Project Notification Form



350 BOYLSTON STREET

Submitted to:

BOSTON REDEVELOPMENT AUTHORITY City Hall Square, 9th Floor Boston, MA 02201

Submitted by:

THE DRUKER COMPANY, LTD. 50 Federal Street Boston, MA 02110

December 18, 2007

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Submitted by:

THE DRUKER COMPANY, LTD.

Prepared by:

In Association with:

EPSILON ASSOCIATES, INC. 3 Clock Tower Place Suite 250 Maynard, MA 01754 Pelli Clarke Pelli Architects CBT Architects, Inc. Goulston & Storrs, P.C. Vanasse Hangen Brustlin, Inc. Haley & Aldrich, Inc. Nitsch Engineering, Inc. Weidlinger Associates, Inc. Cosentini Associates, Inc. Moriarty & Associates

December 18, 2007

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1.0 SUMMARY

1.1 Project Identification

Project Name:	350 Boylston Street
Location:	324-360 Boylston Street bounded by Boylston, Arlington and Providence Streets.
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Permitting Consultants:	Epsilon Associates, Inc. 3 Clock Tower Place, Suite 250 Maynard, MA 01754 (978) 897-7100 Cindy Schlessinger Doug Kelleher
Legal Counsel:	Goulston & Storrs 400 Atlantic Avenue Boston, MA 02210 (617) 482-1776 Marilyn L. Sticklor, Esq.

Transportation and Parking Consultants:	Vanasse Hangen Brustlin, Inc. 99 High Street Boston, MA 02110 (617) 728-7777 R. David Black
Geotechnical Consultant:	Haley & Aldrich 465 Medford Street, Suite 2200 Boston, MA 02129 (617) 886-7400 Mark Haley, P.E. Michael J. Atwood, P.E.
Civil Engineer:	Nitsch Engineering, Inc. 186 Lincoln Street Boston, MA 02111 (617) 338-0063 John M. Schmidt, P.E. Joshua J. Alston, P.E.
Structural Engineer:	Weidlinger Associates, Inc. 201 Broadway, 4th Floor Cambridge, MA 02139 (617) 374-0000 Minhaj A. Kirmani, Ph.D., P.E. Wayne Siladi, P.E.
MEP Engineer:	Cosentini Associates, Inc. One Broadway Cambridge, MA 02142 (617) 494-9090 Richard P. Leber, P.E. Robert M. Leber, P.E.
Construction Manager:	Moriarty & Associates 3 Church Street Winchester, MA 01890 (781) 729-3900 John Moriarty

1.2 Project Summary

1.2.1 Project Site

The 350 Boylston Street project (the Project) will be located on an approximately 27,654 square foot parcel of land located at the intersection of Boylston and Arlington streets in Boston's Back Bay across from The Public Garden, as shown in Figure 1-1. The site is bounded by Boylston, Arlington and Providence Streets and an existing building located at 364 Boylston Street, and includes four parcels of land together having approximately 221 feet of frontage on Boylston Street. The site presently is occupied by four commercial structures located at 324-334, 336-342, 344-350 and 352-360 Boylston Street, as shown in Figure 1-2.

1.2.2 Proposed Development

The Project is a mixed-use development consisting of approximately 221,230 square feet (sf) of gross floor area (as defined under the Boston Zoning Code). The specific uses proposed for this newly constructed, nine-story building will include approximately 15,000 sf of ground floor retail and restaurant space, and eight floors of first class office and related support space. Approximately 150 parking spaces and an approximately 6,000 sf fitness center and spa for use by the building's office tenants are planned for three below-grade levels. Please see Figure 1-3 and Appendix A.

1.2.3 Design Objectives

The proposed design addresses and will capitalize on several unique opportunities inherent to the site. A corner location provides a unique opportunity; the Back Bay corner of Arlington and Boylston streets with diagonal views and frontage on The Public Garden is a singular opportunity that the design addresses by placing a unique rounded glazed bay which emphasizes and reinforces the importance of this prime location. The new building will continue the Arlington and Boylston streets/Back Bay building massing and height relating to the existing buildings across Arlington Street and west of the Project site along Boylston as well as across Providence Street. The base will be articulated by granite facade materials, ground floor wooden storefronts and a lobby entry to continue the historic Boylston Street context along the site. Boylston Street sidewalk improvements will be consistent with the City's standards for the neighborhood. A pattern of glazed projecting bays on the upper floors along Arlington and Boylston streets will articulate and lend scale to the Project's facades along these major thoroughfares consistent with the scale of the older, existing buildings on these streets. Off street loading and below ground garage entry and exiting will be accomplished on Providence Street to keep the traffic and activity from the main public frontages.



FIGURE 1-1: LOCUS MAP [AERIAL]

350 BOYLSTON STREET



350 BOYLSTON STREET THE DRUKER COMPANY, LTD

THE DRUKER COMPANY, LTD

350 BOYLSTON STREET

FIGURE 1-3: PROPOSED NORTH - SOUTH BUILDING SECTION



1.2.4 Public Review

The Proponent has held a series of preliminary meetings with elected and appointed officials, abutters, and interest groups to discuss the proposed Project, including representatives of the Boston Redevelopment Authority (BRA), the Boston Landmarks Commission (BLC), the City of Boston Inspectional Services Department (ISD), Public Improvement Commission (PIC), the Neighborhood Association of the Back Bay (NABB), the Back Bay Association and the Boston Preservation Alliance (BPA). The Proponent anticipates and looks forward to maintaining a continuing dialogue with these and other parties as the permitting process moves forward.

1.2.5 Public Benefits

The Project provides a number of public benefits to the City of Boston. The Project will improve retail vitality and provide first class office space in this highly visible and accessible location. The area will be enhanced by the urban design and architectural character provided by a new signature building designed by a world-class architect which is sensitive to its architectural neighbors, including the Arlington Street Church, The Public Garden, and The Heritage On The Garden. Further, the Project will be in compliance with The Public Garden Shadows Act regarding avoidance of creation of new shadows impacting the Public Garden (St. 1992 c. 384) and will not exceed the allowable Floor Area Ration (FAR) of 8 for the site.

Smart Growth/Transit-Oriented Development

Consistent with smart growth principles, this Project seeks to focus development in an area that has been built on previously, has access to public transportation, and has a mix of uses.

Improved Street and Pedestrian Environment

The Project will include streetscape improvements to Boylston Street adjacent to the site, as well as retail space along the street, enlivening the streetscape and improving the pedestrian environment.

Sustainable Design/ Green Building

The Project is registered in the USGBC LEED Core and Shell (LEED-CS) rating system and will be submitting for pre-certification in the near term, targeting LEED Silver. The Project will be in compliance with Article 37 of the Boston Zoning Code.

Article 32 Compliance

The Project will be fully compliant with Article 32 of the Boston Zoning Code, Groundwater Conservation Overlay District. The Proponent is not only committed to recharging groundwater upon Project completion, but also intends to implement groundwater recharge during construction.

Transportation Demand Management

The Arlington Street MBTA station is adjacent to the Project site, and the Proponent will encourage the use of the MBTA system. In addition, bicycle racks within the garage and showers will be provided for people working in the building who commute to and from work by bicycle.

Increased Employment

The Project will create approximately 300 construction jobs and approximately 880 permanent jobs. The permanent jobs will result from the proposed retail and commercial components and building maintenance.

New Property Tax Revenue

The new development will generate approximately \$1,800,000 in annual property taxes.

Linkage

The Project will generate approximately \$952,000 in housing linkage funds and approximately \$190,000 in jobs linkage funds to the City of Boston.

1.3 Consistency with Zoning

The site is located within the B-8-120C District under the Boston Zoning Code. The site includes land on the south side of Boylston Street from the westerly sideline of Arlington Street to a point 100 feet west of Arlington Street, which is subject to specific height provisions under Section 16-6 of the Code. The site also lies within the Groundwater Conservation Overlay District and the Restricted Parking Overlay District.

In order to permit construction of the Project as proposed, special exceptions from the Board of Appeal will be sought as permitted under Section 16-6 (for height of approximately 121'6" in the area of a depth of 50' from Boylston Street to a point 100 feet west of Arlington Street) and as permitted under Section 21-2 eliminating parapet setback requirements. In addition, conditional use permits will be sought for parking within the Restricted Parking Overlay District and for work in the Groundwater Conservation Overlay District.

1.4 Legal Information

1.4.1 Legal Judgments Adverse to the Proposed Project

The Proponent is not aware of any legal judgments in effect or legal actions pending that are adverse to the Project.

1.4.2 History of Tax Arrears on Property

The Proponent does not have a history of tax arrears on any property owned within the City of Boston.

1.4.3 Evidence of Site Control/Nature of Public Easements

The site is owned by the Arlington-Boylston Realty Trust, under Declaration of Trust dated December 19, 1967, recorded with the Suffolk County Registry of Deeds in Book 8172, Page 335, as amended of record. Arlington-Boylston Realty Trust is an affiliate of The Druker Company, Ltd.

