



Construction Management Plan

Table of Contents

Public Safety

Police Details	2
Perimeter Protection	2
Emergency Site Access	2
Snow Removal	2
Street Cleaning	2

Abutter and Agency Coordination

Abutter Coordination	3
Impact on Existing Construction Projects	3
Signage and Distribution of Information	3
Utility Connections	3
Trees & Plantings	3

Construction Logistics

Material Handling	4
Construction Waste	4
Construction Hours	4
Truck Movements during Construction	4
Construction Employee Trip Generation	6
Construction Worker Parking	7
Interim Parking Conditions for 1 Brookline Place	7
Portable Sanitary Facilities	7

Mitigation Measures

Environmental	8
Air Quality, Dust and Odor Control	8
On-site Dewatering	9
Rodent Control	9
Noise Control	9
Vibration Monitoring	10



Public Safety

Police Details

Police details will be provided during construction activities as required to facilitate traffic flow and pedestrian safety. Construction procedures will be designed to meet all Occupational Safety and Health Administration (OSHA) safety standards for specific site construction activities.

Perimeter Protection

Secure fencing and barricades will be used to isolate construction areas from pedestrian traffic around the site. In addition, sidewalk areas and walkways near construction activities will be well marked to protect pedestrians and ensure their safety. Directional signage will be installed and regularly updated as site conditions change during construction. Overhead protection will be used to isolate and safeguard pedestrians along the temporary Washington Street sidewalk during all phases of construction.

Emergency Site Access

Access to the site for emergency vehicles will be maintained at all times. The site will be available for inspection by the police and fire departments upon completion of the site preparation and mobilization phase to ensure compliance of all emergency access and safety.

Snow Removal

The Construction Manager will be responsible for removing snow from all public sidewalks immediately adjacent to the Project. This will be done as required to ensure that all sidewalks are clear of snow and ice. Under no condition will the removed snow be disposed of on public property.

Street Cleaning

Street cleaning will take place daily or more frequently, as required.



Abutter and Agency Coordination

Abutter Coordination

All immediate abutting properties have been contacted to explain the project phasing, and to discuss any anticipated impacts due to the planned construction. Potential impacts on access to Village Way and 10 Brookline Place will be mitigated throughout the construction period. Immediate abutters will be given updates on progress and expectations for construction activities as the project progresses. At all times during construction activity there will be management staff on-site and available for assistance.

Impact on Existing Construction Projects

The Construction Manager will coordinate construction activities with the Town of Brookline and other on-going construction projects in the area to minimize the impacts to the community.

Signage and Distribution of Information

Signage will direct pedestrians around the site as well as direct truck traffic and deliveries. Signage will be placed at each corner of the site as well as areas that may be confusing to pedestrians and automobile traffic. Construction and regulatory signage shall be provided as shown on the traffic management plans included in this Section 3 of the CMP

The construction site will have a sign indicating the name of the Construction Manager and its contact information including phone number and internet address.

Utility Connections

Lateral utility connections into Washington Street, Pearl Street and Brookline Avenue will occur during the daytime off-peak hours, with all applicable permits, employing all necessary traffic controls.

Trees & Plantings

Specimen trees to be removed from the site, and any manner of treatment of trees within the public way abutting the site, were reviewed with the Town Conservation Agent/Tree Warden in early August 2015. Any tree removals and resultant proposals for locating replacement trees will be reviewed with the Town Conservation Agent/Tree Warden per the requirements of Brookline's DPW.



Construction Logistics

Material Handling

Construction materials delivery trucks will be loaded and unloaded inside the construction fence (or at curbside, with applicable permits, when onsite loading or unloading is impractical). On-site locations will be designated for temporary storage of construction materials (storage containers, palletized shipments, etc.). On-site locations may change to accommodate construction phasing. Trucks and equipment will follow designated truck routes and be staged as indicated at the traffic management plans. After structural and façade work is completed, building loading bays will be the primary locations for loading and unloading.

Construction Waste

The Construction Manager will be responsible for processing and recycling of construction waste and will contract with a licensed waste hauler having off-site sorting capabilities. All construction debris will be taken off site by the waste hauler, sorted as either recycled debris or waste debris and sent to the proper recycling center or waste facility. As necessary, construction debris will be wetted and covered to minimize air born dust particles.

Construction Hours

Construction hours will be from 7:00 AM to 6:00 PM, Monday through Friday, except for legal holidays. After hours or holiday work will be performed only with required permits.

Truck Movements during Construction

Construction of the Project is expected to generate an average of 8 trucks per day for the entire construction period, however truck traffic related to this construction site will vary throughout the construction period with a maximum of approximately 25 trucks per day. “Real-time” management practices will be employed for deliveries. Local streets will not be used for staging delivery trucks. Construction contracts will include provisions restricting truck travel to approved routes.

