabilized.
- Inspections are required within 24 hours of storms which have 0.25-inches or greater of precipitation.
- Before/until the Project Site is fully stabilized, inspections will be conducted at monthly intervals for a period of one year.

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Water Quality and Monitoring Requirements

The Proponent will conduct a stormwater sampling program in accordance with the City of Newton MS4 Permit Redevelopment Requirements (Section 2.3.6.a.). The sampling program will begin within 60 days of the completion of Infiltration System 101 (as shown on the site plans) and continue annually thereafter for two years following the full build out of the project. Sampling will be conducted at two drainage structures:

- The existing drainage structure adjacent to Grove Street on the development parcel approximately 200 feet south of the MBTA rail bridge
- DMH-13 as shown on the site plans. Samples at this location should be taken both from the 48" and 60" pipes entering the structure.

Samples shall be taken both during wet and dry conditions. These samples shall be documented, and the following information shall be provided to the City of Newton Stormwater Program Manager:

- Date of sample and weather conditions
- Date of the most recent rain event
- Depth of precipitation of the most recent rain event
- Percentage of Total Suspended Solids (TSS) by EPA approved method 160. or 180.1
- Total Phosphorus (TP) in sample by EPA approved method 365.1, 265.2 or SM 4500-P-E

Construction Traffic

The construction period will generate construction truck/vehicle traffic and construction employee traffic. The following is a summary of the expected impacts of construction truck traffic and the measures to be used to reduce any potentially negative impacts during the construction period.

Truck Access

The Proponent is committed to working with local and MBTA public officials to help ensure that appropriate traffic maintenance and protection measures are in place during construction. Designated routes for all associated construction truck traffic will be implemented. All construction deliveries will be required to access the project site via the Route 128 corridor and Grove Street interchange and not via local Newton or Wellesley roads.
The contractor will establish site construction trailers and staging areas to minimize impacts on traffic. Trucks will be required to wait in on-site staging/waiting areas and will be prohibited from stopping for extended durations on public roads, including Grove Street. **Figure 12** below shows the proposed construction vehicle routes.

Figure 12 - Construction Vehicle/Delivery Routes

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Traffic Maintenance

A pre-construction coordination meeting with the Proponent, General Contractor, and City will be scheduled to designate truck routes and coordinate operations for off-site work required for the construction of roadway and related utility improvements. Generally, the off-site construction will be performed during off-peak travel periods.

All reasonable efforts will be made to maintain existing traffic patterns at all times. Full road closures and detours will be avoided to the maximum extent possible and will be limited to off-peak travel periods.

Demolition, Excavation and Construction Waste

While overall demolition activities are minimal, all construction and demolition debris will be handled, managed, and disposed of in accordance with applicable regulations, including the "Waste Bans" as applicable at local solid waste facilities in the Project Site area (effective July 1, 2006 solid waste facility management regulations at 310 CMR 19.017). In addition, solid waste/debris generated by the Project's construction activities will be managed and disposed of in accordance with DEP's Waste and Recycling Regulations and Standards (310 CMR 16.00 and 310 CMR 19.000).

The amount of demolition to occur is limited to the existing hotel and a few ancillary MBTA structures. It is anticipated that any concrete demolition debris will be removed and hauled away in the largest sections possible to minimize dust and disturbance. Bedrock and large boulders also will also be hauled away rather than crushed on site to minimize disturbance. To the extent possible, granular soils that are excavated will be reused as compacted backfill. Any geotechnically unsuitable soil, such as organic peat, will be disposed off-site at appropriate locations. During construction, there also will be solid waste generated by the various trades. These materials will be collected into dumpsters and hauled to licensed disposal facilities. To the extent feasible, separate containers or dumpsters will be provided to separate recyclable materials such as cardboard, paper, wood, and metals.

Any asbestos-containing waste material will be managed in accordance with DEP's Solid Waste Management Regulations (310 CMR 19.061) for "special waste." A licensed waste management contractor will be retained to transport all debris to an approved landfill/disposal facility or reclamation facility.

Liaison Committee

At least two months prior to the start of construction, the proponent will work with the City Planning Department to establish a Liaison Committee. The purpose of the Liaison Committee will be:

1. To enhance and ensure communication as to the status and progress of the construction of the Project by the Petitioner
2. To provide a forum for initial presentation of a construction schedule and any significant changes to schedule or changes of plans for which public review is appropriate.
3. To receive and deal with construction-specific issues including, without limitation, noise, dust, parking and traffic; to monitor implementation of the final Construction Management Plan; and to receive notices and communications from the Department of Inspectional Services and the Planning and Development Department

The Liaison Committee will meet monthly for the first six months of construction and thereafter every three months unless there is consensus within the Liaison Committee that no meeting is necessary until at least six months after the occupancy of the final building is complete.

The Committee will consist of two designees of the Petitioner, four residents from the neighborhood surrounding the project and the Ward 4 City Councilors. The President of the City Council shall appoint the resident neighborhood members. Meetings of the Liaison Committee will be open to the public. The proponent will designate a primary point of contact and a secondary point of contact. The primary point of contact will be responsible for the management of communication related to the Liaison Committee including scheduling meetings, setting agendas, disseminating meeting minutes and distributing any necessary project information. The primary point of contact will maintain a phone number and email address for committee members, residents and other interested parties to request information and report issues. A secondary point of contact will be available for contact in the event of emergencies and the primary point of contact cannot be reached.