1.5 Public Agencies

Table 1-1 below presents a list agencies from which permits or other actions are expected to be required:

Agency Name	Permit / Approval / Notification
LOCAL	
Boston Redevelopment Authority	Development Impact Project Plan/Article 80 Large Project Review
	Design Review
Boston Zoning Board of Appeal	Zoning Relief (Special Exceptions and Conditional Use Permits); Building Code Relief (NStar Vaults without Sprinkler System)
Boston Civic Design Commission	Schematic Plan Design Review
Boston Transportation Department	Transportation Access Plan Agreement Construction Management Plan
Boston Landmarks Commission	Article 85 (Demolition Delay) Review
Boston Air Pollution Control Commission	Exemption of Parking Spaces for Employees/Visitors
Parks and Recreation Commission	Approval of Demolition and Construction within 100 feet of park

Table 1-1 Anticipated Permits, Approvals and Notifications

Agency Name	Permit / Approval / Notification	
Boston Water and Sewer Commission	Water and sewer connection permits	
	Cross-connection permit (if required)	
	Site Plan Review	
Public Works Department	Curb cut permit	
Public Safety Commission	Permit to erect and maintain parking structure	
Joint Committee on Licenses	Flammable storage license	
Public Improvement Commission	Improvements within public streets or sidewalks	
	(if applicable)	
Inspectional Services Department	Demolition Permit	
	Building Permit	
STATE		
State agency permits	None anticipated	
FEDERAL		
Federal Aviation Administration	Determination of No Hazard (if crane is in	
	excess of 200 ft)	

 Table 1-1
 Anticipated Permits, Approvals and Notifications (Continued)

This table presents a preliminary list of permits, approvals and notifications from governmental agencies which are presently expected to be required for the Project, based on Project information currently available. It is possible that not all of these permits or actions will be required, or that additional permits or actions may be needed, all of which will become evident during Project design and development.

The Project also will comply with An Act Protecting The Public Garden, St. 1992 c. 384, although no permit or approval is required.

2.0 PROJECT DESCRIPTION

2.1 Existing Site

The Project site is approximately 0.63 acres and is bounded by Boylston Street to the north, Providence Street to the south, Arlington Street to the east, and commercial buildings to the west. The site is made up of four parcels, each containing an existing commercial building. The buildings on the site range in height from two to five stories. The site is across the street from The Public Garden and the Arlington Street Church.

Pictures of the site are located in Appendix B.

2.2 Proposed Development Program

2.2.1 Building Program

As previously noted, the development program for this newly constructed office and retail development will include ground floor retail and restaurant space totaling approximately 15,000 sf, Class A office space on eight floors above grade totaling approximately 200,000 s.f., and, for use by employees working in the building, an approximately 6,000 sf fitness center/spa and off-street parking for 150 cars located on three levels below grade.

2.2.2 Approximate Dimensions

Table 2-1 presents the approximate dimensions of the Project:

Project Element	Dimension
Project Site	Approximately 221' X 125' (27,654 sf)
Parking	Approximately 150 spaces
Floor Area Ratio	8.0
Building Height	Up to approximately 120' and 121' 6"
Office	200,000 sf
Retail/restaurant	15,000 sf
Fitness Center/spa	6,000 sf

Table 2-1 Approximate Project Dimensions

2.3 Determination of Alternative Considered / Project History

The determination of the development program and the building massing for the Project evolved following consideration of an extensive series of urban design analyses as well as The Public Garden Shadows Act and other regulatory parameters such as the allowable Floor Area Ratio and allowable building height under the Boston Zoning Code.

The renovation and reuse of all the existing structures, renovation and reuse of only the Arlington Building, and retention of only the Arlington Building façade were also considered. All of these alternatives yielded buildings with significantly less floor area and parking than the as-of-right proposal, which in combination with greater construction costs incurred to work with and around existing buildings and foundations, make these reuse schemes economically infeasible. Technical complications due to the existing buildings' bearing and fire wall locations and differing floor levels will not allow for large unencumbered floor plates necessary for a feasible contemporary office building in any of the options that reused the existing buildings. Reuse of existing facades would be extremely difficult and costly due to the inability to use temporary external support of the façade because this weight can not be placed on the existing MBTA Green line tunnel, utilities, and steam main located below the sidewalks on Boylston and Arlington streets.

The Proponent also believes that possible alternatives that would retain only the façades of one of the existing buildings lack the appropriate architectural integrity that this important location deserves and requires. Furthermore, retaining only façade portions of one of the existing buildings would likely require dismantling and reconstruction; activities that would have prohibitive costs associated with them, and that are generally not considered acceptable means of preservation.

Further, extensive research was completed concerning the historical and architectural significance of the existing buildings on the Project site, particularly the Arlington Building. The research demonstrated that the Arlington Building is not eligible for designation as a Boston Landmark. The Boston Landmark Commission, on the recommendation of its staff, concurred in this determination by declining in 2006 to accept a landmark petition for further study of the Arlington Building.

2.4 Schedule

Construction is expected to commence the spring of 2009 and be completed by the spring of 2011.

3.0 ASSESSMENT OF DEVELOPMENT REVIEW COMPONENTS

Article 80 of the Code specifies that the BRA may require in its Scoping Determination that the applicant conduct studies to determine the direct or indirect impact to the environment reasonably attributable to a proposed project. The development review components include transportation, environmental protection, urban design, historic resources, and infrastructure systems. Where potential for direct or indirect impacts exist, design measures may be required to mitigate the impacts, to the extent economically feasible. The areas for which studies and mitigation may be required are addressed below.

3.1 Transportation

3.1.1 Introduction

This section provides an overview of the transportation characteristics of the proposed Project, and a preliminary evaluation of any potential transportation impacts. Included in this section is a description of roadway access, parking conditions, transit access and the pedestrian and bicycle environment, along with a preliminary analysis of expected trip generation associated with the Project and an assessment of potential traffic impacts.

Roadway Access

The Project site is well located with regard to roadway access due to its strategic location in the Back Bay. Regional access to and from Storrow Drive (connecting to I-93 North, Route 1 and Route 2) is provided via Arlington Street and Berkeley Street. Access to and from the Massachusetts Turnpike west at the Copley Square I-90 interchange is provided via Boylston Street, Saint James Avenue and Stuart Street, with additional I-90 westbound on-ramps at Arlington Street and Clarendon Street. Connections with the Southeast Expressway I-93 south are provided via the Berkeley Street and Arlington Street/Herald Street corridors.

Project Trip Generation

A preliminary analysis of trip generation for the Project has been performed, based on standard Boston Transportation Department (BTD) methodology, incorporating Institution of Transportation Engineers (ITE) trip rates and BTD mode share data for this location. The analysis considers both estimated trips generated by the existing buildings, and trips expected to be generated by the proposed building. Trips are calculated separately for retail and office uses, and combined to yield total trips for daily and peak hour scenarios. The trip generation analysis results are summarized in Table 3-1.

Time Period	Existing Buildings	Proposed Project	Net Increase
Daily			
Inbound	411	626	215
Outbound	409	626	217
Total	820	1,252	432
AM Peak Hour			
Inbound	32	110	78
Outbound	9	17	8
Total	41	127	86
PM Peak Hour			
Inbound	30	30	0
Outbound	48	107	59
Total	78	137	59

 Table 3-1
 Preliminary Vehicle Trip Generation Analysis Summary

As shown in Table 3-1, the net increase in vehicle trips associated with the Project is estimated to be just over 430 vehicle trips on a daily basis. For the peak periods, increases of approximately 90 and 60 vehicle trips are projected for the morning and evening peak hours, respectively, equivalent to about one or two cars per minute. It is unlikely that this level of trip generation will result in any significant adverse impact to the local roadway network.

Parking

The Project will include a below-grade parking garage, providing approximately 150 parking spaces for use by the building's occupants (i.e., there will be no public parking), equivalent to approximately 0.68 spaces per 1,000 square feet (one space per 1,475 FAR GSF). This level of parking supply is required to accommodate the parking demand anticipated to be created by the building's occupants, and thereby not tax the area's existing parking supply. The projected parking demand has been established by a trip generation analysis, which incorporates the BTD mode share data for this location. Short-term parking is available at parking meters located on both Boylston Street and Providence Street. The proponent anticipates seeking to either remove or relocate some of the existing metered parking spaces from the south side of Providence Street to facilitate offstreet loading. In addition, the Proponent intends to work with the BTD to provide an appropriate curbside

drop-off/pick-up zone for taxis, etc. on the Boylston Street frontage of the Project to avoid impacting traffic operations on Boylston Street.

Public Transportation

The Project site enjoys excellent transit access and is well served by MBTA subway and bus services. A head-house for the Arlington Green Line station is located immediately abutting the site, and Back Bay station is located within a 10-minute walk from the site, providing access to Orange Line and Commuter Rail service. In addition, MBTA bus Routes 55 and 9 provide service on Boylston Street in front of the site, and Routes 39 and 10 are accessible at Back Bay station. Express Bus Route 502 serves Copley Square, and Express Bus Route 170 serves Back Bay station.

Pedestrian and Bicycle Environment

The Project site is located within the walking catchment of several Boston neighborhoods, and enjoys excellent pedestrian accessibility. Back Bay, Beacon Hill, Downtown, the Financial District, Chinatown, Bay Village and the South End are all within reasonable walking distance of the Project. The site benefits from existing sidewalks on both the Boylston Street and Arlington Street frontages, and pedestrian crossing facilities are provided at the immediately adjacent Boylston Street/Arlington Street signalized intersection. Bicycle racks will be provided in the below-grade levels of the building.