The impact of construction trucks in the evening peak hour is expected to be insignificant because most deliveries are completed prior to the end of the typical construction work day (6:00 PM).

Trucks coming to and from the site will be required to use major arterial roadways or highways and not local streets. The selection of proposed truck routes is based on the following criteria:



- Minimizing truck activity in the residential neighborhoods;
- Designating specific roads where trucks are permitted; and
- Providing access to and from the major arteries (e.g. Interstate 90, Interstate 93, Interstate 95, etc.)

Trucks accessing the site will follow the following routes:

From Interstate 90 EB:

- Head east on I-90 E;
- Take exit 14 towards South Shore/N.H – Maine/I-95/MA-128;
- Use right lanes to continue towards I-95 S/MA-128 S;
- Keep right at the fork, follow signs for I-95 S/State Route 128 S/South Shore/Cape Cod and merge onto I-95 S/MA-128 S;
- Take exit 20A to merge onto MA-9 E towards Brookline/Boston;
- Continue on MA-9 E;
- Turn left onto Brookline Avenue;
- Turn left onto Pearl Street;
- Turn left into Project site.

From Interstate 95 NB and SB:

- Take exit 20A to merge onto MA-9 E towards Brookline/Boston;
- Continue on MA-9 E;
- Turn left onto Brookline Avenue;
- Turn left onto Pearl Street;
- Turn left into Project site.

From Interstate 93 NB and SB:

- Take exit 18 towards Roxbury/Andrew Sq/Mass Ave;
- Turn slightly right onto Massachusetts Ave Connector;
- Continue onto Melnea Cass Boulevard;
- Turn left onto Tremont Street;
- Turn right onto Ruggles Street;
- Turn left onto Huntington Avenue/ Route 9 W;
- Continue onto Washington Street;
- Turn right onto Pearl Street;
- Turn right into Project site.



To Interstate 90 WB:

- Turn right out of Pearl Street onto Washington Street;
- Continue straight onto MA-9 W;
- Use right lane to merge onto I-95 N via the ramp to Peabody/Portsmouth NH;
- Take exit 23—24-25 towards Massachusetts Turnpike.

To Interstate 95 NB and SB:

- Turn right out of Pearl Street onto Washington Street;
- Continue straight onto MA-9 W;
- Use right lane to merge onto I-95 N via the ramp to Peabody/Portsmouth NH or I-95 S to Canton/Providence RI.

To Interstate 93 NB and SB:

- Turn right from Pearl onto Brookline Avenue;
- Turn left onto Washington Street/Route 9 E;
- Continue onto Huntington Avenue;
- Turn right onto Ruggles Street;
- Turn left onto Tremont Street;
- Slight right onto Melnea Cass Boulevard;
- Continue onto Massachusetts Avenue Connector;
- Merge onto I-93 Frontage Road;
- Follow signage for I-93 NB and SB.

The individual truck maneuvers for entering and exiting the site are shown on Sheets 14-16 of the attached traffic management plans.

Construction Employee Trip Generation

Trip Generation by construction workers is directly related to the number of workers of the site at a given time. The number of workers per day will vary as construction proceeds. Over the entire construction period, the average number of workers per day will be approximately 50, with a maximum of approximately 100 workers per day.

The project has access to public transportation and many workers will use this transit option. The site is adjacent to the Brookline Village stop of the MBTA Green Line – D Branch, and is close to Washington Street/Pearl Street and Brookline Avenue/Pearl Street Bus Stops serviced by the Route 60, 65, and 66 MBTA buses. The Construction Manager will provide sufficient secure on-site storage



areas for workers' equipment to facilitate use of the "T". Given the high cost of parking, it is likely that a significant number of workers will carpool. In addition to these factors, construction workers generally travel before the morning peak hour (working 7:00 AM to 6:00 PM) further lessening the impact that these workers will have on the adjacent street network during the morning and evening peak hours.

Construction Worker Parking

On-site construction worker parking will not be allowed. Personal vehicles will be restricted from parking at or around the construction site so as to reduce the impact to residential parking.

Interim Parking Conditions for 1 Brookline Place

Existing 1 Brookline Place tenant and visitor parking displaced by the construction will be accommodated through on-site temporary parking. Sheet 10 of the attached traffic management plans illustrates the construction of a temporary parking lot prior to demolition of the Garage. While the majority of displaced parking will be accommodated on-site, additional parking located in adjacent properties may be available for use during the Garage Demolition and Construction phase. All temporary parking areas will be serviced by valet.