Loading and Servicing

Loading and servicing for the Project will be provided by an internal loading dock on Providence Street, thereby reducing the amount of on-street servicing that takes place for the existing buildings. The loading dock will include a trash compactor and three loading bays capable of accommodating 30-ft trucks. Servicing by larger trucks for the proposed office and retail uses is anticipated to be very limited. The internal loading dock will significantly improve the on-street loading conditions on Providence Street.

Transportation Demand Management

To take full advantage of the excellent non-auto accessibility of the Project site, the Proponent will work with building tenants to implement a comprehensive package of TDM measures and strategies. The TDM program will be developed in coordination with BTD, and may include the following components:

- Membership of a Transportation Management Association (TMA)
- On-site Employee Transportation Coordinator
- On-site employee transit pass sales

- Transit subsidies for building employees and encouraging tenants to provide subsidies for their employees through appropriate language in their leases
- Guaranteed Ride Home program for building employees and encouraging tenants to provide such a program for their employees through appropriate language in their leases
- Ridematching program through building management office
- Carpool/Vanpool program through building management office
- Preferred parking for carpools/vanpools
- Secure bicycle parking for people working in the building
- Showers for bicyclists working in the building

The TDM plan will be incorporated in a Transportation Access Plan (TAP) Agreement to be executed by the Proponent. In addition, the Proponent will develop a Construction Management Plan (CMP), including a Maintenance of Traffic Plan (MTP), to address interim conditions during construction of the Project.

3.2 Environmental Protection

3.2.1 Wind

The Project will have a height of approximately 120 feet, and will be of similar height to other buildings in the vicinity. Since the height of the building will be less than 150 feet, no appreciable wind-related effects are anticipated.

3.2.2 Shadow

The site is located in a densely built urban area and the proposed Project will generally be surrounded by and adjacent to structures of similar height and massing. Further, the Project will be adjacent to The Public Garden. Shadows will be in compliance with the provisions of The Public Garden Shadow Act. Under St. 1992 c. 384, "An Act Protecting the Boston Public Harden," "new shadow" (as defined in the Act) may not be cast on The Public Garden, with the exception of the perimeter sidewalks and except during the first hour after sunrise or before 7 o'clock in the morning, whichever is later, or the last hour before sunset. Although the Project may result in shadows, the major portion of the shadows are subsumed within the shadows of existing buildings and all shadows will be in compliance with The Public Garden Shadow Act.

3.2.3 Daylight

As previously described, the site is located in a densely built urban area and the Project will be surrounded by structures of similar height. The purpose of a daylight analysis is to estimate the extent to which a proposed project affects the amount of daylight reaching public streets in the immediate vicinity of a project site. Daylight obstruction values are expected to be similar to daylight obstruction values in the surrounding area.

3.2.4 Solar Glare

The Project will not include the use of reflective glass or other reflective materials on the building facades that would result in adverse impacts from reflected solar glare from the Project.

3.2.5 Air Quality

Potential long-term air quality impacts will be limited to emissions from Project-related mechanical equipment and pollutant emissions from vehicular traffic generated by the development of the Project. Though not anticipated, if changes in traffic operations are significant, potential air quality impacts will be described for both existing and future conditions to demonstrate conformance with the National Ambient Air Quality Standards.

Construction period air quality impacts and mitigation are discussed below in Section 3.2.11.1.

3.2.6 Stormwater/Water Quality

During construction, accumulated storm water runoff and captive groundwater will be collected by sumps located within the excavation and pumped from the sumps into an onsite temporary sediment and storage tank. Once the suspended solids in the temporary storage tank have settled, the stored water will be discharged into a ground water recharge gallery constructed by the Project beneath the Providence Street sidewalk.

The Project's post-construction surface water runoff will be generated solely from runoff collected by the Project's roof drainage system during precipitation events. A nominal amount of groundwater seepage collected from beneath the garage's lowest level slab and the post-construction surface water runoff will be piped to an on-site storage tank located in the garage. Water stored in the tank will be pumped up and out of the building and discharged into the same ground water recharge gallery constructed by the Project beneath the Providence Street sidewalk. During significant precipitation events (greater than one inch over 24 hours), water from the storage tank will be diverted to an overflow pipe that discharges into an existing storm drain beneath Providence Street.

3.2.7 Flood Hazard Zones/Wetlands

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Site located in the City of Boston - Community Panel Number 250286 0010 C indicates the FEMA Flood Zone Designations for the site area. The map shows that the Project is located in a Zone C, Area of Minimal Flooding.

The site is developed and does not contain wetlands.

3.2.8 Geotechnical/Groundwater

Below is a description of existing site conditions, subsurface soil and groundwater conditions, planned below-grade construction activities for the Project, and mitigation measures for protection of adjacent structures and for maintaining groundwater levels in the Project area during excavation and foundation construction.

3.2.8.1 Existing Site Conditions

The site of the Project is currently occupied by four buildings, ranging from two to five stories above ground. The site is bounded by Boylston Street to the north, Arlington Street to the east, Providence Street to the south and the four-story 364-368 Boylston Street building to the west. The Arlington Street Church is located to the north (across Boylston Street). Beneath and aligned parallel to Boylston Street is the MBTA's Green Line Arlington Street Station, a portion of which abuts directly with the Project's property line. Ground surface along the Boylston Street side of the site is at about El. 18.5 Boston City Base (BCB), sloping gently along Arlington Street to about El. 14 BCB along Providence Street.

Each of the existing buildings has a single basement level extending to a depth of approximately 7 to 10 ft (El. 10 to El. 7), and certain buildings have vaults extending beneath the Boylston Street sidewalk. The existing buildings are supported on untreated wood piles that were installed through the near surface fill and organic soils into the underlying marine clay stratum, where these foundations develop their load carrying capacity. The existing buildings will be demolished in their entirety to accommodate the Project.

3.2.8.2 Subsurface Soil and Bedrock Conditions

Based on available subsurface data at the site and in the immediate Project area, the general subsurface profile is listed in Table 3-2 in order of increased depth below the ground surface.

Table 3-2Subsurface Soil

Generalized Subsurface Strata	Approximate Depth Below Ground Surface to Top of Stratum (ft)	Approximate Thickness (ft)
Miscellaneous (Urban) Fill	N/A	15 to 20
Organic Deposits	20 to 25	5 to 15
Marine Clay	25 to 35	100 to 110
Bedrock	125 to 145	N/A

Generalized descriptions of the strata are described below:

- Miscellaneous (Urban) Fill The Project site consists of filled land reclaimed from the former Back Bay tidal flats during the late 1800s. The composition of this material varies, but typically consists of loose to dense, brown to gray, fine to coarse sand, with varying amounts of gravel, silt, clay, concrete, cinders, metal, brick, and other miscellaneous materials. Buried building demolition debris and rubble from pre-existing buildings may also be encountered within and beneath the footprint of the existing buildings which currently occupy the site.
- *Organic Deposits* The organic deposits consist of soft to medium stiff organic silt and peat with varying amounts of sand and shells.
- *Marine Clay* The clay, known locally as Boston Blue Clay, is very stiff to hard at the top of the stratum ("crust"), and generally becomes softer with depth.
- *Bedrock* Bedrock is part of the Cambridge Argillite formation. The upper 10 ft of the bedrock is typically moderately to completely weathered.

3.2.8.3 Groundwater

Groundwater levels in the vicinity of the Project site are monitored by the City of Boston Groundwater Trust (BGwT), an entity that tracks and reports groundwater levels in portions of Boston. Groundwater levels monitored by BGwT at observation well locations near the site between 1999 and 2006 indicate water levels typically range from El. 1 to El. 7 (BCB), or approximately 10 to 16 ft below ground surface. Observed levels at some observation wells are somewhat below those that would be considered "naturally-occurring". Groundwater levels near the site could be influenced by leakage into and out of sewers, storm drains, water utilities, and other below-grade structures, and environmental factors such as precipitation, season, and temperature.

3.2.8.4 Proposed Foundation Construction

The Project includes construction of an above-grade office building with three levels of below-grade parking. Construction will require an excavation extending to the limits of the property and to depths of about 35 to 45 ft below ground surface (approximately El. -25 to El. -35 BCB). It is anticipated that the excavation will terminate within the marine clay deposit. The proposed building will likely be supported by a continuous reinforced concrete spread footing foundation around the inside perimeter of the new building footprint in combination with a reinforced concrete mat foundation within the central core area of the new building footprint. The foundations will be designed to bear on and derive their load carrying capacity in the marine clay stratum.

A lateral earth support system will be installed around the perimeter of the entire site prior to excavation to provide excavation support during construction, limit impacts to adjacent properties, control groundwater seepage, and maintain groundwater levels outside the excavation. Although the wall system has not been selected, it will likely consist of a reinforced concrete diaphragm wall ("slurry wall") or secant pile system installed into the clay stratum. Slurry wall and secant wall systems are relatively impervious wall systems commonly used on projects in the Boston area.

Due to the depth of excavation, lateral bracing of the walls will be required consisting of internal bracing systems; no external tiebacks are anticipated to be used. Some preexcavation or pre- auguring is planned along the building perimeter to remove obstructions prior to installing the excavation support system and foundations. Any penetrations through temporary support walls and permanent below grade structure walls will be attempted to be located above historic groundwater levels and will be sealed.

During below ground construction, groundwater and stormwater that may accumulate during excavation and foundation construction will be collected and recharged back into a recharge gallery constructed by the Project along the Providence Street side of the site to allow re-injection into the ground. Sedimentation controls to filter the effluent will be conducted prior to discharge to the groundwater recharge gallery. In this manner, the below grade construction activities will not adversely affect (lower) current groundwater levels. In the permanent condition, the substantially watertight excavation support walls, which also serve as the new building's below grade foundation walls will prevent any significant withdrawal of groundwater from beyond the below grade limits of the Project. Further, in the permanent condition, any groundwater seepage and stormwater runoff generated on the site will also be pumped into the same recharge gallery constructed beneath Providence Street.

Because the proposed below-grade construction will extend approximately 25 feet below groundwater levels, the lowest level garage slab will be designed as a soil supported slabon-grade, with an underslab drainage system to relieve hydrostatic pressures. Seepage flow collected from the underslab drainage system will be collected and stored on site with stormwater runoff collected from roof drainage and pumped into the same groundwater recharge gallery constructed beneath Providence Street and used for construction dewatering. In this manner, the below grade construction will be designed to not adversely affect (lower) long-term groundwater levels.

Potential Impacts During Excavation and Foundation Construction

Potential impacts during excavation and foundation construction include impacts to area groundwater levels and ground and building movements due to excavation. Additionally, construction activities will generate ground vibrations, dust, and noise. The foundation design and construction will be conducted to limit potential adverse impacts, especially to adjacent structures and to groundwater levels.

Mitigation Measures

Provisions will be incorporated into the design and construction procedures to limit potential adverse impacts, including the following:

- The design team will conduct studies, prepare designs and specifications, and review contractor's submittals for conformance to the Project contract documents with specific attention to protection of nearby structures and facilities and to maintaining existing groundwater levels. In particular, selection of building foundation systems and excavation support systems and their details will be made taking into consideration mitigation of adverse temporary and long-term effects outside the site.
- Performance criteria will be established in the Project specifications for the lateral excavation support systems with respect to movements, water-tightness and the construction sequence of the below-grade portion of the work. The contractor will be required to employ, and modify as necessary, construction methods and take all necessary steps during the work to protect nearby buildings and other facilities.
- Performance criteria will be established for protection of groundwater levels in the vicinity of the Project. The contractor will be required to modify construction methods and take all necessary steps during the work to not lower groundwater levels outside the limits of the site.
- Geotechnical instrumentation will be installed and monitored during the below-grade portion of the work to observe the performance of the excavation, adjacent buildings and structures, and area groundwater levels. Groundwater observation wells will be monitored prior to and during construction activities. When construction begins, groundwater observation wells will be monitored regularly for the duration of the below-grade construction period.

3.2.9 Solid and Hazardous Wastes

3.2.9.1 Removal of Hazardous Materials

There are no documented hazardous waste conditions on the Project site. Prior to commencement of the work, investigations will be performed at the site and in the existing buildings to confirm that there are no contaminated soils, groundwater, asbestos, lead paint, or other hazardous materials present. If such materials are present, they will be characterized based on the type, composition and level of the contaminants. Work plans will be prepared by appropriately licensed professionals to identify the means and methods for safe removal and legal disposal or recycling of these materials.

Abatement and disposal of hazardous materials (or hazardous waste) will be performed by specialty contractors experienced and licensed in handling materials of this nature.

The soils transported off site will be legally disposed of in accordance with the Massachusetts Contingency Plan and other regulatory requirements. Disposal of materials will be tracked via Bills of Lading or other methods, as required to ensure their proper and legal disposal.

3.2.9.2 Operational Solid and Hazardous Wastes

The Project will generate a solid waste stream typical of other office projects due to the similar nature of the occupancies. Solid waste generated by the Project is projected to be approximately 375.35 tons per year, based on office space at a generation rate of 1.3 tons per 1,000 square feet per year, commercial, retail, and restaurant space proposed at a generation rate of 5.5 tons per 1,000 square feet per year, and fitness center space at a generation rate of three pounds per 100 square feet per day, as shown in Table 3-3.

Unit Type	Program	Generation Rate	Solid Waste (tons per year)
Office	200,000 sf	1.3 tons/1,000 sf/year	260
Commercial/Retail/ Restaurant	15,000 sf	5.5 tons/1,000 sf/year	82.5
Fitness Center	6,000 sf	3 lbs/100 sf/day	32.85
Total Solid Waste Generation			375.35

Solid waste from the Project will include recyclables such as wastepaper, cardboard, glass, and plastic bottles. A comprehensive commercial recycling program will be implemented to divert a significant portion of these materials from the landfill waste stream. A portion of

the waste will be recycled as described below. The remainder of the solid waste will be compacted and removed by a commercial waste hauler contracted by building management. With the exception of incidental hazardous wastes typical of office and retail uses (for example, cleaning fluids and paint), the on-site office and ground floor commercial uses will not generate hazardous waste.

An appropriately sized space will be provided within the Project for the temporary collection of waste and the separation of recyclable materials for separate handling. All recycling collection, trash collection, and loading will occur on-site.

Recycling

The Proponent will work with building tenants to implement a recycling program that emphasizes continuous improvement in minimizing the ecological footprint on the environment. Recycling efforts will include the recapture of mixed office paper, newspaper, cardboard, magazines, plastics numbered 1 thru 7, glass, aluminum and other scrap metal, and any additional materials as appropriate. The Proponent will also explore opportunities to maximize waste prevention through the maintenance and cleaning practices of the site, such as the purchase of eco-friendly products.

Adequate space for recycling materials will be conveniently located adjacent to loading bays and will be sized appropriately to meet growing recycling efforts.

Hazardous Wastes

No site specific information has been obtained to date regarding site environmental conditions related to the presence of oil and hazardous materials. Based on the site location, excavated soils may contain levels of chemical constituents typically encountered in urban fill soils. An environmental site assessment will be conducted and specific testing of soil and groundwater will be performed prior to construction to evaluate conditions and requirements for special handling or transport of excavated materials from the site.

3.2.10 Noise

During operations, neither the Project's mechanical equipment, nor traffic noise associated with the Project are expected to result in a perceptible change in noise levels.

Construction period noise impacts and mitigation are discussed below in Section 3.2.11.2.

3.2.11 Construction Impacts

A Construction Management Plan (CMP) will be submitted to the Boston Transportation Department (BTD) for review and approval prior to issuance of a building permit. The CMP will define truck routes which will help in minimizing the impact of trucks on local streets. The construction contractor will be required to comply with the details and conditions of the approved CMP.

Construction methodologies that ensure public safety and protect nearby businesses will be employed. Techniques such as barricades, walkways, painted lines, and signage will be used as necessary. Construction management and scheduling – including plans for construction worker commuting and parking, routing plans and scheduling for trucking and deliveries, protection of existing utilities, maintenance of fire access, and control of noise and dust – will minimize impacts on the surrounding environment.

Throughout Project construction, a secure perimeter will be maintained to protect the public from construction activities.

Below are some of the proposed construction mitigation measures.

3.2.11.1 Construction Air Quality

Short-term air quality impacts from fugitive dust may be expected during demolition, the early phases of construction and during excavation. Plans for controlling fugitive dust during demolition, construction and excavation include mechanical street sweeping, wetting portions of the site during periods of high wind, and careful removal of debris by covered trucks. The construction contract will provide for a number of strictly enforced measures to be used by contractors to reduce potential emissions and minimize impacts. These measures are expected to include:

- Using wetting agents on areas of exposed soil on a scheduled basis;
- Using covered trucks;
- Minimizing spoils on the construction site;
- Monitoring of actual construction practices to ensure that unnecessary transfers and mechanical disturbances of loose materials are minimized;
- Minimizing storage of debris on the site; and
- Periodic street and sidewalk cleaning with water to minimize dust accumulations.

3.2.11.2 Construction Noise

The Proponent is committed to mitigate noise impacts from the construction of the Project. Increased community sound levels, however, are an inherent consequence of construction activities. Construction work will comply with the requirements of the City of Boston Noise Ordinance. Every reasonable effort will be made to minimize the noise impact of construction activities. Mitigation measures are expected to include:

- Instituting a proactive program to ensure compliance with the City of Boston noise limitation policy;
- Using appropriate mufflers on all equipment and ongoing maintenance of intake and exhaust mufflers;
- Muffling enclosures on continuously running equipment, such as air compressors and welding generators;
- Replacing specific construction operations and techniques by less noisy ones where feasible;
- Selecting the quietest of alternative items of equipment where feasible;
- Scheduling equipment operations to keep average noise levels low, to synchronize the noisiest operations with times of highest ambient levels, and to maintain relatively uniform noise levels;
- Turning off idling equipment; and
- Locating noisy equipment at locations that protect sensitive locations by shielding or distance.

3.2.11.3 Construction Waste Management

The Proponent will reuse or recycle construction materials to the greatest extent feasible. Construction procedures will allow for the segregation, reuse, and recycling of materials. Materials that cannot be reused or recycled will be transported in covered trucks by a contract hauler to a licensed facility, per the DEP regulations for Solid Waste Facilities, 310 CMR 16.00.

3.2.12 Rodent Control

A rodent extermination certificate will be filed with the building permit application to the City. Rodent inspection monitoring and treatment will be carried out before, during, and at the completion of all construction work for the proposed Project, in compliance with the City's requirements. Rodent extermination prior to work start-up will consist of treatment of areas throughout the site. During the construction process, regular service visits will be made.