Portable Sanitary Facilities

Portable sanitary facilities will be provided on-site as required by applicable codes at locations appropriate to the stage of construction. The facilities will be maintained on a regular basis to prevent offsite odor migration.



Mitigation Measures

Environmental

The construction activities will be performed under a Release Abatement Measure (RAM) Plan as required under the Massachusetts Contingency Plan (MCP). A Licensed Site Professional (LSP), identified in the Team List in Section 1 of this CMP, will oversee the environmental aspects of the project that are governed by the MCP. Following completion of the construction activities, the RAM will be closed and a Permanent Solution will be filed for the 2-4 Brookline Place property. AULs will remain in place at One and 2-4 Brookline Place and will be relied upon to demonstrate that the Permanent Solution has been achieved for the 2-4 Brookline Place site.

Building materials containing asbestos, mercury and liquid polychlorinated biphenyls are present in both 2 and 4 Brookline Place. A licensed regulated materials removal contractor will remove and legally dispose of all such identified materials prior to the start of demolition activities in accordance with all applicable federal, state and local regulations. Inspection of the removals work and air monitoring will be performed by an independent, licensed environmental consultant.

A complete submission to the Massachusetts Department of Public Health, as required by the Special Permit, is included in Section 5 of this CMP.

Air Quality, Dust and Odor Control

Environmental monitoring will be implemented during construction. The program will include air and dust monitoring, and provide action levels which, if exceeded, will trigger mitigation of dust, vapor migration and/or odors. Air monitoring stations will be established at locations shown on the site plan included in Section 5 of this CMP.

The air monitoring stations will be equipped with real-time dust monitors and photoionization detectors (PID) to monitor the level of total volatile organic compounds (VOCs) in ambient air. The stations will be equipped with data loggers and telemetry to provide remote monitoring of air quality. If action levels are exceeded, the Construction Manager will perform all required additional measures to control dust and limit production of vapors. Such measures may include covering the excavation face, spraying water to control dust, and use of other cover measures to limit dust generation.

While significant excavation related odors are not anticipated due to the limited extent of excavation required to complete the project, the Construction Manager will be required to implement measures



to control odors if needed. These measures may include spraying of odor control foams, limiting the amount of open excavation at any one time, and use of odor neutralizers.

On-site Dewatering and Drainage during Construction

Site dewatering is expected to be limited and will be conducted in accordance with the applicable Stormwater Pollution Prevention Plan (SWPPP) or National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) requirements for sedimentation control and treatment prior to discharge. Effluent from construction dewatering will either be allowed to recharge on-site in accordance with the MCP or will be discharged to the storm drain under an RGP. In the event that an RGP is needed, treatment will likely include sedimentation control through use of frac tanks and bag filters, carbon vessels and other treatment components as needed to remove contaminants to acceptable levels in accordance with the RGP. Detailed Construction drainage plans are included in Section 4 of this CMP.

Rodent Control

The Construction Manager will contract with a licensed pest control contractor. Rodent control measures will be in-place prior to and during demolition and construction activities. The program will include performance of extermination and control procedures. Waste containers will be placed at worker gathering locations and emptied on a daily basis. Litter clean-up will be performed on a daily basis.

Noise Control

All work will be performed in conformance with the Noise Control By-law of The Town of Brookline.

Acoustic monitoring will be performed ahead of the commencement of on-site activities to establish baselines, and will continue to be performed during major activities, to assure continued conformance with permitted noise levels. Proposed monitor locations are shown on the site plan included in Section 5 of this CMP. Noise mitigation measures to be undertaken include:

- Performing work only during permitted hours
- Use of appropriate mufflers on equipment and ongoing maintenance of intake and exhaust mufflers.
- Use of less noisy construction operations and techniques where feasible (e.g., mixing concrete off-site instead of on-site, use of electric or propane powered equipment instead of diesel powered.)



- Scheduling equipment operations to keep average levels low, and to synchronize noisiest operations with times of highest ambient levels.
- Prohibit idling of equipment.
- Use of saw-cutting methods in lieu of jack hammering where feasible.
- Use of tower crane for steel erection at 1 and 2 Brookline Place.

Vibration Monitoring

Geotechnical monitoring will be implemented at the Site and at the surrounding properties. Ground vibration levels will be measured at the Site and adjacent facilities within 150 feet of the proposed work area which may include the following structures/facilities:

- 1 Brookline Place – Medical Office Building
- 5 Brookline Place – Child Care Facility
- 10 Brookline Place – Office Tower
- 55 Village Way – Residential Properties

The actual location of the monitors will be dependent on the Contractor's work areas, and locations may shift based on site observations throughout construction. The monitors will be capable of recording data continuously and will be deployed through the duration of vibration generating activities.