3.2.13 Wildlife Habitat

The site is within a fully developed urban area and, as such, the proposed Project will not impact wildlife habitats as shown on the National Heritage and Endangered Species Priority Habitats of Rare Species and Estimated Habitats of Rare Wildlife.

3.2.14 Sustainable Design

The Project will achieve the City required LEED certifiable status and targets a LEED Silver rating for commercial core and shell construction. Attached in Appendix C is a LEED checklist that has been developed as part of the conceptual design for the Project. The architects for the Project have LEED Accredited Professionals on staff.

3.3 Urban Design

3.3.1 Project Massing and Design

The new building will continue the Arlington and Boylston streets/Back Bay building massing and height relating to the existing buildings across Arlington Street and west of the Project site along Boylston as well as across Providence Street. The Arlington/Boylston corner of the building will be accentuated by a rounded glazed bay to reinforce this important street corner frontage. The base will be articulated by granite façade materials, ground floor wood storefronts and a lobby entry to continue the historic Boylston Street context along the site. A pattern of glazed projecting bays on the upper floors along Arlington and Boylston Streets will articulate and lend scale to the Project's facades along these major thoroughfares consistent with the scale of the older, existing buildings on these streets.

3.3.2 Project Materials

The building along the prominent Arlington and Boylston faces will include a granite base with storefronts at ground level and large scaled windows at the second floor; an ashlar patterned cast stone façade above the base with painted metal frame windows; and curtain wall on the projecting bays. The Providence Street face will be constructed in articulated masonry with painted metal frame windows, as is the west façade above the party wall at the adjacent lot. An energy efficient roof will be utilized. Terraces are surfaced with light colored walking surface pavers.

3.4 Historic and Archaeological Resources

3.4.1 Buildings on the Project Site

The Project site contains four existing buildings, 324-334 Boylston Street (the Arlington Building), 336-342 Boylston Street, 344-350 Boylston Street, and 352-360 Boylston Street. The Project site is located within the boundaries of the Back Bay Historic District, which is listed on the National Register of Historic Places. The National Register nomination for the

Back Bay Historic District does not specifically call out any of the four buildings on the Project site as possessing exceptional architectural or historical significance. The nomination indicates that generally "the district contains along Boylston and Newbury Streets a significant collection of early 20th century commercial buildings which reflect a variety of architectural modes." The nomination specifically mentions only the Berkeley Building (a Boston Landmark) at 416-426 Boylston Street, Boylston Chambers at 739 Boylston Street, 885-889 Boylston Street, 651-655 Boylston Street, and 400-402 Boylston Street as architecturally prominent buildings within this section of the historic district; no reference is made to the Arlington Building, 336-342 Boylston Street, 344-350 Boylston Street, or 352-360 Boylston Street. The following provides more detailed information on each of the four buildings which currently occupy the Project site.

3.4.1.1 Arlington Building, 324 - 334 Boylston Street

Constructed in 1904, the five-story Arlington Building was constructed according to designs by Boston architect William Gibbons Rantoul (1867-1945). Rantoul, a Harvard-trained architect operated a practice at 8 Beacon Street from 1897 to 1942. Rantoul is known primarily for his residential commissions on Boston's North Shore. A Salem resident, Rantoul designed numerous single family dwellings, a golf clubhouse, and country estates in Beverly, Ipswich, Newburyport, Salem, and Topsfield. His other Boston projects include the 1901 Fur Merchant's Warehouse at 717-719 Atlantic Avenue (located within the National Register-listed Leather District) and the 1905 Emily Mandell House at 247 Commonwealth Avenue.

William Gibbons Rantoul's Beaux Arts Style design for the Arlington Building employs a two-story base which gives rise to three upper stories topped by a copper cornice. Three vertical window bays on the Boylston Street elevation and seven vertical window bays on the Arlington Street elevation terminate at the top floor in broad segmental arches. The brick building is ornamented with granite and limestone elements.

In the 1910s, commercial tenants included the Bryant & Stratton Commercial School, a business school which occupied the building until 1950 before relocating to Newbury Street. In 1930, the Arlington Building's first floor storefronts were remodeled in the Art Deco Style by Boston architect William T. Aldrich (1880-1966) for the new home of the Shreve, Crump & Low Company. The Boston jewelry store established in Downtown Crossing in 1796, occupied the first two floors of the building until 2005, before relocating to its current location at 440 Boylston Street.

Since its initial 1904 construction, numerous alterations have occurred to the Arlington Building. At the time of the building's construction, Arlington Street terminated at Boylston Street. The extension of Arlington Street through the block transformed the Arlington Building into a prominent corner block and required the addition of an entirely

new Arlington Street façade where previously only a party wall existed. Today, a comparison of the Boylston Street and Arlington Street facades indicates subtle differences in detailing around the windows and cornice which reflect the differing construction dates.

The 1930 remodeling by Aldrich in the Art Deco Style is limited on the exterior to infilling the original storefronts with ornamented limestone panels and the creation of bronze and glass storefronts (portions of which have been replaced or altered).

In 1984, when the Arlington Building was initially surveyed by Boston Landmarks Commission staff the building was ranked as a "Group III" building out of the following five group ranking system used by the BLC for the purposes of consideration for designation as a Boston Landmark: Group I ("Highest Significance"), Group II ("Major Significance"), Group III ("Significant"), Group IV ("Notable"), and Group V ("Minor"). Only buildings with a ranking of I, II, or III are considered eligible by the BLC for Landmark designation. There are a large number of buildings in Group III, therefore, those Group III buildings which may meet criteria for designation as Boston Landmarks are subcategorized as "Group III, Further Study".

In response to written requests that the BLC reevaluate the 1984 ratings for all the buildings on the south side of Boylston Street between Arlington Street and Berkeley Street, including the four existing buildings on the Project site, the BLC voted to upgrade the rating of the Arlington Building from a rating of "III" to a rating of "III F.S." (Further Study) in April 2006. Subsequent to the upgrading of the building to a rating of "III F.S." a petition was filed with the BLC to designate the Arlington Building a Boston Landmark.

At an October 2006 hearing, the BLC voted not to accept the landmark petition to further study the Arlington Building for designation as a Boston Landmark. The BLC decision was based on historical research presented by the Proponent which demonstrated that the Arlington Building did not meet the criteria for designation as a Boston Landmark.

3.4.1.2 336 – 342 Boylston Street

The narrow, four-story commercial block at 336-342 Boylston Street was constructed by 1898 with George Abbot listed as architect. Floors two and three of the storefront feature large, three-part plate glass windows; the fourth floor contains five round arched window openings separated by columns with Corinthian capitals. At the upper levels, the simple pier and spandrel building is ornamented with Renaissance Revival Style terra cotta details in the form of egg and dart molding, floral swags, putti, and cartouches.

Throughout the 20th century the building housed stores at the ground floor and offices on the upper floors. In the late 1920s, a restaurant occupied the ground floor. The storefront has been extensively altered through repeated remodeling, thereby diminishing the

building's overall architectural integrity. A 1919 photograph depicts the original storefront as having a recessed centered entry with large, flanking plate glass display windows, none of which is extant.

When surveyed in 1984, the building at 336–342 Boylston was ranked a Group IV ("Notable") building. In response to the written requests mentioned above that the BLC reevaluate the 1984 ratings for all the buildings on the south side of Boylston Street between Arlington Street and Berkeley Street, the BLC voted not to change the "IV" rating of the building. The decision not to change the rating of the building was based on a BLC staff recommendation.

3.4.1.3 344 - 350 Boylston Street

This four-story commercial building was completed in 1897 as two separate buildings. The architect was Warren A. Rodman. The pier and spandrel building is nine bays in width. Cast metal piers at floors three and four exhibit a simplified pilaster motif. The building is capped by a Classical Style cornice.

Similar to its neighbors, this building housed first floor commercial uses and upper floor office tenants throughout the 20th century; the New England Trust Company maintained offices in the building from the early 1930s into the mid-1940s.

When surveyed in 1984, the building at 344–350 Boylston was ranked a Group IV ("Notable") building. In response to the written requests mentioned above that the BLC reevaluate the 1984 ratings for all the buildings on the south side of Boylston Street between Arlington Street and Berkeley Street, the BLC voted not to change the "IV" rating of the building. The decision not to change the rating of the building was based on a BLC staff recommendation.

3.4.1.4 352 - 360 Boylston Street

The building was constructed in 1906 according to designs by the Boston architectural firm of Parker & Thomas. The two-story commercial building has a limestone veneer facade with a strong horizontal emphasis created by cornices above the storefronts and second story windows. At the second story, the horizontality is further emphasized by a window band of ten single large sash divided by narrow piers employing a rope motif. At the ground level, the outer two storefronts have been drastically altered; the central storefront retains a highly ornamented cast metal arched entry with flanking display windows, all with gold-highlighted bas relief designs, with marble veneer base. The arched entry is recessed and ornamented with a fanlight and grille transom.

The architects, John Harleston Parker (1873-1930) and Douglas H. Thomas, Jr. (1872-1915), were in partnership from 1901 to 1907 and with Arthur Wallace Rice (1869-1938) from 1908 to 1936. Parker & Thomas had a diverse practice in Boston and Baltimore which included the design of banks, hotels, educational facilities, office buildings, private

residences, and a group of exposition buildings. They were responsible for many of Boston's early 20th century buildings, including the Tennis and Racquet Club at 929 Boylston Street, Fenway Studios (a Boston Landmark) on Ipswich Street, the R.H. Stearns Department Store on Tremont Street, the John Hancock Building, and the United Shoe Machinery Building (also a Boston Landmark).

Throughout the 20th century, the building was occupied by ground floor commercial tenants (including Schrafft's Restaurant in the 1940s) and office uses on the second floor. The Women's Educational and Industrial Union occupied the building from 1975 to 2005.

When surveyed in 1984, the building was ranked a Group IV ("Notable") building. In response to the written requests mentioned above that the BLC reevaluate the 1984 ratings for all the buildings on the south side of Boylston Street between Arlington Street and Berkeley Street, the BLC voted not to change the "IV" rating of the building. The decision not to change the rating of the building was based on a BLC staff recommendation.

3.4.2 Historic Resources in the Project Vicinity

Numerous historic resources and historic districts exist within the Project's vicinity. Notable resources include: Arlington Street Church across the street from the Project site at the corner of Arlington and Boylston Street, the Berkeley Building at 416-426 Boylston Street, the Paine Furniture Building at 75-81 Arlington Street, the Back Bay Historic District, the Boston Common and The Public Garden, and the Bay Village Historic District, all of which are listed on the State and National Registers of Historic Places. The Project site is also within close proximity to the Park Square – Stuart Street Historic District, which has been determined eligible for, and is in the process of being nominated to, the National Register.

Table 3-4 lists State and National Register-listed properties and historic districts located within a quarter mile radius of the Project site. The individually listed properties are assigned numbers, which correspond to the map in Figure 3-1. Figure 3-1 also identifies the locations of the State and National Register-listed and eligible historic districts with a quarter mile of the Project site.

Historic Resource	Address
Back Bay Historic District	Roughly bounded by Arlington, Providence, St. James, Exeter, and Boylston Streets, Charlesgate East, and the Charles River
Back Bay Architectural District	Roughly bounded by Back St., Embankment Rd. and Arlington St., Boylston St. and Charlesgate East

Table 3-4 State and National Register-Listed Properties and Historic Districts

Table 3-4	State and National Register-Listed Properties and Historic Districts (Continued)
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Historic Resource	Address	
Bay Village Historic District	Bounded by Piedmont, Winchester, Melrose, Fayette, and Tremont Streets	
Boston Common	Bounded by Beacon, Park, Tremont, Boylston and Charles Streets	
Boston Public Gardens	Bounded by Beacon, Charles, Arlington and Boylston Streets	
Piano Row Historic District	Bounded by Boylston, Tremont, Avery, Tamworth, and La Grange Streets, Park Square, Haymarket Place, Allens Alley, and Head Place	
1. Trinity Church Rectory	Clarendon Street and Newbury Street	
2. Trinity Church	Boylston Street at Copley Square	
3. Berkeley Building	416-426 Boylston Street	
4. Street Clock	439 Boylston Street	
5. Arlington Street Church	Corner of Arlington Street and Boylston Street	
6. First Corps of Cadets Building	97-105 Arlington Street and 130 Columbus Avenue	
7. Youth Companion Building	140-144 Berkeley Street & 195-217 Columbus Avenue	
8. Charles Playhouse	74-78 Warrenton Street	
9. Park Square Office Building	1-59 Saint James Avenue	
10. Statler (Park Plaza) Hotel / Office Building	54-78 Arlington Street	
11. John Hancock Building	190-200 Berkeley Street	
12. Consolidated Building	100 Arlington Street	
13. Paine Furniture Company Building	75-81 Arlington Street	
14. Salada Tea Building	330 Stuart Street	
15. Pope / Cahner's Building	219-223 Columbus Avenue	
16. Publisher's Building	131 Clarendon Street	
17. U.S. Post Office, Back Bay Branch	390 Stuart Street	
18. Boston Police Headquarters	154 Berkeley Street	
19. Commercial Building	129-133 Columbus Avenue and 304-306 Stuart Street	
20. Motor Mart Garage	60-72 Eliot Street	


3.4.3 Impacts to Historic Resources

As discussed in the above Urban Design section, the new building will continue the Arlington and Boylston Streets/Back Bay building massing and height relating to the existing buildings across Arlington Street and west of the Project site along Boylston as well as across Providence Street. The new building will utilize a base, consistent with older, existing commercial buildings in the Back Bay. Projecting bays, inspired by the rowhouses of the Back Bay, will articulate and lend scale to the upper floors along the Boylston and Arlington street facades

As mentioned above, in response to written requests the BLC reevaluated the 1984 ratings for all the buildings on the south side of Boylston Street between Arlington Street and Berkeley Street, including the four buildings on the Project site, in April 2006. Of the four buildings on the Project site only the Arlington Building's rating was upgraded from a "III" to a "III F.S." (Further Study). However, based on further historical research and documentation, the BLC ultimately voted in 2006 not to accept a landmark petition to further study the Arlington Building for designation as a Boston Landmark.

The National Register nomination for the Back Bay Historic District does not specifically call out any of the four buildings on the Project site as possessing exceptional architectural or historical significance. The nomination specifically mentions only the Berkeley Building (a Boston Landmark) at 416-426 Boylston Street, Boylston Chambers at 739 Boylston Street, 885-889 Boylston Street, 651-655 Boylston Street, and 400-402 Boylston Street as architecturally prominent buildings within this section of the historic district; no reference is made to the Arlington Building, 336-342 Boylston Street, 344-350 Boylston Street, or 352-360 Boylston Street.

As discussed in Section 4.0, the Proponent has met with the staff of the Boston Landmarks Commission (BLC) to review and discuss the Project. At the appropriate time, an Article 85 (Demolition Delay) application will be filed for the demolition of the four existing buildings on the Project site. The Proponent is committed to working with the BLC to advance the Project design in a manner that is respectful to the historic resources within the Project's vicinity.

3.4.4 Archaeological Resources

The Project site consists of previously developed urban parcels. Due to previous development activities and disturbances, it is not anticipated that the site contains significant archaeological resources.

3.5 Infrastructure Systems

The existing infrastructure surrounding the site of the 350 Boylston Street development appears of adequate capacity to service the needs of the Project. The following sections describe the existing sewer, drainage, and water systems surrounding the site and explain how these systems will service the proposed development.

3.5.1 Sewage System

The 350 Boylston Street development will not significantly increase the effluent entering the existing Boston Water and Sewer Commission (BWSC) sewer system. By Massachusetts Department of Environmental Protection (DEP) Title V standards, the aggregate sewer burden for both the existing and the proposed conditions is described below in Tables 3-5 and 3-6, with breakdowns noted by type of use and corresponding design amounts for anticipated flows. The total daily discharge for the proposed Project is estimated as 20,200 gallons per day (gpd), which represents a net increase/decrease of approximately 16,711 gpd from the existing conditions.

Table 3-5	Existing Estimated Daily Source Discharges for 224 260 Poulston Street
Table 5-5	Existing Estimated Daily Sewage Discharges for 324-360 Boylston Street

Type of Uses	Units Design Load per Title V Standards		Daily Flow (GPD)	
Office Space	44,983 sq ft	75 GPD / 1,000 sq ft	3,374	
Retail Space	42,300 sq ft	50 GPD / 1,000 sq ft	2,115	
Total			5,489	

Table 3-6	Proposed Estimated Daily Sewage Discharges for 350 Boylston Street
Table J=0	Toposed Estimated Daily Sewage Discharges for 550 Doyiston Street

Type of Uses	Units	Design Load per Title V Standards	Daily Flow (GPD)	
Office Space	200,000 sq ft	75 GPD / 1,000 sq ft	15,000	
Retail	15,000 sq ft	50 GPD / 1,000 sq ft	750	
Restaurant	150 seats	35 GPD / seat	5,250	
Fitness and Spa	60 lockers	20 GPD / locker	1,200	
Total			22,200	

The building is bordered by an adjoining building at 364-368 Boylston Street on its southwest side, Arlington Street on its northeast side. The back of 350 Boylston is connected to Providence Street. Providence Street contains sewer lines owned and

operated by the BWSC by which the Project may be serviced. According to BWSC record mapping for sewer and drain systems available as sheet 23J, the following is a general description of the sewer system in the vicinity of the site (Refer to Figure 3-2, Existing Sewer/Storm Drain System for all sewer line locations):

• Providence Street contains a 15-inch sewer main that flows in a southwesterly direction adjacent to the site beginning at BWSC manhole #158 at invert elevation 6.15. Sewage from the Project would likely be discharged between BWSC manhole #158 and BWSC manhole #156. The sewer main continues southwesterly until it connects to a BWSC manhole at the intersection of Providence Street and Berkley Street. The main then continues southeasterly until it connects to BWSC manhole #394 and enters a 36-inch sewer main that flows southwesterly down St. James Avenue. The sewer system ultimately discharges to the MWRA's Deer Island Treatment Plant.

Any new sewer service connections for the Project will need to connect directly to the existing sewer main located within Providence Street. The parking garage sewer service will connect to the existing BWSC sewer main. The wastewater from the parking garage will be routed through oil and grit separators prior to discharging to the BWSC sewer mains. The restaurant kitchen waste will be pre-treated with a grease trap prior to discharging to the BWSC sewer mains. The location of the new service connections will be coordinated with the BWSC. Preliminary analysis of the existing BWSC infrastructure indicates that the existing system is adequate for this development.

3.5.2 Stormwater System

Stormwater runoff generated from the streets that bound the existing property is collected in separated storm drainage systems owned and operated by the BWSC. (See Figure 3-2, Existing Sewer/Storm Drain System) These systems are described below:

Arlington Street contains a 12-inch storm drain that flows in a southeasterly direction adjacent to the site. It then connects to a 12-inch storm drain that flows southwesterly on Providence Street. This storm drain continues southwesterly and becomes a 15-inch storm drain, and eventually, an 18-inch storm drain before leaving Providence Street. This storm drain then connects to a 72 x 76–inch combined sewer and storm drain, and flows northwesterly down Berkley Street. In addition to the storm drain main within Providence Street, BWSC infrastructure includes CBs on both sides of Providence Street that direct surface runoff into the storm drain system.

Stormwater runoff from the roof of the Project will be collected in a closed roof drainage system. The proposed roof drainage system will connect to the proposed groundwater recharge system within the basement of 350 Boylston Street and under the sidewalk in Providence Street. Any required emergency overflows from the recharge system will be directed into an existing storm drain system in Providence Street, at a point to be determined after consultation with BWSC.



Due to the fact that the building footprint will not be changing and there is virtually no additional site work, the Project will not increase the impervious area on site. As a result, the peak rate of stormwater discharge from the site will not increase from the pre- to post-development conditions. Additionally, the stormwater design will include a stormwater infiltration system to recharge a portion of the stormwater runoff from the building roofs required by the Groundwater Overlay District regulations, and will likely decrease the net runoff from the site during storm events.

The requirement to recharge stormwater, or rainfall, into the groundwater table has been set forth by the City of Boston and the BWSC through the use of Groundwater Conservation Overlay Districts (GCODs). These districts have been established in areas of the City where groundwater levels have been significantly depleted from historic levels and lowered groundwater tables have been causing problems for property owners. Since the Project site is situated within a GCOD, an additional requirement to recharge 1-inch of rain over the entire impervious area of the site will be required. To meet the requirements of the GCOD, the Project "must promote the infiltration of rainwater into the ground by capturing, within a suitably-designed infiltration system, a volume of rainfall on the lot equivalent to no less than 1.0 inches across the impervious surface area of the lot to be occupied by the proposed Project (or, in the case of a proposed project for a substantial rehabilitation, the lot area occupied by the structure to be substantially rehabilitated). This system shall be designed so that no negative impact occurs on neighboring sites."(Source: Groundwater District Requirements. [Online] Available www.bwsc.org February 8, 2007).

Nitsch Engineering conducted a preliminary analysis to size the rainwater recharge system per the requirements stated above and estimates that the proposed expansion and renovation Project will require a storage system capable of recharging 2,300cf (17,225 gallons) of rainfall. The storm water recharge system is proposed to be a combination of internal storage tanks within the building sized to capture 1-inch of roof runoff and an external recharge trench under the Providence Street sidewalk that would recharge water from the tank into the ground water.

3.5.3 Water Supply System

Water consumption on the proposed site is expected to be 24,420 gallons per day (gpd), based on the Project's estimated sewer generation. Similarly, the Project's existing water consumption is estimated as 6,038 gpd. To achieve these estimates of water demand, a factor of 1.1 (conservative) is applied to the average daily wastewater flows to estimate average water use on a daily basis. During the summer months, the estimated maximum cooling tower make-up water demand will be an additional 25,000 gpd. The proposed Project expects to increase the overall water consumption by approximately 18,382 gpd, not taking into account the increase in demand during summer months when the cooling towers are operating under peak conditions.

BWSC owns and operates water mains adjacent to the Project. (See Figure 3-3 - Existing Water System). According to BWSC record mapping for water systems available as sheet 23J, the following is a general description of the high service and low service water system in the vicinity of the site:

- Boylston Street contains a 20-inch high service water main.
- Boylston Street contains a 12-inch low service water main.
- Providence Street contains an 8-inch low service water main at its western limits. The 8-inch water main increases midway down Providence Street to a 10-inch which is directly adjacent to the site. At the very southeastern corner of the site near the Providence Street intersection with Arlington Street, the main is increased again to 12-inches.
- Providence Street contains an 8-inch high service water main.
- Arlington Street contains a 12-inch low service water main.
- Arlington Street contains a 10-inch high service water main which begins near the southeast corner of the site and runs southerly down Arlington Street. This main does not immediately border the site to the east.

A hydrant flow test was performed on the 12" low service water main on Boylston Street on January 6, 2007. The results are in Table 3-7 below.

Table 3-7Hydrant Flow Test Results

Static Pressure	Residual Pressure	Total Flow	Flow at 20 psi	Flow at 10 psi		
74 psi	64 psi	4,008 gpm	9,964 gpm	10,921 gpm		

In order to service the building, new water services will be connected to the abovementioned public water mains. The location of any necessary connections will be determined in consultation with the BWSC. Preliminary analysis of the existing BWSC infrastructure indicates that the existing system is adequate for this development.

3.5.4 Water Quality / Stormwater

Stormwater runoff from the proposed building will be collected in a closed roof drainage system and conveyed to the groundwater recharge system, as described in Section 3.5.2, Stormwater System. Stormwater overflow from the roof/groundwater recharge system will be conveyed into the BWSC's closed drainage system within Providence Street.



The Project will incorporate best stormwater management practices (BMPs) recommended by the Department of Environmental Protection (DEP) Stormwater Management Standards and Policy. Due to the fact that the proposed development will occur at a location of existing development, and the proposed impervious area will not increase from pre- to postdevelopment conditions, as well as the fact that the Project will incorporate a rainwater recharge system capable of recharging one inch of runoff from all roof surfaces, peak rates of stormwater runoff will remain at or below the rates of the existing conditions. There will be no increase in rate of runoff from the 2-, 10-, 25- and 100-year storm events.

The design objective for the proposed Stormwater Management System is to meet the Massachusetts Stormwater Management Standards to the greatest extent possible. These standards have been specifically addressed in the Project design in the following manner:

Standard #1: No untreated stormwater will discharge into, or cause erosion to, wetlands or waters.

Compliance: The proposed design will comply with this standard. There will be no untreated stormwater discharge. All discharges will be treated prior to connection to the BWSC system.

Standard #2: Post-Development peak discharge rates do no exceed pre-development rates on the site either at the point of discharge or down-gradient of the property boundary for the 2- year and 10-year 24-hour design storms. The project's stormwater design will not increase flooding impacts offsite for the 100-year design storm.

Compliance: The proposed design will comply with this standard. The proposed design will not increase peak discharge rates from the 2- and 10-year 24-hour and the 100-year design storms.

Standard #3: The annual groundwater recharge for the post-development site must approximate the annual recharge from existing site conditions, based on soil type.

Compliance: The proposed design will comply with this standard. Since the site is highly urbanized, there is little to no area for natural infiltration and the annual groundwater recharge for the predevelopment site is likely minimal. Additionally, the proposed site will recharge to the groundwater a minimum of one inch of the stormwater runoff from roof areas to meet City of Boston Groundwater Conservation Overlay District requirements. Although the proposed development does not intend to alter existing surface features, the annual groundwater recharge is expected to increase from pre- to post- development conditions with the addition of the recharge system.

Standard #4: For new development, the proposed stormwater management system must achieve an 80 percent removal rate for the Site's average annual load of TSS.

Compliance: The proposed design will comply with this standard. Additionally, the Project is a redevelopment and under proposed conditions, runoff from the site's roof areas will be routed through an infiltration system capable of recharging a volume equal to one inch over the roof area. The remainder of runoff associated with the proposed redevelopment (non-roof runoff) will be consistent with existing conditions.

Standard #5: If the Site contains an area with Higher Potential Pollutant Loads (as prescribed by the Policy), BMPs must be used to prevent the recharge of stormwater.

Compliance: The proposed design will comply with this standard. The Project is not associated with Higher Potential Pollutant Loads (per the Policy, Volume 1, page 1-8).

Standard #6: If the Site contains areas of Sensitive Resources (as prescribed by the Policy), such as rare/endangered wildlife habitats, ACECs, etc., a larger volume of runoff from the "first flush" must be treated (1 inch of runoff from impervious area vs. the standard ½ inch).

Compliance: The proposed design will comply with this standard. The Project will not discharge untreated stormwater to any area designated as a Sensitive Resource.

Standard #7: Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.

Compliance: The proposed design will comply with this standard. The Project will meet or exceed all Stormwater Management Standards.

Standard #8: Erosion and sediment controls must be designated into the project to minimize adverse environmental effects.

Compliance: The proposed design will comply with this standard. Sedimentation and erosion controls will be incorporated as part of the design of this Project and employed during site construction.

Standard #9: A long-term BMP operation and maintenance plan is required to ensure proper maintenance and functioning of the Stormwater Management System.

Compliance: The proposed design will comply with this standard. An Operations and Maintenance Plan including long-term BMP operation requirements will be prepared and will ensure proper maintenance and functioning of the system. The Operations and Maintenance Plan will be implemented for this facility in order to ensure that this facility adequately provides preventative maintenance to minimize damage to the drainage infrastructure and makes necessary repairs accordingly during and after construction.

4.0 COORDINATION WITH OTHER GOVERNMENTAL AGENCIES

4.1 Boston Landmarks Commission

The Project proponent has met with the staff of the Boston Landmarks Commission (BLC) to review and discuss the Project. At the appropriate time, an Article 85 (Demolition Delay) application will be filed for the demolition of the four existing buildings on the Project site. The Proponent is committed to working with the BLC to advance the Project design in a manner that is respectful to the historic resources within the Project's vicinity.

4.2 Architectural Access Board Requirements

The Project will comply with the requirements of the Architectural Access Board and the standards of the Americans with Disabilities Act.

4.3 Boston Civic Design Commission

The Project will comply with the provisions of Article 28 of the Boston Zoning Code. This PNF will be submitted to the Boston Civic Design Commission by the BRA as part of the Article 80 process.

4.4 Other Permits and Approvals

Section 1.5 of this PNF lists agencies from which permits and approvals for the Project are anticipated to be sought.

4.5 Community Outreach

The Proponent is committed to effective community outreach and will engage the community to ensure public input on the Project. The Proponent will contact local officials as well as local community groups, abutters, neighbors and property owners to introduce them to the Project.

5.0 PROJECT'S CERTIFICATION

This form has been circulated to the Boston Redevelopment Authority as required by the Boston Zoning Code, Article 80.

Signature of Proponent's Representative

Ronald M. Druker, President The Druker Company, Ltd. 50 Federal Street Boston, MA 02110 (617) 357-5700

2/18/07

Signature of Preparer

Douglas J. Kelleher Epsilon Associates, Inc. 3 Clock Tower Place, Suite 250 Maynard, MA 01754 (978) 897-7100

1**8/**07 Date:

APPENDIX A

FLOOR PLANS, BUILDING ELEVATIONS, BUILDING SECTIONS, AND PERSPECTIVES



PROPOSED SITE PLAN

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD

BOYLSTON STREET



PROPOSED GROUND FLOOR PLAN

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD

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PROPOSED TYPICAL BELOW GRADE PARKING PLAN

350 BOYLSTON STREET

The druker company, LTD

PELLI CLARKE PELLI ARCHITECTS | CBT ARCHITECTS





PROPOSED TYPICAL OFFICE FLOOR PLAN

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD



BOYLSTON STREET ELEVATION

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD



ARLINGTON STREET ELEVATION

PROPOSED EAST ELEVATION

350 BOYLSTON STREET THE DRUKER COMPANY, LTD

PELLI CLARKE PELLI ARCHITECTS | CBT ARCHITECTS





PROVIDENCE STREET ELEVATION

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD



THE DRUKER COMPANY, LTD

350 BOYLSTON STREET

PROPOSED NORTH - SOUTH BUILDING SECTION



THE DRUKER COMPANY, LTD

350 BOYLSTON STREET

PROPOSED EAST - WEST BUILDING SECTION





PERSPECTIVE VIEW OF PROPOSED BUILDING FROM THE PUBLIC GARDEN

350 BOYLSTON STREET THE DRUKER COMPANY, LTD



PERSPECTIVE VIEW OF PROPOSED BUILDING FROM BOYLSTON STREET LEVEL

350 BOYLSTON STREET THE DRUKER COMPANY, LTD

APPENDIX B EXISTING CONDITIONS - PHOTOGRAPHS









PHOTOGRAPHS OF THE SITE

350 BOYLSTON STREET

THE DRUKER COMPANY, LTD

APPENDIX C LEED CHECKLIST

	LEED-CS V2.0 Checklist					
City of Boston	The Druker Company - 350 Boylston					
	·····	-				
Yes ?+ ?(-) No						
9 4 1 1	Sustainable Sites	15	Current			
	oustainable offes	15	Responsibility			
X	A Construction Activity Ballytian Brownstian	-	O a set sea a ta se			
Y	p 1 Construction Activity Pollution Prevention	Req	Contractor			
1	c 1 Site Selection	1	Arch			
1	c 2 Development Density & Community Connectivity	1	Arch			
1	c 3 Brownfield Redevelopment	1	Owner			
1	c 4.1 Alternative Transportation. Public Transportation Access	1	Arch			
1	c 4.2 Alternative Transportation, Bicycle Storage & Changing Rooms	1	Arch			
1	c 4.3 Alternative Transportation, Low emitting & Fuel efficient Vehicles	1	Arch			
1	c 4.4 Alternative Transportation, Parking Capacity and Carsharing	1	Arch			
1	c 5.1 Site Development, Protect or Restore Habitat	1				
1	c 5.2 Site Development, Maximize Open Space	1	Civil/Lscpe			
	c 6.1 Stormwater Design, Quantity Control	1	Civil Eng.			
1	c 6.2 Stormwater Design, Quality Control	1	Civil Eng.			
	c 7.1 Heat Island Effect, Non-Roof	1	Sust. Cnslt.			
	c7.2 Heat Island Effect, Roof	1	Sust. Cnslt.			
	c8 Light Pollution Reduction	1	E-Eng			
			Owner/Arch			
1	c 9 Tenant Design & Construction Guidelines	1	Sust. Cnslt.			
			JUSI, CIISIL			
Yes ?+ ?(-) No						
3 1 1 0	Water Efficiency	5				
1	c 1.1 Water Efficient Landscaping, Reduce by 50%	1	Lscpe/P-eng			
1	c 1.2 Water Efficient Landscaping, No Potable Use or No Irrigation	1	P-eng			
1	c 2 Innovative Wastewater Technologies	1	Sust. Cnslt.			
1	c 3.1 Water Use Reduction, 20% Reduction	1	P-eng			
1	c 3.2 Water Use Reduction, 30% Reduction	1	P-eng			
Yes ?+ ?(-) No						
3 4 0 7	Energy & Atmosphere	14				
3 4 0 7	Energy & Atmosphere	14				
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Y Y Y Y 2 2 4 1 1 1 1 1 1 1 Y 1 Yes ?+ ?(.) No 3 4 0 Y 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	p1 Fundamental Building Systems Commissioning of the Building Energy Systems p2 Minimum Energy Performance p3 Fundamental Refrigerant Management c1 Optimize Energy Performance (new-starts at 10.5%) c2 On-Site Renewable Energy c3 Enhanced Commissioning c4 Enhanced Refrigerant Management c5.1 Measurement & Verification, Base Building c5.2 Measurement & Verification, Tenant Sub-metering c6 Green Power (35%) Muilding Reuse, Maintain 25% of Existing Walls, Floors & Roof c1.3 Building Reuse, Maintain 50% of Existing Walls, Floors & Roof c1.3 Building Reuse, Maintain 75% of Existing Walls, Floors & Roof c1.3 Building Reuse, Maintain 75% of Existing Walls, Floors & Roof c2.1 Construction Waste Management, Divert 50% from disposal c2.2 Construction Waste Management, Divert 75% from disposal c3.1 Material Reuse, Specify 1% c4.1 Recycled Content, Specify 10% (post-consumer + ½ pre-consumer)	Req Req 1 to 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Mech. Eng Mech. Eng Mech. Eng/ Team Comsh Agent Mech. Eng Sust. Cnslt. Sust. Cnslt.			
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LEED-CS v2.0 Checklist

	Yes	?+	?(-)	No				
	8	3	0	0	Indo	or Environmental Quality	11	
1 for 2 2 for 3	Y Y 1 1 Y 1 1	1			p 1 p 2 c 1 c 2 c 3 c 4.1 c 4.2 c 4.3	Minimum IAQ Performance Environmental Tobacco Smoke (ETS) Control Outdoor Air Delivery Monitoring Increased Ventilation Construction IAQ Management Plan, During Construction Low-Emitting Materials, Adhesives & Sealants Low-Emitting Materials, Paints Low-Emitting Materials, Carpet	Req Req 1 1 1 1 1 1 1	Mech. Eng Owner Mech. Eng Mech. Eng Contractor Arch Arch Arch
3 for 4	1 1 1 1 Yes	1	?(-)	No	c 4.4 c 5 c 6 c 7 c 8.1 c 8.2	Low-Emitting Materials, Composite Wood & Agrifiber Products Indoor Chemical & Pollutant Source Control Controllability of Systems, Thermal Comfort Thermal Comfort, Design Daylight & Views, Daylight 75% of Spaces Daylight & Views, Views for 90% of Spaces	1 1 1 1 1	Arch Arch/M Eng Mech. Eng Mech. Eng Arch/Sust. Cnslt. Arch/Sust. Cnslt.
	2	3	0	0	Innov	vation & Design Process	5	
	1 1 Yes	1 1 1 ?+	?(-)	No	c 1.1 c 1.2 c 1.3 c 1.4 c 2	Innovation in Design: Education Innovation in Design: Green Housekeeping Innovation in Design: >40% water efficiency Innovation in Design: Green Power 70% LEED™ Accredited Professional	1 1 1 1 1	Owner/Arch Owner/Arch Owner/Arch Owner/Arch Team
	28	19	2	12	61	Project Totals (pre-certification estimates)	61	

Certified 23-27 points Silver 28-33 points Gold 34-44 points Platinum 45-61 points

compliance

Article 37 - Appendix A - - Boston Credits



b1 Modern Grid

- b2 b3 b4 **Historic Preservation** Ground water recharge
- Modern Mobility

credits required by City of Boston for "certifiable" for LEED_CS